SPC/FFA REGIONAL PURSE SEINE FISHERIES

Trip Preparation Page

A few words of preparation: Remember it is the responsibility of contracted observers to ensure they are properly prepared for their trips – to be in good health, good mind, up to date with current requirements and to have all necessary **forms** and equipment.

At the start of each trip it is imperative to check that all the following items are available for the trip:

Tick a box only when you are sure you have that item. ⟶ **N.B.: Forms version should be "Revised Dec 2016"**

1.	One of these **Observer Workbooks** for every 35 days at sea.	
2.	Sufficient **Catch Monitoring Forms PS-4's** for the trip (*30 sheets per pad*)	
3.	Extra pads of **PS-2, PS-3, GEN-5** forms as required (*30 sheets per pad*)	
4.	NEW: **Trip Report Booklet** (*one per trip*)	
5.	Sufficient **Observer Journals** (*normally 30 pages per Journal*)	
6.	Two blank **notebooks** (*preferably waterproof*)	
7.	One box of pens and pencils (*should contain at least 10 X @B pencils, 2 X erasers, 1 X pencil sharpener, paper clips, 2 X pens, 2 X waterproof felt pens, 1 small straight-edge ruler*)	
8.	One calculator	
9.	One set of fish-measuring callipers / and or measuring board.	
10.	A suitable chart	
11.	Your personal requirements	
12.		
13.		
14.		
15.		

Being prepared from the start will make a trip easier, more pleasant and far more effective.

OBSERVER PROGRAMME
FIELD DATA COLLECTION INSTRUCTIONS
(Read these regularly)

Ensure that your observer trip I.D. number* is recorded on every form, your journal and any other sheets containing information relative to the trip.

1. Please write clearly - unreadable data are of no use. Use a sharp pencil and keep a spare sharp pencil handy.
   For waterproof paper and plastic boards write with a soft (#2 or #2B) pencil.
   An eraser should be used to correct errors on the <u>day of entry</u> only.

2. If using a camera the first photograph on each film should be of a piece of paper with the observer's trip ID number written in very large numbers, with the date the photograph is taken written underneath. For a clear picture keep the camera at least 1.5 metres away from the paper. Use a waterproof felt-tip pen to record the observer trip ID number on the metal casing of any films used or on the outside of disposable cameras used.

3. Always carry a notebook (preferably waterproof) and pencil with you on deck.
   Note information as it happens and transfer to forms or journal once inside.
   After information is in journal draw a single neat line through notebook entry to show it is done.

4. Unless otherwise stated, make only one (the best) choice when using the codes to record data.

5. Everything you write on the forms should be <u>printed</u>. Always be conscious about being neat.

6. Number the pages in your journal. Think of something to write in it every day.
   Don't forget to start each day's entries with the date.

7. Notes and comments are good but, on forms, restrict these only to the areas for that purpose.
   If there is not enough space to write all that is useful or interesting on the form, make a short note and continue in the journal. Record journal page number next to the short note on the form.

8. Observe and record data accurately. Extra notes and explanations should be simple and clear. Record data as it happens. All data should be entered the same day - trust nothing to memory.

9. Make sure forms are filled in the right order. If a form is accidentally left blank and one after it is filled instead, do not go back to fill the blank form later. If a blank form is discovered between filled forms, draw a thick line diagonally across the page and write "missed" on it.

10. Do not make any changes or corrections to data after the day it is recorded. If a mistake is discovered later, draw a neat circle around it and write:
    "Mistake - correct entry is <u>???</u> (whatever it is). See journal page No. <u>??</u>"
    at the top of the form. Comment in the journal why it was a mistake and how it was discovered.

11. All compass readings are to be degrees true. Do not use magnetic readings.
    (Note: true north is 000 degrees).

* <u>UNDERSTANDING OBSERVER TRIP ID NUMBERS</u>

The <u>observer trip ID number</u> is issued by the authority that authorised the observer trip. It is unique to one ever single observer trip. It should be recorded on any piece of paper with information related to that trip so that no matter where that paper finishes up it can always be traced to that specific trip.

If an observer from a National Observer Programme works in a regional programme for a trip or two, then the observer should use the Observer Trip ID Number provided by the regional programme and not one from the National Programme. If a national programme insists on recording their number (as occasionally happens) record it on the front of this workbook only - in the second (smaller) space provided for a second trip ID number. BUT record the correct regional programme number on all other forms etc., as usual.

N.B.: all observer trips in the region are recorded on the OFP regional database using both the number given and a number made up of: 1) a unique 3-letter code issued to every observer in the region, followed by a space; 2) then two digits for the year, followed by a dash; 3) then two digits that show the number of observer trips that the observer has started that year.
    (For example, Albert Einstein, starting his ninth trip in the year 2001 would have the observer trip ID number: ABC 01-09.)
This is also the format used by several national programmes. It has the advantage that an observer knows these things and so knows the trip ID number without having to ask. If the number given does not use this format and the second space is not otherwise needed for a differently formatted number given by a National Programme, then the observer could record this format in the second space.

SPC/FFA REGIONAL OBSERVER
OBSERVER PLACEMENT MEETING RECORD

FORM SUP-1 (pg1)

REV DEC. 2016

TRIP DETAILS

OBSERVER NAME	TRIP START LOCATION	TRIP START DATE (YY/ MM/DD)
OBSERVER TRIP ID NUMBER	ESTIMATED TRIP END LOCATION	VESSEL GEAR
VESSEL NAME	FLAG	CALIPER SERIAL NUMBER	UVI and / or IRCS

VESSEL SIZE: circle to indicate	< 16 metres	16-25 meters	26-39 meters	40-65 meters	> 65 meters

Personal Lifesaving Beacon (PLB) Y / N	PLB Make: PLB Model:	Comments

OBSERVER PLACEMENT CHECKLIST

A Fisheries Authority Representative/Placement Officer is to assist the observer, before and during boarding, as well as over see that information is recorded and actions taken as prescribe in this form. Please intial the space at the left of each number item to show it has been

	Inital :	Placement Officer to initial when they have:
1		Set up the placement meeting
2		Assisted the observer with their personal requirements before boarding
3		Checked that the observer has been assigned appropriate accommodation and an area to store their equipment
4		Carried out a vessel safety check in the presence of the observer and Captain
5		Ensured that the Captain receives and understands the attached description (check-list) of standard observer duties and vessel obligations
6		Ensured that both parties are informed of their rights and responsibilities under CMM 2008-01 (Show and, if necessary, supply copy)
7		Reminded the observer that there is no obligation to do extra duties, but it is very much appreciated if they can help out when appropriate.
8		Reminded the Captain and Observer of importance of cooperation
9		Supplied or informed the Captain of the "Vessel on Observer Report" form
10		Informed the Captian and Observer than an observer-debriefing meeting will take place immediately upon return to port at completion of trip
11		Ensured observer's compulsory 2-way communication device is tested and working.
	Inital :	Observer to initial when they have:
12		Clearly described any special sampling requirements to the Vessel Captain
13		Has been present at the Vessel Safety Check and have agreed to board the vessel
14		Confirmed that they are medically fit, informed the Captain of any special medical issues (prescription medication etc); and supplied contact details for their next-of-kin
15		Understood that they must report all gifts in their trip report.
16		Understood that in line with their Observer Code of Conduct they should not drink alcohol at any point during the entire trip.
17		Ensured observer's compulsory 2-way communication device is tested and working.
	Inital :	Vessel Captain to initial when they have:
18		Read and understood the "Obligations of the Vessel Operators to Observers"
19		Shown the observer all current and valid license certificates
20		Shown the observer the location of their life jackect
21		Informed the observer of all safety regulations, procedures and muster stations
22		Shown the observer which electronic bridge equipment is used and which is not used
23		Shown the observer how to obtain position and UTC time and date from the onboard GPS and plotter to which they have access to during the trip
24		Understood that offering excessive alcohol to observers may interfere with their work duties and general conduct; and be aware that many observers are required by their programmes' Code of Conduct not to drink alcohol at any time while onboard the vessel
25		Ensured observer's compulsory 2-way communication device is tested and working.

Notes for the VESSEL CAPTAIN on the OBSERVER PLACEMENT

An observer's primary function is to collect and report reliable and accurate information for scientific, management and compliance. Observers collect data on any fish, including catch and effort, size composition, position, fishing methods, fisheries interactions, environmental impace, processing and distribution (including discards) and any other matter tht may assist fisheries managers verify infomation for purpose of administering fisheries regulations, license requirements and access agreements.

The observer duties and their obligations, along with the obligations of the vessel operator to the observers are described below. A thorough understanding of these by both the vessel operator and the observer will help ensure an effective working arrangement while on board.

→ Vessel Captain please read and initial when the obligations of both parties is understood   Capt. Initals

	OBSERVER'S DUTIES AND OBLIGATIONS	
1	Must promptly report any harassment they were subjected to (including a written report to their fisheries authority representative or when not available the nearest Police station)	1
2	May take, measure and retain samples or specimens of any fish	2
3	May observe and record details of any incidental take, including the recording of set position information	3
4	May record position, activity and identification details of other vessels sighted	4
5	May use communications and other equipment of the vessel but should get permission from the Captain before using it	5
6	Should not be involved in the fishing operations but may assist in normal vessel housekeeping duties	6
7	Should not stand watch on the vessel	7
8	May take photographs of the fishing operations, including fish, gear, equipment, documents, charts and records, and remove from the vesel such photographs or film as was taken or used onboard	8
9	Observers should not drink alcohol at any point during the trip in accordance with Observer Code of Conduct.	9
10	Observer must sign for and report any gifts they have received from the vessel duing the trip.	10
	OBLIGATIONS OF THE VESSEL OPERATORS TO THE OBSERVER (CMM 2008-01)	
11	Ensure vessel personnel do not assault, obstruct, resist, refuse boarding to, delay, intimidate or interfere with an observer performing observer duties	11
12	Allow access to the bridge, communications and navigation equipment	12
13	Instruct observer on use of vessel communications equipment to receive and transmit message with the shore, Fishery Authority and other vessels	13
14	Assist observer as requested, in recording accurate vessel position using vessel navigation and positioning equipment	14
15	Provide access to areas where fish are held, processed, weighed or stored	15
16	Allow observer access to document and records, including all logbook for purpose of inspection and copying	16
17	Allow observer to remove samples	17
18	Ensure vessel personal do not assuault, obstruct, resist, refuse boarding to, delay, intimidate or interfere with an observer performing observer duties	18
19	Show the observer appropriate vessel safety procedures and location of various safety equipment (life rafts, life jackets, etc) and how to use such equipment in the event of an emergency	19
20	Advise the observer of dangerous work areas and instruct the observer on how to minimise exposure (e.g. hard hat) to danger yet still do their work	20
21	Provide the observer with food, clean bunk space large enough for a national observer and any necessary medical facilities and treatment in the course of the observer trip and up to two full days after landing in	21
22	Provide appropiate space for the storage of observer equipment, supplies and samples	22
23	Vessel operators and owners should be fully aware that any instance of reported observer harassment will be fully investigated and, if warranted, legal action will follow, which may include civil and criminal	23
24	Inform vessel Captain of where he can get a copy of the Vessel Report on the Observer	24

REV DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER

VESSEL SAFETY CHECK

CIRCLE ONE **COMMENTS**

1 VESSEL SURVEY DOCUMENTATION (Current)	Yes No	
2 CORRECT SIZE PERSONAL FLOATATION DEVICES AVAILABLE	Yes No	
3 APPROVED LIFERAFT OR LIFEBOATS UNDER CURRENT SURVEY AND ADEQUATE FOR NUMBER OF CREW	Yes No	
4 EPIRBS (Current Survey)	Yes No	
5 DISTRESS SIGNALS AND FLARES	Yes No	
6 FIRE FIGHTING EQUIPMENT IN GOOD ORDER	Yes No	
7 FIRE EXTINGUISHERS (Current Checked)	Yes No	
8 MARINE RADIO HF SSB or SUBITUTE COMMUNICATIONS	Yes No	
9 NAVIGATION LIGHTS / VESSEL LIGHTS (Working Order)	Yes No	
10 SOUND PRODUCING DEVICES OR BELL	Yes No	
11 REGISTRATION DOCUMENTATION IN ORDER	Yes No	
12 OTHER WORK RELATED VESSELS ON BOARD THAT COULD BE UTILISED IN CASE OF EMERGENCY	Yes No	
13 NAUTICAL CHARTS AND NAVIGATION AIDS (GPS/RADAR)	Yes No	
14 FIRST AID EQUIPMENT	Yes No	
15 SANITATION	Yes No	
16 PHONE	Yes No	
17 EMAIL / FAX	Yes No	
18 INSURANCE FOR OBSERVER WHILST ON BOARD	Yes No	
19 VESSEL INSURANCE	Yes No	
20 ROOM FOR CREW AND OBSERVER TO WORK SAFELY	Yes No	

THE OBSERVER WAS PRESENT FOR THE VSC AND AGREES TO BOARD THE VESSEL   YES / NO

(If no: record the reasons here and continue on to another attached page if necessary)

ACKNOWLEDGED   (Observer Placement Meeting Record - page 1 and page 2, front and back read/ initaled/ accepted)

OBSERVER

NAME	SIGNATURE	DATE

VESSEL CAPTAIN

NAME	SIGNATURE	DATE

FISHING MASTER
(if any)

NAME	SIGNATURE	DATE

FISHING AUTHORITY REPRESENTATIVE

NAME	SIGNATURE	DATE

INTERPRETER
(if any)

NAME / POSITION	SIGNATURE	DATE

FISHING AUTHORITY REPRESENTATIVE

POSITION	SIGNATURE	DATE

EXPLANATION ON VSC REQUIREMENTS

The fields in this form may be used to check safety, on whether an observer is safe to board the vessel.

1. **VESSEL SURVEY DOCUMENTATION CURRENT** Fishing Vessels and support vessels operating in the WCPFC must comply with their Flag State regulations and/or the Code of Practice for Safety. Ship surveys including condition, safety and security aspects of hull, machinery and on board safety equipment must be available to be viewed.

2. **CORRECT SIZE PERSONAL FLOATATION DEVICE AVAILABLE** Life Jackets must be approved types and in good serviceable condition, Life Jackets of suitable sizes must be readily accessible for the observer and all crew. Life jackets will not be stored away or locked in cupboards or rooms.

3. **APPROVED LIFE** -Life rafts must be currently in survey and be adequate to carry the amount of crew and observer.

4. **EPIRBS** International Standard 406 MHz EPIRB. The signal frequency (406 MHz) has been designated internationally for use only for distress. Check to see the frequency number and position of these EPIRBS, a few vessels may have the older relatively common type of 121.5/243 MHz emergency beacons, these became obsolete in late 2008.

5. **DISTRESS SIGNAL AND FLARES.** Vessels should have on board appropriate pyrotechnics devices that will suitably operate in both day and night emergency situations.

6. **FIRE FIGHTING EQUIPMENT** Fire fighting must be readily available, be able to work and be currently serviceable. Note that some small vessels may only have fire extinguishers on board.

7. **MOUNTED FIRE EXTINGUISHER,** Fire extinguishers must be readily available and be of the correct type. Portable extinguishers require periodic maintenance therefore the last inspection date when last tested or refilled should be available. All must be currently serviceable and if possible should be checked to ensure extinguishes have not been fully or partially discharged.

8. **MARINE RADIO HF SSB(WORKING ORDER**) Marine SSB (Single Side Band) is a means of communications for many fishing vessels. The radio must be capable of transmitting and receiving frequencies used for emergency marine communications as agreed by the International Telecommunication Union (ITU) or by the Flag State of the vessel.

9. **NAVIGATION LIGHTS AND VESSEL LIGHTS** Vessels must be able to display international standard navigation lights between sunset and sunrise and in conditions of reduced visibility. Internal and external vessel lighting must be fully operational. In the case of power failure, battery operated safety lights must be appropriately placed to ensure a safe exit from the vessel.

10. **SOUND PRODUCING SIGNALS OR BELLS** Vessels must carry a sound producing device (whistle, horn, siren or bell) capable of a prolonged blast or ringing for distress signaling purposes.

11. **REGISTRATION DOCUMENTATION IN ORDER** Flag State Registration documentation papers must be on board and available to be viewed and must show registration number, boats name, country and port of registration.

12. **OTHER WORK RELATED VESSELS** Many vessels have auxiliary vessels that can be used in emergency situations. Note these.

13. **.NAUTICAL CHARTS AND NAVIGATION AIDS** Vessel must have a set of appropriate, up to date nautical charts. Check to ensure that the Radar, GPS and any other navigational equipment is in good order and functioning.

14. **FIRST AID EQUIPMENT** The vessel must have adequate first aid facilities with current "use by dates" on all apparatus, drugs, dressings and other first aid paraphernalia.

15. **SANITATION** The vessel should have clean, well maintained sanitation and bathing facilities. Depending on the size of the vessel, observers may experience a lack of these facilities on board.

16. **PHONE** if the vessel has a satellite phone note the number for future reference.

17. **EMAIL/FAX** If the vessel has Fax or Email system note the numbers for future reference or emergencies.

18. **INSURANCE FOR OBSERVERS ON BOARD** - Observers must be covered by insurance before making a boarding

19. **VESSEL INSURANCE** – Check if vessel has insurance

20. **ROOM FOR OBSERVER AND CREW TO WORK SAFELY.** There must be adequate room on board the deck for the Observer and Crew to work in such a manner, so as to not hinder each other in their respective work duties.

CHANGES TO THE PURSE SEINE OBSERVER FORMS AGREED AT THE
10TH TUNA FISHERY DATA COLLECTION COMMITTEE (DCC)
DEC 2016[1]

| OBSERVER PROGRAMME:	SPC/FFA REGIONAL PURSE SEINE GENERAL INFORMATION	FORM PS-1 (pg 1)

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified data form

The **AIS data field** has been dropped from the top of the Electronics to just above the VMS data fields.

New data fields

Brail Type: Previously observers were asked to describe the brail types on the PS-1 form. The information collected by observers has now been used to separate the different brail types into four distinct categories. These are shown below. Use the codes to fill in the brail type data field. If you think you have seen a different type of brail please report and describe this this in your trip report.
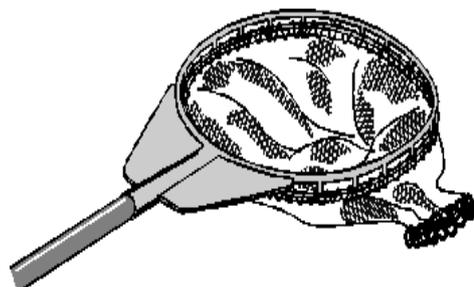
LH - LONG HANDLE - crew use long handle to push brail into sac, allowing tuna to spill into the brail. Often seen on small purse-seiners and some PH vessels.
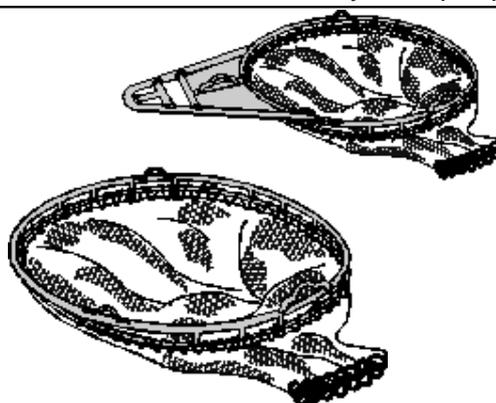
HF - HEAVY FRAME - the heavy frame makes it easy to scoop more tuna into the brail. The brail is moved with hydraulic and electrical winches.
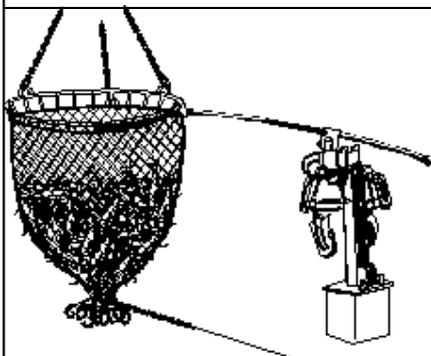
SP - SPANISH TYPE - The long handle is attached to the davit block.

JP - JAPANESE TYPE - No circle ring to keep the mouth of the brail open. Often seen on Japanese vessels to remove live fish from the net.

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[1] Observers are strongly encouraged to read the form instructions to better understand what data needs to be recorded. These notes are only to help observers identify the changes that were made to the forms and provide graphics.

mT: Record the <u>capacity</u> of the brail in **metric tonnes.** The capacity of a brail means the total amount of fish (tuna) it can hold when full. Normally, the brail with the largest capacity should be recorded as Brail 1. If there is a second brail and it has a smaller (or equal) brail capacity, record this as Brail 2. If the capacity of the brail is deliberate changed during the trip (i.e. a new netting panel added to the brail), then record this as Brail 3. See 'Brail Change Comments' below.

Live Fish Brail Y / N: Circle "Y" if the brail is used at any stage during the trip to specifically bring live fish on board. Such live fish (tuna) will normally be sold for the sashimi or katsuobushi (flaked fish) market and will be refrigerated differently to the rest of the tuna (standard brine wells). Indicate if the brail was specifically used to remove live fish from the net during any set on the PS-4 form. Separate any live fish brailing from non-fish brailing on the PS-4 form by using separate sampling types (see PS-4).

Brail Change Comments: Use this data field to add any comments you have on brail changes. Brail change refers to changes in the capacity of the brail (see above). If the capacity of the brail is deliberate changed during the trip (i.e. a new netting panel added to the brail increasing the capacity, or a section of the netting was removed due to a large hole decreasing the capacity of the brail) it is recognised as a new brail and all the details of the brail (type, new capacity, live fish brail) should be recorded as Brail 3. If Brail 1 was changed there is no need to remove the details of Brail 1, with an eraser etc. Remember to continue with any new brail numbering through to your PS-4.

Adding the 'date of the brail change' into the "Brail Change Comments" data field will be helpful and/or the journal page where it is further described.

Modified data fields

GT or GRT: Observers are asked to record the **Gross Tonnage (GT)** of the vessel. This information can be found on the vessel paperwork / licensing document. **GT** is the current international standard for vessel volume and should be available for most purse-seine vessels at this stage. However, some older vessels may have been assigned a **Gross Register Tonnage (GRT)** when built. Observers are asked to record GT for vessels, unless they can only find GRT on the paperwork. In this case circle GRT and record the value. GT and GRT are both units of vessel volume, but they are calculated differently.

Under Communication and Information Services:

'Empty Data Field': Previously there was an empty data field beside the satellite weather monitor data field. Some observers found it annoying and wondered if something should be filled in. The answer was no – nothing needed to be filled. To resolve the problem the empty data field has been absorbed into the mobile/cell phone cell data field.

- Clarifying that a **mobile phone** is also a **cell phone** was requested by the US territories and most especially for the US fleets. The data field was modified.

- **Other** the second line for information services started with the word 'Other'. It was suggested that the word '**websites**' was more appropriate and was edited to reflect this. Observers are encouraged to write the address of the website supplying the fishery information service and the indication www (world wide web) has been added to reflect this.

New codes

Usage Codes: OTH – other please specify. Observers have questioned the most appropriate 'usage code' when they have to record the usage of 'buoys' (GPS and echo sounding buoys) during the FAD closure period. They suggested that none of the 2014 usage codes were appropriate to indicate that the buoys were not used during the FAD closure period, but that they are used at most other times. The decision was made to add a new code 'OTH – other please specific' to cover for this.

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Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified form/extra pages

New workbook sheets *(crew list, well pattern, net plan).* To improve the management of observer data, new blank pages will be placed at the back of the workbook for observers to attach loose information sheets). This will improve the scanning and filing of these pages, so observers' work will not be lost. This is mentioned under the PS-1 page 2 form as the well pattern can be drawn at the bottom of the PS-1 (pg 2) form.

Instruction change

EPIRBs the instructions will be modified to inform observers that there is no need to record information on EPIRBs that are hard to access, most especially inside life-rafts. A note can be made in the comments section of the form to highlight the presence of EPIRBs that were not accessible.

Modified data fields

Comments or Drawings of Well Pattern: A minor data field edit was made to include the missing 's' on the word drawing.

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Instruction change

Radio buoys: The DCC meeting agreed that radio buoy will be the overall phrase or 'catch all' term when referring generally to all types of buoys (i.e. GPS, echo sounding etc.)

Modified codes

The **activity and helicopter codes** were changed. The wording "no fishing" was removed from codes 11, 12 and 13. This is consistent with the fact that a PS vessel is nearly always fishing as it checks its long range echo-sounding or sonar buoys. The following codes were amended.

11 Drifting at day's end

12 Drifting and tied with floating object

13 Other reason - please specify

New code

A new activity code was added. The new code **'18 Drifting – No fishing'**. As an example the new code can be used by observers when the vessel is alongside another vessel and transfer crew etc. There may be other uses for this new code during the trip.

SPC/FFA REGIONAL PURSE SEINE OBSERVER **SET DETAILS**	**FORM PS - 3**

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified data form

Species of Special Interest. There are some big changes with how SSIs will be recorded on the PS-3 form.

> Please note that the PS-3 form will now cater for all species of special interest landed on deck and any interactions with the primary gear (net) that do not result in a landing.

When we talk about primary gear we mean the net. A FAD can be seen as 'fishing gear', but it is not primary gear, only the net is. Any interactions of SSI with the FAD or other non-primary gear (skiff etc.) should be recorded on the GEN-2 (interactions) and the GEN-5 (FAD form). Do not record any landings of SSIs on the GEN-2 form anymore. However, it should also be noted that observers can record any lengths, and the sex of SSIs on the PS-4 form.

New data fields

If SSI OBSERVERD (Obs Time Sighted): This data field used to be on the GEN-2 form. Observers are asked to record the first time they saw any SSI that was with a school of tuna that the vessel set on. If when the vessel is watching a school of fish, deciding whether to set on it, and the observer sees an SSI (often a RHN, or other marine mammal), then the observer should record the first time they saw the SSI. It doesn't matter if the SSI is not captured or not, a time-stamp record should still be made.

Comments / SSI Treatment : Observers are encouraged to make a short note on how the SSI was treated by the vessel (dragged by its tail, released by lowering the net etc.) in the comments section. Other comments can be added to the journal/trip report.

New section

A new section has been added to allow observers to record any SSI that do not land on deck but are captured by the net and generally released (do not record any SSI landings in this section). Use some of the new Interaction with Primary Gear Codes at the bottom of the form to explain the interactions and fill in the condition of the SSI when it was captured and then released.

SPC/FFA REGIONAL PURSE SEINE OBSERVER **LENGTH MEASUREMENT**	**FORM PS - 4**

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified data fields

Which brail was sampled? Record the brail number for the brail that the observer is sampling from. Reminder - the brail number is recorded on the PS-1 form (along with its type, capacity, and whether it is for live fish brailing). Observers must follow this brail numbering through to the PS-4 form. If a second (or other) brail is used during the set then the observer must start a new PS-4 form and indicate the new brail number. An option to record a third brail has now been added. Normally vessels only have a maximum of two brails on board, so a third brail (Brail 3) usually indicates that a brail's capacity (the total amount it can hold when full) has been changed and this is recorded on the PS-1 form.

Pattern (24 brails) Previously, observers could record the fullness and the number of samples on one form for 30 brails. However, if observers correctly recorded five fish per brail there was no more space on the PS-4 form to record these fish lengths after 24 brails (although it was always okay to start a new page). In recognition of this the number of brails you can now record is 24. However, if observer sample more than 5 fish per brail – which may happen when they grab fish quickly they will still run out of space to record all the lengths and they are encouraged to record a new form.

New data fields

Calibrated this set? Observers are asked to state if they have calibrated their measuring instrument (calliper) before they started sampling. Circle 'Y' to say that the calliper has been calibrated.

Callipers should be calibrated by 1) marking a known length on the deck and checking the calliper to see if it records the same length. 2) measuring a specific length of a deck tape (see the drawing below).

= / -   mm: Record any calibration error for the calliper.

IF THE CORRECT CALLIPER READING IS 30 CM.

And then if the calliper correctly shows 30 cm, then the calibration should be recorded as zero millimetres.
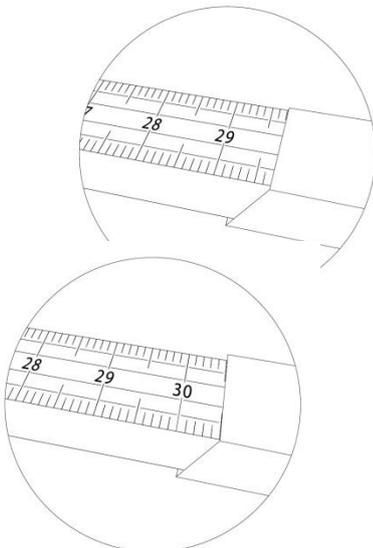
The true length is 30 cm. The calliper is incorrectly reading 29.7 cm. The callibration should be recorded as minus 3 mms.

The true length is 30 cm. The calliper is incorrectly reading 30.5 cm. The callibration should be recorded as plus 5 mms.

'Other' Sampling Protocols

{Remember to start a new page, when you start a sampling protocol}

SS – This is a new sampling protocol that allows observers to record information on landed **species of special interest.** If landed SSIs are encountered on purse-seine vessels then observers can tick the 'other' sample type and record SS as the sampling protocol (SS – Species of Special Interest). This new sampling protocol allows observers to record both the length and sex on the PS-4 form, by marking the sex of the animal (when known) in the length measurement box. M- Male, F – Female, U- Unknown.

SPECIES CODE	LENGTH (cm)	
1 FAL	M99	21
2 FAL	M107	22
3 FAL	F97	23
4 FAL	M121	24
5 OCS	F132	25
6 OCS	F149	26
7 OCS	M136	27
8 OCS	F93	28
9 LTB	U 89	29
10		30

LB – This new sampling protocol is for **Live-fish Brailing**. Record LB into the "Other" Sample Type and then sampling as five live fish per brail, or as many as possible, and record the lengths on the main part of the PS-4 form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM	FORM PS - 5

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified Instructions

The instructions were changed to remind observers that each transfer of fish (in or out of a well) requires <u>at least one line of data</u>. Additional lines of data may be required if additional well transfers occur (additional well loaded during the set for instance).

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified instructions

18 – Drifting – No Fishing- This code can be used if the vessel is alongside another vessel transferring crew etc. There may be other ways to use this code during the trip.

SPC/FFA REGIONAL OBSERVER **FISH, BUNKERING and OTHER TRANSFERS LOGS (continued)**	**Supplementary FORM GEN - 1**

Date of revision

The **date of revision** of the form was changed to Dec 2016.

The instructions on the back of the form for the Fish Transferred (circle units) empty data field was modified to remind observers that this data field can be useful to fill in 'mixed' tuna species for purse-seine vessel transfers.

SPC / FFA REGIONAL OBSERVER **SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS**	**FORM GEN - 2**

Modified form

This form has been **completely re-designed.** The GEN-2 form is only to be used for species of species interest (SSI) that interact with the vessel and non-primary gear. Do not record any interactions with the vessels primary gear on the GEN-2 form. (The primary gear on a purse-seiner is the net. The primary gear on a longline vessel is the mainline and attached branch lines.)

Record all interactions with the vessel, FADs, tori pole, tender vessels, etc. on this form. An SSI interaction occurs when the presence of the vessel or some of its associated objects (but not gear) change the behaviour of the SSI (i.e. – they start swimming close to the boat).

Some data fields are listed here, to provide further explanation – even if they are not new.

Latitude and Longitude – Provide the position of the observer's vessel when the observer first notices the SSI.

New data fields

Most of the data fields are not new. They were already seen on earlier version of the GEN-2 form. A full explanation of each data field can be seen on the instruction page of the form.

Some data fields are listed here, only to provide further explanation.

Latitude and Longitude – Provide the position of the observer's vessel when the observer first notices the SSI.

Est Distance from V – **Estimated Distance from Vessel** – Record an eye-estimate of the <u>average distance</u> the SSI was from the vessel during the interaction. Record the distance in (m) meters or (NM) nautical miles.

Estimate of SSI Length – Record an eye-estimate of the SSI's length for both adults and juveniles (if present). Record the length in m – meters or cm – centimetres – more appropriate for turtles for instance.

Total Number – Record an eye-estimate of the total number of adults and juveniles (if present). If there are a lot of species (large pod of marine mammals) moving quickly, just do your best to provide a good estimate.

New codes

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.	
IBV - Interaction, beside vessel	ICV - Collision with vessel
ION - Interaction, outside net	ICP - Collision with propeller
ICF - Interaction, crew feeding	ICT= Collision with Tori line
IWF - Interaction - with FADs, but not set on	FRB- Feeding on bait during set
IDW - Interaction - dead in water	IFO - Feeding on discarded offal
OTH - Interactions - other, please specify	IRE - Resting on vessel or floats (birds)

Deleted data fields

Most of the data fields relating to any landings of SSI have been removed from the GEN-3 form.

SPC / FFA REGIONAL OBSERVER SPECIES OF SPECIAL INTEREST - SIGHTINGS	Supplement to FORM GEN - 2

Modified form

This form has been **completely re-designed**. Record any <u>sightings</u> of species of special interest on this form. Normally sighted SSI will be far from the vessel. **CAUTION** Observers are advised to use common sense when recording sightings of birds. We are not asking for observers to sit on deck and record bird sightings all day. Further training and ID guides for bird identification will come through in 2017. When filling in any bird sightings observers are advised to try to give a general indication of the type and amount of birds that are in the area.

New data fields

Most of the data fields are not new. They were already seen on earlier versions of the GEN-2 form. A full explanation of each data field can be seen on the instruction page of the form.

Some data fields are listed here, only to provide further explanation.

Latitude and Longitude – Provide the position of the observer's vessel when the observer first notices the SSI.

New Codes

Sighting Codes

Record a sighting code to explain the behaviour of the SSI when sighted.

New data fields contd

SIGHTINGS CODES
SDS - Sighting - Distance Swimming
SBR - Sighting - Breaching
STP - Sighting - Tail slapping or playing
SMG - Sighting - Motionless in group
SDW - Sighting - Dead in Water
SBO - Sighting - Bird overhead
OTH - Sighting - Other, please specify

TALLY – Use this area to tally up any SSI sighted from the vessel. This will mostly relate to marine mammal with a large number of individuals. Record this tally by incident/event normally, or record a tally for a full day if appropriate. Tally should also be separated by sighting codes. For instance you may have a tally of 5 for MYS - (Baleen Whales) sighted as breaching and 3 SIW - (Sei Whales) sighted as distance swimming. Note you are not being asked to fill a tally of birds sighted on a daily basis. Use some common sense when recording bird sightings until further training is provided.

Total number – Record the total number of SSI sighted mostly by incident/event, but by day if appropriate.

OBSERVER PROGRAMME:	**SPC/FFA REGIONAL OBSERVER** **VESSEL TRIP MONITORING SUMMARY**	**FORM GEN - 3** (pg 1)

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified form

The name of the form was modified to **vessel trip monitoring summary** so it was in alignment with the wording on the WCPFC minimum data standards.

New data fields

The **start of trip** and **end of trip** data fields were added so the trip can be more easily identified if the GEN-3 form is separated from the rest of the observer data for compliance reasons.

TRIP START DATE	YY	MM	DD
TRIP END DATE	YY	MM	DD

SPC/FFA REGIONAL OBSERVER **VESSEL TRIP MONITORING SUMMARY**	**FORM GEN - 3** (pg 2)

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified form

The name of the form was modified to **vessel trip monitoring summary** so it was in alignment with the wording on the WCPFC minimum data standards.

New data fields

Debriefing Status: New data fields were added to show whether the GEN-3 form has been debriefed or not. Please note observers should not fill in these data fields. If under the data sharing rules the GEN-3 form is transferred to another party the observer coordinator must circle 'not debriefed' if that is the case. If a debriefer does check the GEN-3 form at any stage, they must circle whether it has been pre-debriefed or debriefed.

Modified instructions

Debriefing Status: The instructions were modified to inform debriefers to circle the most appropriate status of debriefing (see above).

SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS	FORM GEN-4

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified instructions

A new weight code 'NM' – not measured was added for consistency with the LL-4 (longline) form.

FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD	Form GEN-5

Date of revision

The **date of revision** of the form was changed to Dec 2016.

Modified form / instructions

"THE WCPFC recognises live whale sharks, marine mammals etc. as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal."

The new instructions on the back of the GEN-5 form should be self-explanatory. Some observers have been wondering if the GEN-5 is relevant when the FAD is a <u>whale shark</u>, or another living object. It is true that many of the data fields on the form do not relate well to live animals, but these live animals are recognised by the WCPFC as being a FAD, so they should be recorded on the FAD form. Just dash through any data fields that are not relevant.

{The definition of a FAD in footnote 1 to CMM 2008-01 shall be interpreted as including: "any object or group of objects, of any size, that has or has not been deployed, that is living or non-living, including but not limited to buoys, floats, netting, webbing, plastics, bamboo, logs and whale sharks floating on or near the surface of the water that fish may associate with"}

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT	FORM GEN-6

Date of revision

The **date of revision** of the form was changed to Dec 2016.

There were no other changes made to this form.

SPC/FFA REGIONAL OBSERVER OBSERVER PLACEMENT MEETING RECORD	FORM SUP-1 (pg1)

The placement form is filled in by the Placement Officer. The Observer and the Captain will be asked to sign the form.

Date of revision

The **date of revision** of the form was changed to Dec 2016.

New data fields

Calliper Serial Number The placement form will now trap the serial number of the calliper the observer boarded with, or was available on the vessel for the observer's use.

Personal Lifesaving Beacon (PLB): Circle Y to indicate that the observer has a PLB.

PLB Make: The placement officer should record the make, or the name of the manufacturer who made the PLB.

PLB Model: The placement officer should record the model (or specific type) of PLB unit that was made by the manufacturer.

Ensured that the Observer's compulsory 2-way communication device tested and checked is working.

The placement officer, observer and captain should sign when they agree that the observer has a functioning PLB.

Observer must sign for and report any gifts they have received from the vessel during the trip.

The Captain and Observer must initial when they understand that observer must report any received gifts. The observer should mention any received gifts in their trip report.

Interpreter signature – If present, the interpreter should sign and acknowledge that they have read the Placement form.

Modified data fields

In line with the Observer code of Conduct ensure that the observer should not drink alcohol at any point during the trip. Observers are to sign to understand that they cannot drink alcohol from the trip start to the trip end. This includes drinking alcohol on-board other vessels encountered during the trip (carrier vessels, bunkering etc.).

Vessel Safety Check – The acronym for WCPFC was removed from the title to reflect that the check list is amended from the original WCPFC Vessel Check List guideline.

The wording was modified in the following lines

Page 1

~~Provide~~ Allow access to the bridge, communications and navigation equipment

~~Provide~~ Instruct observer on use of vessel communications equipment to receive and transmit message with the shore, Fishery Authority and other vessels.

Provide "appropriate" (added) space for the storage of observer equipment, supplies and samples.

Deleted data fields

- *Page 1*

Line 4 was repeated under line 7 in the 2014 edition. The line was removed and the numbering below edited. "Carried out a vessel safety check in the presence of the observer and Captain."

- *Back of page 1*

Line 9 on the 2014 edition under "Obligations of the vessel operator to the Observer" was repeated as line 16. **Line 16 was removed** and the lines below re-numbered.

N/A – The option to record N/A – not available from the vessel safety check list was removed. The placement officer must indicate if the item exists or not.

SPC/FFA REGIONAL OBSERVER WORKBOOK REFERENCE FORM	FORM SUP-2 for Purse Seine

Date of revision

The **date of revision** of the form was changed to Dec 2016.

There were no other changes made to this form.

SPC/FFA REGIONAL OBSERVER TRIP RECONCILIATION	FORM SUP-3

Date of revision

The **date of revision** of the form was changed to Dec 2016.

There were no other changes made to this form.

SPC/FFA REGIONAL OBSERVER ADVANCES and CLAIMS FORM	FORM SUP-4

Date of revision

The **date of revision** of the form was changed to Dec 2016.

There were no other changes made to this form.

SINGLE TAG RECOVERY FORM	PAGE	OF

REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:	DATE WHEN TAG FOUND:	YY	MM	DD

Date of revision

The **date of revision** of the form was changed to Feb 2017.

Some changes have been made to the tagging form to allow information on tags recovered from species of special interest to be recorded. For this reason **all reference to 'fish' have been removed** from the tagging form.

Length code – observers are no longer restricted to recording an UF – upper jaw to fork in tail on the tagging form. Other type of measurement can be done for turtles, birds etc. Please see the length measurement page in the PS Workbook. Record the code for the length measurement done on the tagging form.

NEW BLANK PAGES

 Attach any loose pages here (Crew list, Well Layout, Net Plans etc)

New Blank pages have been attached to the workbook to improve the paper filing of observer forms. Attach any loose pages (like the crew list etc) to this area of the workbook.

SPC/FFA REGIONAL OBSERVER WORKBOOK REFERENCE FORM	FORM SUP-2 for Purse Seine

REV MAR. 2014

TRIP DETAILS

OBSERVER NAME	TRIP START LOCATION	TRIP START DATE (YY/ MM/DD)
VESSEL NAME	TRIP END LOCATION	TRIP END DATE (YY/MM/DD)
OBSERVER TRIP ID NUMBER		

OBSERVER PROGRAMME DETAILS

Name of placement observer programme	
Name of observer's national programme	
Cross-endorsed trips: Programme Name and Trip Id Number	

SPECIAL PROJECTS

Special Projects: Name and Reference Number	
Special Projects: Name and Reference Number	

FORMS MANAGEMENT

FORMS TYPE	NAME OF FORM	How Many ?
SUP-1 (page1)	Observer Placement Meeting Record Form (pg1)	
SUP-1 (page 2)	Observer Placement Meeting Record Form (pg2)	
SUP-2	Workbook Reference Form	
PS-1 (page 1)	Purse-Seine General Information (pg1)	
PS-1 (page2)	Purse-Seine General Information (pg2)	
PS-2	Purse-Seine Daily Information	
PS-3	Purse-Seine Set Details	
PS-4	Purse-Seine Length Measurement	
PS-5	Well Transfer Reconciliation Form	
GEN-1	Vessel and Aircraft Sightings/ Fish Bunkering & Other Transfers	
GEN-1 supp	Vessel and Aircraft Sightings/ Fish Bunkering & Other Transfers	
GEN-2	Species of Special Interest - vessel interactions	
GEN-2 supp	Species of Special Interest - sightings	
GEN-3 (page 1 + page 2)	Vessel Trip Report (pg1+pg2) - **you must fill in this form**!	
GEN-4	Conversion Factors	
GEN-5	FAD/PAYAO and Floating Object Information Record	
GEN-6	Pollution Report	
SUP-3	Trip Reconciliation Form	
SUP-4	Advances and Claims Forms	
TAG	Tag Recovery Forms (single and mutliple tags)	
JOU	Journal (RECORD TOTAL NUMBER OF PAGES)	
RPT	Trip Report Submitted	Yes or No

*** Observers are not required to fill in the shaded areas below***

REV. DEC 2016

TRIP DETAILS

OBSERVER

NAME		TRIP START LOCATION	TRIP START (SHIP'S DATE AND TIME)
			YY MM DD hh mm
NATIONALITY	TRIP ID NUMBER	TRIP END LOCATION	TRIP END (SHIP'S DATE AND TIME)
			YY MM DD hh mm
VESSEL NAME		FISHING PERMIT / LICENSE No.s	VESSEL DEPARTURE PORT	VESSEL DEPARTURE DATE YY MM DD

VESSEL CHARACTERISTICS

VESSEL OWNER	COUNTRY REG. No.	IRCS	UVI	FLAG	LENGTH	M	GT	(circle one)
						F	GRT	mT

No. of SPEED BOATS	No. of OTHER ONBOARD AUXILARY BOATS	Do OTHER TENDER BOATS WORK with CATCHER Y / N	NET SKIFF ENGINE ;	MAKE / POWER / hp	VESSEL CRUISING SPEED: kts

HELICOPTER CHARACTERISTICS	MAKE	MODEL	REGISTRATION NUMBER	EFFECTIVE RANGE KM NM	COLOUR	No. of VESSELS that the HELICOPTER SERVICES: (including this vessel)

FISHING GEAR

	MAKE	MODEL		MAKE	MODEL	BRAIL 1	TYPE		mT	LIVE FISH BRAIL:	Y / N
POWER BLOCK:			PURSE WINCH:								

NET - MAX. DEPTH:	M Y F	NET - MAX. LENGTH:	Metres Yards Fathoms	NET - No. of STRIPS	NET - MESH SIZE (of main body) CM IN	BRAIL 2	TYPE		mT	LIVE FISH BRAIL:	Y / N

BRAIL TYPE CODES	LH - LONG HANDLE HF - HEAVY FRAME SP - SPANISH TYPE JP - JAPANESE TYPE	BRAIL CHANGE COMMENTS	BRAIL 3	TYPE		mT	LIVE FISH BRAIL:	Y / N

ELECTRONICS

			USAGE			USAGE
	GPS	Y / N		DEPTH SOUNDER	Y / N	
	TRACK PLOTTER	Y / N		SST GAUGE	Y / N	

ADV in TEC.		USAGE	MAKE	MODEL	COMMENTS
	EQUIPMENT TYPE	Y / N			
	EQUIPMENT TYPE	Y / N			
	BIRD RADAR	Y / N			
	SONAR	Y / N			
	GPS BUOYS	Y / N			
	ECHO SOUNDING BUOY	Y / N			
	NET DEPTH INSTRUMENTATION	Y / N			
	DOPPLER CURRENT METER	Y / N			
	AIS	Y / N			
VMS SYSTEMS	1	Y / N			
	2	Y / N			

COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone #	MOBILE/ CELL PHONE:	Y / N	Phone #
	OTHER	FACSIMILE:	Y / N	Fax #			

INFORMATION SERVICES	WEATHER	WEATHER FAX:	Y / N	WEATHER SATELLITE MONITOR:	Y / N	EMAIL:	Y / N	Email address:
	WEBSITES	PHYTOPLANTION www.	Y / N	SST www.	Y / N		SEA HEIGHT www.	Y / N

OBSERVATIONS / COMMENTS / OTHER GEAR / UNUSUAL USE OF GEAR
(write brief notes here and a full description in trip report)

USAGE CODES

ALL	- used all the time in fishing
TRA	- used only in transit
OIF	- used often in fishing
SIF	- used sometimes in fishing
RAR	- rarely used
BRO	- broken now but used normally
NOL	- no longer ever used
OTH	- other please specify

N.B. - fishing can be searching, setting, retrieving, deploying, investigating, etc.

REV. DEC. 2016	N.B.: Wherever there is a Y / N (yes or no) option for an item, either the "Y" or the "N" must be circled

TRIP DETAILS	A complete fishing trip is defined as 'from one full or partial unloading to the next full or partial unloading'. If observer trip does not cover a normal complete fishing trip explain reasons why in trip report - also see "*Partial trips*" notes, below.

OBSERVER

NAME and NATIONALITY	First and family names must be in full and in correct order (e.g. "John Masa" not "Masa, John"). Nationality as passport.
TRIP ID NO.	Print number issued by the authority sending you on this trip. (E.g.: John H. Masa, on his third trip in 1996 might be issued Trip ID Number: "JHM 96-03").
TRIP START / **TRIP END** (SHIP'S DATE and TIME)	} Print date using "year year/ month month / day day" format. } Print time using 24 hour "hour hour : minute minute" format. (e.g. Print five past one on the afternoon on 3rd of January, 1996 as "96/01/03 - 13:05"). **USE SHIP'S TIME (and DATE)**
TRIP START LOCATION / **TRIP END LOCATION / VESSEL DEPARTURE PORT**: Record in all three boxes even if the same port.	
Partial trips	N.B.:Observer trip officially starts and ends only when the vessel on which the catch is actually observed is boarded and disembarked. If boat met at sea "Trip Start Date and Time" is day of transfer from transit vessel to observed boat. "Trip Start Location" is "At sea". If transferred off host vessel to another to return to port "Trip End Date and Time" is day of transfer. Trip End Location is "At sea". In each case 'at sea' should be followed by a position in degrees and minutes (dd^{0}mm') only.
Multiple trips	- If observing catch on 2 (or more) boats, each new observed boat must be a new trip with separate observer trip ID No. and new forms.
VESSEL NAME	Full name with no abbreviations. E.g.: a vessel with the name "Captain Paul John Smith" should not be abbreviated to Capt. P.J. Smith.
FISHING PERMIT / LICENSE NUMBERS	Record all numbers of current fishing licenses on board. This may include more than one license. There should be at least one on board if the vessel fishes in any EEZ waters. Note country the license comes from in brackets alongside number. E.g.: K3453789H (Kiribati).

VESSEL CHARACTERISTICS

VESSEL OWNER	Name of Company or Person who owns the vessel. This should be in the Registration Papers.
COUNTRY REGISTRATION NUMBER	Number given by the Country (Flag State) to where the vessel is registered. This can be found in the registration papers of the vessel. Do not confuse this with FFA Regional Registration Number.
VESSEL FLAG	Country where vessel is registered. E.g.: Japanese purse seiners are usually registered in Japan so their Flag State is Japan.
IRCS (*international radio call sign*)	Series of numbers and letters painted on the side of the boat, must be either in black lettering on a white background or white on black.
UVI - Unique Vessel Identifier	WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear on certificates before 2016. Generally the UVI is the International Marine Organistion number or may be the Lloyd's Register (LR) no.
NO OF SPEED BOATS	Number of speed boats. Don't count tow boats, or a boat that looks like a speed boat but is only used as a tow boat.
NO OF AUXILIARY BOATS	Count only the tow boats and light boats that the vessel keeps **onboard**. Don't count a speed boat if it is already counted.
Do OTHER TENDER BOATS WORK with CATCHER ?	Boats (ranger boats, light boats, reefers, etc.) not carried on board but work with the catcher boat as a regular part of the fishing strategy. N.B.: do not include such boats, operating as light boats, in the count of "Auxiliary boats onboard". Describe operations in trip report.
NET SKIFF ENGINE MAKE / POWER	Brand of engine used in net skiff and the power (horsepower - hp) of the engine. Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp).

	LENGTH	**GROSS TONNAGE**
	The place to find vessel's length overall (LOA) and gross tonnage is on registration papers. Be alert for any signs that suggest there has been a change to length and/or gross tonnage. Note in report.	

VESSEL CRUISING SPEED	Ask the captain for the cruising speed of the vessel (not top speed).
HELICOPTER MAKE/MODEL	Brand name and model of the helicopter. Ask the pilot if you need to.
REGISTRATION NO.	Registration No. of helicopter. Written on side or pontoons or ask pilot.
EFFECTIVE RANGE	Distance helicopter can go and return safely, without running out of fuel.
COLOUR of HELIC	Main colour or colours of the helicopter

FISHING GEAR

POWER BLOCK - Make - Model	Brand of main power block on the vessel. The model of the block.
PURSE WINCH (Make, Model)	Brand of main purse winch on the vessel. The model of the winch.

If these cannot be seen, ask the captain, engineer or winch driver. Only fill in this information if sure it is correct. If unsure, record the information in your written report only, with a note.

MAX. NET DEPTH	Deepest depth of the net wall when it has been set.
MAX. NET LENGTH	The length of the net when it has been set.

M = Metres; Y = Yards; F = Fathoms. Make sure you circle the correct unit used on the vessel for net measurements.

NET - No OF STRIPS	Each net is made up of strips of netting sewn together to create the depth of the net (*e.g.: if the depth of net is to be 300 metres then 30 strips of 10 metre wide net are required to make the net depth* (adding strips deepens the net, removing strips makes it shallower). How many of these strips make up the net ? Ask the deck boss or engineer for this information.
NET MESH SIZE OF MAIN SECTION	The mesh is a different size in different parts of the net. Record the mesh size of the main body of the net. Make sure the units are recorded in "CM" (centimetres) or "IN" (inches). Ask the Deck Boss.
BRAIL: TYPE, CAPACITY, LIVE FISH BRAIL	Starting with Brail 1 (the brail with the largest capacity), use the new **brail type codes** to indicate what type of brail it was (see notes and drawing at the start of the workbook - 'Changes to PS workbook'). Then record the **capacity** of the brail in **metric tonnes**. This will help estimate the total catch. Remember to identiy the same brail (brail 1) in the same way (brail 1) on the PS-4 form. If there is a second type of brail record the information for Brail 2. If the vessel intentionally brails live fish onboard with any of the brails and processes these tuna differently mark Yes.
Brail change comments	Record any changes to brail capacity (new panel inserted etc) by recording a new brail number (i.e. Brail 2 or Brail 3) and then recording all the brail details and specifiying the type, new capacity and whether the brail is used for live fish brailing. *Provide brief comments* on the brail change (like date, reason etc) in this data field.

ELECTRONICS-YES / NO	If vessel has a device, circle "Y"(yes); if it does not have the device circle "N" (no). You must circle "Y" or "N" for every device listed.
USAGE	use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used.
NEW TECH :	Only record new types of equip. or major upgrades to technology here. Not to be used to record old or unlisted equip. i.e. radio. Give a full description of any new equipment or new capability (through upgrades technology) in the journal etc.
AIS	Automatic Identification System: Transponding unit that will be attached to VHF Antenna, but maybe located inside.
MAKE AND MODEL	Name of company and model (name or number) of each device listed. Don't mix up make and model. *E.g.: for a "JRC, JMA - 7790": "JRC" is the brand (make); "JMA - 7790" is the model.*
VMS System:	Record the manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model of the MTU unit.
INFORMATION SERVICES	Vessels may access "Fishery information services" to get instant information on oceanographic features.

OBSERVATIONS / COMMENTS, OTHER GEAR, UNUSUAL USE of GEAR

Make notes if there is anything special about this boat compared to others. Comment if equipment is not working, not used or used in unusual way.

Describe fishing gear if different to equipment you see on other purse seiners and record make, model, special characteristics and usage of new gear.

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER

TOTAL POSSIBLE FISH STORAGE CAPACITY (in metric tonnes): ⟶ [ ] mT

CREW	NAME	YRS.EXP	NATIONALITY	COMMENTS
CAPTAIN				License No.
MASTER				License No.
NAVIGATOR				
MATE				
CHIEF ENGINEER				
ASSISTANT ENGINEER				
DECK BOSS				
COOK				
HELICOPTER PILOT				
HELICOPTER MECHANIC				
RADIO OPERATOR				
SKIFF MAN				
WINCH MAN				
TRANSLATOR				

CREW	NAME	YRS.EXP	NATIONALITY	CREW	NAME	YRS.EXP	NATIONALITY

TOTAL NUMBER OF CREW (include Captain and officers): ⟶ [ ]

WASTE DISPOSAL SYSTEM ?	Y / N
DESCRIBE waste disposal system especially for fish offal, but also other waste.	

SAFETY EQUIPMENT

LIFE JACKET	PROVIDED FOR OBSERVER:	Y / N / O	Number of **LIFE BUOYS** / **LIFE RINGS**
AVAILABILITY (circle one)	SUITABLE SIZE:	Y / N	
	Easy Moderate Hard		

LIFE RAFTS Number of people and Inspection due date(D) or last date of inspection (L)	1	2	3	4
	Number	Number	Number.	Number
	YY / MM (L or D)	YY / MM (L or D)	YY / MM (L or D)	YY / MM (L or D)

EPIRB (406)	Total No.	No. with Exp. Batteries	EPIRB (other)	Total No.	No. with Exp. Batteries

COMMENTS or DRAWINGS of WELL PATTERN

REV. DEC 2016

OBSERVER NAME	Print your name in full. Put your first name, or Christian name, first and your last name, or surname, last.
VESSEL NAME	Print the vessel's name in full as stated on its fishing licence. Don't use any abbreviations.
OBSERVER TRIP ID NO.	Fill in your trip identification number as supplied by your programme before departure - exactly as on PS-1 (pg.1) and elsewhere.

CREW

NAME	**(for listed specialist positions)**	For each of the listed positions enter the name of the crew person who works in this position. This information should be available on the crew list that must be given to immigration when a vessel visits port. Record first name first and last name last. Be certain of the spelling. If a person holds more than one position write "same as (the other position they hold)". E.g.: if Joe Flyer is both helicopter pilot and helicopter mechanic, write "Joe Flyer" next to "Helicopter Pilot" and write "same as helicopter pilot" next to "helicopter mechanic". Another common double position is the Captain and Navigator/Master. If the vessel does not have anyone in the position indicated write "Vacant" in the "Name" column. If the vessel has a specialist position that is not listed here try to squeeze the name of that position followed by a dash (-) and the name of the person holding the position in one of the "Crew" rows below. Be sure to describe this position in the written trip report.
	(for non-specialist positions)	For each crew mewmber not working in a specialist position correctly record the name, number of years of experience and the nationality in the lower crew sections.
YEARS EXPERIENCE (YRS.EXP)		Record the number of years experience the crew member or officer has **in this position**. E.g.: if the Captain has been fishing on purse seine vessels for 20 years but has only been a Fishing Captain on purse seine vessels for five years write in "5".
NATIONALITY		Nationality should be available on the crew list. Pay special attention to the nationality of any Pacific Islanders amongst the crew.
COMMENTS		Record any information about the crew in this column. Any relevant information may be useful. Examples could include: name of boat previously worked; name of Fishery College attended; famous fishing family connection; etc.
License No.s (Captain / Master / Navigator)		To be recorded if readily available but not necessary if obtaining it will in any way hinder other observer activities on board. If licence is not available then try to obtain other identification document types (e.g. passport) and their document numbers.
TOTAL NUMBER OF CREW (include Captain and officers)		Add up all the crew. Include the Captain, listed positions and other crew. But be very careful not to count any of the crew twice. This is an easy mistake to make in situations where one crew person has two different positions. Be Careful !
WASTE DISPOSAL SYSTEM		Circle "Y" or "N" (yes or no) to show if the vessel has equipment and / or follows standard procedures to manage fish offal or other waste. Examplesof equipment of equipment include incinerators, crushers, shredders, compacters, balers, meal plants, etc. Example of procedures might be keeping all plastic waste until the end of the trip. If present describe how these are used and how effectively they are used in your trip report. (i.e., what pollution control processes does the vessel have?)

SAFETY EQUIPMENT   (obtain as much information as possible

LIFE JACKET	If observer has their own (or a fisheries) life jacket (LJ), the "O" must be circled. Otherwise circle the "Y" or "N" to show if the vessel showed the observer a L J that they could use in an emergency. Also circle the "Y" or "N" to show if the LJ the vessel offered was a suitable size. Circle "easy" if the allocated L.J was easily available, "moderate" ift not so easy to get to, or "hard" if it would be very hard to find in an emergency.
EPIRBS LIFEBUOYS / LIFE RINGS	Count all EPIRBs together (with or without expired batteries). Then count only those with expired batteries. Only record information for EPIRBs that are easily accessible (not found in liferaft etc). Count all lifebuoys and life rings that can be found
LIFE RAFTS	Find info on labels on life-rafts. If, **after a careful check**, dates are not found, record "ND" for 'dates not displayed'.

OBSERVER PROGRAMME:	**SPC/FFA REGIONAL PURSE SEINE GENERAL INFORMATION**	**FORM PS-1** (pg 1)

REV. DEC 2016

TRIP DETAILS

OBSERVER

NAME	TRIP START LOCATION	TRIP START (SHIP'S DATE AND TIME) YY MM DD hh mm
NATIONALITY	TRIP ID NUMBER	TRIP END LOCATION	TRIP END (SHIP'S DATE AND TIME) YY MM DD hh mm

VESSEL NAME	FISHING PERMIT / LICENSE No.s	VESSEL DEPARTURE PORT	VESSEL DEPARTURE DATE YY MM DD

VESSEL CHARACTERISTICS

VESSEL OWNER	COUNTRY REG. No.	IRCS	UVI	FLAG	LENGTH	M	GT	(circle one)
						F	GRT	mT

No. of SPEED BOATS	No. of OTHER ONBOARD AUXILARY BOATS	Do OTHER TENDER BOATS WORK with CATCHER Y / N	NET SKIFF ENGINE;	MAKE / POWER / hp	VESSEL CRUISING SPEED kts

HELICOPTER CHARACTERISTICS	MAKE	MODEL	REGISTRATION NUMBER	EFFECTIVE RANGE KM NM	COLOUR	No. of VESSELS that the HELICOPTER SERVICES: (including this vessel)

FISHING GEAR

	MAKE	MODEL		MAKE	MODEL	BRAIL 1	TYPE	mT	LIVE FISH BRAIL:	Y N
POWER BLOCK:			PURSE WINCH:							
NET - MAX. DEPTH:	M Y F	NET - MAX. LENGTH:	Metres Yards Fathoms	NET - No. of STRIPS	NET - MESH SIZE (of main body) CM IN	BRAIL 2	TYPE	mT	LIVE FISH BRAIL:	Y N
BRAIL TYPE CODES	LH - LONG HANDLE HF - HEAVY FRAME SP - SPANISH TYPE JP - JAPANESE TYPE		BRAIL CHANGE COMMENTS			BRAIL 3	TYPE	mT	LIVE FISH BRAIL:	Y N

ELECTRONICS

		USAGE			USAGE	
GPS	Y / N		DEPTH SOUNDER	Y / N		
TRACK PLOTTER	Y / N		SST GAUGE	Y / N		

ADV in TEC.		USAGE	MAKE	MODEL	COMMENTS
	EQUIPMENT TYPE	Y / N			
	EQUIPMENT TYPE	Y / N			
BIRD RADAR		Y / N			
SONAR		Y / N			
GPS BUOYS		Y / N			
ECHO SOUNDING BUOY		Y / N			
NET DEPTH INSTRUMENTATION		Y / N			
DOPPLER CURRENT METER		Y / N			
AIS		Y / N			
VMS SYSTEMS	1	Y / N			
	2	Y / N			

COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone #	MOBILE/ CELL PHONE:	Y / N	Phone #
	OTHER	FACSIMILE:	Y / N	Fax #			

INFORMATION SERVICES	WEATHER	WEATHER FAX:	Y / N	WEATHER SATELLITE MONITOR:	Y / N	EMAIL:	Y / N	Email address:
	WEBSITES	PHYTOPLANTION Y / N		SST Y / N		SEA HEIGHT Y / N		
		www.		www.		www.		

OBSERVATIONS / COMMENTS / OTHER GEAR / UNUSUAL USE OF GEAR
(write brief notes here and a full description in trip report)

USAGE CODES

ALL	- used all the time in fishing
TRA	- used only in transit
OIF	- used often in fishing
SIF	- used sometimes in fishing
RAR	- rarely used
BRO	- broken now but used normally
NOL	- no longer ever used
OTH	- other please specify

N.B. - fishing can be searching, setting, retrieving, deploying, investigating, etc.

REV. DEC. 2016	N.B.: Wherever there is a Y / N (yes or no) option for an item, either the "Y" or the "N" must be circled

	A complete fishing trip is defined as 'from one full or partial unloading to the next full or partial unloading'.
TRIP DETAILS	If observer trip does not cover a normal complete fishing trip explain reasons why in trip report - also see "*Partial trips*" notes, below.

OBSERVER

NAME and NATIONALITY	First and family names must be in full and in correct order (e.g. "John Masa" not "Masa, John"). Nationality as passport.
TRIP ID NO.	Print number issued by the authority sending you on this trip. (E.g.: John H. Masa, on his third trip in 1996 might be issued Trip ID Number: "JHM 96-03").
TRIP START / **TRIP END** (SHIP'S DATE and TIME)	} Print date using "year year/ month month / day day" format. } Print time using 24 hour "hour hour : minute minute" format. (e.g. Print five past one on the afternoon on 3rd of January, 1996 as "96/01/03 - 13:05"). **USE SHIP'S TIME (and DATE)**
TRIP START LOCATION	/ **TRIP END LOCATION / VESSEL DEPARTURE PORT**: Record in all three boxes even if the same port.
Partial trips	N.B.:Observer trip officially starts and ends only when the vessel on which the catch is actually observed is boarded and disembarked. If boat met at sea "Trip Start Date and Time" is day of transfer from transit vessel to observed boat. "Trip Start Location" is "At sea". If transferred off host vessel to another to return to port "Trip End Date and Time" is day of transfer. Trip End Location is "At sea". In each case 'at sea' should be followed by a position in degrees and minutes (dd^{0}mm') only.
Multiple trips	- If observing catch on 2 (or more) boats, each new observed boat must be a new trip with separate observer trip ID No. and new forms.
VESSEL NAME	Full name with no abbreviations. E.g.: a vessel with the name "Captain Paul John Smith" should not be abbreviated to Capt. P.J. Smith.
FISHING PERMIT / LICENSE NUMBERS	Record all numbers of current fishing licenses on board. This may include more than one license. There should be at least one on board if the vessel fishes in any EEZ waters. Note country the license comes from in brackets alongside number. E.g.: K3453789H (Kiribati).

VESSEL CHARACTERISTICS

VESSEL OWNER	Name of Company or Person who owns the vessel. This should be in the Registration Papers.		
COUNTRY REGISTRATION NUMBER	Number given by the Country (Flag State) to where the vessel is registered. This can be found in the registration papers of the vessel. Do not confuse this with FFA Regional Registration Number.		
VESSEL FLAG	Country where vessel is registered. E.g.: Japanese purse seiners are usually registered in Japan so their Flag State is Japan.		
IRCS (*international radio call sign*)	Series of numbers and letters painted on the side of the boat, must be either in black lettering on a white background or white on black.		
UVI - Unique Vessel Identifier	WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear on certificates before 2016. Generally the UVI is the International Marine Organistion number or may be the Lloyd's Register (LR) no.		
NO OF SPEED BOATS	Number of speed boats. Don't count tow boats, or a boat that looks like a speed boat but is only used as a tow boat.		
NO OF AUXILIARY BOATS	Count only the tow boats and light boats that the vessel keeps **onboard**. Don't count a speed boat if it is already counted.		
Do OTHER TENDER BOATS WORK with CATCHER ?	Boats (ranger boats, light boats, reefers, etc.) not carried on board but work with the catcher boat as a regular part of the fishing strategy. N.B.: do not include such boats, operating as light boats, in the count of "Auxiliary boats onboard". Describe operations in trip report.		
NET SKIFF ENGINE MAKE / POWER	Brand of engine used in net skiff and the power (horsepower - hp) of the engine. Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp)	**LENGTH**	**GROSS TONNAGE**
VESSEL CRUISING SPEED	Ask the captain for the cruising speed of the vessel (not top speed).	The place to find vessel's length overall (LOA) and gross tonnage is on registration papers. Be alert for any signs that suggest there has been a change to length and/or gross tonnage. Note in report.	
HELICOPTER MAKE/MODEL	Brand name and model of the helicopter. Ask the pilot if you need to.		
REGISTRATION NO.	Registration No. of helicopter. Written on side or pontoons or ask pilot.		
EFFECTIVE RANGE	Distance helicopter can go and return safely, without running out of fuel.		
COLOUR of HELIC	Main colour or colours of the helicopter		

FISHING GEAR

POWER BLOCK - Make - Model	Brand of main power block on the vessel. The model of the block.	If these cannot be seen, ask the captain, engineer or winch driver. Only fill in this information if sure it is correct. If unsure, record the information in your written report only, with a note.
PURSE WINCH (Make, Model)	Brand of main purse winch on the vessel. The model of the winch.	
MAX. NET DEPTH	Deepest depth of the net wall when it has been set.	M = Metres; Y = Yards; F = Fathoms. Make sure you circle the correct unit used on the vessel for net measurements.
MAX. NET LENGTH	The length of the net when it has been set.	
NET - No OF STRIPS	Each net is made up of strips of netting sewn together to create the depth of the net (*e.g.: if the depth of net is to be 300 metres then 30 strips of 10 metre wide net are required to make the net depth* (adding strips deepens the net, removing strips makes it shallower). How many of these strips make up the net ? Ask the deck boss or engineer for this information.	
NET MESH SIZE OF MAIN SECTION	The mesh is a different size in different parts of the net. Record the mesh size of the main body of the net. Make sure the units are recorded in "CM" (centimetres) or "IN" (inches). Ask the Deck Boss.	
BRAIL: TYPE, CAPACITY, LIVE FISH BRAIL	Starting with Brail 1 (the brail with the largest capacity), use the new **brail type codes** to indicate what type of brail it was (see notes and drawing at the start of the workbook - 'Changes to PS workbook'). Then underline record the **capacity** of the brail in **metric tonnes.** This will help estimate the total catch. Remember to identiy the same brail (brail 1) in the same way (brail 1) on the PS-4 form. If there is a second type of brail record the information for Brail 2. If the vessel intentionally brails live fish onboard with any of the brails and processes these tuna differently mark Yes.	
Brail change comments	Record any changes to brail capactity (new panel inserted etc) by recording a new brail number (i.e. Brail 2 or Brail 3) and then recording all the brail details and specifiying the type, new capacity and whether the brail is used for live fish brailing. ***Provide brief comments*** on the brail change (like date, reason etc) in this data field.	

ELECTRONICS-YES / NO

ELECTRONICS-YES / NO	If vessel has a device, circle "Y"(yes); if it does not have the device circle "N" (no). You must circle "Y" or "N" for every device listed.
USAGE	use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used.
NEW TECH :	Only record new types of equip. or major upgrades to technology here. Not to be used to record old or unlisted equip. i.e. radio. Give a full description of any new equipment or new capability (through upgrades technology) in the journal etc.
AIS	Automatic Identification System: Transponding unit that will be attached to VHF Antenna, but maybe located inside.
MAKE AND MODEL	Name of company and model (name or number) of each device listed. Don't mix up make and model. *E.g.: for a "JRC, JMA - 7790": "JRC" is the brand (make); "JMA - 7790" is the model.*
VMS System:	Record the manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model of the MTU unit.
INFORMATION SERVICES	Vessels may access "Fishery information services" to get instant information on oceanographic features.

OBSERVATIONS / COMMENTS, OTHER GEAR, UNUSUAL USE of GEAR

Make notes if there is anything special about this boat compared to others. Comment if equipment is not working, not used or used in unusual way.

Describe fishing gear if different to equipment you see on other purse seiners and record make, model, special characteristics and usage of new gear.

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER

TOTAL POSSIBLE FISH STORAGE CAPACITY (in metric tonnes): ⟶ [ ] mT

CREW	NAME	YRS.EXP	NATIONALITY	COMMENTS
CAPTAIN				License No.
MASTER				License No.
NAVIGATOR				
MATE				
CHIEF ENGINEER				
ASSISTANT ENGINEER				
DECK BOSS				
COOK				
HELICOPTER PILOT				
HELICOPTER MECHANIC				
RADIO OPERATOR				
SKIFF MAN				
WINCH MAN				
TRANSLATOR				

CREW	NAME	YRS.EXP	NATIONALITY	CREW	NAME	YRS.EXP	NATIONALITY

TOTAL NUMBER OF CREW (include Captain and officers): ⟶ [ ]

WASTE DISPOSAL SYSTEM ?	Y / N
DESCRIBE waste disposal system especially for fish offal, but also other waste.	

SAFETY EQUIPMENT

LIFE JACKET	PROVIDED FOR OBSERVER:	Y / N / O	Number of LIFE BUOYS / LIFE RINGS
AVAILABILITY (circle one)	SUITABLE SIZE:	Y / N	
	Easy Moderate Hard		

LIFE RAFTS Number of people and Inspection due date(D) or last date of inspection (L)	1	2	3	4
	Number	Number	Number.	Number
	YY / MM (L or D)	YY / MM (L or D)	YY / MM (L or D)	YY / MM (L or D)

EPIRB (406)	Total No.	No. with Exp. Batteries	EPIRB (other)	Total No.	No. with Exp. Batteries

COMMENTS or DRAWINGS of WELL PATTERN

REV. DEC 2016

OBSERVER NAME	Print your name in full. Put your first name, or Christian name, first and ly our last name, or surname, last.
VESSEL NAME	Print the vessel's name in full as stated on its fishing licence. Don't use any abbreviations.
OBSERVER TRIP ID NO.	Fill in your trip identification number as supplied by your programme before departure - exactly as on PS-1 (pg.1) and elsewhere.

CREW

NAME (for listed specialist positions)	For each of the listed positions enter the name of the crew person who works in this position. This information should be available on the crew list that must be given to immigration when a vessel visits port. Record first name first and last name last. Be certain of the spelling. If a person holds more than one position write "same as (the other position they hold)". E.g.: if Joe Flyer is both helicopter pilot and helicopter mechanic, write "Joe Flyer" next to "Helicopter Pilot" and write "same as helicopter pilot" next to "helicopter mechanic". Another common double position is the Captain and Navigator/Master. If the vessel does not have any one in the position indicated write "Vacant" in the "Name" column. If the vessel has a specialist position that is not listed here try to squeeze the name of that position followed by a dash (-) and the name of the person holding the position in one of the "Crew" rows below. Be sure to describe this position in the written trip report.
(for non-specialist positions)	For each crew mewmber not working in a specialist position correctly record the name, number of years of experience and the nationality in the lower crew sections.
YEARS EXPERIENCE (YRS.EXP)	Record the number of years experience the crew member or officer has **in this position**. E.g.: if the Captain has been fishing on purse seine vessels for 20 years but has only been a Fishing Captain on purse seine vessels for five years write in "5".
NATIONALITY	Nationality should be available on the crew list. Pay special attention to the nationality of any Pacific Islanders amongst the crew.
COMMENTS	Record any information about the crew in this column. Any relevant information may be useful. Examples could include: name of boat previously worked; name of Fishery College attended; famous fishing family connection; etc.
License No.s (Captain / Master / Navigator)	To be recorded if readily available but not necessary if obtaining it will in any way hinder other observer activities on board. If licence is not available then try to obtain other identification document types (e.g. passport) and their document numbers.
TOTAL NUMBER OF CREW (include Captain and officers)	Add up all the crew. Include the Captain, listed positions and other crew. But be very careful not to count any of the crew twice. This is an easy mistake to make in situations where one crew person has two different positions. Be Careful !
WASTE DISPOSAL SYSTEM	Circle "Y" or "N" (yes or no) to show if the vessel has equipment and / or follows standard procedures to manage fish offal or other waste. Examples of equipment of equipment include incinerators, crushers, shredders, compacters, balers, meal plants, etc. Example of procedures might be keeping all plastic waste until the end of the trip. If present describe how these are used and how effectively they are used in your trip report. (i.e., what pollution control processes does the vessel have?)

SAFETY EQUIPMENT (obtain as much information as possible

LIFE JACKET	If observer has their own (or a fisheries) life jacket (LJ), the "O" must be circled. Otherwise circle the "Y" or "N" to show if the vessel showed the observer a LJ that they could use in an emergency. Also circle the "Y" or "N" to show if the LJ the vessel offered was a suitable size. Circle "easy" if the allocated L.J was easily available, "moderate" ift not so easy to get to, or "hard" if it would be very hard to find in an emergency.
EPIRBS **LIFEBUOYS / LIFE RINGS**	Count all EPIRBs together (with or without expired batteries). Then count only those with expired batteries. Only record information for EPIRBs that are easily accessible (not found in liferaft etc). Count all lifebuoys and life rings that can be found
LIFE RAFTS	Find info on labels on life-rafts. If, **after a careful check**, dates are not found, record "ND" for 'dates not displayed'.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts)	(°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1   Set
2   Searching
3   Transit
4   No fishing - Breakdown
5   No fishing - Bad weather
6   In port - please specify
7   Net cleaning set
8   Investigate free school
9   Investigate floating object
10D   Deploy - raft, FAD or payao
10R   Retrieve - raft, FAD or payao
11   Drifting at day's end
12   Drifting with floating object
13   Other reason (specify)
14   Drifting -With fish aggregatting lights
15R   Retrieve radio buoy
15D   Deploy radio buoy
16   Transhipping or bunkering
17   Servicing FAD or floating object
18   Drifting - No fishing
H1   *Helicoptor takes off to search*
H2   *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1   Seen from vessel
2   Seen from helicopter
3   Marked with beacon
4   Bird radar
5   Sonar / depth sounder
6   Info. from other vessel
7   Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1   Unassociated } Free schools
2   Feeding on Baitfish
3   Drifting log, debris or dead animal
4   Drifting raft, FAD or payao
5   Anchored raft, FAD or payao
6   Live whale
7   Live whale shark
8   Other (please specify)
9   No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/ / **6**	Tally / No.	Tally / No.	Tally / No.	Tally / No.	Tally / No.	**YES NO** (circle one) / **Journal** pg #

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Page of : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
  (e.g. if there are 36 pages then the first page will be " Page 1 of 36 ", the fourth page,
  " Page 4 of 36 " and the last page will be " Page 36 of 36 ").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

Start of day: At start of each day, date and time on ship's clock (and observer's watch) must be matched to the UTC time and date as read from the GPS. **Always record date as YY/MM/DD.*

Ship's Date and Ship's Time: is the date and time used by crew on board normally. The observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date and time when it is used incorrectly, as it often is.
  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and Set No . - from PS-3) - for all activity code "1" write the set No. before ther comments in this field. Get "set No." from the PS-3 that must be used every set.

Activity and Helicopter Codes : The activity codes are shown on the front.
  Use only one code per entry. If it seems that two different codes could be used,
  record only the most important one and note the other in comments column.
  Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
  code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes, otherwise the school association (tuna) and how detected code fields must be dashed !
Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

Floating object and school sightings : Through each day try to keep count of every floating objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
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Tally : Mark with a stroke every time you sight something (see example on front)
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How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
  N.B. : usually a depth sounder or sonar is only used to investigate an already found object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

School Association (*tuna*): Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

#	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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3												
4												
5												
6												
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20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

| 1 | Unassociated |
| 2 | Feeding on Baitfish |

} Free schools

3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY	**Journal**
Example /N// **6**	Tally	Tally	Tally	Tally	Tally	**YES NO** *(circle one)*	
	No.	No.	No.	No.	No.		pg #

Observer Name and *Vessel Name* : Always print each of these names out **in full**
(e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
(e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
Be sure to record all activities. Record as often as necessary during the day.
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Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
minutes to three decimal places, which is usually as it is displayed on a GPS.
N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
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(for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
Use the chart supplied or the chart of the vessel to work this out.
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Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
(e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
Judge this yourself. A guide is the wind. If it has been blowing awhile then
0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
and anything over 40 kts is usually very rough, however not always so.

Comments (and *Set No* *. - from PS-3)* - for all activity code "1" write the set No. before ther
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Tally : Mark with a stroke every time you sight something (see example on front)
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and time when it is used incorrectly, as it often is.
Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date
is sometimes different from Ship's date.
Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
Please record every activity change throughout the day. There may be many. Note that, except
for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
- if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
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activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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HOW DETECTED

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"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
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3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
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1 } 2 } Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** **Journal**
/||// **6**	No.	No.	No.	No.	No.	*(circle one)* p g #

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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} Free schools

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Example /||/ / **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** *(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

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from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
  N.B. : usually a depth sounder or sonar is only used to investigate an already found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targeted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1 Set
2 Searching
3 Transit
4 No fishing - Breakdown
5 No fishing - Bad weather
6 In port - please specify
7 Net cleaning set
8 Investigate free school
9 Investigate floating object
10D Deploy - raft, FAD or payao
10R Retrieve - raft, FAD or payao
11 Drifting at day's end
12 Drifting with floating object
13 Other reason (specify)
14 Drifting -With fish aggregatting lights
15R Retrieve radio buoy
15D Deploy radio buoy
16 Transhipping or bunkering
17 Servicing FAD or floating object
18 Drifting - No fishing
H1 *Helicoptor takes off to search*
H2 *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1 Seen from vessel
2 Seen from helicopter
3 Marked with beacon
4 Bird radar
5 Sonar / depth sounder
6 Info. from other vessel
7 Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated }
2 Feeding on Baitfish } Free schools
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** *(circle one)*
////// **6**	No.	No.	No.	No.	No.	**Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and **Set No** *. - from PS-3)* - for all activity code "1" write the set No. before ther
  comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating
objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
   Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there
was no incident for the day circle **No**.

*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
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  " Page 4 of 36 " and the last page will be " Page 36 of 36 ").

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Ship's Date and Ship's Time: is the date and time used by crew on board normally. The
observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date
and time when it is used incorrectly, as it often is.
  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date
is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
 Please record every activity change throughout the day. There may be many. Note that, except
for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (tuna) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
 - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (named) vessel, arrive
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts)	(°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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12													
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15													
16													
17													
18													
19													
20													
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22													
23													

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
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"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish	} Free schools
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**Journal**
/||/ / **6**	No.	No.	No.	No.	No.	**YES NO** *(circle one)* pg #

OBSERVER'S DAILY LOG

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  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set	If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record
2	Searching	
3	Transit	
4	No fishing - Breakdown	
5	No fishing - Bad weather	
6	In port - please specify	
7	Net cleaning set	
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H1	*Helicoptor takes off to search*	
H2	*Helicopter returned from search*	

HOW DETECTED

1	Seen from vessel	"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on
2	Seen from helicopter	
3	Marked with beacon	
4	Bird radar	
5	Sonar / depth sounder	
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7	Anchored FAD / payao (recorded)	

SCHOOL ASSOCIATION (tuna)

1	Unassociated } Free schools
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
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Example	Tally	Tally	Tally	Tally	Tally	**YES NO**
⟍⟋⟍⟋⟋ **6**	No.	No.	No.	No.	No.	*(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

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fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
 Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
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  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
9												
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22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||// **6**	Tally	Tally	Tally	Tally	Tally	**YES NO** *(circle one)* **Journal** pg #
	No.	No.	No.	No.	No.	

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
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Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
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                  (for example "05°27.985' S, 152°28.239' W")

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  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°):   Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.
Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.
Comments (and Set No . - from PS-3) - for all activity code "1" write the set No. before ther comments in this field. Get "set No." from the PS-3 that must be used every set.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
  Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
Us **e 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

Floating object and school sightings : Through each day try to keep count of every floating objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
  Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

How Detected : Use this code to best show how investigated tuna or object was found.
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  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
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Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targeted are with floating object, animal, feeding on baitfish, unassociated.
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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START OF DAY

SHIP's DATE	SHIP's TIME
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ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
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4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school)	(with school)	Free floating objects (no anchor) (with NO school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/ / 6	Tally _No._	Tally _No._	Tally _No._	Tally _No._	Tally _No._	**YES NO** *(circle one)* **Journal** pg #

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

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Example /\\\|/ **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** *(circle one)*	pg #

OBSERVER'S DAILY LOG

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DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts)	(°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1													
2													
3													
4													
5			If FAD involved be sure											
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17			"Seen from helicopter"											
18													
19													
20													
21													
22													
23													

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1 Set
2 Searching
3 Transit
4 No fishing - Breakdown
5 No fishing - Bad weather
6 In port - please specify
7 Net cleaning set
8 Investigate free school
9 Investigate floating object
10D Deploy - raft, FAD or payao
10R Retrieve - raft, FAD or payao
11 Drifting at day's end
12 Drifting with floating object
13 Other reason (specify)
14 Drifting -With fish aggregatting lights
15R Retrieve radio buoy
15D Deploy radio buoy
16 Transhipping or bunkering
17 Servicing FAD or floating object
18 Drifting - No fishing
H1 *Helicoptor takes off to search*
H2 *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1 Seen from vessel
2 Seen from helicopter
3 Marked with beacon
4 Bird radar
5 Sonar / depth sounder
6 Info. from other vessel
7 Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated }
2 Feeding on Baitfish } Free schools
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** **Journal**
/||/ / **6**	No.	No.	No.	No.	No.	*(circle one)* pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and *Set No* *. - from PS-3)* - for all activity code "1" write the set No. before ther
comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating
objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there
was no incident for the day circle **No**.

Page of : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
  (e.g. if there are 36 pages then the first page will be " Page 1 of 36 ", the fourth page,
  " Page 4 of 36 " and the last page will be " Page 36 of 36 ").

Start of day: At start of each day, date and time on ship's clock (and observer's watch) must be matched to the UTC time and date as read from the GPS. **Always record date as YY/MM/DD.*

Ship's Date and Ship's Time: is the date and time used by crew on board normally. The observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date and time when it is used incorrectly, as it often is.
  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
 Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
 N.B. : usually a depth sounder or sonar is only used to investigate an already found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

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START OF DAY

SHIP's DATE	SHIP's TIME
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ALL MUST BE RECORDED

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13 Other reason (specify)
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1 Seen from vessel
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"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated } Free schools
2 Feeding on Baitfish
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5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /N// 6	Tally / No.	Tally / No.	Tally / No.	Tally / No.	Tally / No.	**YES NO** *(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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START OF DAY

SHIP's DATE	SHIP's TIME
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ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
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6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
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H1	*Helicoptor takes off to search*
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If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

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"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** *(circle one)* **Journal** pg #
//|// **6**	No.	No.	No.	No.	No.	

OBSERVER'S DAILY LOG

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  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
 N.B. : usually a depth sounder or sonar is only used to investigate an underlined found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
 Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

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DAILY LOG

FORM PS - 2

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START OF DAY

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ALL MUST BE RECORDED

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8   Investigate free school
9   Investigate floating object
10D   Deploy - raft, FAD or payao
10R   Retrieve - raft, FAD or payao
11   Drifting at day's end
12   Drifting with floating object
13   Other reason (specify)
14   Drifting -With fish aggregatting lights
15R   Retrieve radio buoy
15D   Deploy radio buoy
16   Transhipping or bunkering
17   Servicing FAD or floating object
18   Drifting - No fishing
H1   *Helicoptor takes off to search*
H2   *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1   Seen from vessel
2   Seen from helicopter
3   Marked with beacon
4   Bird radar
5   Sonar / depth sounder
6   Info. from other vessel
7   Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1   Unassociated   } Free schools
2   Feeding on Baitfish
3   Drifting log, debris or dead animal
4   Drifting raft, FAD or payao
5   Anchored raft, FAD or payao
6   Live whale
7   Live whale shark
8   Other (please specify)
9   No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	YES NO **Journal**
/X// / **6**	No.	No.	No.	No.	No.	*(circle one)* pg #

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                  (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and *Set No* *. - from PS-3)* - for all activity code "1" write the set No. before ther
comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating
objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there
was no incident for the day circle **No**.

Page of : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
  (e.g. if there are 36 pages then the first page will be " Page 1 of 36 ", the fourth page,
  " Page 4 of 36 " and the last page will be " Page 36 of 36 ").

Start of day: At start of each day, date and time on ship's clock (and observer's watch) must be
matched to the UTC time and date as read from the GPS. **Always record date as YY/MM/DD.*

Ship's Date and Ship's Time: is the date and time used by crew on board normally. The
observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date
and time when it is used incorrectly, as it often is.
  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date
is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
 Please record every activity change throughout the day. There may be many. Note that, except
for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
 N.B. : usually a depth sounder or sonar is only used to investigate an <u>already found</u> object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targeted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
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18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

| 1 | Unassociated |
| 2 | Feeding on Baitfish |

} Free schools

3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school) / (with school)		Free floating objects (no anchor) (with **NO** school) / (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO**
/||// **6**	No.	No.	No.	No.	No.	*(circle one)* Journal pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
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  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
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  Judge this yourself. A guide is the wind. If it has been blowing awhile then
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  and anything over 40 kts is usually very rough, however not always so.

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comments in this field. Get "set No." from the PS-3 that must be used every set.

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objects and free schools. Try to note if floating objects have fish with them or not.
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  This can be a rough but sensible count. It is used to get an idea of life in your area.
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No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there
was no incident for the day circle **No**.

*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
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and time when it is used incorrectly, as it often is.
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is sometimes different from Ship's date.
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record only the most important one and note the other in comments column.
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for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
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activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
  N.B. : usually a depth sounder or sonar is only used to investigate an underlined already found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
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18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1. Set
2. Searching
3. Transit
4. No fishing - Breakdown
5. No fishing - Bad weather
6. In port - please specify
7. Net cleaning set
8. Investigate free school
9. Investigate floating object
10D. Deploy - raft, FAD or payao
10R. Retrieve - raft, FAD or payao
11. Drifting at day's end
12. Drifting with floating object
13. Other reason (specify)
14. Drifting -With fish aggregatting lights
15R. Retrieve radio buoy
15D. Deploy radio buoy
16. Transhipping or bunkering
17. Servicing FAD or floating object
18. Drifting - No fishing
H1. *Helicoptor takes off to search*
H2. *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1. Seen from vessel
2. Seen from helicopter
3. Marked with beacon
4. Bird radar
5. Sonar / depth sounder
6. Info. from other vessel
7. Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1. Unassociated
2. Feeding on Baitfish } Free schools
3. Drifting log, debris or dead animal
4. Drifting raft, FAD or payao
5. Anchored raft, FAD or payao
6. Live whale
7. Live whale shark
8. Other (please specify)
9. No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /X// 6	Tally / No.	Tally / No.	Tally / No.	Tally / No.	Tally / No.	**YES NO** (circle one) **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

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Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
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Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
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---

*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
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Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

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  If more than one method used, use code that shows what **first** made vessel
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toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
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vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER **DAILY LOG**			**FORM PS - 2**

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
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10												
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16												
17												
18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set	
2	Searching	If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record
3	Transit	
4	No fishing - Breakdown	
5	No fishing - Bad weather	
6	In port - please specify	
7	Net cleaning set	
8	Investigate free school	
9	Investigate floating object	
10D	Deploy - raft, FAD or payao	
10R	Retrieve - raft, FAD or payao	
11	Drifting at day's end	
12	Drifting with floating object	
13	Other reason (specify)	
14	Drifting -With fish aggregatting lights	
15R	Retrieve radio buoy	Changing buoys ? - use first line for 15R and next for 15D
15D	Deploy radio buoy	
16	Transhipping or bunkering	
17	Servicing FAD or floating object	
18	Drifting - No fishing	
H1	*Helicoptor takes off to search*	
H2	*Helicopter returned from search*	

HOW DETECTED

1	Seen from vessel	"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on
2	Seen from helicopter	
3	Marked with beacon	
4	Bird radar	
5	Sonar / depth sounder	
6	Info. from other vessel	
7	Anchored FAD / payao (recorded)	

SCHOOL ASSOCIATION (tuna)

1	Unassociated	} Free schools
2	Feeding on Baitfish	
3	Drifting log, debris or dead animal	
4	Drifting raft, FAD or payao	
5	Anchored raft, FAD or payao	
6	Live whale	
7	Live whale shark	
8	Other (please specify)	
9	No tuna associated	

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school) (with school)		Free floating objects (no anchor) (with **NO** school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY	
Example	Tally	Tally	Tally	Tally	Tally	**YES NO**	**Journal**
/||// **6**	No.	No.	No.	No.	No.	*(circle one)*	pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
(e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
(e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
Be sure to record all activities. Record as often as necessary during the day.
At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
minutes to three decimal places, which is usually as it is displayed on a GPS.
N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
Never forget to enter north or south and east or west correctly
(for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
Use the chart supplied or the chart of the vessel to work this out.
If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
(e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
Judge this yourself. A guide is the wind. If it has been blowing awhile then
0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
and anything over 40 kts is usually very rough, however not always so.

Comments (and *Set No* *. - from PS-3)* - for all activity code "1" write the set No. before ther comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating objects and free schools. Try to note if floating objects have fish with them or not.
Also count anchored floating objects (FADs or payaos) and note if they have fish.
Note that free schools can be feeding on baitfish or completely unassociated.
This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today *?*
Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

Page   of   : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
At end of trip check pages are all there (again). Put last page number on every page
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Ship's Date and Ship's Time: is the date and time used by crew on board normally. The observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date and time when it is used incorrectly, as it often is.
Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes, otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
- if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
If more than one method used, use code that shows what **first** made vessel
change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
bird radar to finally find the tuna then use code "2" - seen from helicopter.)
N.B. : usually a depth sounder or sonar is only used to investigate an already found object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
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16												
17												
18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /|\\|// **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** (circle one) **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
   (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
   (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
   Be sure to record all activities. Record as often as necessary during the day.
   At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
   minutes to three decimal places, which is usually as it is displayed on a GPS.
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   For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
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EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
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   (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
   If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

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   C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
   Judge this yourself. A guide is the wind. If it has been blowing awhile then
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   and anything over 40 kts is usually very rough, however not always so.

Comments (and Set No. - from PS-3) - for all activity code "1" write the set No. before ther
   comments in this field. Get "set No." from the PS-3 that must be used every set.

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objects and free schools. Try to note if floating objects have fish with them or not.
   Also count anchored floating objects (FADs or payaos) and note if they have fish.
   Note that free schools can be feeding on baitfish or completely unassociated.
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   Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
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Did You Observe Any Events To Record On Form GEN-3 Today ?
   Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
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was no incident for the day circle **No**.

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*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
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is sometimes different from Ship's date.
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For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
Use **15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
   - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
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activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
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How Detected : Use this code to best show how investigated tuna or object was found.
   If more than one method used, use code that shows what **first** made vessel
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toward its position but had to use its
   bird radar to finally find the tuna then use code "2" - seen from helicopter.)
   N.B. : usually a depth sounder or sonar is only used to investigate an <u>already found</u> object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
   Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (tuna) : Use "School Association" code that best describes if
   tuna being targeted are with floating object, animal, feeding on baitfish, unassociated.
   If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)
1											
2											
3											
4											
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7											
8											
9											
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12											
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14											
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18											
19											
20											
21											
22											
23											

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1 Set
2 Searching
3 Transit
4 No fishing - Breakdown
5 No fishing - Bad weather
6 In port - please specify
7 Net cleaning set
8 Investigate free school
9 Investigate floating object
10D Deploy - raft, FAD or payao
10R Retrieve - raft, FAD or payao
11 Drifting at day's end
12 Drifting with floating object
13 Other reason (specify)
14 Drifting -With fish aggregatting lights
15R Retrieve radio buoy
15D Deploy radio buoy
16 Transhipping or bunkering
17 Servicing FAD or floating object
18 Drifting - No fishing
H1 *Helicoptor takes off to search*
H2 *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1 Seen from vessel
2 Seen from helicopter
3 Marked with beacon
4 Bird radar
5 Sonar / depth sounder
6 Info. from other vessel
7 Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated   } Free schools
2 Feeding on Baitfish
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school)	(with school)	Free floating objects (no anchor) (with NO school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/ / **6**	Tally *No.*	Tally *No.*	Tally *No.*	Tally *No.*	Tally *No.*	**YES NO** *(circle one)* **Journal** p g #

OBSERVER'S DAILY LOG

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  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
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  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

School Association (*tuna*) : Use "School Association" code that best describes if
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  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)
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22												
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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated	} Free schools
2	Feeding on Baitfish	
3	Drifting log, debris or dead animal	
4	Drifting raft, FAD or payao	
5	Anchored raft, FAD or payao	
6	Live whale	
7	Live whale shark	
8	Other (please specify)	
9	No tuna associated	

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)	Free floating objects (no anchor) (with NO school) (with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /|||/| 6	Tally No. Tally No.	Tally No. Tally No.	Tally No.	YES NO (circle one) Journal pg #

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and **Set No** *. - from PS-3)* - for all activity code "1" write the set No. before ther
comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating
objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
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was no incident for the day circle **No**.

Page of : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
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Ship's Date and Ship's Time: is the date and time used by crew on board normally. The
observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date
and time when it is used incorrectly, as it often is.
  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date
is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
  Please record every activity change throughout the day. There may be many. Note that, except
for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
  N.B. : usually a depth sounder or sonar is only used to investigate an already found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts)	(°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
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14													
15													
16													
17													
18													
19													
20													
21													
22													
23													

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1 Set
2 Searching
3 Transit
4 No fishing - Breakdown
5 No fishing - Bad weather
6 In port - please specify
7 Net cleaning set
8 Investigate free school
9 Investigate floating object
10D Deploy - raft, FAD or payao
10R Retrieve - raft, FAD or payao
11 Drifting at day's end
12 Drifting with floating object
13 Other reason (specify)
14 Drifting -With fish aggregatting lights
15R Retrieve radio buoy
15D Deploy radio buoy
16 Transhipping or bunkering
17 Servicing FAD or floating object
18 Drifting - No fishing
H1 *Helicoptor takes off to search*
H2 *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1 Seen from vessel
2 Seen from helicopter
3 Marked with beacon
4 Bird radar
5 Sonar / depth sounder
6 Info. from other vessel
7 Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated
2 Feeding on Baitfish } Free schools
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects		Free floating objects (no anchor)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
	(with **NO** school)	(with school)	(with **NO** school)	(with school)		
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** **Journal**
/\X//	No.	No.	No.	No.	No.	*(circle one)* pg #
6						

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
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comments in this field. Get "set No." from the PS-3 that must be used every set.

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objects and free schools. Try to note if floating objects have fish with them or not.
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  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
  Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there
was no incident for the day circle **No**.

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*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
  At end of trip check pages are all there (again). Put last page number on every page
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Use only one code per entry. If it seems that two different codes could be used,
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  Please record every activity change throughout the day. There may be many. Note that, except
for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
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activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
  N.B. : usually a depth sounder or sonar is only used to investigate an underlined found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
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7												
8												
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14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1 Set
2 Searching
3 Transit
4 No fishing - Breakdown
5 No fishing - Bad weather
6 In port - please specify
7 Net cleaning set
8 Investigate free school
9 Investigate floating object
10D Deploy - raft, FAD or payao
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11 Drifting at day's end
12 Drifting with floating object
13 Other reason (specify)
14 Drifting - With fish aggregatting lights
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16 Transhipping or bunkering
17 Servicing FAD or floating object
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H1 *Helicoptor takes off to search*
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If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1 Seen from vessel
2 Seen from helicopter
3 Marked with beacon
4 Bird radar
5 Sonar / depth sounder
6 Info. from other vessel
7 Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated } Free schools
2 Feeding on Baitfish
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school) (with school)		Free floating objects (no anchor) (with **NO** school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO**
/|||/ **6**	No.	No.	No.	No.	No.	*(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
(e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
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10D	Deploy - raft, FAD or payao
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11	Drifting at day's end
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Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

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SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
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5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example
/N/l/ **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** (circle one) **Journal** pg #

OBSERVER'S DAILY LOG

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  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
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  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
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  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
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  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
  Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
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 Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
Us **15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

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 N.B. : usually a depth sounder or sonar is only used to investigate an **already found** object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
 Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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3												
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7												
8												
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23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1 Set
2 Searching
3 Transit
4 No fishing - Breakdown
5 No fishing - Bad weather
6 In port - please specify
7 Net cleaning set
8 Investigate free school
9 Investigate floating object
10D Deploy - raft, FAD or payao
10R Retrieve - raft, FAD or payao
11 Drifting at day's end
12 Drifting with floating object
13 Other reason (specify)
14 Drifting -With fish aggregatting lights
15R Retrieve radio buoy
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16 Transhipping or bunkering
17 Servicing FAD or floating object
18 Drifting - No fishing
H1 *Helicoptor takes off to search*
H2 *Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1 Seen from vessel
2 Seen from helicopter
3 Marked with beacon
4 Bird radar
5 Sonar / depth sounder
6 Info. from other vessel
7 Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1 Unassociated }
2 Feeding on Baitfish } Free schools
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)
9 No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/ **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** (circle one) **Journal** pg #

OBSERVER'S DAILY LOG

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  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

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  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
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13	Other reason (specify)
14	Drifting -With fish aggregatting lights
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HOW DETECTED

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5	Sonar / depth sounder
6	Info. from other vessel
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SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/| **6**	Tally — No.	Tally — No.	Tally — No.	Tally — No.	Tally — No.	**Journal** **YES NO** *(circle one)* pg #

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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Example	Tally	Tally	Tally	Tally	Tally	**YES NO**
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OBSERVER'S DAILY LOG

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EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
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For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes, otherwise the school association (tuna) and how detected code fields must be dashed !
Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log
  - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

Floating object and school sightings : Through each day try to keep count of every floating objects and free schools. Try to note if floating objects have fish with them or not.
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  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
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How Detected : Use this code to best show how investigated tuna or object was found.
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   change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
   bird radar to finally find the tuna then use code "2" - seen from helicopter.)
  N.B. : usually a depth sounder or sonar is only used to investigate an already found object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
  Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
   Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

School Association (*tuna*) : Use "School Association" code that best describes if
   tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
   If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
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21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated	} Free schools
2	Feeding on Baitfish	
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO**
/XX// 6	No.	No.	No.	No.	No.	*(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
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9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** (circle one) **Journal** pg #
/X// **6**	No.	No.	No.	No.	No.	

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

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FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/ / **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** (circle one) **Journal** pg #

OBSERVER'S DAILY LOG

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   Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
   Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
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 Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
 - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
   If more than one method used, use code that shows what **first** made vessel
   change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
   bird radar to finally find the tuna then use code "2" - seen from helicopter.)
 N.B. : usually a depth sounder or sonar is only used to investigate an already found object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
   Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
   tuna being targeted are with floating object, animal, feeding on baitfish, unassociated.
   If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
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15												
16												
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18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

| 1 | Unassociated |
| 2 | Feeding on Baitfish |

} Free schools

3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school) (with school)	Free floating objects (no anchor) (with **NO** school) (with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /\\|/| **6**	Tally No. Tally No.	Tally No. Tally No.	Tally No.	**YES NO** (circle one) **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
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Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and **Set No** *. - from PS-3)* - for all activity code "1" write the set No. before ther
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 N.B. : usually a depth sounder or sonar is only used to investigate an underlined already found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts)	(°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1													
2													
3													
4													
5		If FAD involved be sure											
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17		"Seen from helicopter"											
18													
19													
20													
21													
22													
23													

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
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13	Other reason (specify)
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Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
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3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated } Free schools
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** Journal
/\/\ / / 6	No.	No.	No.	No.	No.	(circle one) pg #

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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START OF DAY

SHIP's DATE	SHIP's TIME
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OBSERVER'S DAILY LOG

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was no incident for the day circle **No**.

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*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
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observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date
and time when it is used incorrectly, as it often is.
   Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date
is sometimes different from Ship's date.
   Observers should record Ship's time in all other forms and paperwork.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
   Please record every activity change throughout the day. There may be many. Note that, except
for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
   - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive
from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
   If more than one method used, use code that shows what **first** made vessel
   change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns
toward its position but had to use its
   bird radar to finally find the tuna then use code "2" - seen from helicopter.)
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fish, so code "5" should not be used very often. It is usually something else that first causes a
vessel to change direction to investigate a school or floating object further.
   Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
   tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
   If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
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22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

Free schools (1, 2)

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example	Tally	Tally	Tally	Tally	Tally	**YES NO** (circle one) **Journal** pg #
/||// **6**	No.	No.	No.	No.	No.	

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and **Set No** *. - from PS-3)* - for all activity code "1" write the set No. before ther
  comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating
objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
  Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
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 N.B. : usually a depth sounder or sonar is only used to investigate an underlined found object or
fish, so code "5" should not be used very often. It is usually something else that first causes a
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

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6	Live whale
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} Free schools

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/|\/|/| **6**	No.	No.	No.	No.	No.	(circle one) pg #

OBSERVER'S DAILY LOG

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START OF DAY

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} Free schools

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FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
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/\\// 6	No.	No.	No.	No.	No.	*(circle one)* pg #

OBSERVER'S DAILY LOG

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  Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
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code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log
 - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Use **code 17** if making any repair or change to floating objects other than changing buoys
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

How Detected : Use this code to best show how investigated tuna or object was found.
  If more than one method used, use code that shows what **first** made vessel
  change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
  bird radar to finally find the tuna then use code "2" - seen from helicopter.)
 N.B. : usually a depth sounder or sonar is only used to investigate an already found object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
 Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
9												
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11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish	} Free schools
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /||/|| 6	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	YES NO *(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
  (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
  (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
  Be sure to record all activities. Record as often as necessary during the day.
  At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
  minutes to three decimal places, which is usually as it is displayed on a GPS.
  N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
  For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
  Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
  Use the chart supplied or the chart of the vessel to work this out.
  If you are not sure then put the code for the EEZ where you think you are.

Wind *(kts)* (°): Record speed in knots and direction in degrees of the compass
  (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
  If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
  C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
  Judge this yourself. A guide is the wind. If it has been blowing awhile then
  0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
  and anything over 40 kts is usually very rough, however not always so.

Comments (and **Set No** *. - from PS-3)* - for all activity code "1" write the set No. before ther
  comments in this field. Get "set No." from the PS-3 that must be used every set.

Floating object and school sightings : Through each day try to keep count of every floating
objects and free schools. Try to note if floating objects have fish with them or not.
  Also count anchored floating objects (FADs or payaos) and note if they have fish.
  Note that free schools can be feeding on baitfish or completely unassociated.
  This can be a rough but sensible count. It is used to get an idea of life in your area.
  Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
No : Count the "tally" strokes at end of day to get the number of each type of sighting.

Did You Observe Any Events To Record On Form GEN-3 Today ?
  Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
   Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there
was no incident for the day circle **No**.

Page   of   : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

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START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set	
2	Searching	If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record
3	Transit	
4	No fishing - Breakdown	
5	No fishing - Bad weather	
6	In port - please specify	
7	Net cleaning set	
8	Investigate free school	
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10D	Deploy - raft, FAD or payao	
10R	Retrieve - raft, FAD or payao	
11	Drifting at day's end	
12	Drifting with floating object	
13	Other reason (specify)	
14	Drifting -With fish aggregatting lights	
15R	Retrieve radio buoy	Changing buoys ? - use first line for 15R and next for 15D
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HOW DETECTED

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2	Seen from helicopter	
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SCHOOL ASSOCIATION (tuna)

1	Unassociated } Free schools
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
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FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects		Free floating objects (no anchor)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
	(with **NO** school)	(with school)	(with **NO** school)	(with school)		
Example	Tally	Tally	Tally	Tally	Tally	**Journal**
/||/ / **6**	No.	No.	No.	No.	No.	YES NO (circle one) p g #

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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

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START OF DAY

SHIP's DATE	SHIP's TIME
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ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

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FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school) (with school)		Free floating objects (no anchor) (with **NO** school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
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OBSERVER'S DAILY LOG

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Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (_named_) vessel, arrive from other (_named_) vessel, visit shore, rescue seaman, etc.

Floating object and school sightings : Through each day try to keep count of every floating objects and free schools. Try to note if floating objects have fish with them or not.
Also count anchored floating objects (FADs or payaos) and note if they have fish.
Note that free schools can be feeding on baitfish or completely unassociated.
This can be a rough but sensible count. It is used to get an idea of life in your area.
Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.
Tally : Mark with a stroke every time you sight something (see example on front)
_No_ : Count the "tally" strokes at end of day to get the number of each type of sighting.

How Detected : Use this code to best show how investigated tuna or object was found.
If more than one method used, use code that shows what **first** made vessel
change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its
bird radar to finally find the tuna then use code "2" - seen from helicopter.)
N.B. : usually a depth sounder or sonar is only used to investigate an _already found_ object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.
Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

Did You Observe Any Events To Record On Form GEN-3 Today ?
Circle **Yes** if any infringements, as listed on Form GEN-3, were observed.
Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

School Association (_tuna_) : Use "School Association" code that best describes if
tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
If it is an unusual **tuna** association comment here and describe in journal.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and **Set No.** - from PS-3)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

START OF DAY

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

1	Set
2	Searching
3	Transit
4	No fishing - Breakdown
5	No fishing - Bad weather
6	In port - please specify
7	Net cleaning set
8	Investigate free school
9	Investigate floating object
10D	Deploy - raft, FAD or payao
10R	Retrieve - raft, FAD or payao
11	Drifting at day's end
12	Drifting with floating object
13	Other reason (specify)
14	Drifting -With fish aggregatting lights
15R	Retrieve radio buoy
15D	Deploy radio buoy
16	Transhipping or bunkering
17	Servicing FAD or floating object
18	Drifting - No fishing
H1	*Helicoptor takes off to search*
H2	*Helicopter returned from search*

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

1	Seen from vessel
2	Seen from helicopter
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

1	Unassociated
2	Feeding on Baitfish
3	Drifting log, debris or dead animal
4	Drifting raft, FAD or payao
5	Anchored raft, FAD or payao
6	Live whale
7	Live whale shark
8	Other (please specify)
9	No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with **NO** school)	(with school)	Free floating objects (no anchor) (with **NO** school)	(with school)	Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY
Example /|/|/ / **6**	Tally No.	Tally No.	Tally No.	Tally No.	Tally No.	**YES NO** *(circle one)* **Journal** pg #

OBSERVER'S DAILY LOG

Observer Name and *Vessel Name* : Always print each of these names out **in full**
   (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

Observer Trip ID Number : Number issued by the authority you are working for.
   (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Page of : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
   At end of trip check pages are all there (again). Put last page number on every page
   (e.g. if there are 36 pages then the first page will be " Page 1 of 36 ", the fourth page,
   " Page 4 of 36 " and the last page will be " Page 36 of 36 ").

Start of day: At start of each day, date and time on ship's clock (and observer's watch) must be matched to the UTC time and date as read from the GPS. **Always record date as YY/MM/DD.**

Ship's Date and Ship's Time: is the date and time used by crew on board normally. The observer's watch should be set to this date and time as soon as they board.
UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date and time when it is used incorrectly, as it often is.
   Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.
   Observers should record Ship's time in all other forms and paperwork.

Ships Time : Record the "Ship's time" whenever there is a change of an activity.
   Be sure to record all activities. Record as often as necessary during the day.
   At the very least, record a morning, noon and evening position when in transit.

Latitude , *Longitude* , *N* , *S* , *E* , *W*: Record position as degrees, minutes and
   minutes to three decimal places, which is usually as it is displayed on a GPS.
   N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.
   For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
   Never forget to enter north or south and east or west correctly
                    (for example "05°27.985' S, 152°28.239' W")

EEZ Code : Place the code for the EEZ (on back of Form GEN-6) for your position.
   Use the chart supplied or the chart of the vessel to work this out.
   If you are not sure then put the code for the EEZ where you think you are.

Wind (kts) (°):   Record speed in knots and direction in degrees of the compass
   (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090")
   If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

Sea conditions (C-S-M-R-V) .
   C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough.
   Judge this yourself. A guide is the wind. If it has been blowing awhile then
   0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough;
   and anything over 40 kts is usually very rough, however not always so.

Comments (and Set No . - from PS-3) - for all activity code "1" write the set No. before their comments in this field. Get "set No." from the PS-3 that must be used every set.

Activity and Helicopter Codes : The activity codes are shown on the front.
Use only one code per entry. If it seems that two different codes could be used,
record only the most important one and note the other in comments column.
 Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one
code also means the end of the activity identified by the previous activity code.
For *codes* 1, 8, 9 or **17** always use *school association* (*tuna*) and *how detected* codes, otherwise the school association (tuna) and how detected code fields must be dashed !
U**se 15R and 15D when vessel retrieves or deploys a buoy set** on FAD or log
 - if changing buoys use 15R on one line and 15D on the next.
If using **code 16** remember that **transhipment** includes any transfer between vessels
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SPC/FFA REGIONAL PURSE SEINE OBSERVER
DAILY LOG

FORM PS - 2

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

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} Free schools

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Example	Tally	Tally	Tally	Tally	Tally	**Journal**
/||/ / **6**	No.	No.	No.	No.	No.	**YES NO** *(circle one)* pg #

OBSERVER'S DAILY LOG

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*Page   of   * : Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.
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and time when it is used incorrectly, as it often is.
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 Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

School Association (*tuna*) : Use "School Association" code that best describes if
  tuna being targetted are with floating object, animal, feeding on baitfish, unassociated.
  If it is an unusual **tuna** association comment here and describe in journal.

Purse-Seine Length Measurements

(You may <u>only</u> take these measurements on board a purse-seine vessel)

UF

UF: Upper jaw to the fork in the tail

UF

UF: Upper snout to fork in tail

UF – (for all tuna, bycatch and sharks)

LF

LF: Lower jaw to fork in tail

LF – (for all billfish)

TW

TW: Total width

TW – (for rays)

TL

TL: Total length

TL – (for all species with no fork in their tail)
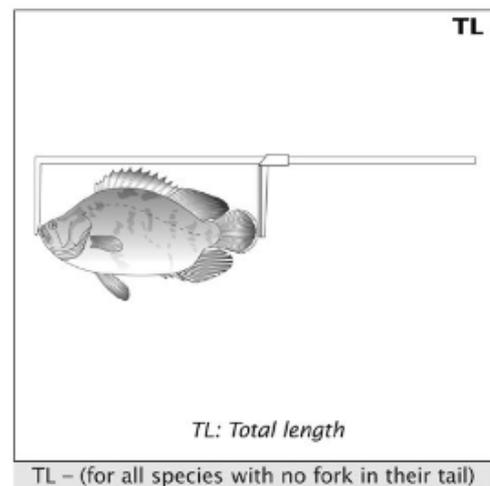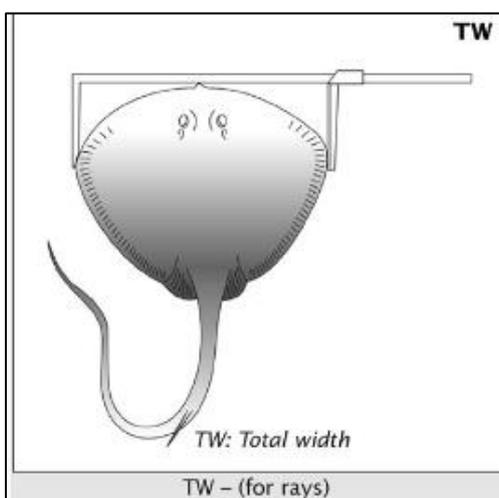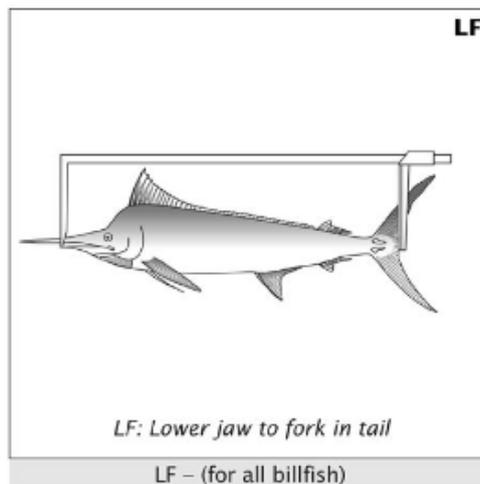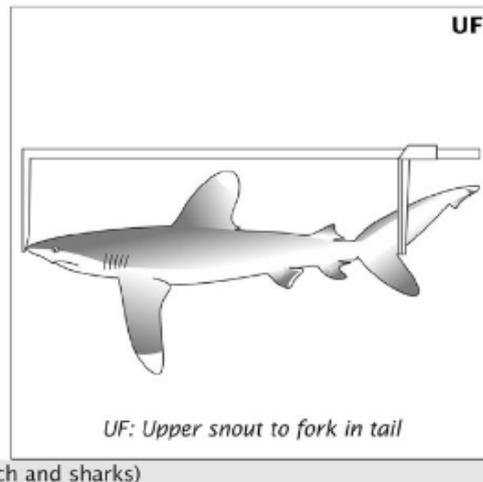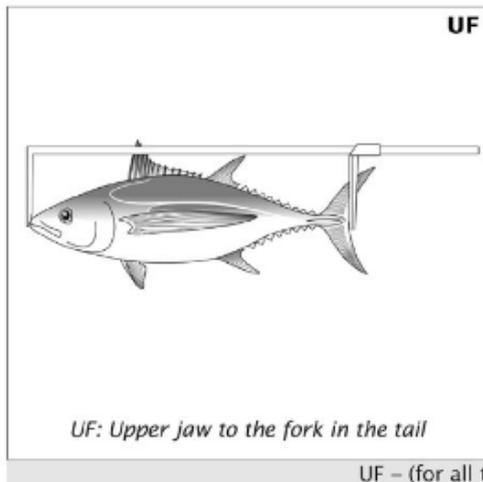
Purse-Seine Length Measurements

- For Species of Special interest -

	BL
BILL LENGTH	
WING LENGTH	WL
(for all dead birds)	

Note: Wing Length is 'wrist to the fingertips'. For more information, please refer to the Bird Identification Guide that will be released in 2017.

CL

CL: Carapace length

CL – (for turtles)
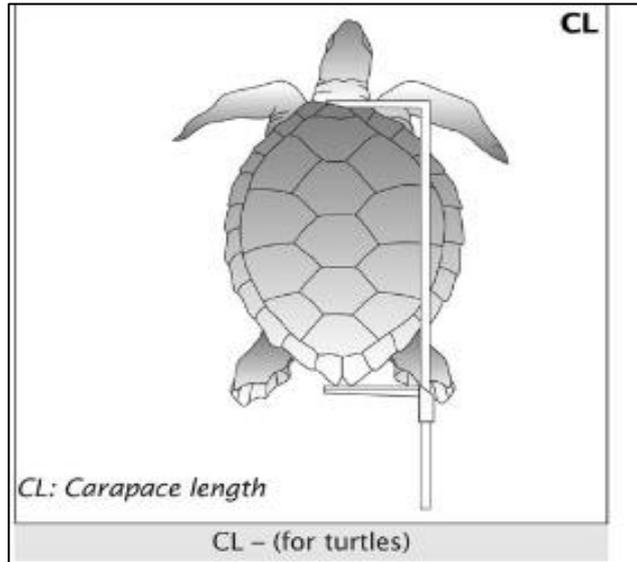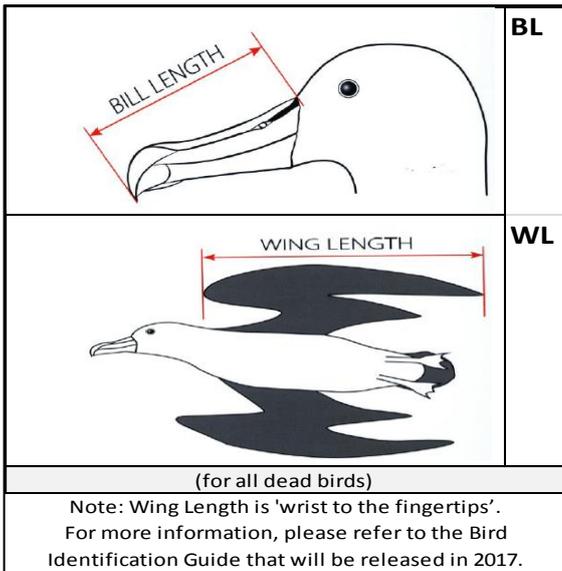
CALIBRATING CALLIPERS

Observers are asked to calibrate their callipers before every purse-seine set. This can be done by marking a known length on the deck. For instance use the ruler of the calliper (not the calliper itself) to mark out 30cm on the deck with a pen etc. Take time to do this properly, then measure that known length with the calliper. Or as the drawing shows, measure a known length on a deck tape. Remember not to use a tape measure made from material as these can stretch in wet conditions.

IF THE CORRECT CALLIPER READING IS 30 CM.

And the calliper correctly shows 30 cm, then the calibration should be recorded as zero millimetres.
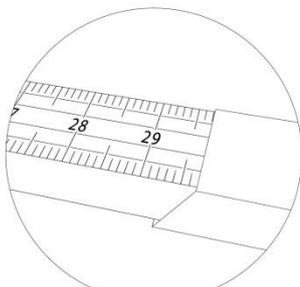
> The true length is 30 cm. The calliper is incorrectly reading 29.7 cm. The callibration should be reacord as minus 3 mms.
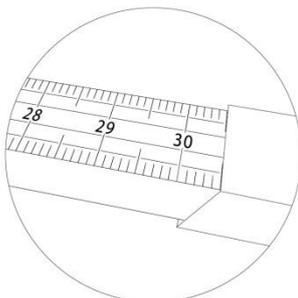
> The true length is 30 cm. The calliper is incorrectly reading 30.5 cm. The callibration should be recorded as plus 5 mms.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity sum of all brails Total catch

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form) (see PS-4 form) less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT) x [ ] = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle YES or NO for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)   TARGET TUNA

								SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT   [ ] mT

B. OBSERVER totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)				COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released			OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN	- Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO	- Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR	- Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR	- Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH	- Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown			

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

	OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
	VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
	PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
	START of SET **Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	DATE and **TIME** **Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER **(mT)**		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number		Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
			Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × sum of all brails = Total catch (mT)

([ ] mT) × [ ]) = [ ] mT

Type 1 brail (see PS-1 form) / (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT × [ ]) => = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle YES or NO for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)		BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)	
YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT

Total weight of bycatch: [ ] mT [ ] mT

TARGET TUNA

	SKJ	YFT	BET
A. OBSERVER estimates of total of each species caught (mT)			
Observer FATE			
a. (mT)			
Vessel FATE			
(mT)			
Observer FATE			
b. (mT)			
Vessel FATE			
(mT)			
Observer FATE			
c. (mT)			
Vessel FATE			
(mT)			
B. OBSERVER totals (mT) discards + RCC (a+b+c):			

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT

Tuna kept onboard for later unload if not RWW

	SKJ	YFT	BET
FATE			
OBS (mT)			
VES (mT)			
FATE	RWW	RWW	RWW
OBS (mT)			
VES (mT)			
Due to gear break / bycatch mitigation	ESC	ESC	ESC
estimates OBS (mT)			
VES (mT)			

How many Tags were recovered? [ ]

Record species and tag numbers. Fill tag recovery forms!

FATE CODES

RWW	Retained - whole weight	DFR Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD Discarded - gear damage (tuna only)	ESC Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR	Retained - other reason (specify)	DSD Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and Vessel (logsheet) **TIME**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorving). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	**if SSI OBSERVED** (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT) **x** [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch (see below) [ ] mT

+

Type 2 brail ([ ] mT **x** [ ])   = Total tuna catch [ ] mT

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)		
	YES (%)	YES (%)	YES (%)	NUMBER		YES (%)	YES (%)	NUMBER	
	NO	NO	NO			NO	NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer **FATE**			
							a. (mT)			
							Vessel **FATE**			
							(mT)			
							Observer **FATE**			
							b. (mT)			
							Vessel **FATE**			
							(mT)			
							Observer **FATE**			
							c. (mT)			
							Vessel **FATE**			
							(mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
					FATE				
					OBS (mT)				
					VES (mT)				
					FATE		RWW	RWW	RWW
					OBS (mT)				
					VES (mT)				
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates OBS (mT)				
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*			VES (mT)				

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while
	1. (under Bycatch all non-target species landings)	recorvering). Note these landed SSIs are no longer recorded on Gen-2 form Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.
		Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch *(see below)* [ ] mT

Type 2 brail + [ ] mT x [ ]

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN			BIGEYE		
	SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

			SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	**FATE**		
								a. (mT)		
							Vessel	**FATE**		
								. (mT)		
							Observer	**FATE**		
								b. (mT)		
							Vessel	**FATE**		
								. (mT)		
							Observer	**FATE**		
								c. (mT)		
							Vessel	**FATE**		
								. (mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
						FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			

How many Tags were recovered? | *Record species and tag numbers. Fill tag recovery forms!* | VES (mT) | | | |

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.	

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET **DATE and** **TIME** — Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**	
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.	
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.	
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)	
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.	
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field	
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.	
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch	
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT — **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.	
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !	
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.	
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorving). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).	
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.	
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.	
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH	
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.	
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.	
	Number		
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates	
	TARGET TUNA A. OBSERVER estimates of total caught	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)	
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form	
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.	
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.	
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??	
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch (see below) [ ] mT

+

Type 2 brail ([ ] mT x [ ])   => = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES / (%)	YES / (%)	YES / (%) / NUMBER		YES / (%)	YES / (%) / NUMBER	
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

						SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT   [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

COMMENTS / SSI TREATMENT

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured / Released		Tuna kept onboard for later unload if not RWW		
						FATE		
						OBS (mT)		
						VES (mT)		
						FATE	RWW	RWW	RWW
						OBS (mT)		
						VES (mT)		

Due to gear break / bycatch mitigation: ESC   ESC   ESC

	estimates OBS (mT)			

How many Tags were recovered?

Record species and tag numbers. Fill tag recovery forms!

estimates VES (mT)

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC Escaped
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown

GEAR INTERACTION CODES

IEN - Entangled (in gear)
IJO - Jumped out (over net)
ICR - Crew released from net
IBR - Broke through net
OTH - Other, please specify

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.

	OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
	VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
	PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
	START of SET **Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	DATE and	
	TIME **Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**			
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**	
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.	
	Type 1		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.	
	and		Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.	
	Type 2		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields	
	brails		and all other calculations will be based only on the 'type 1' brail information that is provided.)	
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.	
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field	
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.	
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**YES or NO**	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch	
		%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.	
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !	
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.	
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).	
	1. (under Bycatch all non-target species landings)			
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.	
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.	
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH	
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.	
	VESSEL LOG **(mT)**		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.	
	Number			
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates	
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)	
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form	
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.	
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.	
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??	
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.	
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .	

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity sum of all brails Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT x [ ]) => = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)		YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)		BIGEYE LARGE (> 75 cm)		
	YES	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
	NO	NO		NO			NO		NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

COMMENTS / SSI TREATMENT

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released		Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

						GEAR INTERACTION CODES
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	**Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and TIME	**Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.
			Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
			Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
			and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
		YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	1. (under Bycatch all non-target species landings)		
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER	**(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	**(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
		Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
			Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × sum of all brails = Total catch (mT)

([ ] mT) × [ ] = [ ] mT

Type 1 brail (see PS-1 form) — (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail ([ ] mT) × [ ]

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS) / TARGET TUNA

SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							(mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							(mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							(mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW			
						FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
						Due to gear break / bycatch mitigation	ESC	ESC	ESC
						OBS (mT) estimates			
How many Tags were recovered?	*Record species and tag numbers. Fill tag recovery forms!*					VES (mT)			

FATE CODES

						GEAR INTERACTION CODES
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

	OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
	VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
	PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
	START of SET **Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	DATE and TIME **Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
	If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of % **TOTAL TUNA CAUGHT**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST **1. (under Bycatch all non-target species landings)**	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity x sum of all brails) = Total catch (mT)

Type 1 brail (see PS-1 form) (see PS-4 form)

less bycatch (see below) (mT) =>

+

Type 2 brail (mT) x)

= Total tuna catch (mT)

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle YES or NO for each species
N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)		BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)	
YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

							SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)		
							Observer FATE		
							a. (mT)		
							Vessel FATE		
							. (mT)		
							Observer FATE		
							b. (mT)		
							Vessel FATE		
							. (mT)		
							Observer FATE		
							c. (mT)		
							Vessel FATE		
							. (mT)		

Total weight of bycatch: ___ mT ___ mT

B. OBSERVER totals (mT) discards + RCC (a+b+c):			

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW — FATE		
						OBS (mT)		
						VES (mT)		
						FATE	RWW	RWW	RWW
						OBS (mT)		
						VES (mT)		
						Due to gear break / bycatch mitigation	ESC	ESC	ESC
						estimates OBS (mT)		
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)		

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET **Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and	
TIME **Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA A. **OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. **OBSERVER totals (mT)** **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × **sum of all brails** = **Total catch** mT

([ ] mT) × [ ] = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch (see below) [ ] mT

+

([ ] mT × [ ]) Type 2 brail   =>   = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

							SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT		A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE			
								a. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								b. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								c. (mT)			
							Vessel	FATE			
								(mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. OBSERVER totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST				COMMENTS / SSI TREATMENT			

Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released		Tuna kept onboard for later unload if not RWW	FATE			
							OBS (mT)			
							VES (mT)			
							FATE	RWW	RWW	RWW
							OBS (mT)			
							VES (mT)			
						Due to gear break / bycatch mitigation	ESC	ESC	ESC
						estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*					VES (mT)			

FATE CODES

						GEAR INTERACTION CODES
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET **DATE and** Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna is retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
		(SET No.)	

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity sum of all brails Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail *(see PS-1 form)*   *(see PS-4 form)*   less bycatch *(see below)* [ ] mT

+   => = Total tuna catch

Type 2 brail

([ ] mT x [ ]) [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species   *N.B.: these calculations include all the tuna in this catch, whether retained or discarded*

SKIP-JACK	YELLOWFIN			BIGEYE		
	SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

					SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer — FATE			
							a. (mT)			
							Vessel — FATE			
							. (mT)			
							Observer — FATE			
							b. (mT)			
							Vessel — FATE			
							. (mT)			
							Observer — FATE			
							c. (mT)			
							Vessel — FATE			
							. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

COMMENTS / SSI TREATMENT

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released		Tuna kept onboard for later unload if not RWW — FATE			
					OBS (mT)			
					VES (mT)			
					FATE	RWW	RWW	RWW
					OBS (mT)			
					VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC
					estimates — OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*			VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC Escaped
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown

GEAR INTERACTION CODES
IEN - Entangled (in gear)
IJO - Jumped out (over net)
ICR - Crew released from net
IBR - Broke through net
OTH - Other, please specify

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

	OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
	VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
	PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
	START of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	DATE and	
	TIME Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
	If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of % TOTAL TUNA CAUGHT	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed. Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT / RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA A. OBSERVER estimates of total caught	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × **sum of all brails**) = **Total catch** (mT)

Type 1 brail (see PS-1 form) — sum of all brails (see PS-4 form)

less bycatch (see below) (mT)

+

Type 2 brail (mT) × ( )

= Total tuna catch (mT)

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN		BIGEYE	
	SMALL (< 75 cm)	LARGE (> 75 cm)	SMALL (< 75 cm)	LARGE (> 75 cm)
YES (%)	YES (%)	YES (%) NUMBER	YES (%)	YES (%) NUMBER
NO	NO	NO	NO	NO

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	COMMENTS / SSI TREATMENT

	SKJ	YFT	BET
A. **OBSERVER** estimates of total of each species caught (mT)			
Observer — FATE			
a. (mT)			
Vessel — FATE			
. (mT)			
Observer — FATE			
b. (mT)			
Vessel — FATE			
. (mT)			
Observer — FATE			
c. (mT)			
Vessel — FATE			
. (mT)			

Total weight of bycatch: ___ mT ___ mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT

Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
	FATE			
	OBS (mT)			
	VES (mT)			
	FATE	RWW	RWW	RWW
	OBS (mT)			
	VES (mT)			
Due to gear break / bycatch mitigation estimates	ESC	ESC	ESC
	OBS (mT)			
	VES (mT)			

How many Tags were recovered?

Record species and tag numbers. Fill tag recovery forms!

FATE CODES

RWW Retained - whole weight	DFR Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality	GEAR INTERACTION CODES
RHG Retained - headed and gutted (billfish only)	DTS Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG Retained - gilled and gutted (kept for sale)	DGD Discarded - gear damage (tuna only)	ESC Escaped	IJO - Jumped out (over net)
RPT Retained - partial (e.g. fillet, loin)	DVF Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC Retained - crew consumption (onboard)	DUS Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR Retained - other reason (specify)	DSD Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR Retained trunk - fins retained (shark only)	DWD Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET DATE and TIME Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE		
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS		
	TOTAL CATCH and TOTAL TUNA CATCH	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS		
	How many tags were recovered ?	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	OBSERVER: (see PS-2)	START OF SET DATE AND TIME YY MM DD hh mm	VESSEL LOG:	START OF SET DATE AND TIME YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity | sum of all brails | Total catch

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form) | (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT x [ ]) => = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)		BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS) | TARGET TUNA

| | | | | | | SKJ | YFT | BET |

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE			
								a. (mT)			
							Vessel	FATE			
								. (mT)			
							Observer	FATE			
								b. (mT)			
							Vessel	FATE			
								. (mT)			
							Observer	FATE			
								c. (mT)			
							Vessel	FATE			
								. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
							OBS (mT)			
							VES (mT)			
							FATE	RWW	RWW	RWW
							OBS (mT)			
							VES (mT)			
						Due to gear break / bycatch mitigation		ESC	ESC	ESC
						estimates	OBS (mT)			

How many Tags were recovered? | *Record species and tag numbers. Fill tag recovery forms!* | estimates | VES (mT) | | | |

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	**Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and TIME	**Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	1. (under Bycatch all non-target species landings)		
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER	**(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	**(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
		Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA		
	A. OBSERVER estimates of total caught		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME		START OF SET DATE AND TIME	
	OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG:	YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity x sum of all brails = Total catch (mT)

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form) — sum of all brails (see PS-4 form)

less bycatch (see below) [ ] mT

Type 2 brail + ([ ] mT x [ ])

= Total tuna catch [ ] mT

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle YES or NO for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN				BIGEYE				
	SMALL (< 75 cm)		LARGE (> 75 cm)			SMALL (< 75 cm)		LARGE (> 75 cm)	
YES (%)	YES (%)		YES (%)	NUMBER		YES (%)		YES (%)	NUMBER
NO	NO		NO			NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

						SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE		
								a. (mT)		
							Vessel	FATE		
								(mT)		
							Observer	FATE		
								b. (mT)		
							Vessel	FATE		
								(mT)		
							Observer	FATE		
								c. (mT)		
							Vessel	FATE		
								(mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
							OBS (mT)			
							VES (mT)			
							FATE	RWW	RWW	RWW
							OBS (mT)			
							VES (mT)			
						Due to gear break / bycatch mitigation		ESC	ESC	ESC
						estimates	OBS (mT)			
How many Tags were recovered?	*Record species and tag numbers. Fill tag recovery forms!*						VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE

BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS

TOTAL CATCH and TOTAL TUNA CATCH

Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.

YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !

BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
SPECIES OF SPECIAL INTEREST	
1. (under Bycatch all non-target species landings)	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.

FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
OBSERVER	**(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
VESSEL LOG	**(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates

TARGET TUNA

A. OBSERVER estimates of total caught		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS

How many tags were recovered ?	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity **x** sum of all brails) = Total catch (mT)

Type 1 brail (see PS-1 form) / (see PS-4 form)

less bycatch *(see below)* (mT)

+

Type 2 brail (mT) **x**) = Total tuna catch (mT)

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN			BIGEYE		
	SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
YES (%)	YES (%)	YES (%) NUMBER		YES (%)	YES (%) NUMBER	
NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

					SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer — FATE			
							a. (mT)			
							Vessel — FATE			
							. (mT)			
							Observer — FATE			
							b. (mT)			
							Vessel — FATE			
							. (mT)			
							Observer — FATE			
							c. (mT)			
							Vessel — FATE			
							. (mT)			

Total weight of bycatch: ___ mT ___ mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST				COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
Interactions with primary gear (not landed)						FATE			
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released			OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET **DATE and** **TIME**	**Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and Type 2 brails	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure. (If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity x sum of all brails = Total catch (mT)

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch (see below) [ ] mT

+

([ ] mT x [ ]) => = Total tuna catch [ ] mT

Type 2 brail

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

							SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST *Interactions with primary gear (not landed)*				COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released			OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC	
					estimates	OBS (mT)			
How many Tags were recovered?	*Record species and tag numbers. Fill tag recovery forms!*					VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET **DATE and** Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE

BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS

TOTAL CATCH and TOTAL TUNA CATCH

Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.

	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !

BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.

FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH	
Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.	
VESSEL LOG **(mT)** **Number**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.	
Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates	

TARGET TUNA

A. OBSERVER estimates of total caught	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS

How many tags were recovered ?	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME		START OF SET DATE AND TIME
	OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × sum of all brails = Total catch

([ ] mT) × [ ] = [ ] mT

Type 1 brail (see PS-1 form) (see PS-4 form)

less bycatch *(see below)* [ ] mT

+ => = Total tuna catch [ ] mT

Type 2 brail

([ ] mT × [ ])

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS) / TARGET TUNA

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT			SKJ	YFT	BET
							A. **OBSERVER** estimates of total of each species caught (mT)				
							Observer	**FATE**			
								a. (mT)			
							Vessel	**FATE**			
								. (mT)			
							Observer	**FATE**			
								b. (mT)			
							Vessel	**FATE**			
								. (mT)			
							Observer	**FATE**			
								c. (mT)			
							Vessel	**FATE**			
								. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
						FATE				
						OBS (mT)				
						VES (mT)				
						FATE		RWW	RWW	RWW
						OBS (mT)				
						VES (mT)				
					Due to gear break / bycatch mitigation			ESC	ESC	ESC
					estimates	OBS (mT)				
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)				

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST **1. (under Bycatch all non-target species landings)**	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME		START OF SET DATE AND TIME	
	OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG:	YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × sum of all brails = Total catch (mT)

Type 1 brail (see PS-1 form) × (see PS-4 form) less bycatch (see below) (mT)

Type 2 brail + (mT ×) = Total tuna catch (mT)

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN		BIGEYE	
	SMALL (< 75 cm)	LARGE (> 75 cm)	SMALL (< 75 cm)	LARGE (> 75 cm)
YES (%)	YES (%)	YES (%) NUMBER	YES (%)	YES (%) NUMBER
NO	NO	NO	NO	NO

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)					
					Observer	FATE				
						a. (mT)				
					Vessel	FATE				
						(mT)				
					Observer	FATE				
						b. (mT)				
					Vessel	FATE				
						(mT)				
					Observer	FATE				
						c. (mT)				
					Vessel	FATE				
						(mT)				

Total weight of bycatch: ____ mT ____ mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	**Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and		
TIME	**Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.
	and		Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
			Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails		and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
		YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	1. (under Bycatch all non-target species landings)		
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER	**(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	**(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
		Number	
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA		
	A. OBSERVER estimates of total caught		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity × sum of all brails = Total catch (mT)

([ ] mT) **x** [ ]) = [ ] mT

Type 1 brail (see PS-1 form) | (see PS-4 form) | less bycatch (see below) [ ] mT

+

([ ] mT **x** [ ]) = Total tuna catch [ ] mT

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%) NUMBER		YES (%)	YES (%) NUMBER	
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

				SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
					Observer	FATE		
						a. (mT)		
					Vessel	FATE		
						(mT)		
					Observer	FATE		
						b. (mT)		
					Vessel	FATE		
						(mT)		
					Observer	FATE		
						c. (mT)		
					Vessel	FATE		
						(mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST *Interactions with primary gear (not landed)*				COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released			VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET DATE and TIME Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT %	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity **x** sum of all brails = **Total catch** mT

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form) — sum of all brails (see PS-4 form)

less bycatch *(see below)* [ ] mT

=>

+

Type 2 brail

([ ] mT) x [ ]

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN			BIGEYE		
	SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
YES (%)	YES (%)	YES (%) NUMBER		YES (%)	YES (%) NUMBER	
NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
					Observer	**FATE**		
						a. (mT)		
					Vessel	**FATE**		
						. (mT)		
					Observer	**FATE**		
						b. (mT)		
					Vessel	**FATE**		
						. (mT)		
					Observer	**FATE**		
						c. (mT)		
					Vessel	**FATE**		
						. (mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?	*Record species and tag numbers. Fill tag recovery forms!*					VES (mT)			

FATE CODES

RWW Retained - whole weight	DFR Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality	**GEAR INTERACTION CODES**
RHG Retained - headed and gutted (billfish only)	DTS Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG Retained - gilled and gutted (kept for sale)	DGD Discarded - gear damage (tuna only)	ESC Escaped	IJO - Jumped out (over net)
RPT Retained - partial (e.g. fillet, loin)	DVF Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC Retained - crew consumption (onboard)	DUS Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR Retained - other reason (specify)	DSD Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR Retained trunk - fins retained (shark only)	DWD Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET DATE and TIME Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE

BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS

TOTAL CATCH and TOTAL TUNA CATCH

Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.

YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.

SPECIES OF SPECIAL INTEREST	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
1. (under Bycatch all non-target species landings)	
2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.

FATE CODE		Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
OBSERVER	**(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
VESSEL LOG	**(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number	
Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates

TARGET TUNA

A. OBSERVER estimates of total caught		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
Due to gear break / bycatch mitigation	**ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS

How many tags were recovered ?	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	OBSERVER: (see PS-2)	START OF SET DATE AND TIME — YY MM DD hh mm	VESSEL LOG:	START OF SET DATE AND TIME — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

$$(\boxed{\quad}_{mT} \times \boxed{\quad}) = \boxed{\quad}_{mT}$$

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch (see below) $\boxed{\quad}_{mT}$ =>

+

Type 2 brail

$$(\boxed{\quad}_{mT} \times \boxed{\quad})$$

= Total tuna catch $\boxed{\quad}_{mT}$

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)		YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)		BIGEYE LARGE (> 75 cm)		
		YES (%)		YES (%)		NUMBER	YES (%)		YES (%)		NUMBER
	YES / NO	YES / NO		YES / NO			YES / NO		YES / NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							(mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							(mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							(mT)			

Total weight of bycatch: _____ mT   _____ mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST *Interactions with primary gear (not landed)*				COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW					
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released		FATE					
					OBS (mT)					
					VES (mT)					
					FATE	RWW	RWW	RWW		
					OBS (mT)					
					VES (mT)					
					Due to gear break / bycatch mitigation	ESC	ESC	ESC		
					estimates OBS (mT)					
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*			estimates VES (mT)					

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)	

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**YES or NO**	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
		%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed. Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number		Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	OBSERVER: (see PS-2)	START OF SET DATE AND TIME					VESSEL LOG:	START OF SET DATE AND TIME				
		YY	MM	DD	hh	mm		YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch   **OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT** - circle **YES** or **NO** for each species   *N.B.: these calculations include all the tuna in this catch, whether retained or discarded*

([ ] mT x [ ]) = [ ] mT

Type 1 brail *(see PS-1 form)*   *(see PS-4 form)*   less bycatch *(see below)* [ ] mT

+   =>

Type 2 brail
([ ] mT x [ ])   = Total tuna catch [ ] mT

	SKIP-JACK	YELLOWFIN					BIGEYE				
		SMALL (< 75 cm)		LARGE (> 75 cm)			SMALL (< 75 cm)		LARGE (> 75 cm)		
		YES (%)		YES (%)		NUMBER	YES (%)		YES (%)		NUMBER
		NO		NO			NO		NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer **FATE**			
							a. (mT)			
							Vessel **FATE**			
							. (mT)			
							Observer **FATE**			
							b. (mT)			
							Vessel **FATE**			
							. (mT)			
							Observer **FATE**			
							c. (mT)			
							Vessel **FATE**			
							. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST *Interactions with primary gear (not landed)*				COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released			OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC	
					estimates	OBS (mT)			
How many Tags were recovered?	*Record species and tag numbers. Fill tag recovery forms!*					VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)		IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped		IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)			ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive			IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead			OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown			

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and		
TIME	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE

BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS

TOTAL CATCH and TOTAL TUNA CATCH

Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.

	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.

SPECIES OF SPECIAL INTEREST	
1. (under Bycatch all non-target species landings)	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.

FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH	
Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.	
VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.	
Number	Place a dash in the column if they have not recorded the species.	
Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates	

TARGET TUNA

A. OBSERVER estimates of total caught	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
B. OBSERVER totals (mT) discards + RCC	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS

How many tags were recovered ?	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG:	YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity **x** sum of all brails **=** Total catch

([ ] mT) x [ ] = [ ] mT

Type 1 brail (see PS-1 form) (see PS-4 form)   less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT x [ ]) = Total tuna catch [ ] mT

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN			BIGEYE		
		SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE			
								a. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								b. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								c. (mT)			
							Vessel	FATE			
								(mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC Escaped
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown

GEAR INTERACTION CODES
IEN - Entangled (in gear)
IJO - Jumped out (over net)
ICR - Crew released from net
IBR - Broke through net
OTH - Other, please specify

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and TIME	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
		YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	1. (under Bycatch all non-target species landings)		
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.
			Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER (mT)		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
	Number		
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity x **sum of all brails**) = **Total catch** (mT)

Type 1 brail (see PS-1 form) — (see PS-4 form) — **less bycatch** (see below) (mT)

+

Type 2 brail (mT) x ( ) — **= Total tuna catch** (mT)

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle YES or NO for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)		
	YES	YES (%)	YES (%)		NUMBER	YES (%)	YES (%)		NUMBER
	NO	NO	NO			NO	NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT

Total weight of bycatch: ___ mT ___ mT

TARGET TUNA

		SKJ	YFT	BET
A. OBSERVER estimates of total of each species caught (mT)				
Observer	FATE			
	a. (mT)			
Vessel	FATE			
	(mT)			
Observer	FATE			
	b. (mT)			
Vessel	FATE			
	(mT)			
Observer	FATE			
	c. (mT)			
Vessel	FATE			
	(mT)			
B. OBSERVER totals (mT) discards + RCC (a+b+c):				

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT

Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
	FATE			
	OBS (mT)			
	VES (mT)			
	FATE	RWW	RWW	RWW
	OBS (mT)			
	VES (mT)			
Due to gear break / bycatch mitigation estimates	ESC	ESC	ESC	ESC
	OBS (mT)			
	VES (mT)			

How many Tags were recovered? ___

Record species and tag numbers. Fill tag recovery forms!

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	**Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and TIME	**Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		
	1. (under Bycatch all non-target species landings)		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER	**(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	**(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
		Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA		
	A. OBSERVER estimates of total caught		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

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OBSERVER NAME	VESSEL NAME	PAGE	OF
		(SET No.)	

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT x [ ]) = Total tuna catch [ ] mT

=>

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)		YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)		BIGEYE LARGE (> 75 cm)		
		YES (%)		YES (%)		NUMBER	YES (%)		YES (%)		NUMBER
	YES / NO	NO		NO			NO		NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

					SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE		
								a. (mT)		
							Vessel	FATE		
								. (mT)		
							Observer	FATE		
								b. (mT)		
							Vessel	FATE		
								. (mT)		
							Observer	FATE		
								c. (mT)		
							Vessel	FATE		
								. (mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured / Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW			
						FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
						Due to gear break / bycatch mitigation	ESC	ESC	ESC
						estimates OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	1. (under Bycatch all non-target species landings)		
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER	(mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	(mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
		Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch (see below) [ ] mT =>

+

Type 2 brail

([ ] mT x [ ])

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)		YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)		BIGEYE LARGE (> 75 cm)		
	YES (%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
	NO	NO		NO			NO		NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

				SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)		
							Observer FATE		
							a. (mT)		
							Vessel FATE		
							(mT)		
							Observer FATE		
							b. (mT)		
							Vessel FATE		
							(mT)		
							Observer FATE		
							c. (mT)		
							Vessel FATE		
							(mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE		
						OBS (mT)		
						VES (mT)		
						FATE	RWW	RWW	RWW
						OBS (mT)		
						VES (mT)		
					Due to gear break / bycatch mitigation	ESC	ESC	ESC
					estimates	OBS (mT)		
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)		

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
		%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		
	1. (under Bycatch all non-target species landings)		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER	(mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	(mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set. Place a dash in the column if they have not recorded the species.
		Number	
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME			START OF SET DATE AND TIME	
	OBSERVER: (see PS-2)	YY MM DD hh mm		VESSEL LOG:	YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

brail capacity x sum of all brails) = Total catch mT

Type 1 brail (see PS-1 form) / (see PS-4 form)

less bycatch (see below) mT

+

Type 2 brail (mT x) = Total tuna catch mT

=>

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)		BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)	
	YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

									SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)				
							Observer	FATE			
								a. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								b. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								c. (mT)			
							Vessel	FATE			
								(mT)			

Total weight of bycatch: ___ mT ___ mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation		ESC	ESC	ESC
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded		(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	**Observer (PS-2)**	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and		
TIME	**Vessel (logsheet)**	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST **1. (under Bycatch all non-target species landings)**	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE OF
		(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity — sum of all brails — Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form) — (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT x [ ]) =>

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle YES or NO for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN				BIGEYE			
	SMALL (< 75 cm)	LARGE (> 75 cm)			SMALL (< 75 cm)	LARGE (> 75 cm)		
YES (%)	YES (%)	YES	(%)	NUMBER	YES (%)	YES	(%)	NUMBER
NO	NO	NO			NO	NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

				SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
					Observer	FATE			
						a. (mT)			
					Vessel	FATE			
						. (mT)			
					Observer	FATE			
						b. (mT)			
					Vessel	FATE			
						. (mT)			
					Observer	FATE			
						c. (mT)			
					Vessel	FATE			
						. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT			

Tuna kept onboard for later unload if not RWW:

	FATE			
	OBS (mT)			
	VES (mT)			
	FATE	RWW	RWW	RWW
	OBS (mT)			
	VES (mT)			

Due to gear break / bycatch mitigation | ESC | ESC | ESC |

estimates:
| | OBS (mT) | | | |
| | VES (mT) | | | |

How many Tags were recovered? | *Record species and tag numbers. Fill tag recovery forms!*

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and TIME	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	**if SSI OBSERVED** (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity x sum of all brails = Total catch (mT)

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch (see below) [ ] mT

Type 2 brail
+
([ ] mT x [ ]) => = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN				BIGEYE				
		SMALL (< 75 cm)	LARGE (> 75 cm)			SMALL (< 75 cm)	LARGE (> 75 cm)		
	YES	YES (%)	YES (%)	(%)	NUMBER	YES (%)	YES (%)	(%)	NUMBER
	NO	NO	NO			NO	NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

							SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE		
								a. (mT)		
							Vessel	FATE		
								(mT)		
							Observer	FATE		
								b. (mT)		
							Vessel	FATE		
								(mT)		
							Observer	FATE		
								c. (mT)		
							Vessel	FATE		
								(mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST *Interactions with primary gear (not landed)*	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
			OBS (mT)			
			VES (mT)			

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released				
					FATE	RWW	RWW	RWW
					OBS (mT)			
					VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC
					estimates OBS (mT)			
How many Tags were recovered?	*Record species and tag numbers. Fill tag recovery forms!*		VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality		GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET **DATE and** **TIME** Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET** (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**			
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
		YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER	(mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
		Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG	(mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
		Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA A. OBSERVER estimates of total caught		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation	ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

brail capacity × sum of all brails) = Total catch (mT)

([ ] mT) Type 1 brail (see PS-1 form) × [ ] (see PS-4 form) = [ ] mT

less bycatch (see below) [ ] mT

+ Type 2 brail ([ ] mT × [ ]) => = Total tuna catch [ ] mT

	SKIP-JACK	YELLOWFIN					BIGEYE				
		SMALL (< 75 cm)	LARGE (> 75 cm)				SMALL (< 75 cm)	LARGE (> 75 cm)			
	YES / NO	(%)	YES / NO	(%)	YES / NO	(%)	NUMBER	YES / NO	(%)	YES / NO	(%)	NUMBER

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS) / TARGET TUNA

				SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured / Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW		SKJ	YFT	BET
						FATE				
						OBS (mT)				
						VES (mT)				
						FATE		RWW	RWW	RWW
						OBS (mT)				
						VES (mT)				
						Due to gear break / bycatch mitigation		ESC	ESC	ESC
						estimates OBS (mT)				
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)				

FATE CODES

RWW	Retained - whole weight	DFR Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality	GEAR INTERACTION CODES
RHG	Retained - headed and gutted (billfish only)	DTS Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD Discarded - gear damage (tuna only)	ESC Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR	Retained - other reason (specify)	DSD Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET DATE and TIME Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and Type 2 brails	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure. (If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT %	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA A. **OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. **OBSERVER totals (mT) discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
OBSERVER: (see PS-2)	YY MM DD hh mm	VESSEL LOG: YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity sum of all brails Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch (see below) [ ] mT

+

Type 2 brail

([ ] mT x [ ])

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)		YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)		BIGEYE LARGE (> 75 cm)		
		YES (%)		YES (%)		NUMBER	YES (%)		YES (%)		NUMBER
		NO		NO			NO		NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

								SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW			
						FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
						Due to gear break / bycatch mitigation	ESC	ESC	ESC
						estimates OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR Discarded trunk - fins retained (shark only)	DPQ Discarded - poor quality
RHG	Retained - headed and gutted (billfish only)	DTS Discarded - too small (tuna only)	DOR Discarded - other reasons (specify)
RGG	Retained - gilled and gutted (kept for sale)	DGD Discarded - gear damage (tuna only)	ESC Escaped
RPT	Retained - partial (e.g. fillet, loin)	DVF Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)
RCC	Retained - crew consumption (onboard)	DUS Discarded - unwanted species	DPA - Discarded Protected Species - Alive
ROR	Retained - other reason (specify)	DSD Discarded - shark damage	DPD - Discarded Protected Species - Dead
RFR	Retained trunk - fins retained (shark only)	DWD Discarded - whale damage	DPU - Discarded Protected Species - Unknown

GEAR INTERACTION CODES
IEN - Entangled (in gear)
IJO - Jumped out (over net)
ICR - Crew released from net
IBR - Broke through net
OTH - Other, please specify

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**YES or NO**	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
		%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		
	1. (under Bycatch all non-target species landings)		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number		Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA A. **OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. **OBSERVER totals (mT)** **discards + RCC**		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
			Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity **x** sum of all brails **)** = Total catch mT

(Type 1 brail mT) (see PS-1 form) (see PS-4 form)

less bycatch *(see below)* mT

+

(Type 2 brail mT **x**) => = Total tuna catch mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN					BIGEYE				
		SMALL (< 75 cm)		LARGE (> 75 cm)			SMALL (< 75 cm)		LARGE (> 75 cm)		
	YES	(%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
	NO		NO		NO			NO		NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS) | TARGET TUNA

						SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE			
								a. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								b. (mT)			
							Vessel	FATE			
								(mT)			
							Observer	FATE			
								c. (mT)			
							Vessel	FATE			
								(mT)			

Total weight of bycatch: _____ mT _____ mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC
					estimates	OBS (mT)			

How many Tags were recovered? | *Record species and tag numbers. Fill tag recovery forms!* | VES (mT) | | | |

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET **DATE and** **TIME** Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**	
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.
		Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity sum of all brails Total catch

([ ] mT x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)

less bycatch (see below) [ ] mT =>

+

Type 2 brail

([ ] mT x [ ])

= Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)			BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)		
	YES (%)	YES (%)	YES (%)	NUMBER		YES (%)	YES (%)	NUMBER	
	NO	NO	NO			NO	NO		

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

							SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)				
					Observer	FATE			
						a. (mT)			
					Vessel	FATE			
						(mT)			
					Observer	FATE			
						b. (mT)			
					Vessel	FATE			
						(mT)			
					Observer	FATE			
						c. (mT)			
					Vessel	FATE			
						(mT)			

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST *Interactions with primary gear (not landed)*	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW				
SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION — Captured Released		FATE	
					OBS (mT)	
					VES (mT)	
					FATE	RWW RWW RWW
					OBS (mT)	
					VES (mT)	

Due to gear break / bycatch mitigation — ESC ESC ESC

estimates		
OBS (mT)		
VES (mT)		

How many Tags were recovered? *Record species and tag numbers. Fill tag recovery forms!*

FATE CODES

Code	Description	Code	Description	Code	Description	
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	*(use these fate codes for any SSIs landed on deck)*		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and	
TIME Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**	
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.	
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.	
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)	
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.	
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field	
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.	
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch	
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.	
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !	
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.	
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).	
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.	
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.	
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH	
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.	
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.	
	Number	Place a dash in the column if they have not recorded the species.	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates	
	TARGET TUNA **A. OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)	
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form	
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.	
	B. OBSERVER totals (mT) **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.	
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??	
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
		Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME	START OF SET DATE AND TIME
	OBSERVER: (see PS-2) — YY MM DD hh mm	VESSEL LOG: — YY MM DD hh mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity x sum of all brails) = Total catch (mT)

Type 1 brail (see PS-1 form) (see PS-4 form)

less bycatch (see below) (mT) =>

+

Type 2 brail (mT) x) = Total tuna catch (mT)

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN SMALL (< 75 cm)	YELLOWFIN LARGE (> 75 cm)		BIGEYE SMALL (< 75 cm)	BIGEYE LARGE (> 75 cm)	
	YES / (%)	YES / (%)	YES / (%) / NUMBER		YES / (%)	YES / (%) / NUMBER	
	NO	NO	NO		NO	NO	

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

					SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT

A. **OBSERVER** estimates of total of each species caught (mT)

Observer	FATE	
	a. (mT)	
Vessel	FATE	
	. (mT)	
Observer	FATE	
	b. (mT)	
Vessel	FATE	
	. (mT)	
Observer	FATE	
	c. (mT)	
Vessel	FATE	
	. (mT)	

Total weight of bycatch: ___ mT ___ mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT

Tuna kept onboard for later unload if not RWW:

FATE				
OBS (mT)				
VES (mT)				
FATE	RWW	RWW	RWW	
OBS (mT)				
VES (mT)				

Due to gear break / bycatch mitigation

	ESC	ESC	ESC
OBS (mT)			
VES (mT)			

estimates

How many Tags were recovered? *Record species and tag numbers. Fill tag recovery forms!*

FATE CODES

					GEAR INTERACTION CODES
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)	ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive	IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead	OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown	

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)	

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF		Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.		This number is the same on all forms for a single observer trip.
START of SET **DATE and TIME**	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**YES or NO**	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
		%	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line. Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number		Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) **discards + RCC**		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch *(see below)* [ ] mT

+

Type 2 brail ([ ] mT x [ ]) => = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

SKIP-JACK	YELLOWFIN			BIGEYE		
	SMALL (< 75 cm)	LARGE (> 75 cm)		SMALL (< 75 cm)	LARGE (> 75 cm)	
YES / NO	YES (%) / NO	YES (%) / NO	NUMBER	YES (%) / NO	YES (%) / NO	NUMBER

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)   TARGET TUNA

						SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer FATE			
							a. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							b. (mT)			
							Vessel FATE			
							. (mT)			
							Observer FATE			
							c. (mT)			
							Vessel FATE			
							. (mT)			

Total weight of bycatch: [ ] mT   [ ] mT

B. **OBSERVER** totals (mT) discards + RCC *(a+b+c)*:

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT)	No.	CONDITION Captured / Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
							OBS (mT)			
							VES (mT)			
							FATE	RWW	RWW	RWW
							OBS (mT)			
							VES (mT)			

Due to gear break / bycatch mitigation   ESC   ESC   ESC

estimates OBS (mT)

How many Tags were recovered?   *Record species and tag numbers. Fill tag recovery forms!*   estimates VES (mT)

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.

OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
START of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DATE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.
TIME	

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity		Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**
	Sum of all brails		After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and		... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2 brails		(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH		This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch		Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field
	TOTAL TUNA CATCH		Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.
	YES or NO		YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	**%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.
		Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !
	BY-CATCH SPECIES CODE		Record every species that lands on deck with the three letter FAO species code.
	SPECIES OF SPECIAL INTEREST		In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while
	1. (under Bycatch all non-target species landings)		recorvering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).
	2. (under Interactions with net not landed)		Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.
	3. Comment / SSI Treatment		Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE		Use fate codes provided to say what happened to each species landed Use 1 line per species/fate group. Remember that a species may be split into groups each with a different fate code. Eg: RRU RWW 2 mT **REMEMBER** - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)		Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH
	Number		Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)		Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number		Place a dash in the column if they have not recorded the species.
	Total weight of bycatch		Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates
	TARGET TUNA **A. OBSERVER estimates of total caught**		Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)
	FATE		Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form
	OBS (mT)		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
	VES (mT)		Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT) discards + RCC		For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.
	Tuna kept onboard for later unload		Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??
	Due to gear break / bycatch mitigation ESC		Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.
TAGS	**How many tags were recovered ?**		Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers		Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition.
			Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
SET DETAILS

FORM PS - 3

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	PAGE	OF
			(SET No.)

OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME					
	OBSERVER: (see PS-2)	YY	MM	DD	hh	mm	VESSEL LOG:	YY	MM	DD	hh	mm

SET SEQUENCE TIMES

EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS

brail capacity   sum of all brails   Total catch

([ ] mT) x [ ]) = [ ] mT

Type 1 brail (see PS-1 form)   (see PS-4 form)   less bycatch (see below) [ ] mT

Type 2 brail [ ] mT   +   ([ ] mT x [ ])   =>   = Total tuna catch [ ] mT

OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT - circle **YES** or **NO** for each species

N.B.: these calculations include all the tuna in this catch, whether retained or discarded

	SKIP-JACK	YELLOWFIN				BIGEYE				
		SMALL (< 75 cm)	LARGE (> 75 cm)			SMALL (< 75 cm)	LARGE (> 75 cm)			
		YES (%)	YES (%)		NUMBER	YES (%)	YES (%)		NUMBER	
		NO	NO	NO		NO	NO			

BY-CATCH (ALL NON-TARGET SPECIES LANDINGS)

TARGET TUNA

							SKJ	YFT	BET

SPECIES CODE	FATE CODE	OBSERVER (mT)	No.	VESSEL LOG (mT)	No.	COMMENTS / SSI TREATMENT	A. **OBSERVER** estimates of total of each species caught (mT)			
							Observer	FATE		
								a. (mT)		
							Vessel	FATE		
								(mT)		
							Observer	FATE		
								b. (mT)		
							Vessel	FATE		
								(mT)		
							Observer	FATE		
								c. (mT)		
							Vessel	FATE		
								(mT)		

Total weight of bycatch: [ ] mT [ ] mT

B. **OBSERVER** totals (mT) discards + RCC (a+b+c):

SPECIES OF SPECIAL INTEREST
Interactions with primary gear (not landed)

SPECIES CODE	GEAR INTERACTION CODE	Observer (mT) No.	CONDITION Captured Released	COMMENTS / SSI TREATMENT	Tuna kept onboard for later unload if not RWW	FATE			
						OBS (mT)			
						VES (mT)			
						FATE	RWW	RWW	RWW
						OBS (mT)			
						VES (mT)			
					Due to gear break / bycatch mitigation	ESC	ESC	ESC	
					estimates	OBS (mT)			
How many Tags were recovered?		*Record species and tag numbers. Fill tag recovery forms!*				VES (mT)			

FATE CODES

RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	**GEAR INTERACTION CODES**
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		OTH - Other, please specify
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

PURSE SEINE LOG - SET DETAILS

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code* **1** on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occassion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)	

	OBSERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
	VESSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
	PAGE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	OBSERVER TRIP ID No.	This number is the same on all forms for a single observer trip.
	START of SET **DATE and TIME** Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/date.

If SSI Observed (Obs Time Sighted)	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).

SET SEQUENCE	**BEGIN SET (SKIFF OFF)**	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch. Record the time the winch is switched on.
	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears. This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash
	END BRAILING / SACK ONBOARD	Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the deck.
	END SET (NEXT ACTIVITY START)	Next activity START marks end of set (no later than 'skiff comes on board').Record the activity change on PS -2.

SET CATCH / CAPTURE DETAILS	**TOTAL CATCH and TOTAL TUNA CATCH**		
	Brail Capacity	Find on the PS-1. Use to calcualte total catch. **'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'**	
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.	
	Type 1 and	... if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made. Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.	
	Type 2 brails	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' brail information that is provided.)	
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.	
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field	
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped **alive** from net.	
	YES or NO	YES' or 'NO' **must** be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch	
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT **%**	Carefully eye-estimate the **percentage of the TOTAL TUNA** for each species (+ each size category for YFT and BET) N.B.: **%** of small (or large) YFT (or BET) is the **%** of **TOTAL TUNA** ! NOT **%** of that species of tuna.	
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a **good** estimate (counts) is not easy, dash the 'number' field. **Do not** make a rough estimate !	
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.	
	SPECIES OF SPECIAL INTEREST *1. (under Bycatch all non-target species landings)*	In the normal manner, record any SSI that land on deck, estimate total weight and number. Use the SSIs fate code to record condition status when discarded. (DPA, DPD, DPU). Note no SSI can be kept onboard (injured turtle may be while recovrering). Note these landed SSIs are no longer recorded on Gen-2 form. Use new PS 4 to record length and sex of landed SSIs (sharks etc).	
	2. (under Interactions with net not landed)	Record any SSI you see in the net, but are not landed on deck in this area. Use the **new gear interaction codes** instead of the normal fate codes here. Record their condition (A0- alive, A1- alive and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data field.	
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.	
	FATE CODE	Use fate codes provided to say what happened to each species landed Remember that a species may be split into groups each with a different fate code. **REMEMBER** - use only one (the best and most informative) code for each line.	Use 1 line per species/fate group. Eg: RRU RWW 2 mT RRU DTS 0.5 mT
	OBSERVER **(mT)**	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH	
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.	
	VESSEL LOG **(mT)**	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.	
	Number	Place a dash in the column if they have not recorded the species.	
	Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates	
	TARGET TUNA A. **OBSERVER estimates of total caught**	Calculate the combined large and small **%** x **Total tuna catch** for each species (SKJ, YFT and BET)	
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form	
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
	VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.	
	B. **OBSERVER totals (mT)** **discards + RCC**	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded and the retained for crew consumption (RCC) combined for that species.	
	Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species If tuna is otherwise retained onboard for later unload (fate = R??) then A. - B. = the combined total of RWW + R??	
	Due to gear break / bycatch mitigation **ESC**	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	

TAGS	**How many tags were recovered ?**	Note the number of tags found from in this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record **tag number** and **species**. Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form .

SPC/FFA REGIONAL PURSE SEINE OBSERVER
WELL TRANSFER RECONCILIATION FORM

FORM PS - 5

REVISED MAR. 2014

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE OF

DATE	TIME	WELL ACTIVITY CODE	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+ / - / 0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET ? Y / N	COMMENT

WELL ACTIVITY CODES		SOURCE	DESTINATION	VESSEL CHANGE ?
FS	Received as desired catch from a set on this vessel	"NET"	<well no.>	+
CR	Retained from a set solely because of catch-retention rules	"NET"	<well no.>	+
WT	Transferred between wells	<well no.>	<well no.>	0
UL	Unloaded to cannery or cool store	<well no.>	"SHORE"	-
TR	Received into well from another vessel's hold	<vessel name>	<well no.>	+
TG	Given from well to another vessel's hold	<well no.>	<vessel name>	-
SR	Received into well from another vessels net	<vessel name>	<well no.>	+
DC	Discarded into the sea from Well due to spoilage, etc.	<well no.>	"DISC."	-

CR <well no.>s	Record ALL CATCH in metric tonnes. Use whole numbers (e.g.: 25).
	Calculate the "NEW CUMULATIVE TOTAL" by adding or subtracting (see the "VESSEL CHANGE ?" value for '+' or '-') to or from the previous "cumulative total" (on the previous line). This is tonnage that has been 'added to' or 'removed from' the vessel.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
WELL TRANSFER RECONCILIATION FORM

FORM PS - 5

REVISED MAR. 2014

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE OF

DATE	TIME	WELL ACTIVITY (CODE)	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+ / - / 0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET? Y / N	COMMENT

Date: **Time**	Record the date that the fish was transferred on. Use ship's time. Record the time the fish were transferred. Use ship's time. Note each transfer (in or out of a well) should be recorded with at least one line of data.
Well activity code:	Use **Well Activity** codes at bottom of this page to show types of fish transfer that took place. The well activity codes explain where the fish came from and where they were transferred to. This might include fish that were not loaded into your vessel's well, but were transferred directly from the brailer to another boat.
Source:	The source indicates where the fish has come from. The source code is related to the well activity code that you have recorded. An explanation of the source information that should be recorded is outlined to the right of the well activity code you have used. NET: The fish has come from the net. Record 'NET'. WELL NO.: The fish has come from a well. Record the well number here. VESSEL NAME: The fish has come from a vessel. Record vessel's full name here, including numbers, etc.
Destination:	to the well activity code that has been recorded. The type of destination information required is outlined on the bottom of this form - on the same line and to the right of the related ' well activity code'
Vessel Change?	Use the symbol provided to indicate if they were more or less fish on your vessel after the fish transfer. See further explanations below. You do not have to state the amount. (+) indicates a positive change - there are more fish on your vessel after the fish transfer. (--) indicates a negative change - there are less fish on your vessel after the fish transfer.
New Cumulative Total	Record the vessel's new 'onboard' total or 'cumulative' total here. The figure should be consistent with the amounts you have recorded to date.
Recorded on logsheet? Y/ N	Check the vessel's logsheet to see if they have recorded the fish transfer clearly on the logsheet. Record Y for yes and N for no.

Examples

DATE	TIME	WELL ACTIVITY	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE?	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET	COMMENT
10/10/11	11.25	FS	NET	P5	30	+	30	Y	*From set, on logsheet*
11/10/11	15.20	FS	NET	P1	35	+	65	Y	*See PS-3 form*
11/10/11	15.20	FS	NET	P2	30	+	95	Y	*See PS-3 form*
11/10/11	15.20	FS	NET	S3	15	+	110	Y	*See PS-3 form*
15/10/11	22.20	WT	P1	S1	30	0	110	N	*Not observed, see jnl page 52*
16/10/11	08.10	TR	Yasu# 2	S7	40	+	150	N	*See journal page 58*
18/10/11	15.45	TG	S1	Ying#9	30	-	120	N	*See journal page 62*
19/10/11	11.25	FS	NET	P7	35	+	155	N	*From set, not on logsheet*
20/10/11	18.05	SR	Yasu# 8	P2	20	+	175	N	

WELL ACTIVITY CODES		SOURCE	DESTINATION	VESSEL CHANGE ?
FS	Received from a set on this vessel	"NET"	<well no.>	+
CR	Retained from a set solely because of catch-retention rules	"NET"	<well no.>	+
WT	Transferred between wells	<well no.>	<well no.>	0
UL	Unloaded to cannery or cool store	<well no.>	"SHORE"	-
TR	Received into well from another vessel	<vessel name>	<well no.>	+
TG	Given from well to another vessel's hold	<well no.>	<vessel name>	-
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DC	Discarded into the sea from Well due to spoilage, etc.	<well no.>	"DISC."	-

CR <well no.>s	
	CR <well no.>s are wells used by a vessel to collect fish that would have been discarded if there was no WCPFC catch retention CMM. These <well no.>s will be the DESTINATION <well no.>s when WELL ACTIVITY CODE = CR is used. They may also be used with WELL ACTIVITY CODE = WT, if small fish are sorted from other (mixed sized fish) wells and into these wells. CR <well no.>s may also be used it as SOURCE <well no.>s if fish are being removed from these wells during **other Well Activities**.

SPC/FFA REGIONAL PURSE SEINE OBSERVER
WELL TRANSFER RECONCILIATION FORM

FORM PS - 5

REVISED MAR. 2014

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE	OF

DATE	TIME	WELL ACTIVITY CODE	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+ / - / 0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET ? Y / N	COMMENT

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CR <well no.>s		Record ALL CATCH in metric tonnes. Use whole numbers (e.g.: 25).
		Calculate the "NEW CUMULATIVE TOTAL" by adding or subtracting (see the "VESSEL CHANGE ?" value for '+' or '-') to or from the previous "cumulative total" (on the previous line). This is tonnage that has been 'added to' or 'removed from' the vessel.

SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM		FORM PS - 5

REVISED MAR. 2014

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE OF

DATE	TIME	WELL ACTIVITY (CODE)	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (**+** / **-** / **0**)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET? Y / N	COMMENT

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Examples

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15/10/11	22.20	WT	P1	S1	30	0	110	N	*Not observed, see jnl page 52*
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20/10/11	18.05	SR	Yasu# 8	P2	20	+	175	N	

WELL ACTIVITY CODES | SOURCE | DESTINATION | VESSEL CHANGE ?

		SOURCE	DESTINATION	VESSEL CHANGE ?
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TG	Given from well to another vessel's hold	<well no.>	<vessel name>	-
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CR <well no.>s		

CR <well no.>s are wells used by a vessel to collect fish that would have been discarded if there was no WCPFC catch retention CMM.
These <well no.>s will be the DESTINATION <well no.>s when WELL ACTIVITY CODE = CR is used.
They may also be used with WELL ACTIVITY CODE = WT, if small fish are sorted from other (mixed sized fish) wells and into these wells.
CR <well no.>s may also be used it as SOURCE <well no.>s if fish are being removed from these wells during **other Well Activities**.

CODES PAGE
PURSE-SEINE OBSERVER WORKBOOK

Think about tearing out this page to help you fill in your forms, esp. GEN-5.

ISO (alpha 2) Country Codes

AS	American Samoa
AU	Australia
BZ	Belize
CK	Cook Islands
CA	Canada
EC	Ecuador
SV	El Salvador
FM	Fed. States of Micronesia
FJ	Fiji Islands
FR	France
PF	French Polynesia
GU	Guam
ID	Indonesia
IW	International Waters
JP	Japan
TO	Kingdom of Tonga
KI	Kiribati
KR	Korea
LT	Lithuania
CN	Mainland China
MY	Malaysia
MT	Malta
MH	Marshall Islands
NR	Nauru
NL	Netherlands
NZ	New Zealand
NC	New Caledonia
NU	Niue
MR	Northern Marianas
PW	Palau
PA	Panama
PG	Papua New Guinea
PH	Philippines
RU	Russia
SB	Solomon Islands
TK	Tokelau
TV	Tuvalu
TW	Chinese Taipei (Taiwan)
US	United States
VU	Vanuatu
WF	Wallis and Futuna
WS	Samoa

Origin of FAD

1	Your vessel's deployed this trip
2	Your vessel's deployed previous trip
3	Other vessel's (owner consent)
4	Other vessel's (no owner's consent)
5	Other vessel's (consent unknown)
6	Drifting and found by your vessel
7	Deployed by FAD auxillary vessel
8	Origin unknown
9	Other origin - *(please specify)*

FAD MATERIALS
Main Materials

1	Logs, trees or debris tied together
2	Timber / planks / pallets / spools
3	PVC or Plastic tubing
4	Plastic drums
5	Plastic sheeting
6	Metal drums (i.e. 44 gal)
7	Philippines design drum FAD
8	Bamboo / Cane
9	Floats / Corks
10	Unknown (describe)

Floating Object
"as found" or "as left"

1	Man made object (Drifting FAD)
2	Man made object (Non FAD)
3	Tree or log (natural, free floating)
4	Tree or log (converted into FAD)
5	Debris (flotsam bunched together)
6	Dead Animal (specify i.e. whale horse etc.)
7	Anchored Raft, FAD, or Payo
8	Anchored Tree or Logs
9	Other (please specify)
10	Man made object (Drifting FAD) - changed

FAD MATERIALS
FAD Attachments

11	Chain, cable rings, weights
12	Cord / rope
13	Netting hanging underneath FAD
14	Bait containers
15	Sacking / bagging
16	Coconut fronds / tree branches
17	Other (describe)

SPECIES OF SPECIAL INTEREST CODES

SSI	**ALL SPECIES OF SPECIAL INTEREST**
TTX	**All Turtles**
TTL	Loggerhead Turtle
LTB	Leatherback Turtle
TUG	Green Turtle
LKV	Olive Ridley Turtle
TTH	Hawksbill Turtle
KEZ	Eastern Pacific Green Turtle (black turtle)
FBT	Flatback turtle

MAM	**All Marine Mammals**
ODN	**Toothed Whales**
FAW	False Killer Whale
SHW	Short-Finned Pilot Whale
SPW	Sperm Whale
KPW	Pygmy Killer Whale
DWW	Dwarf sperm whale
BCW	Cuvier's Beaked Whale
BBW	Blainville's Beaked Whale
MEW	Melon-headed Whale

MYS	**All Baleen Whales**
BLW	Blue whale
FIW	Fin whale
SIW	Sei whale
BRW	Bryde's whale
MIW	Minke whale
HUW	Humpback whale

SHK	**All Sharks**
RHN	Whale Shark
OCS	Oceanic White-tip Shark
FAL	Silky Shark

RMV	**Mobula spp.**
RMB	Giant Manta

DLP	**All Dolphins**
DBO	Bottlenose Dolphin
DCO	Common Dolphin (short-beaked)
DRR	Risso's Dolphin
DSI	Spinner Dolphin
DPN	Spotted Dolphin
DST	Stiped Dolphin
RTD	Rough-toothed Dolphin

BIZ	**All birds**
DKN	Black-footed albatross
DIZ	Laysan albatross
ALZ	Albatrosses
SZV	Boobies and Gannets
PRX	Petrels and Shearwaters
LRD	Gulls, Terns, Skuas

GEAR INTERACTION CODES

IEN - Entangled (in gear)
IJO - Jumped out (net closed)
ICR - Crew released from net
IBR - Broke through net
IHE - Hooked internally (mouth)
IDJ - Hooked in jaw (circle hook)
IHD - Hooked deeply - throat or stomach
IHU - Hooked unknown
OTH - Other, please specify

VESSEL INTERACTION CODES

IBV - Interaction, beside vessel
ION - Interaction, outside net
ICF - Interaction, crew feeding
IWF - Interaction, with FADs, but not set on
IDW - Interaction, dead in water
ICV - Interaction, collision with vessel
ICP - Interaction, collision with propeller
ICT - Interaction, collision with tori line
FRB - Interaction, feeding on bait during set
IFO - Interaction, feeding on discarded offal
IRE - Interaction, resting on vessel, floats or FADs(birds)
OTH - Interaction- other, please specifiy

SIGHTINGS CODES

SDS - Sighting - Distance Swimming
SBR - Sighting - Breaching
STP - Sighting - Tail slapping or playing
SMG - Sighting - Motionless in group
SDW - Sighting - Dead in Water
SBO - Sighting - Bird overhead
OTH - Sighting - Other, please specify

SPC/FFA REGIONAL OBSERVER
VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS

FORM GEN - 1

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

VESSEL OR AIRCRAFT SIGHTINGS

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				SIGHTED VESSEL OR AIRCRAFT				COMPASS BEARING	DISTANCE	ACTION CODE	PHOTO	COMMENTS
	DATE (MMDD)	TIME (hh mm)	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	BEARING (degrees)	(Nautical Miles)	(seen vess)	FRAME #	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED (circle units)				ACTION CODE	COMMENTS
	DATE (MMDD)	TIME (hh mm)	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT. NO.	YFT WGT. NO.	BET WGT. NO.	WGT. NO.	(host vess)	
1																
2																
3																

VESSEL AND AIRCRAFT TYPE CODES
1	SINGLE PURSE SEINE	8	SEARCH, ANCHOR OR LIGHT BOAT
2	LONGLINE	9	FISH CARRIER
3	POLE AND LINE	10	TRAWLER
4	MOTHERSHIP		
5	TROLL	21	LIGHT AIRCRAFT
6	NET BOAT	22	HELICOPTER
7	BUNKER		
		31	OTHER - please specify: _____

FLAG COUNTRY CODES
• IF COUNTRY IS NOT IN LIST WRITE NAME OF COUNTRY

CN	CHINA	US	USA	BZ	BELIZE
JP	JAPAN	PH	PHILLIPINES	RU	RUSSIA
TW	TAIWAN	PA	PANAMA	SG	SINGAPORE
KR	KOREA	HN	HONDURAS	LK	SRI LANKA
				VU	VANUATU

ACTION CODES
• FISHING INCLUDES ANY FISHING RELATED ACTIVITY NOT OTHERWISE COVERED HERE

RECEIVING / **GIVING**

FI	FISHING	TR	TRANSHIPPING FISH
PF	POSSIBLY FISHING	SR	SET SHARING
NF	NOT FISHING	BR	BUNKERING
DF	DUMPING FISH		

GIVING:
- TG TRANSHIPPING FISH (from hold in one boat to hold in other)
- SG SET SHARING... (from one boat's net to another boat's hold)
- BG BUNKERING

OR OTHER ..specify... OG OTHER _____

ALL WEIGHTS MUST BE METRIC TONNES

Sighting vessels is a very important surveillance role of observers. If vessels are seen that could possibly be fishing illegally, record as much detail as possible. Don't hesitate to contact the "Observer Co-ordinator" at FFA or your local fishery division, by telex, fax or email, immediately you see such activity. Include all information about the vessel and its activities. An example of the format to use when reporting a sighting to FFA is at the bottom of this page. Please follow the format, and add any other comments at the end of the message.

Observer Name	Put first name first and last name last. Print name in full.
Vessel Name	Put vessel's full name. Names <u>must not</u> be abbreviated.
Observer Trip ID	Same on all Forms - issued to observer before leaving port.
Page of	If there is more than one page for the trip, number each page.

SIGHTED VESSEL OR AIRCRAFT

Be as thorough as you possibly can when filling this section of the form. Any small piece of information can assist in identifying the vessel. This is especially important if you can not see the name or call sign. If you can not get some information because it is not visible or impossible to work out, put a dash in the data field.

Date/Time	Ship's date / time at start of sighting or transfer activity (dd/mm/yy hh:mm)
Latitude dd°mm.mmm' Longitude ddd°mm.mmm'	Take positions from the GPS. Record in degrees (2 digits for latitude and 3 for longitude), minutes and to 3 decimal place fractions of minutes
N S & E W	It is very important to record if latitude is North or South of the equator by writing "N" or "S" beside the position. Also be sure to note longitude as East or West of the 180° line. These can also be confirmed on the GPS.
Name *(of sighted vessel)*	If possible name the vessel you sighted. If you can't see the name properly, try to get a few of the letters from the name.
International Call-sign	If possible get any call signs or numbers that are visible.
Flag	Try to find out the flag country - often written on stern.
Type Code	"Vessel and aircraft **type codes**" are on front of Form. E.g.: purse-seiner = 1; longliner = 2; etc.
Compass bearing (degrees) and Distance (nautical miles)	Check compass and radar for a bearing and an exact distance from the observer's vessel to the other vessel. Estimate the distance if the radar is not available.
Action Code (seen vess)	In this section the "action code" describes the activity the sighted *(seen)* vessel is involved in when it was observed. If unsure of the best code, describe the activity in "comments".
Photo Frame #	If taking a photo, record the camera's photo frame number.
Comments	Comments about the sighted vessel or aircraft that have not been covered on the form. (E.g., distinguishing features such as colour, hull design or shape, bridge position, etc.). Be as thorough as possible as this will help identify the vessel later, especially if you can not get a name or call-sign.

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

Other vessel name		Name of any other vessel that is involved in a transfer operation with the observer's vessel.
International callsign		The call-sign that should be visibly painted on the other vessel
Type Code		Use the "Vessel and aircraft **type codes**" on front of this form to describe what type of vessel is receiving the fish.
FISH TRANSFERRED	SkipJack Weight	Total Weight of Skipjack that has been transferred
	Yellowfin weight	Total Weight of Yellowfin that has been transferred
	Bigeye Weight	Total Weight of Bigeye that has been transferred
	"Blank" Weight	Record the species code for any other type of species that are being transferred. Recording 'mixed' species is an option, especially on purse seiners.
	Action Code	See codes on front of Form.
	Comments	Comment about the transfer activities that take place (e.g.: method used; problems; destination of the fish; etc.)

CODES

Vessel & Aircraft type codes	To make recording easier, each type of vessel has a unique number code (see code table). Be careful using number codes.
Action Codes (host vess)	Here describe the activity of the observer's vessel. If with another vessel be sure to use a code that shows whether the observer's (host) vessel receives ("_R") or it gives ("_G") items.
Host vessel = vessel that observer is on. *Use the "**?R**" codes if host vessel is receiving fish or items from another vessel. Use the "**?G**" codes if the host vessel is giving fish or items to another vessel*	If more than one action is taking place record the most important (usually to do with fish transfer) in the "ACTION" column and the second action code in the comments column. TR, TG - transferring fish between vessel holds SR, SG - set sharing - when vessel has too many fish after all wells are filled (usually from its last set) and another vessel is invited to brail the remaining fish from the its net. BR, BG - bunkering - when one vessel takes fuel from another OR, OG - other - if vessels meet to transfer other items DF – dumping fish - because bad, damaged or too many
Flag Country Codes	Try to identify country that vessel comes from either by seeing the actual flag flying or by the home-port name on the stern.

Report Format Example.

To FFA Observer Co-ordinator

sighting *- Jun. 23-1400Z- -* **Pos.** *0512345S -15612233E   Moon-shadow -Q2344*

flag *KR -* **type** *2 -* **dir.** *180 -* **dis** *3* **act** *fi* photo **Xtra** *large green stripe on hull.*

Regards. "observer name"

This explains that on 23rd June a Korean longline vessel was sighted fishing at the position with latitude: 05°12.345'S and longitude: 156°12.233'E. The name of the vessel is *Moonshadow* and its callsign is Q2344. It has a large green stripe on the hull and a photo has been taken by the observer.

SPC/FFA REGIONAL OBSERVER
VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS

FORM GEN - 1

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

VESSEL OR AIRCRAFT SIGHTINGS

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				SIGHTED VESSEL OR AIRCRAFT				COMPASS BEARING (degrees)	DISTANCE (Nautical Miles)	ACTION CODE (seen vess)	PHOTO FRAME #	COMMENTS
	DATE (MMDD)	TIME (hh mm)	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE					
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED (circle units)				ACTION CODE (host vess)	COMMENTS
	DATE (MMDD)	TIME (hh mm)	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT. NO.	YFT WGT. NO.	BET WGT. NO.	WGT. NO.		
1																
2																
3																

VESSEL AND AIRCRAFT TYPE CODES

1	SINGLE PURSE SEINE	8	SEARCH, ANCHOR OR LIGHT BOAT
2	LONGLINE	9	FISH CARRIER
3	POLE AND LINE	10	TRAWLER
4	MOTHERSHIP		
5	TROLL	21	LIGHT AIRCRAFT
6	NET BOAT	22	HELICOPTER
7	BUNKER		
		31	OTHER - please specify: ....

FLAG COUNTRY CODES

• IF COUNTRY IS NOT IN LIST WRITE NAME OF COUNTRY

CN	CHINA	US	USA	BZ	BELIZE
JP	JAPAN	PH	PHILLIPINES	RU	RUSSIA
TW	TAIWAN	PA	PANAMA	SG	SINGAPORE
KR	KOREA	HN	HONDURAS	LK	SRI LANKA
				VU	VANUATU

ACTION CODES

• FISHING INCLUDES ANY FISHING RELATED ACTIVITY NOT OTHERWISE COVERED HERE

RECEIVING — **GIVING**

FI	FISHING	TR	TRANSHIPPING FISH	TG	TRANSHIPPING FISH (from hold in one boat to hold in other)
PF	POSSIBLY FISHING	SR	SET SHARING	SG	SET SHARING... (from one boat's net to another boat's hold)
NF	NOT FISHING	BR	BUNKERING	BG	BUNKERING
DF	DUMPING FISH				
		OR	OTHER ...specify...	OG	OTHER ....

ALL WEIGHTS MUST BE METRIC TONNES

Sighting vessels is a very important surveillance role of observers. If vessels are seen that could possibly be fishing illegally, record as much detail as possible. Don't hesitate to contact the "Observer Co-ordinator" at FFA or your local fishery division, by telex, fax or email, immediately you see such activity. Include all information about the vessel and its activities. An example of the format to use when reporting a sighting to FFA is at the bottom of this page. Please follow the format, and add any other comments at the end of the message.

Observer Name	Put first name first and last name last. Print name in full.
Vessel Name	Put vessel's full name. Names must not be abbreviated.
Observer Trip ID	Same on all Forms - issued to observer before leaving port.
Page of	If there is more than one page for the trip, number each page.

SIGHTED VESSEL OR AIRCRAFT

Be as thorough as you possibly can when filling this section of the form. Any small piece of information can assist in identifying the vessel. This is especially important if you can not see the name or call sign. If you can not get some information because it is not visible or impossible to work out, put a dash in the data field.

Date/Time	Ship's date / time at start of sighting or transfer activity (dd/mm/yy hh:mm)
Latitude dd°mm.mmm' Longitude ddd°mm.mmm'	Take positions from the GPS. Record in degrees (2 digits for latitude and 3 for longitude), minutes and to 3 decimal place fractions of minutes
N S & E W	It is very important to record if latitude is North or South of the equator by writing "N" or "S" beside the position. Also be sure to note longitude as East or West of the 180° line. These can also be confirmed on the GPS.
Name (of sighted vessel)	If possible name the vessel you sighted. If you can't see the name properly, try to get a few of the letters from the name.
International Call-sign	If possible get any call signs or numbers that are visible.
Flag	Try to find out the flag country - often written on stern.
Type Code	"Vessel and aircraft **type codes**" are on front of Form. E.g.: purse -seiner = 1; longliner = 2; etc.
Compass bearing (degrees) and Distance (nautical miles)	Check compass and radar for a bearing and an exact distance from the observer's vessel to the other vessel. Estimate the distance if the radar is not available.
Action Code (seen vess)	In this section the "action code" describes the activity the sighted (seen) vessel is involved in when it was observed. If unsure of the best code, describe the activity in "comments".
Photo Frame #	If taking a photo, record the camera's photo frame number.
Comments	Comments about the sighted vessel or aircraft that have not been covered on the form. (E.g., distinguishing features such as colour, hull design or shape, bridge position, etc.). Be as thorough as possible as this will help identify the vessel later, especially if you can not get a name or call-sign.

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

Other vessel name		Name of any other vessel that is involved in a transfer operation with the observer's vessel.
International callsign		The call-sign that should be visibly painted on the other vessel
Type Code		Use the "Vessel and aircraft **type codes**" on front of this form to describe what type of vessel is receiving the fish.
FISH TRANSFERRED	SkipJack Weight	Total Weight of Skipjack that has been transferred
	Yellowfin weight	Total Weight of Yellowfin that has been transferred
	Bigeye Weight	Total Weight of Bigeye that has been transferred
	"Blank" Weight	Record the species code for any other type of species that are being transferred. Recording 'mixed' species is an option, especially on purse seiners.
	Action Code	See codes on front of Form.
	Comments	Comment about the transfer activities that take place (e.g.: method used; problems; destination of the fish; etc.)

CODES

Vessel & Aircraft type codes	To make recording easier, each type of vessel has a unique number code (see code table). Be careful using number codes.
Action Codes (host vess) *Host vessel = vessel that observer is on.* *Use the "**?R**" codes if host vessel is receiving fish or items from another vessel. Use the "**?G**" codes if the host vessel is giving fish or items to another vessel*	Here describe the activity of the observer's vessel. If with another vessel be sure to use a code that shows whether the observer's (host) vessel receives ("_R") or it gives ("_G") items. If more than one action is taking place record the most important (usually to do with fish transfer) in the "ACTION" column and the second action code in the comments column. TR, TG - transferring fish between vessel holds SR, SG - set sharing - when vessel has too many fish after all wells are filled (usually from its last set) and another vessel is invited to brail the remaining fish from the its net. BR, BG - bunkering - when one vessel takes fuel from another OR, OG - other - if vessels meet to transfer other items DF – dumping fish - because bad, damaged or too many
Flag Country Codes	Try to identify country that vessel comes from either by seeing the actual flag flying or by the home-port name on the stern.

Report Format Example.

To FFA Observer Co-ordinator

sighting - *Jun. 23-1400Z-* - **Pos.** *0512345S -15612233E   Moon-shadow -Q2344*
flag *KR* - **type** *2* - **dir.** *180* - **dis** *3* **act** *fi* *photo* **Xtra** *large green stripe on hull.*
Regards. "observer name"

This explains that on 23rd June a Korean longline vessel was sighted fishing at the position with latitude: 05°12.345'S and longitude: 156°12.233'E. The name of the vessel is *Moonshadow* and its callsign is Q2344. It has a large green stripe on the hull and a photo has been taken by the observer.

SPC/FFA REGIONAL OBSERVER
FISH, BUNKERING and OTHER TRANSFERS LOGS (continued)

Supplementary FORM GEN - 1

REV. DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF
			1	1

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

SHIP'S TIME		OBSERVER'S VESSEL POSITION					OTHER VESSEL				FISH TRANSFERRED (circle units)				ACTION	COMMENTS
DATE (MM/DD)	TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W		NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT. NO.	YFT WGT. NO.	BET WGT. NO.	WGT. NO.	CODE host ves.	

pto.

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL															
SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED *(circle units)*				ACTION CODE	COMMENTS
DATE (MM/DD)	TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT. NO.	YFT WGT. NO	BET WGT. NO	WGT. NO	CODE host ves.	

SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

First edition DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START m NM	END m NM	START	END	Adults m cm	Juvenilles m cm	Adults	Juvenilles

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START m NM	END m NM	START	END	Adults m cm	Juvenilles m cm	Adults	Juvenilles

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START m NM	END m NM	START	END	Adults m cm	Juvenilles m cm	Adults	Juvenilles

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START m NM	END m NM	START	END	Adults m cm	Juvenilles m cm	Adults	Juvenilles

Description of Species / Interaction

SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS <u>Instructions</u>

First Edition Dec. 2016

The Purpose of the new <u>*Vessel Interaction Form*</u> is to capture any interactions by any Species of Special Interest with the <u>vessel</u> or its <u>non-primary gear</u>. An interaction with the vessel or its non-primary gear is said to have occurred if the SSI has come close to the vessel/non-primary gear or if the behaviour of the SSI has been influenced by the presence of the vessel/non-primary gear. For instance, the marine mammal came close to the vessel and swam alongside it. Record all interactions with the primary fishing gear on the PS-3, LL-4 or PL-3 form.

Non-primary gear means equipment that belongs to the vessel, but it not the gear used by the vessel to catch tuna.

<u>On a purse-seine vessel</u> only the net is the primary gear. FADs, tender vessels, skiff etc are not considered primary gear. All SSIs caught/trapped/entangled by the purse-seine net should be recorded on the PS-3 form.
<u>On a longline vessel</u> the mainline, all componets of the branchline, and the radio buoys attached to the mainline are seen as part of the primary gear. All SSI caught/trapped/ hooked by the longline gear should be recorded on the LL-4 form.

<u>On a pole-and-line</u> vessel only the fishing poles are part of the primary gear.

Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (surname) last.

Observer Trip ID Number: Fill in your trip identification number as supplied by your programme before departure - exactly as recorded on the PS-1 (pg1) form.

Page   of: Number forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

SSI Code: Record the three-letter FAO species code for each species of special interest that interacts with the vessel/non-primary gear.

Start of Interaction Time: Record in hours and minutes the time the SSI started to interact with the vessel/non-primary gear. This is the time the observer first noted that there was an interaction or that the SSI behaviour was influenced by the vessel presence.

End of Interaction Time: Record the time in hours and minutes when the SSI's interaction with the vessel ended.
Date: Record the date of the interaction (year-month-day).

Latitude / Longitude: Record the location of the <u>start of the interaction</u> (or when the observer first noticed the interaction)by filling in the degrees, minutes and decimal minutes for latitude and longitude to three decimal places.

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

IBV - Interaction, beside vessel	ICV - Collision with vessel
ION - Interaction, outside net	ICP - Collision with propeller
ICF - Interaction, crew feeding	ICT= Collision with Tori line
IWF - Interaction - with FADs, but not set on	FRB- Feeding on bait during set
IDW - Interaction - dead in water	IFO - Feeding on discarded offal
OTH - Interactions - other, please specify	IRE - Resting on vessel, floats or FADs (birds)

Estimate of Distance from Vessel: Record an observer eye-estimate of the distance of the SSI from the vessel when the observer <u>first noticed the interaction</u>. If the SSI moves towards or away from the vessel/non-primary gear   record this in the description box below. Normally the distance will be recorded in (m) **meters, or** (nm) **nautical miles.**

Condition Codes:

A0 - Alive, condition unknown	A3 - Alive, but unlikely to live
A1 - Alive and healthy	D - Dead
A2 -Alive, but injured or distressed	U - Conditinon

Estimate of SSI Length: Record an observer eye-estimate of the average length of 1) the adult SSIs and 2) the juvenille SSIs. Normally, marine mammals will be recorded in (m) **meters**, while turtle, birds will be recorded as (cm) **centimeters.**

Total Numbers: Record the total number of adults, and or the total number of juvenille SSIs. If there are a large number of species, record an eye-estimate, and mention this is in the description area below.

Description of Species / Interaction: Provide more information on the species to help confirm the species (size, colour, markings) code recorded by the observer. Also, describe all aspects of the interaction as briefly, but also as informative, as possible.

SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

First edition DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS <u>Instructions</u>

First Edition Dec. 2016

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Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (surname) last.

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Page   of: Number forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

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End of Interaction Time: Record the time in hours and minutes when the SSI's interaction with the vessel ended.
Date: Record the date of the interaction (year-month-day).

Latitude / Longitude: Record the location of the <u>start of the interaction</u> (or when the observer first noticed the interaction) by filling in the degrees, minutes and decimal minutes for latitude and longitude to three decimal places.

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

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IWF - Interaction - with FADs, but not set on	FRB- Feeding on bait during set
IDW - Interaction - dead in water	IFO - Feeding on discarded offal
OTH - Interactions - other, please specify	IRE - Resting on vessel, floats or FADs (birds)

Estimate of Distance from Vessel: Record an observer eye-estimate of the distance of the SSI from the vessel when the observer <u>first noticed the interaction</u>. If the SSI moves towards or away from the vessel/non-primary gear record this in the description box below. Normally the distance will be recorded in (m) **meters, or** (nm) **nautical miles.**

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SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

First edition DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE	OF

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

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VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
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VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START	END	START	END	Adults	Juvenilles	Adults	Juvenilles
	m NM	m NM			m cm	m cm		

Description of Species / Interaction

SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS <u>Instructions</u>

First Edition Dec. 2016

The Purpose of the new <u>*Vessel Interaction Form*</u> is to capture any interactions by any Species of Special Interest with the <u>vessel</u> or its <u>non-primary gear</u>. An interaction with the vessel or its non-primary gear is said to have occurred if the SSI has come close to the vessel/non-primary gear or if the behaviour of the SSI has been influenced by the presence of the vessel/non-primary gear. For instance, the marine mammal came close to the vessel and swam alongside it. Record all interactions with the primary fishing gear on the PS-3, LL-4 or PL-3 form.

Non-primary gear means equipment that belongs to the vessel, but it not the gear used by the vessel to catch tuna.

<u>On a purse-seine vessel</u> only the net is the primary gear. FADs, tender vessels, skiff etc are not considered primary gear. All SSIs caught/trapped/entangled by the purse-seine net should be recorded on the PS-3 form.
<u>On a longline vessel</u> the mainline, all componets of the branchline, and the radio buoys attached to the mainline are seen as part of the primary gear. All SSI caught/trapped/ hooked by the longline gear should be recorded on the LL-4 form.

<u>On a pole-and-line</u> vessel only the fishing poles are part of the primary gear.

Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (surname) last.

Observer Trip ID Number: Fill in your trip identification number as supplied by your programme before departure - exactly as recorded on the PS-1 (pg1) form.

Page   of: Number forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

SSI Code: Record the three-letter FAO species code for each species of special interest that interacts with the vessel/non-primary gear.

Start of Interaction Time: Record in hours and minutes the time the SSI started to interact with the vessel/non-primary gear. This is the time the observer first noted that there was an interaction or that the SSI behaviour was influenced by the vessel presence.

End of Interaction Time: Record the time in hours and minutes when the SSI's interaction with the vessel ended.
Date: Record the date of the interaction (year-month-day).

Latitude / Longitude: Record the location of the <u>start of the interaction</u> (or when the observer first noticed the interaction)by filling in the degrees, minutes and decimal minutes for latitude and longitude to three decimal places.

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

IBV - Interaction, beside vessel	ICV - Collision with vessel
ION - Interaction, outside net	ICP - Collision with propeller
ICF - Interaction, crew feeding	ICT= Collision with Tori line
IWF - Interaction - with FADs, but not set on	FRB- Feeding on bait during set
IDW - Interaction - dead in water	IFO - Feeding on discarded offal
OTH - Interactions - other, please specify	IRE - Resting on vessel, floats or FADs (birds)

Estimate of Distance from Vessel: Record an observer eye-estimate of the distance of the SSI from the vessel when the observer <u>first noticed the interaction</u>. If the SSI moves towards or away from the vessel/non-primary gear record this in the description box below. Normally the distance will be recorded in (m) **meters, or** (nm) **nautical miles.**

Condition Codes:

A0 - Alive, condition unknown	A3 - Alive, but unlikely to live
A1 - Alive and healthy	D - Dead
A2 -Alive, but injured or distressed	U - Conditinon

Estimate of SSI Length: Record an observer eye-estimate of the average length of 1) the adult SSIs and 2) the juvenille SSIs. Normally, marine mammals will be recorded in (m) **meters**, while turtle, birds will be recorded as (cm) **centimeters.**

Total Numbers: Record the total number of adults, and or the total number of juvenille SSIs. If there are a large number of species, record an eye-estimate, and mention this is in the description area below.

Description of Species / Interaction: Provide more information on the species to help confirm the species (size, colour, markings) code recorded by the observer. Also, describe all aspects of the interaction as briefly, but also as informative, as possible.

SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS
FORM GEN - 2

First edition DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
			YY MM DD	(dd mm.mmm)	N / S	(ddd mm.mmm)	E / W

VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
	START m NM	END m NM	START	END	Adults m cm	Juvenilles m cm	Adults	Juvenilles

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)	END OF INTERACTION TIME (HH : mm)	DATE	LATITUDE		LONGITUDE	
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VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers	
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Description of Species / Interaction

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Description of Species / Interaction

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Description of Species / Interaction

SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS <u>Instructions</u>

First Edition Dec. 2016

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Page   of: Number forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

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Start of Interaction Time: Record in hours and minutes the time the SSI started to interact with the vessel/non-primary gear. This is the time the observer first noted that there was an interaction or that the SSI behaviour was influenced by the vessel presence.

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Date: Record the date of the interaction (year-month-day).

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OTH - Interactions - other, please specify	IRE - Resting on vessel, floats or FADs (birds)

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SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - SIGHTINGS

Supplement to
FORM GEN - 2

First Edition DEC. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID No.	PAGE OF

DATE YY MM DD	LATITUDE (dd mm.mmm)	N S	LONGITUDE (ddd mm.mmm)	E W	SIGHTING CODE	TALLY	TOTAL NUMBER
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE (dd mm.mmm)	N S	LONGITUDE (ddd mm.mmm)	E W	SIGHTING CODE	TALLY	TOTAL NUMBER
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SPECIES CODE	Species Description						

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SSI CODE	Species Description						

SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) __Instructions__

First Edition Dec. 2016

The purpose of the newly formated *Species of Special Interest - Supplementary (**Sightings)*** Form is to capture any *sightings of Species of Special Interest made by the observer.* Make sure that it is a *sighting and not an interaction* with the vessel or non-primary gear (see GEN-2 interactions). Recording a sighting of a SSI suggests that the SSI's behaviour was not affected by the presence of the observer's vessel. Be reflective about how you record birds. Obviously, recording every single bird you see over-head with the species group code (BIZ) is not helpful. So think about what is helpful before recording bird sightings. Record (if you can identify them), the species you generally see during your trip. Your data should indicate the general abundance of birds, by species during the trip. Further training in Bird Identification and data recording will be provided from mid-2017. Recording the presence of marine mammals and birds on their migatory routes can be helpful to define, understand and evaluate their species ranges (the areas they can be found) and any impacts changes in the ecosystem is having on their migatory routes.

Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (Surname) last.

Observer Trip ID Number: Fill in your trip identification number as supplied by your programme before departure - exactly as recorded on the PS-1 (pg1) form.

Page   of: Number Forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

DATE: Record the date (year-month-day) the sighting was made.

LONGITUDE LATITUDE: Give the position of the observer's vessel when the first SSI was sighted.

SIGHTING CODE: Record one of the 'Sighting Codes' to indicate the SSI behaviour when sighted.

SIGHTING CODES
SDS - Sighting- Distance Swimming
SBR - Sighting - Breaching
STP - Sighting - Tail Slapping or Playing
SMG - Sighting - Motionless in Group
SDW - Sighting -Dead in Water
SBO - Sighting - Bird Overhead
OTH - Other, please specify

TALLY: Use this area if there are a number of SSIs that are noticed during the day. This area will be useful for bird sightings, or pods of marine mammal with many individuals.

TOTAL NUMBER: Record the total number of the SSI species that were seen. If there are large numbers of individual species record an eye-estimate.

SSI CODE Record the three letter FAO species identification code,

SPECIES DESCRIPTION: Provide a description of the species that will help to confirm its species code, mention colour, markings, length, fin shape etc.

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SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) __Instructions__

First Edition Dec. 2016

The purpose of the newly formated *Species of Special Interest - Supplementary (**Sightings)*** Form is to capture any *sightings of Species of Special Interest made by the observer.* Make sure that it is a *sighting and not an interaction* with the vessel or non-primary gear (see GEN-2 interactions). Recording a sighting of a SSI suggests that the SSI's behaviour was not affected by the presence of the observer's vessel. Be reflective about how you record birds. Obviously, recording every single bird you see over-head with the species group code (BIZ) is not helpful. So think about what is helpful before recording bird sightings. Record (if you can identify them), the species you generally see during your trip. Your data should indicate the general abundance of birds, by species during the trip. Further training in Bird Identification and data recording will be provided from mid-2017. Recording the presence of marine mammals and birds on their migatory routes can be helpful to define, understand and evaluate their species ranges (the areas they can be found) and any impacts changes in the ecosystem is having on their migatory routes.

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Page   of: Number Forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

DATE: Record the date (year-month-day) the sighting was made.

LONGITUDE LATITUDE: Give the position of the observer's vessel when the first SSI was sighted.

SIGHTING CODE: Record one of the 'Sighting Codes' to indicate the SSI behaviour when sighted.

SIGHTING CODES
SDS - Sighting- Distance Swimming
SBR - Sighting - Breaching
STP - Sighting - Tail Slapping or Playing
SMG - Sighting - Motionless in Group
SDW - Sighting -Dead in Water
SBO - Sighting - Bird Overhead
OTH - Other, please specify

TALLY: Use this area if there are a number of SSIs that are noticed during the day. This area will be useful for bird sightings, or pods of marine mammal with many individuals.

TOTAL NUMBER: Record the total number of the SSI species that were seen. If there are large numbers of individual species record an eye-estimate.

SSI CODE Record the three letter FAO species identification code,

SPECIES DESCRIPTION: Provide a description of the species that will help to confirm its species code, mention colour, markings, length, fin shape etc.

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SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) Instructions

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DATE: Record the date (year-month-day) the sighting was made.

LONGITUDE LATITUDE: Give the position of the observer's vessel when the first SSI was sighted.

SIGHTING CODE: Record one of the 'Sighting Codes' to indicate the SSI behaviour when sighted.

SIGHTING CODES
SDS - Sighting- Distance Swimming
SBR - Sighting - Breaching
STP - Sighting - Tail Slapping or Playing
SMG - Sighting - Motionless in Group
SDW - Sighting -Dead in Water
SBO - Sighting - Bird Overhead
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SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) <u>Instructions</u>

First Edition Dec. 2016

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SPC/FFA REGIONAL OBSERVER VESSEL TRIP MONITORING SUMMARY — FORM GEN - 3 (pg 1)

REV. DEC 2016

This form __must__ be filled in by the observer for every trip

OBSERVER PROGRAMME:		TRIP START DATE YY MM DD
Observer NAME		TRIP END DATE YY MM DD
Obs. NATIONALITY TRIP ID NUMBER	COASTAL STATE LICENCES (IF ANY)	NATIONALITY OF BOARDING VESSEL IF BOARDED DURING TRIP AT SEA
VESSEL NAME	COUNTRY REG. # UVI IRCS	VESSEL FLAG VESSEL GEAR TYPE

Did the vessel do any of the following (indicate 'Yes' or 'No' with an 'X' for every item)

Category	Item	Description	Yes	No	pg No.
Observer rights / social behaviour	RS -a	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties		RS -a	
	RS -b	Request that an event not be reported by the observer		RS -b	
	RS -c	Mistreat other crew		RS -c	
	RS -d	Did operator fail to provide observer, while onboard, at no expense to observer or the observer's Government, with food, accommodation, access to safety gear and medical facilities of reasonable standard - equivalent to those normally available to an officer onboard the vessel		RS -d	
National regulations	NR -a	Fish in areas where the vessel is not permitted to fish		NR -a	
	NR -b	Target species other than those they are licenced to target		NR -b	
	NR -c	Use a fishing method other than the method the vessel was designed or licensed		NR -c	
	NR -d	Not display or present a valid (and current) licence document onboard		NR -d	
	NR -e	Transfer or transship fish from or to another vessel		NR -e	
	NR -f	Was involved in bunkering activities		NR -f	
	NR -g	Fail to stow fishing gear when entering areas where vessel is not authorised to fish		NR -g	
WCPFC CMMs	WC -a	Fail to comply with any Commission Conservation and Management Measures (CMMs)		WC -a	
	WC -b	High-grade the catch		WC -b	
	WC -c	Fish on FAD during FAD Closure		WC -c	
Logsheet recording - Position	LP -a	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch		LP -a	
	LP -b	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)		LP -b	
Logsheet recording - Catch	LC -a	Inaccurately record retained 'Target Species" in the Vessel logs [or weekly reports]		LC -a	
	LC -b	Inaccurately record 'Target Species" Discards		LC -b	
	LC -c	Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]		LC -c	
	LC -d	Not record bycatch discards		LC -d	
	LC -e	Inaccurately record retained bycatch Species		LC -e	
	LC -f	Inaccurately record discarded bycatch species		LC -f	
SSIs	SI -a	Land on deck Species of Special Interest (SSI (eg. Marine mammmals, turtles		SI -a	
	SI -b	Interact (not land) with SSIs seabirds or protected sharks)		SI -b	
Pollution	PN -a	Dispose of any metals, plastics, chemicals or old fishing gear		PN -a	
	PN -b	Discharge any oil		PN -b	
	PN -c	Lose any fishing gear		PN -c	
	PN -d	Abandon any fishing gear		PN -d	
	PN -e	Fail to report any abandoned gear		PN -e	
Sea safety	SS -a	Fail to monitor international safety frequencies		SS -a	
	SS -b	Carry out-of-date safety equipment		SS -b	

Refer to instruction pages for the full wording of all items on this page

If unsure that a violation has been committed but suspect a vessel has violated its license agreement place an 'X' in the 'YES' box. Then wrie a full account of the incident, including a all evidence that aroused suspicion.

OBSERVER PROGRAMME	The observer programme/provider you are contracted to (employed by) for this trip.
OBSERVER NAME	Tas written in your passport. Observer must print first name first and last name (family name) last.
OBSERVER NATIONALITY	YOUR nationality as per the passport you are using.
OBSERVER TRIP ID No.	Observer trip identification number. Same number for all forms and issued before leaving port.
COASTAL STATE LICENCE (if any)	List the licence number(s) of any current licence issued by a Coastal States (i.e countries w here the vessel is licensed to fish).
NATIONALITY OF BOARING VESSEL IF BOARDED AT SEA	If host vessel is boarded by authorities and inspected at sea, what was nationality of the authority?
VESSEL NAME	Full vessel name, as written on licence documentation - not abbreviated. Include all numbers.
COUNTRY REGISTRATION #	The country registration number that was issued by the country where the vessel is registered.
UNIQUE VESSEL IDENTIFIER	WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear on certificates before 2016. Generally the UVI is the International Marine Organistion number or may be the the Lloyd's Register (LR) no.
INTERNATIONAL RADIO CALL SIGN (IRCS)	International Radio Call Sign is issued by the flage state, normally painted on the side of the boat and a mix of letters and numbers. The IRCS should be the main number on the hull or side of the vessel. Confirm this before recording it. It may also be found on the vessel's licence.
VESSEL FLAG	Record the flag of the vessel. This is the same as the country the vessel is registered in.
VESSEL GEAR TYPE	The fishing method vessel is licensed to use (i.e purse seine, longline, pole-and-line)

If unsure that a violation has been committed but suspect a vessel has violated its license agreement, place an '**X**' in the '**Yes**' box. Then write a full account of the incident, including all evidence that aroused suspicion.

During the trip did the Master or crew of the vessel attempt or do any of the following:

Observer rights / social behaviour	**RS-a**	**Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties** Were you prevented, blocked, intimidated, harassed or threatened by any of the crew or operator while onboard ? Did any crew member attempt to bias your work through a gift or bribe ?
	RS-b	**Request that an event not be reported by the observer** Did any crew member or operator ask you not to record, report photograph or video an event?
	RS-c	**Mistreat other crew** Were there any clear systematic or prejudiced bullying or mistreatment of any crew ?
	RS-d	**Did the operator fail to provide the observer , while on board the vessel, at no expense to the observer or the observers Government, with food, accommodation [access to safety gear] and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel** Do you think you were purposely given poor accommodation, food, no access to safety gear or medical treatment?

National regulations	**NR-a**	**Fish in areas where the vessel is not permitted to fish** Be aware of areas within EEZs that a vessel is not allowed to fish. These include closed 'high seas pockets for purse-seiners', internal waters, territorial seas (12 miles from a land and archipelagic waters baseline) that are off limits to most gear types (however some exceptions do occur).
	NR-b	**Target species other than those they are licensed to target** The target species is mentioned on the vessel's fishing permit. Usually "Tuna" will be the target species. Most common species targeted illegally are sharks or reef species targeted with handlines.
	NR-c	**Use a fishing method other than the method the vessel was designed or licensed** The licensed fishing method is on the vessel's fishing permit. Note if a fishing method other than that on the permit is used. Common violations are hand lining near reefs and purse seiners setting lines at night to catch sharks. Fully describe the type of gear used and what species, if any, were caught.
	NR-d	**Not display or present a valid (and current) licence document onboard** A valid original licence document should be in the wheelhouse on display. Regulations usually require an official license document to be kept onboard ready for inspection on request by suitable people, including observers. Record 'YES' if: no document; a copy or faxed document; an outdated document; or a cover letter shown. Report which type and
	NR-e	**Transfer or tranship fish from or to another vessel.** Transhipping of fish by purse seiners can only occur in designated ports. Indicate if host vessel transhipped fish or any fish products (e.g. shark fins) at sea. Note: group seine operations in PNG may tranship at sea in their zone
	NR-f	**Was involved in bunkering activities** Bunkering is transfer of fuel between vessels. Generally a bunker vessel is a specialised fuel carrier. Some countries ban bunkering except at port, while others require notification prior to bunkering.
	NR-g	**Fail to stow fishing gear when entering areas where vessel is not authorised to fish** Fishing gear should be stowed when entering waters of areas where vessels are not authorised to fish E.g.: net covered, boom lowered on purse seiners; floats stored and covered and snoods stored on longliners

WCPFC CMMs	**WC-a**	**Fail to comply with any Commission Conservation and Management measures (CMMs)** Has any WCPFC regional regulation (CMM) been breached ?
	WC-b	**High grade the catch** Did the vessel discard target species already on board to make room for better quality, larger size or for a more marketable target species
	WC-c	**Fish on FAD during FAD Closure** During the period July 1- October 31: Did the vessel retrieve, service, set or fish on any floating object or group of objects, of any size, that was or was not deployed, living or non-living, including (but not only) buoys, floats, netting, webbing, plastics, bamboo, logs or whale sharks, floating on or near the surface of the water that fish may associate with ? Was vessel used to aggregate fish or to move aggregated fish, including using underwater lights or chumming.

REV. DEC 2016

OBSERVER NAME	VESSEL NAME	OBSERVER NATIONALITY
TRIP ID NUMBER	OBSERVER PROGRAMME	

IF YOU ANSWERED YES TO ANY ITEM ON THE GEN-3 FORM PLEASE EXPLAIN BRIEFLY IN THE AREA BELOW.
A FULL EXPLANATION MUST BE WRITTEN IN THE OBSERVER DAILY JOURNAL AND/OR TRIP REPORT
JOURNAL PAGE NUMBERS FOR THE EXPLANATION SHOULD BE RECORDED IN THE BOXES PROVIDED ON THE FRONT OF THIS FORM

	DEBREIFING STATUS	OBSERVER SIGNATURE	DATE YY / MM / DD
Circle one:	Not Debriefed Pre-debriefed Debriefed		

Logsheet recording - Position	*LP-a*	**Inaccurately record vessel position on vessel log sheets for sets, hauling and catch** The vessel logsheet should be filled out by the Captain or a designated officer, daily, or after each set. The observer has the right to ask to see this log (inspect this log at least once a day). If there are significant discrepancies (>3nm) of reported set positions between the vessel log and the observer forms the details should be written into the observer report.
	LP-b	**Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)** Zone Entry and Zone Exit as well as Port Entry and Port Exit notifications are regulated by countries. Most countries also have mandatory Wednesday reporting of position when fishing in their EEZs.
Logsheet Recording – Catch	*LC-a*	**Inaccurately record retained 'Target Species' in the Vessel logs or weekly reports** Is the vessel under reporting, over reporting or not reporting any of the observed sets for any reason ? It is critical that observers do their own accurate estimate of catch. Compare vessel logged catches with your estimates to ensure all sets are recorded and the catch has been logged correctly every day.
	LC-b	**Inaccurately record 'Target Species' Discards** Report any attempt to not report commercial species that have been rejected because they are damaged, too small or are considered to be undesirable for other reasons. Note in your report if discards were reported by vessel.
	LC-c	**Record target species inaccurately** On purse seiners BET are commonly recorded as YFT; and both BET and YFT are sometimes recorded as SKJ. Mixed small BET and YFT are often recorded as just YFT, simply because they fetch the same cannery price.
	LC-d	**Not record bycatch discards** Report any attempt to not report any fish, shark, reptile or mammal species - retained or discarded.
	LC-e	**Inaccurately record retained bycatch species** Report if vessel wrongly reports retained bycatch species.
	LC-f	**Inaccurately record discarded bycatch species** Report if vessel wrongly reports discarded bycatch species.

SSIs	*SI-a*	**Land on deck Species of Special Interest (SSIs)** Did the vessel land on deck at any time (either deliberately or accidentally) during the trip any SSIs. SSIs are: all turtles; all marine mammals – dolphins, whales, seals, dugongs, etc; birds; oceanic whitetip sharks and silky sharks and whale sharks. All landings should also be fully recorded on the catch details forms (PS-3, PL-3, LL-4). More complete data and description must be in GEN-2 forms, the observer's journal and written report It is important to note the vessel's general attitude to such animals in reports.
	SI-b	**Interact (not land) with SSIs (e.g. Marine mammals, turtle or whale sharks)** Did any SSIs interact with any part of the vessel, its gear, or its support boats, etc., during the trip ? More information on interactions must be recorded on GEN-2 forms, observer journal and written report.

Pollution *(see MARPOL explanation on GEN-6)*	*PN-a*	**Dispose of any metals, plastics, chemicals or old fishing gear** Was there any deliberate throwing over of: metals or plastics (from kitchen or elsewhere on boat); or parts of the fishing gear (netting, nylon line, etc.); from the vessel into the ocean at any time ? Was any unprocessed perishable garbage discharged within 12 nautical miles of land or a reef ?
	PN-b	**Discharge any oil** Was any fuel oil spilled or dumped within 50 nautical miles of shore ?
	PN-c	**Lose any fishing gear** Was any fishing gear lost during this trip ?
	PN-d	**Abandon any fishing gear** Was any fishing gear dumped or abandoned by the observer's host vessel ?
	PN-e	**Fail to report any abandoned gear** Did vessel not report any lost fishing gear (IF REQUIRED by the country in which waters it is fishing) ?

Sea safety	*SS-a*	**Fail to monitor international Safety frequencies**
		Does the vessel keep its radio tuned into and turned onto the international distress, safety and calling frequencies when it is not communicating ? Frequencies are:
		          VHF marine radio for medium to long range voise communications - 2182 kHz
		          VHF marine radio for short range voice communications - Channel 16

	SS-b	**Carry out-of-date safety equipment** Was any of the safety equipment (lifeboats, EPIRBs, etc.) out of survey date or in a bad condition ?

Debriefing Status: Normally the 'pre-debriefer' or 'debriefer' should circle one choice to indicate if debriefing has taken place at any time on the GEN-3 form. It is possible that the form will be first circled -'not debriefed', then circled pre-debriefed and finally circled debriefed .

SPC/FFA REGIONAL OBSERVER
VESSEL TRIP MONITORING SUMMARY

FORM GEN - 3
(pg 1)

REV. DEC 2016

*This form **must** be filled in by the observer for every trip*

OBSERVER PROGRAMME:		
Observer NAME		TRIP START DATE YY MM DD
		TRIP END DATE YY MM DD
Obs. NATIONALITY	TRIP ID NUMBER	COASTAL STATE LICENCES (IF ANY)	NATIONALITY OF BOARDING VESSEL IF BOARDED DURING TRIP AT SEA
VESSEL NAME		COUNTRY REG. # UVI IRCS	VESSEL FLAG VESSEL GEAR TYPE

Did the vessel do any of the following (indicate 'Yes' or 'No' with an 'X' for every item)

	Item		Yes	No	pg No.
Observer rights / social behaviour	RS -a	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties		RS -a	
	RS -b	Request that an event not be reported by the observer	Refer to instruction pages for the full wording of all items on this page	RS -b	
	RS -c	Mistreat other crew		RS -c	
	RS -d	Did operator fail to provide observer, while onboard, at no expense to observer or the observer's Government, with food, accommodation, access to safety gear and medical facilities of reasonable standard - equivalent to those normally available to an officer onboard the vessel		RS -d	
National regulations	NR -a	Fish in areas where the vessel is not permitted to fish		NR -a	
	NR -b	Target species other than those they are licenced to target		NR -b	
	NR -c	Use a fishing method other than the method the vessel was designed or licensed		NR -c	
	NR -d	Not display or present a valid (and current) licence document onboard		NR -d	
	NR -e	Transfer or transship fish from or to another vessel		NR -e	
	NR -f	Was involved in bunkering activities		NR -f	
	NR -g	Fail to stow fishing gear when entering areas where vessel is not authorised to fish		NR -g	
WCPFC CMMs	WC -a	Fail to comply with any Commission Conservation and Management Measures (CMMs)		WC -a	
	WC -b	High-grade the catch		WC -b	
	WC -c	Fish on FAD during FAD Closure		WC -c	
Logsheet recording - Position	LP -a	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch		LP -a	
	LP -b	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)		LP -b	
Logsheet recording - Catch	LC -a	Inaccurately record retained 'Target Species" in the Vessel logs [or weekly reports]		LC -a	
	LC -b	Inaccurately record 'Target Species" Discards		LC -b	
	LC -c	Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]		LC -c	
	LC -d	Not record bycatch discards		LC -d	
	LC -e	Inaccurately record retained bycatch Species		LC -e	
	LC -f	Inaccurately record discarded bycatch species		LC -f	
SSIs	SI -a	Land on deck Species of Special Interest (SSI *(eg. Marine mammmals, turtles*		SI -a	
	SI -b	Interact (not land) with SSIs *seabirds or protected sharks)*		SI -b	
Pollution	PN -a	Dispose of any metals, plastics, chemicals or old fishing gear		PN -a	
	PN -b	Discharge any oil		PN -b	
	PN -c	Lose any fishing gear		PN -c	
	PN -d	Abandon any fishing gear		PN -d	
	PN -e	Fail to report any abandoned gear		PN -e	
Sea safety	SS -a	Fail to monitor international safety frequencies		SS -a	
	SS -b	Carry out-of-date safety equipment		SS -b	

If unsure that a violation has been committed but suspect a vessel has violated its license agreement place an 'X' in the 'YES' box. Then wrie a full account of the incident, including a all evidence that aroused suspicion.

OBSERVER PROGAMME	The observer programme/provider you are contracted to (employed by) for this trip.
OBSERVER NAME	Tas written in your passport. Observer must print first name first and last name (family name) last.
OBSERVER NATIONALITY	YOUR nationality as per the passport you are using.
OBSERVER TRIP ID No.	Observer trip identification number. Same number for all forms and issued before leaving port.
COASTAL STATE LICENCE (if any)	List the licence number(s) of any current licence issued by a Coastal States (i.e countries where the vessel is licensed to fish).
NATIONALITY OF BOARING VESSEL IF BOARDED AT SEA	If host vessel is boarded by authorities and inspected at sea, what was nationality of the authority?
VESSEL NAME	Full vessel name, as written on licence documentation - not abbreviated. Include all numbers.
COUNTRY REGISTRATION #	The country registration number that was issued by the country where the vessel is registered.
UNIQUE VESSEL IDENTIFIER	WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear on certificates before 2016. Generally the UVI is the International Marine Oranistion number or may be the the Lloyd's Register (LR) no.
INTERNATIONAL RADIO CALL SIGN (IRCS)	International Radio Call Sign is issued by the flage state, normally painted on the side of the boat and a mix of letters and numbers. The IRCS should be the main number on the hull or side of the vessel. Confirm this before recording it. It may also be found on the vessel's licence.
VESSEL FLAG	Record the flag of the vessel. This is the same as the country the vessel is registered in.
VESSEL GEAR TYPE	The fishing method vessel is licensed to use (i.e purse seine, longline, pole-and-line)

If unsure that a violation has been committed but suspect a vessel has violated its license agreement, place an '**X**' in the '**Yes**' box. Then write a full account of the incident, including all evidence that aroused suspicion.

During the trip did the Master or crew of the vessel attempt or do any of the following:

Observer rights / social behaviour	**RS-a**	**Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties** Were you prevented, blocked, intimidated, harassed or threatened by any of the crew or operator while onboard ? Did any crew member attempt to bias your work through a gift or bribe ?
	RS-b	**Request that an event not be reported by the observer** Did any crew member or operator ask you not to record, report photograph or video an event?
	RS-c	**Mistreat other crew** Were there any clear systematic or prejudiced bullying or mistreatment of any crew ?
	RS-d	**Did the operator fail to provide the observer , while on board the vessel, at no expense to the observer or the observers Government, with food, accommodation [access to safety gear] and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel** Do you think you were purposely given poor accommodation, food, no access to safety gear or medical treatment?

National regulations	**NR-a**	**Fish in areas where the vessel is not permitted to fish** Be aware of areas within EEZs that a vessel is not allowed to fish. These include closed 'high seas pockets for purse-seiners', internal waters, territorial seas (12 miles from a land and archipelagic waters baseline) that are off limits to most gear types (however some exceptions do occur).
	NR-b	**Target species other than those they are licensed to target** The target species is mentioned on the vessel's fishing permit. Usually "Tuna" will be the target species. Most common species targeted illegally are sharks or reef species targeted with handlines.
	NR-c	**Use a fishing method other than the method the vessel was designed or licensed** The licensed fishing method is on the vessel's fishing permit. Note if a fishing method other than that on the permit is used. Common violations are hand lining near reefs and purse seiners setting lines at night to catch sharks. Fully describe the type of gear used and what species, if any, were caught.
	NR-d	**Not display or present a valid (and current) licence document onboard** A valid original licence document should be in the wheelhouse on display. Regulations usually require an official license document to be kept onboard ready for inspection on request by suitable people, including observers. Record 'YES' if: no document; a copy or faxed document; an outdated document; or a cover letter shown. Report which type and
	NR-e	**Transfer or tranship fish from or to another vessel**. Transhipping of fish by purse seiners can only occur in designated ports. Indicate if host vessel transhipped fish or any fish products (e.g. shark fins) at sea. Note: group seine operations in PNG may tranship at sea in their zone
	NR-f	**Was involved in bunkering activities** Bunkering is transfer of fuel between vessels. Generally a bunker vessel is a specialised fuel carrier. Some countries ban bunkering except at port, while others require notification prior to bunkering.
	NR-g	**Fail to stow fishing gear when entering areas where vessel is not authorised to fish** Fishing gear should be stowed when entering waters of areas where vessels are not authorised to fish E.g.: net covered, boom lowered on purse seiners; floats stored and covered and snoods stored on longliners

WCPFC CMMs	**WC-a**	**Fail to comply with any Commission Conservation and Management measures (CMMs)** Has any WCPFC regional regulation (CMM) been breached ?
	WC-b	**High grade the catch** Did the vessel discard target species already on board to make room for better quality, larger size or for a more marketable target species
	WC-c	**Fish on FAD during FAD Closure** During the period July 1 - October 31: Did the vessel retrieve, service, set or fish on any floating object or group of objects, of any size, that was or was not deployed, living or non-living, including (but not only) buoys, floats, netting, webbing, plastics, bamboo, logs or whale sharks, floating on or near the surface of the water that fish may associate with ? Was vessel used to aggregate fish or to move aggregated fish, including using underwater lights or chumming.

REV. DEC 2016

OBSERVER NAME	VESSEL NAME	OBSERVER NATIONALITY
TRIP ID NUMBER	OBSERVER PROGRAMME	

IF YOU ANSWERED YES TO ANY ITEM ON THE GEN-3 FORM PLEASE EXPLAIN BRIEFLY IN THE AREA BELOW.
A FULL EXPLANATION MUST BE WRITTEN IN THE OBSERVER DAILY JOURNAL AND/OR TRIP REPORT
JOURNAL PAGE NUMBERS FOR THE EXPLANATION SHOULD BE RECORDED IN THE BOXES PROVIDED ON THE FRONT OF THIS FORM

	OBSERVER SIGNATURE	DATE YY / MM / DD
DEBREIFING STATUS		
Circle one: Not Debriefed Pre-debriefed Debriefed		

Logsheet recording - Position	**LP-a**	**Inaccurately record vessel position on vessel log sheets for sets, hauling and catch** The vessel logsheet should be filled out by the Captain or a designated officer, daily, or after each set. The observer has the right to ask to see this log (inspect this log at least once a day). If there are significant discrepancies (>3nm) of reported set positions between the vessel log and the observer forms the details should be written into the observer report.
	LP-b	**Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)** Zone Entry and Zone Exit as well as Port Entry and Port Exit notifications are regulated by countries. Most countries also have mandatory Wednesday reporting of position when fishing in their EEZs.
Logsheet Recording – Catch	**LC-a**	**Inaccurately record retained 'Target Species" in the Vessel logs or weekly reports** Is the vessel under reporting, over reporting or not reporting any of the observed sets for any reason ? It is critical that observers do their own accurate estimate of catch. Compare vessel logged catches with your estimates to ensure all sets are recorded and the catch has been logged correctly every day.
	LC-b	**Inaccurately record 'Target Species" Discards** Report any attempt to not report commercial species that have been rejected because they are damaged, too small or are considered to be undesirable for other reasons. Note in your report if discards were reported by vessel.
	LC-c	**Record target species inaccurately** On purse seiners BET are commonly recorded as YFT; and both BET and YFT are sometimes recorded as SKJ. Mixed small BET and YFT are often recorded as just YFT, simply because they fetch the same cannery price.
	LC-d	**Not record bycatch discards** Report any attempt to not report any fish, shark, reptile or mammal species - retained or discarded.
	LC-e	**Inaccurately record retained bycatch species** Report if vessel wrongly reports retained bycatch species.
	LC-f	**Inaccurately record discarded bycatch species** Report if vessel wrongly reports discarded bycatch species.

SSIs	**SI-a**	**Land on deck Species of Special Interest (SSIs)** Did the vessel land on deck at any time (either deliberately or accidentally) during the trip any SSIs. SSIs are: all turtles; all marine mammals – dolphins, whales, seals, dugongs, etc; birds; oceanic whitetip sharks and silky sharks and whale sharks. All landings should also be fully recorded on the catch details forms (PS-3, PL-3, LL-4). More complete data and description must be in GEN-2 forms, the observer's journal and written report It is important to note the vessel's general attitude to such animals in reports.
	SI-b	**Interact (not land) with SSIs (e.g. Marine mammals, turtle or whale sharks)** Did any SSIs interact with any part of the vessel, its gear, or its support boats, etc., during the trip ? More information on interactions must be recorded on GEN-2 forms, observer journal and written report.

Pollution *(see MARPOL explanation on GEN-6)*	**PN-a**	**Dispose of any metals, plastics, chemicals or old fishing gear** Was there any deliberate throwing over of: metals or plastics (from kitchen or elsewhere on boat); or parts of the fishing gear (netting, nylon line, etc.); from the vessel into the ocean at any time ? Was any unprocessed perishable garbage discharged within 12 nautical miles of land or a reef ?
	PN-b	**Discharge any oil** Was any fuel oil spilled or dumped within 50 nautical miles of shore ?
	PN-c	**Lose any fishing gear** Was any fishing gear lost during this trip ?
	PN-d	**Abandon any fishing gear** Was any fishing gear dumped or abandoned by the observer's host vessel ?
	PN-e	**Fail to report any abandoned gear** Did vessel not report any lost fishing gear (IF REQUIRED by the country in which waters it is fishing) ?

Sea safety	**SS-a**	**Fail to monitor international Safety frequencies**
		Does the vessel keep its radio tuned into and turned onto the international distress, safety and calling frequencies when it is not communicating ? Frequencies are:
		      VHF marine radio for medium to long range voise communications - 2182 kHz
		      VHF marine radio for short range voice communications - Channel 16

	SS-b	**Carry out-of-date safety equipment** Was any of the safety equipment (lifeboats, EPIRBs, etc.) out of survey date or in a bad condition ?

Debriefing Status: Normally the 'pre-debriefer' or 'debriefer' should circle one choice to indicate if debriefing has taken place at any time on the GEN-3 form. It is possible that the form will be first circled -'not debriefed', then circled pre-debriefed and finally circled debriefed .

SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS

FORM GEN-4

REVISED DEC. 2016

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	PAGE OF
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	SHIP'S START OF TRIP DATE (YYYY/MM/DD)	SHIP'S END OF TRIP DATE (YYYY/MM/DD)

DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED

SET NO.	SHIP'S TIME	LABEL NO.	SPECIES CODE	LENGTHS (in cm.)						WEIGHTS (in kg.)					PROCESSED WGT.		LANDED WEIGHT		COMMENTS
				UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS	WET FIN	(kg.)	CODE	(kg.)	CODE	

Notes on FORM GEN-4

CONVERSION FACTORS

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	PAGE OF
This header should be filled in completly	*e.g.:SPC 1.5 m Aluminium calipers*	*e.g.: JMA 97-*	This is page 7 → *7 → 19*
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	Don't forget !	Total number of GEN-4s forms used in the trip was 19
	e.g.:Salzer 100kg dial-faced spring scales		

DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED

SET NO.	LABEL NO.	SHIP'S TIME	SPECIES CODE	LENGTHS (in cm.)						WEIGHTS (in kg.)				WET FIN	PROCESSED WGT.		LANDED WEIGHT		COMMENTS
				UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS		(kg.)	CODE	(kg.)	CODE	
#1	*3*	*1720*	*BET*	*152*	*124*	—	—	*98*	—	—	—	*4*		*9*	*72*	*GG*	*70*	*GG*	*An example*

Set No.

Record the relevant set number ie set # 1, 2 etc. There is no need to start a new page for a new set but you must indicate the correct set number for each line The set number is at the top of the PS-3 and LL-4 form

Label No.

When unable to get **whole** or **processed weight** during the trip attach a label inside the mouth or gut cavity of the fish. When back on shore record **landed weight.**

If processed weight can be collected on board still use labels and then also record **landed weight** of fish as it is recorded at unloading. This can be used for checking weight loss during storage

Ship's Time and **Species Code**

must be recorded exactly as they are on Catch Monitoring Form (LL-4).on longliners or the set time and species from the Set Details Form (PS-3) on purse seiners

If using Form GEN-4 but not using Form LL-4 (see * below), record sex in the

Length code describes what parts of the fish or animal are actually measured

Code   Description

UF - Upper jaw to fork in tail
US - Upper jaw to second dorsal
LF fin
PF - Lower jaw to fork in tail
PS - Pectoral fin to fork in tail
TL - Pectoral fin to second dorsal fin
- Total length (for sharks)
measure the pectoral and second dorsal fins at the most forward points that they attach to the body

Collect "UF", "US" and "PS" for tunas
Collect "LF", "PF" and "PS" for billfish

Weights:

if <10 kg aim for accuracy to 0.5 kg (round to nearest whole kg)

if >10kg aim for accuracy to 1.0 kg

Tunas: Include removed gills with guts when weighing whole weight.

Billfish: Include removed bills with guts when weighing whole weight

Weight codes describe the state of the fish at the time that it was weighed. As such they must not be confused with Fate codes, which describe the final state of the fish.

Code   Description

WW - Whole weight
GG - Gutted and gilled
GH - Gutted and headed
GT - Gutted, gilled and tailed
GX - Gutted, headed and tailed
GO - Gutted only (gills left in)
NM - Not Measured

The GEN-4 form can be used to collect information from several sets (see the set number column on the left). As with all data it is important that you collect information as accurately as possible.

However, it is not important to collect this data for all catch. Usually only the more experienced and proven observers will be asked to collect this extra information. Only collect data for this form when it can be comfortably and accurately gathered without stopping the collection of other important data.

* On some more difficult trips you may choose, or were asked, to take time out from normal sampling to put more effort into collecting conversion factor information. In this situation the Catch Monitoring Form may not be used. At times like this record the sex of the fish in the comments section of Form GEN-4.

The comments section can be used to note any factor that you feel has had an important influence on the data collection for this form.

SPC/FFA REGIONAL OBSERVER
CONVERSION FACTORS

FORM GEN-4

REVISED DEC. 2016

OBSERVER NAME			MEASURING INSTRUMENT			OBSERVER TRIP ID No.			PAGE	OF
VESSEL NAME			MAKE, MODEL AND CAPACITY OF SCALES			SHIP'S START OF TRIP DATE (YYYY/MM/DD)			SHIP'S END OF TRIP DATE (YYYY/MM/DD)	

DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED

SET NO.	SHIP'S TIME	LABEL NO.	SPECIES CODE	LENGTHS (in cm.)						WEIGHTS (in kg.)					PROCESSED WGT.		LANDED WEIGHT		COMMENTS
				UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS	WET FIN	(kg.)	CODE	(kg.)	CODE	

CONVERSION FACTORS

OBSERVER NAME		MEASURING INSTRUMENT	OBSERVER TRIP ID No.		PAGE	OF
This header should be filled in completly		*e.g.:SPC 1.5 m Aluminium calipers*	*e.g.: JMA 97 -*	This is page 7	7	19
VESSEL NAME		MAKE, MODEL AND CAPACITY OF SCALES				
		e.g.:Salzer 100kg dial-faced spring scales	Don't forget!	Total number of GEN-4s forms used in the trip was 19		

DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED

SET NO.	LABEL NO.	SHIP'S TIME	SPECIES CODE	LENGTHS (in cm.)						WEIGHTS (in kg.)				WET FIN	PROCESSED WGT.		LANDED WEIGHT		COMMENTS
				UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS		(kg.)	CODE	(kg.)	CODE	
# 1	3	1720	BET	152	124	—	—	98	—	—	—	4		9	72	GG	70	GG	*An example*

Set No.

Record the relevant set number ie set # 1, 2 etc. There is no need to start a new page for a new set but you must indicate the correct set number for each line The set number is at the top of the PS-3 and LL-4 form

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When back on shore record **landed weight.**

If processed weight can be collected on board still use labels and then also record **landed weight** of fish as it is recorded at unloading. This can be used for checking weight loss during storage

Ship's Time
and
Species Code

must be recorded exactly as they are on Catch Monitoring Form (LL-4).on longliners or the set time and species from the Set Details Form (PS-3) on purse seiners

If using Form GEN-4 but not using Form LL-4 (see * below), record sex in the

Length code describes what parts of the fish or animal are actually measured

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LF fin
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PS - Pectoral fin to fork in tail
TL - Pectoral fin to second dorsal fin
 - Total length (for sharks)
measure the pectoral and second dorsal fins at the most forward points that they attach to the body

Collect "UF", "US" and "PS" for tunas
Collect "LF", "PF" and "PS" for billfish

Weights:

if <10 kg
aim for accuracy to 0.5 kg
(round to nearest whole kg)

if >10kg
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Tunas: Include removed gills with guts when weighing whole weight.

Billfish: Include removed bills with guts when weighing whole weight

Weight codes describe the state of the fish at the time that it was weighed.
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Code   Description

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The GEN-4 form can be used to collect information from several sets (see the set number column on the left). As with all data it is important that you collect information as accurately as possible.

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The comments section can be used to note any factor that you feel has had an important influence on the data collection for this form.

FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

REVISED DEC. 2016

OBSERVER NAME:

VESSEL NAME:

OBSERVER TRIP ID NUMBER:

PAGE ___ OF ___

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Diagrams- *label with 'Object number'*

FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.
(except if for same object encountered unchanged within four hours of previous encounter)

Observer name, Vessel name - Print each name out in full.
For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

Observer trip ID number: - number issued by the authority that placed the observer.

Page of : Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc.
At end of trip put the last page number on every page.
For example if there are 10 x FAD Information Forms filled out then the first page will be
"Page 1 of 10", the fourth page will be "Page 4 of 10" and the last page will be "Page 10 of 10".

Date & Time - Must match the PS-2 form time for the activity code related to this floating object.
Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard.
Observers should set their watches to this date and time as soon as they board the vessel.

Set Number - If object is involved in a set during this encounter record the same Set No. that is
recorded on the daily activity sheet (PS-2). If no set is made record a dash in this space.

Object Number - Give new (consecutive) 'Object Number' to each floating object. Start with 001.
If that same object is recognised in future activities use the same 'Object Number' in the record.
If it comes onboard it still gets an Object No. and if returned to water at same place, number stays the
same, however if it goes to a different area it gets a new number and a new record is created.

Origin of FAD - Try to find out the origin of the object before this current encounter.
Use the "Origin" code that best describes where the FAD or floating object came from.
If you cannot find out where the FAD came from, use the code for "unknown".
If origin not listed use "other" and describe in comments. Also use comments for additional details.
N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6
are used for will have a radio buoy still attached, whereas the FAD (or other floating object)
will no longer have a buoy attached to it.

Deployment date, latitude and **longitude** - If deployment is not actually witnessed by observer
efforts try to get this information from the vessel's records, if applicable. Otherwise enter dashes.

FAD as Found, **FAD lifted** *and* **FAD as Left**
Shows what an object is when it is found and if it has changed by the time the vessel leaves it.
N.B.: Complete the 'FAD as Found' field only if object was found in the water - if the object is
a FAD being deployed for the first time then only record a dash in the 'FAD as found' field.
Circle YES or NO to show if FAD was lifted from water at any time.
Watch for changes being made to any found floating object before the vessel leaves it adrift again.
If no modifications were made to the object, the 'As found' and 'As Left' fields should be identical.
If object is brought aboard vessel and moved to another area put a dash in the 'FAD as left' field.
A new record will be created if that floating object is redeployed.

FAD Materials - **Main Materials**, **FAD Attachments** and **Net/mesh size**
Most materials found in the main body (or platform) of floating objects and those commonly used
for attachments under FADs have codes '1' to '17' in the list under 'FAD materials' on this form.
N.B.: some materials can be used as main material or as attachment materials
so the material codes amy be used twice - describing both the main and the attachment materials.
If many materials make up the body of a FAD, list up to 3 of them starting with the most abundant.
If the object has a component not included in the list use other code "17" and describe in comments.
If not sure of the material use unknown code "10" and describe it, if possible.
If possible get diagonal mesh measurements of net used to make the platform and/or attachments

Max Est Depth (maximum estimated depth) Record the estimated depth (**in metres**) below the surface of
the water of any objects, streamers or other equipment attached to the FAD (but not including the anchor
rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this
record). If there are any attachments at all always make an estimate even if estimating depth is very
difficult. - comment on the difficulty.

> **THE WCPFC recognises live whale sharks, marine mammals etc as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.**

Fad Length & **Fad Width**
Record dimensions (length and width) of the man body of a floating object or FAD when it is found
(or deployed if the deployment is the reason for this record).
If the object has an irregular shape or is made up of multiple components, imagine a box with
the object in it and record the length and width dimensions of the imaginary box.

Buoy number and **FAD/PAYO Numbers and markings**
Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Payao itself.
If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

SSI seen *and* **SSI trapped** - *circle* 'Y' = yes, 'N' = no; *or* 'U' = unknown
to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is
trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other.
NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen.
Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

Comments / Change details
Record any information that will help identify a FAD or floating object and any information
that can help understand why the FAD or floating object works well or doesn't work well.
If a FAD has been changed describe the changes. with notes and refer to more description
that are written in the observer's trip report and/or daily journal.
Diagrams - A drawing of an object can be very helpful.

REVISED DEC. 2016

OBSERVER NAME:	VESSEL NAME:	OBSERVER TRIP ID NUMBER:	PAGE OF

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

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	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Diagrams - *label with 'Object number'*

FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.
(except if for same object encountered unchanged within four hours of previous encounter)

Observer name, Vessel name - Print each name out in full.
For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

Observer trip ID number: - number issued by the authority that placed the observer.

Page of : Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc.
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For example if there are 10 x FAD Information Forms filled out then the first page will be
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Date & Time - Must match the PS-2 form time for the activity code related to this floating object.
Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard.
Observers should set their watches to this date and time as soon as they board the vessel.

Set Number - If object is involved in a set during this encounter record the same Set No. that is
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Object Number - Give new (consecutive) 'Object Number' to each floating object. Start with 001.
If that same object is recognised in future activities use the same 'Object Number' in the record.
If it comes onboard it still gets an Object No. and if returned to water at same place, number stays the
same, however if it goes to a different area it gets a new number and a new record is created.

Origin of FAD - Try to find out the origin of the object before this current encounter.
Use the "Origin" code that best describes where the FAD or floating object came from.
If you cannot find out where the FAD came from, use the code for "unknown".
If origin not listed use "other" and describe in comments. Also use comments for additional details.
N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6
are used for will have a radio buoy still attached, whereas the FAD (or other floating object)
will no longer have a buoy attached to it.

Deployment date, latitude and **longitude** - If deployment is not actually witnessed by observer
efforts try to get this information from the vessel's records, if applicable. Otherwise enter dashes.

FAD as Found, **FAD lifted** *and* **FAD as Left**
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Circle YES or NO to show if FAD was lifted from water at any time.
Watch for changes being made to any found floating object before the vessel leaves it adrift again.
If no modifications were made to the object, the 'As found' and 'As Left' fields should be identical.
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If possible get diagonal mesh measurements of net used to make the platform and/or attachments

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rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this
record). If there are any attachments at all always make an estimate even if estimating depth is very
difficult. - comment on the difficulty.

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> any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.**

Fad Length & Fad Width
Record dimensions (length and width) of the man body of a floating object or FAD when it is found
(or deployed if the deployment is the reason for this record).
If the object has an irregular shape or is made up of multiple components, imagine a box with
the object in it and record the length and width dimensions of the imaginary box.

Buoy number and **FAD/PAYO Numbers and markings**
Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Payao itself.
If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

SSI seen *and* **SSI trapped** - *circle* 'Y' = yes, 'N' = no; *or* 'U' = unknown
to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is
trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other.
NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen.
Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

Comments / Change details
Record any information that will help identify a FAD or floating object and any information
that can help understand why the FAD or floating object works well or doesn't work well.
If a FAD has been changed describe the changes. with notes and refer to more description
that are written in the observer's trip report and/or daily journal.
Diagrams - A drawing of an object can be very helpful.

FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

REVISED DEC. 2016

OBSERVER NAME:	VESSEL NAME:	OBSERVER TRIP ID NUMBER:	PAGE OF

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
										YES / NO		

FAD materials **Main materials**	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
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	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
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	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	*Comments / Change details*
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FAD materials **Main materials**	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Diagrams- *label with 'Object number'*

FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.
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Observer name, Vessel name - Print each name out in full.
For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

Observer trip ID number: - number issued by the authority that placed the observer.

Page of : Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc.
At end of trip put the last page number on every page.
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Date & Time - Must match the PS-2 form time for the activity code related to this floating object.
Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard.
Observers should set their watches to this date and time as soon as they board the vessel.

Set Number - If object is involved in a set during this encounter record the same Set No. that is
recorded on the daily activity sheet (PS-2). If no set is made record a dash in this space.

Object Number - Give new (consecutive) 'Object Number' to each floating object. Start with 001.
If that same object is recognised in future activities use the same 'Object Number' in the record.
If it comes onboard it still gets an Object No. and if returned to water at same place, number stays the
same, however if it goes to a different area it gets a new number and a new record is created.

Origin of FAD - Try to find out the origin of the object before this current encounter.
Use the "Origin" code that best describes where the FAD or floating object came from.
If you cannot find out where the FAD came from, use the code for "unknown".
If origin not listed use "other" and describe in comments. Also use comments for additional details.
N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6
 are used for will have a radio buoy still attached, whereas the FAD (or other floating object)
 will no longer have a buoy attached to it.

Deployment date, latitude and **longitude -** If deployment is not actually witnessed by observer
 efforts try to get this information from the vessel's records, if applicable. Otherwise enter dashes.

FAD as Found, **FAD lifted** *and* **FAD as Left**
Shows what an object is when it is found and if it has changed by the time the vessel leaves it.
N.B.: Complete the 'FAD as Found' field only if object was found in the water - if the object is
 a FAD being deployed for the first time then only record a dash in the 'FAD as found' field.
Circle YES or NO to show if FAD was lifted from water at any time.
Watch for changes being made to any found floating object before the vessel leaves it adrift again.
If no modifications were made to the object, the 'As found' and 'As Left' fields should be identical.
If object is brought aboard vessel and moved to another area put a dash in the 'FAD as left' field.
A new record will be created if that floating object is redeployed.

FAD Materials - **Main Materials**, **FAD Attachments** and **Net/mesh size**
Most materials found in the main body (or platform) of floating objects and those commonly used
 for attachments under FADs have codes '1' to '17' in the list under 'FAD materials' on this form.
N.B.: some materials can be used as main material or as attachment materials
 so the material codes amy be used twice - describing both the main and the attachment materials.
If many materials make up the body of a FAD, list up to 3 of them starting with the most abundant.
If the object has a component not included in the list use other code "17" and describe in comments.
If not sure of the material use unknown code "10" and describe it, if possible.
If possible get diagonal mesh measurements of net used to make the platform and/or attachments

Max Est Depth (maximum estimated depth)Record the estimated depth (**in metres**) below the surface of
the water of any objects, streamers or other equipment attached to the FAD (but not including the anchor
rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this
record). If there are any attachments at all always make an estimate even if estimating depth is very
difficult. - comment on the difficulty.

> **THE WCPFC recognises live whale sharks, marine mammals etc as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.**

Fad Length & Fad Width
Record dimensions (length and width) of the man body of a floating object or FAD when it is found
 (or deployed if the deployment is the reason for this record).
If the object has an irregular shape or is made up of multiple components, imagine a box with
 the object in it and record the length and width dimensions of the imaginary box.

Buoy number and **FAD/PAYO Numbers and markings**
Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Payao itself.
If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

SSI seen *and* **SSI trapped -** *circle* 'Y' = yes, 'N' = no; *or* 'U' = unknown
to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is
trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other.
NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen.
Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

Comments / Change details
 Record any information that will help identify a FAD or floating object and any information
 that can help understand why the FAD or floating object works well or doesn't work well.
 If a FAD has been changed describe the changes. with notes and refer to more description
 that are written in the observer's trip report and/or daily journal.
 Diagrams - A drawing of an object can be very helpful.

FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

REVISED DEC. 2016

OBSERVER NAME:	VESSEL NAME:	OBSERVER TRIP ID NUMBER:	PAGE OF

Date	Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	Comments / Change details
											YES / NO		

FAD materials Main materials	*net/mesh size*	Attachments	*net/mesh size*	Max est. depth	FAD length	FAD width	Buoy number	FAD / Payao No. and or markings	SSI seen	SSI trapped	
	cm		cm	M	M	M			Y / N / U	Y / N / U	

Date	Time *(from PS-2)*	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	FAD lifted	FAD as left	Comments / Change details
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Diagrams- *label with 'Object number'*

FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.
(except if for same object encountered unchanged within four hours of previous encounter)

Observer name, Vessel name - Print each name out in full.

For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

Observer trip ID number: - number issued by the authority that placed the observer.

Page   of   : Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc.

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For example if there are 10 x FAD Information Forms filled out then the first page will be
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FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

REVISED DEC. 2016

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  that are written in the observer's trip report and/or daily journal.
 Diagrams - A drawing of an object can be very helpful.

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REVISED Dec. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF

- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE (dd°mm.mmm')	N / S	LONGITUDE (ddd°mm.mmm')	E / W	EEZ / HARBOUR
YY	MM	DD	hh	mm					

WIND DIRECTION	WIND SPEED	SEA CONDITIONS (C, S, M, R)	CURRENT : (knts and direction °)	OBSERVER'S VESSEL ACTIVITY

NAME OF OFFENDING VESSEL	IRCS	TYPE OF VESSEL	YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)	

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics			
Metals			
Waste oil			
Chemicals			
General garbage (*within 12 miles of shoreline*)	describe:		

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision			
Vessel at Anchor / Berth			
Vessel Underway			
Land based source - Describe source			
Other - please specifiy			

Abandoned or Lost Fishing Gear

Source	Activity	Describe Gear	Estimate Quantity
Lost during fishing			
Abandoned			
Dumped			

Other comments:

Were there any stickers/ posters displayed to remind the vessel about MARPOL Regulations? **Y / N**

Did you take any photos? **Y / N**

If yes, please state the number(s) of the photo frames or files.

MARPOL Regualations - state

It is illegal for any vessel to discard any form of plastics into the sea at anytime. It is illegal for any vessel to discard any form of oil into the sea less than 50 nautical miles (nm) from shore. It is illegal for any vessel to dump any form of rubbish into the sea within 12 nautical mile of the shore, unless the vessel has a machine on-board (comminuter) to shred and treat the waste. In this case they can release the treated garbage up to 3 nm from the shore.

POLLUTION REPORT

Remember - Fill in one form for each pollution incident. There might be more than one per day.
If forms run out, report this on the last form and continue recording pollution infringements in diary.

Observer Name	Put first name first, and your family name last.
Vessel Name	Record the full name of the vessel. Do not use any abbrevations.
Observer ID Number	Use the number assigned by the observer programme e.g. AA 03-01
Page of	Number all GEN-6 pages in sequence from the start until the end of the trip
Date of Incident (yy / mm /dd)	Date pollution seen in year, month and day. *Use ship's time as defined in other*
Time (00.00 hrs)	Report the time using the 24hr clock. *observer data collection forms*
Latitude / Longitude	Record the GPS positon of the host vessel when the pollution was first seen.
EEZ / Harbour	Record the EEZ or, for shorebase staff, mark port or Harbour name here.
Wind Direction	The prevailing wind direction. Use degree eg. 90 degrees for an east wind
Wind Speed	Record the prevailng wind speed.
Sea Conditions	C- Calm, S- Slight, M- Moderate, R - Rough.
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transhipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper name of offending vessel. Be careful not to make any spelling mistakes which may make it difficult to prosecute the vessel if the report goes through legal proceedings.
IRCS	The international callsign is marked in large letters on the side of the boat.
Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.
Your positon from offending vessel.	Use the vessel compass to get direction of theoffending vessel from the obs.' vessel. The radar can be used to get an extact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maxium of two materials ifmore than one material type dumped over at the same time - e.g.: it dumped plastic and metal at 10:00hrs. If plastic was dumped at 10:00hrs and metal at 16:00hrs - record
Describe type	Give as good a description as possible of the type of dumped material. E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;
Describe Quantities	Give a best estimate of the amount dumped. Sometimes this will be easy - e.g., 12 metal oil drums were dumped. At other times the material might be too far away to see the amount. If it is too far away then estimate the amount as well as possible and make note that it is only a rough estimate at
OIL SPILLAGES AND LEAKAGES	
Source	Tick to indicate where the spillage or leak came from
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.
Describe Area and Quantity	Give a best estimate of the size of the spill. The boat could be a size reference - e.g.: it was 4 times bigger than the boat.
Abandoned or Lost Fishing Gear	
Source	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing the information for the corresponding row of information. For instance if the source is 'lost during fishing' fill in the activity, describe gear, and estimate quantity on the line to the right of 'lost during fishing'.
Source - Lost during fishing	Use this line if the gear was _accidentally_ lost from the observer's vessel during this trip and the vessel tried to search and recover the gear.
Source - Abandoned	Use this line if the gear was deliberately abandoned from the observer's vessel during the trip, or similarly the vessel made no effort to retrive the gear.
Source - Dumped	Use this line if the vessel deliberately dumped any fishing gear overboard (either old fishing gear, or some of the gear that was used during the trip).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	Given information on the gear, especially the type of materials it was made of (e.g. aluminium, nylon rope) and its make up - fishing net 10cm mesh, old monofilament branchline, no hooks
Estimate Quantifty	Refer to the total area in square meters. Mention the length, breadth and width.

For Country Codes - see the **Code Page** in your Workbook

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REVISED Dec. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF

- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE (dd°mm.mmm')	N / S	LONGITUDE (ddd°mm.mmm')	E / W	EEZ / HARBOUR
YY	MM	DD	hh	mm					

WIND DIRECTION	WIND SPEED	SEA CONDITIONS (C, S, M, R)	CURRENT : (knts and direction °)	OBSERVER'S VESSEL ACTIVITY

NAME OF OFFENDING VESSEL	IRCS	TYPE OF VESSEL	YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics			
Metals			
Waste oil			
Chemicals			
General garbage (*within 12 miles of shoreline*)	*describe:*		

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision			
Vessel at Anchor / Berth			
Vessel Underway			
Land based source - Describe source			
Other - please specifiy			

Abandoned or Lost Fishing Gear

Source	Activity	Describe Gear	Estimate Quantity
Lost during fishing			
Abandoned			
Dumped			

Other comments:

Were there any stickers/ posters displayed to remind the vessel about MARPOL Regulations? **Y / N**

Did you take any photos? **Y / N**

If yes, please state the number(s) of the photo frames or files.

MARPOL Regualations - state

It is illegal for any vessel to discard any form of plastics into the sea at anytime. It is illegal for any vessel to discard any form of oil into the sea less than 50 nautical miles (nm) from shore. It is illegal for any vessel to dump any form of rubbish into the sea within 12 nautical mile of the shore, unless the vessel has a machine on-board (comminuter) to shred and treat the waste. In this case they can release the treated garbage up to 3 nm from the shore.

POLLUTION REPORT

Remember - Fill in one form for each pollution incident. There might be more than one per day.
If forms run out, report this on the last form and continue recording pollution infringements in diary.

Observer Name	Put first name first, and your family name last.
Vessel Name	Record the full name of the vessel. Do not use any abbrevations.
Observer ID Number	Use the number assigned by the observer programme e.g. AA 03-01
Page of	Number all GEN-6 pages in sequence from the start until the end of the trip
Date of Incident (yy / mm /dd)	Date pollution seen in year, month and day. *Use ship's time as defined in other observer data collection forms*
Time (00.00 hrs)	Report the time using the 24hr clock.
Latitude / Longitude	Record the GPS positon of the host vessel when the pollution was first seen.
EEZ / Harbour	Record the EEZ or, for shorebase staff, mark port or Harbour name here.
Wind Direction	The prevailing wind direction. Use degree eg. 90 degrees for an east wind
Wind Speed	Record the prevailng wind speed.
Sea Conditions	C- Calm, S- Slight, M- Moderate, R - Rough.
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transhipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper name of offending vessel. Be careful not to make any spelling mistakes which may make it difficult to prosecute the vessel if the report goes through legal proceedings.
IRCS	The international callsign is marked in large letters on the side of the boat.
Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.
Your positon from offending vessel.	Use the vessel compass to get direction of theoffending vessel from the obs.' vessel. The radar can be used to get an extact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maxium of two materials ifmore than one material type dumped over at the same time - e.g.: it dumped plastic and metal at 10:00hrs. If plastic was dumped at 10:00hrs and metal at 16:00hrs - record
Describe type	Give as good a description as possible of the type of dumped material. E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;
Describe Quantities	Give a best estimate of the amount dumped. Sometimes this will be easy - e.g., 12 metal oil drums were dumped. At other times the material might be too far away to see the amount. If it is too far away then estimate the amount as well as possible and make note that it is only a rough estimate at
OIL SPILLAGES AND LEAKAGES	
Source	Tick to indicate where the spillage or leak came from
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.
Describe Area and Quantity	Give a best estimate of the size of the spill. The boat could be a size reference - e.g.: it was 4 times bigger than the boat.
Abandoned or Lost Fishing Gear	
Source	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing the information for the corresponding row of information. For instance if the source is 'lost during fishing' fill in the activity, describe gear, and estimate quantity on the line to the right of 'lost during fishing'.
Source - Lost during fishing	Use this line if the gear was _accidentally_ lost from the observer's vessel during this trip and the vessel tried to search and recover the gear.
Source - Abandoned	Use this line if the gear was _deliberately_ abandoned from the observer's vessel during the trip, or similarly the vessel made no effort to retrive the gear.
Source - Dumped	Use this line if the vessel deliberately dumped any fishing gear overboard (either old fishing gear, or some of the gear that was used during the trip).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	Given information on the gear, especially the type of materials it was made of (e.g. aluminium, nylon rope) and its make up - fishing net 10cm mesh, old monofilament branchline, no hooks
Estimate Quantifty	Refer to the total area in square meters. Mention the length, breadth and width.

For Country Codes - see the **Code Page** in your Workbook

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REVISED Dec. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF

- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE (dd°mm.mmm')	N / S	LONGITUDE (ddd°mm.mmm')	E / W	EEZ / HARBOUR
YY	MM	DD	hh	mm					

WIND DIRECTION	WIND SPEED	SEA CONDITIONS (C, S, M , R)	CURRENT : (knts and direction °)	OBSERVER'S VESSEL ACTIVITY

NAME OF OFFENDING VESSEL	IRCS	TYPE OF VESSEL	YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics			
Metals			
Waste oil			
Chemicals			
General garbage (*within 12 miles of shoreline*)	describe:		

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision			
Vessel at Anchor / Berth			
Vessel Underway			
Land based source - Describe source			
Other - please specifiy			

Abandoned or Lost Fishing Gear

Source	Activity	Describe Gear	Estimate Quantity
Lost during fishing			
Abandoned			
Dumped			

Other comments:

Were there any stickers/ posters displayed to remind the vessel about MARPOL Regulations?	**Y / N**
Did you take any photos?	**Y / N**
If yes, please state the number(s) of the photo frames or files.	

MARPOL Regualations - state

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POLLUTION REPORT

Remember - Fill in one form for each pollution incident. There might be more than one per day.
If forms run out, report this on the last form and continue recording pollution infringements in diary.

Observer Name	Put first name first, and your family name last.
Vessel Name	Record the full name of the vessel. Do not use any abbrevations.
Observer ID Number	Use the number assigned by the observer programme e.g. AA 03-01
Page of	Number all GEN-6 pages in sequence from the start until the end of the trip
Date of Incident (yy / mm /dd)	Date pollution seen in year, month and day. *Use ship's time as defined in other*
Time (00.00 hrs)	Report the time using the 24hr clock. *observer data collection forms*
Latitude / Longitude	Record the GPS positon of the host vessel when the pollution was first seen.
EEZ / Harbour	Record the EEZ or, for shorebase staff, mark port or Harbour name here.
Wind Direction	The prevailing wind direction. Use degree eg. 90 degrees for an east wind
Wind Speed	Record the prevailng wind speed.
Sea Conditions	C- Calm, S- Slight, M- Moderate, R - Rough.
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transhipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper name of offending vessel. Be careful not to make any spelling mistakes which may make it difficult to prosecute the vessel if the report goes through legal proceedings.
IRCS	The international callsign is marked in large letters on the side of the boat.
Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.
Your positon from offending vessel.	Use the vessel compass to get direction of theoffending vessel from the obs.' vessel. The radar can be used to get an extact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maxium of two materials ifmore than one material type dumped over at the same time - e.g.: it dumped plastic and metal at 10:00hrs. If plastic was dumped at 10:00hrs and metal at 16:00hrs - record
Describe type	Give as good a description as possible of the type of dumped material. E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;
Describe Quantities	Give a best estimate of the amount dumped. Sometimes this will be easy - e.g., 12 metal oil drums were dumped. At other times the material might be too far away to see the amount. If it is too far away then estimate the amount as well as possible and make note that it is only a rough estimate at
OIL SPILLAGES AND LEAKAGES	
Source	Tick to indicate where the spillage or leak came from
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.
Describe Area and Quantity	Give a best estimate of the size of the spill. The boat could be a size reference - e.g.: it was 4 times bigger than the boat.
Abandoned or Lost Fishing Gear	
Source	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing the information for the corresponding row of information. For instance if the source is 'lost during fishing' fill in the activity, describe gear, and estimate quantity on the line to the right of 'lost during fishing'.
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Describe Gear	Given information on the gear, especially the type of materials it was made of (e.g. aluminium, nylon rope) and its make up - fishing net 10cm mesh, old monofilament branchline, no hooks
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SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REVISED Dec. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF

- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE (dd°mm.mmm')	N / S	LONGITUDE (ddd°mm.mmm')	E / W	EEZ / HARBOUR
YY	MM	DD	hh	mm					

WIND DIRECTION	WIND SPEED	SEA CONDITIONS (C, S, M, R)	CURRENT : (knts and direction °)	OBSERVER'S VESSEL ACTIVITY

NAME OF OFFENDING VESSEL	IRCS	TYPE OF VESSEL	YOUR POSITION FROM OFFENDING VESSEL	
			Compass Bearing	Distance (nautical miles)

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics			
Metals			
Waste oil			
Chemicals			
General garbage (*within 12 miles of shoreline*)	describe:		

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision			
Vessel at Anchor / Berth			
Vessel Underway			
Land based source - Describe source			
Other - please specifiy			

Abandoned or Lost Fishing Gear

Source	Activity	Describe Gear	Estimate Quantity
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Abandoned			
Dumped			

Other comments:

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SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REVISED Dec. 2016

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF

- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE (dd°mm.mmm')	N / S	LONGITUDE (ddd°mm.mmm')	E / W	EEZ / HARBOUR
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NAME OF OFFENDING VESSEL	IRCS	TYPE OF VESSEL	YOUR POSITION FROM OFFENDING VESSEL Compass Bearing	Distance (nautical miles)

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
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Metals			
Waste oil			
Chemicals			
General garbage (*within 12 miles of shoreline*)	*describe:*		

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
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OIL SPILLAGES AND LEAKAGES	
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	SPC/FFA REGIONAL OBSERVER TRIP RECONCILIATION		FORM SUP-3

REV. Dec 2016

OBSERVER NAME	VESSEL NAME	VESSEL CALL-SIGN	OBSERVER TRIP ID No.

TRAVEL DETAILS

EVENT CODE	DEPARTURE			ARRIVAL			ACTIV-ITY CODE	DAYS	COMMENTS
	PLACE OR VESSEL	DATE	TIME	PLACE OR VESSEL	DATE	TIME			

ALL DETAILS TO BE FILLED OUT IN A CHRONOLGICAL ORDER

EVENT CODES		ACTIVITY CODES	
Observer boards plane	BP	Air Flight	AF
Observer boards ferry	BF	Ferry Trip	FT
Observer arrives in stopover port or town	OS	Observer stopover travelling to or from vessel	SO
Observer arrives in port for start of trip	OA	Observer waiting for vessel departure on shore	OW
Observer boards vessel	BV	Observer transiting home after trip	TR
Vessel departs port with observer	VD	Vessel in Port (observer onboard)	VP
Vessel arrives in port with observer	VA	Vessel at Sea (observer on board)	VS
Observer disembarks vessel	DV		
Observer transfers to a different vessel	OT	Other (describe in comments)	OR

SPC/FFA REGIONAL OBSERVER	FORM
ADVANCES and CLAIMS FORM	**SUP-4**

REV DEC. 2016

OBSERVER NAME	VESSEL NAME	IRCS	PAGE OF

ADVANCES

Advance Claim Ref No.		NAME OF OBSERVER PROGRAMME or FISHING COMPANY MAKING ADVANCE	NAME OF PERSON PROVIDING ADVANCE	SIGNATURE (of person making advance)	State TYPE of ADVANCE (i.e. cash /other)	Curr-ency	Amount
ADV #	Observer Trip ID No						
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

OBSERVER EXPENSE CLAIMS FOR REIMBURSEMENT

	Claim item [number (#) each receipt]	Curr-ency	Amount		Claim item [number (#) each receipt]	Curr-ency	Amount
EXP #	Description			#	Description		
1				13			
2				14			
3				15			
4				16			
5				17			
6				18			
7				19			
8				20			
9				21			
10				22			
11				23			
12				24			

Tick one box only:

☐ Please make payments to: ....
(payee's *name*)

observer's signature

....
(*bank*) (*branch*) (*account number*)

☐ Please arrange for funds to be available on presentation of passport

Written report and data was sent by: .... on .... Registered mail
(*hand caried, courier, express mail, etc.*) (*date*)

I certify that the expense claims and dates of travel and sea days are a true account of expenses and dates of travel; and I verify that my independent report and data collection is a true and correct record of my observations onboard the vessel

SIGNED: .... Date: ....

New for 2016: All advances received by an observer must be filled in on this form.

Advances will not be reimbursed unless the advances are fully documented on this form and signed off.

ADVANCES	
Advance Claim Reference Number	The advance claim reference number is a mixture of a 'claim' number and the observer trip id number. Combined these numbers help to uniquely identify each observer advance so it can be reimbursed to the person that made the advance. In the future advances will not be reimbursed if they don't have the advance claim reference number It is important that you notify the person making the advance of the number and get them to sign the form. See below. If possible make sure they get a photcopy of the form after they have signed it. Example of an advance claim reference number : ADV #1: ELE 15-07
NAME OF OBSERVER PROGRAMME or FISHING COMPANY MAKING ADVANCE	State the name of the observer programme or the fishing company that provided the advance. You should include the full contact details for the fishing company in your journal. Remember to record the full mailing address and the email and phone number in the journal.
FULL NAME OF PERSON PROVIDING THE ADVANCE	Clearly record the full name of the person that gave you the advance.
SIGNATURE (of person making advance)	You must get the signature of the person who made the advance. In future the person or their observer programme or fishing company will not be paid back the advance if this form is not filled in. If the advance was sent from overseas your Observer Coordinator must sign the form.
TYPE OF ADVANCE	State if you received cash, traveller's check or a bank transfer.
CURRENCY	State the currency that was received (i.e US for US dollars, YEN for Japanese yen, FJ for Fijian dollars etc)
AMOUNT	State the amount that was received in figures to two decimal places.

OBSERVER EXPENSE CLAIMS FOR REIMBURSEMENT

1. All receipts should be dated and have the name of the company clearly indicated. A cash register receipt must be clear and have the item purchased listed on the receipt if this is not available ask for a hand written receipt with company name on the receipt. Remember to record what the currency is on each receipt.

2. If no receipts are available (e.g. taxis) list these items on a sheet with full details, dates and currency and sign the sheet.

3. Make sure all claim receipts are numbered and are placed in a separate envelope along with used and/or unused airline tickets. Send the envelope with work books. **Under no circumstances send anything by normal or surface mail**

4. Observers are able to claim work related taxi/bus fares, airport tax, safety deck boots, helmets, etc. If you are not sure if you can make a claim for an item, put a claim in and your coordinator will assess the claim.

5. Safely package (preferably in a padded envelope) data and workbooks, the envelope containing receipts, photographs and/or any other items and make sure they are hand carried, sent by Courier, or sent by Express Registered Air-Mail. Normal or surface mail can take months and will delay final payment. All costs of sending the packages by courier or express mail are refundable.
   – UNDER NO CIRCUMSTANCE MAIL THESE ARTICLES BY NORMAL OR SURFACE MAIL –

6. Fax a copy of this form to your main office or as advised by your coordinator. Send the original copy with the receipts.

7. Although DSA (per diem / travel and accomodation allowances) cover accommodation copies of hotel/motel receipts that show clearly the dates stayed, must be sent in. Do not send in receipts for food purchases or personal items.

FOR TAGS RECOVERED ON BOARD DURING YOUR TRIP,
EVEN IF YOU ARE NOT THE FINDER,
THE RECOVERY INFORMATION MUST BE RECORDED IN YOUR WORKBOOK.

DO NOT REMOVE THE FORM FROM YOUR WORKBOOK !
BUT PROVIDE A COPY OF THE INFORMATION TO THE FINDER.
(either by using the tag recovery envelopes or by copying the data on another paper or forms)

What do you do if you find a tagged fish during fishing time?

- Ask permission to put the fish aside.
- Verify that there is no archival tag in the belly. You should be able to see the antenna of the archival tag sticking out. Remove the archival tag by cutting the fish from the anus toward the gills (a small cut will be enough, do not pull the antenna).
- Measure the fish. If possible weigh the fish.
- Remove entirely the tag from the fish. Make sure that the dart doesn't remain inside the flesh of the fish.
- Fill in the tag recovery form and report the exact date and position of the catch.
- If you have access to a freezer, you can collect biological samples (otoliths, first dorsal spine, stomach, gonads, muscle, liver)

What do you do if you find a tagged fish during a well transfer or during transhipment?

- Ask permission to put the fish aside.
- Note the well number and tag number.
- Verify that there is no archival tag in the belly. You should be able to see the antenna of the archival tag sticking out. Remove the archival tag by cutting the fish from the anus toward the gills (a small cut will be enough, do not pull the antenna).
- Measure the fish. If possible weigh the fish.
- Remove entirely the tag from the fish. Make sure that the dart doesn't remain inside the flesh of the fish.
- Fill in the tag recovery form and if there were several sets in the well, report the period and the position that include all the sets.
- If you have access to a freezer, you can collect biological samples (otoliths, first dorsal spine, stomach, gonads, muscle, liver)

What do you do if the crew gives you a tag?

- Ask when they found the tagged fish and all possible questions to recover information relative to the recovery. If the date when the tag was found is not precise you can at least enter the month and the year of the catch.
- If the catch position cannot be retrieved, try to at least describe the region where the tagged fish was caught.
- If the crew gives you an approximate date, try to access the vessel's logbook to find out where the boat was around that date and use the estimate section of the form to report the position.
- If the tag was traded and the tagged fish was recaptured by another fishing vessel that the one you are observing on, please note the information in the general comment section of the form.
- Note all the recovery information in your workbook, provide a copy to the finder (report data on another form, or tag recovery envelope). Do not take the tag from the finder.
- On your tag recovery form, in the section 'Tag provided with this form' place a cross in 'No' and specify where the crew will collect his reward.
- Upon Arrival at port you can provide assistance to the crew to collect his reward.

Rewards

In each main port you can find a **Tag Recovery Officer** (**TRO**), they are able to distribute reward for recovered tags.

If a crew member on the boat finds a tag, fill out the tag recovery form with him and give the tag back to the finder with a copy of the data and advise him where to collect his reward in the next major port.

Tag recoveries may also be reported to SPC by email (tagging@spc.int), or on a web-based form at:
www.spc.int/tagging

You can inform the captain and the crew that they can use the website if they recover tags in the future. Observers must always use the recovery forms in the workbook to report tag recoveries. At the end of the trip if you have extra forms, you can remove them from your workbook and provide them to the captain.

For advices contact the Tagging Recovery Officer Coordinator:
Caroline Sanchez - Carolines@spc.int /(+687 242227)

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Reward Collection Locations
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American Samoa
1. CIFFO – Cook Island Field Fisheries Office PAGO PAGO (Contact: Lyndsay Mundri)

China
1. China Fisheries Association, BEIJING (Contact: Zhao Gang)
2. Ningbo Poseidon Food Company NINGBO (Contact: Shirley Chen)

Cook Islands
1. Ministry of Marine Resources RAROTONGA (Contact: Andrew Jones)

Ecuador
1. Inter American Tropical Tuna Commission IATTC/CIAT in MANTA (Contact: Erick Largacha)

Federated States of Micronesia
1. Secretariat of the Pacific Community POHNPEI (Contact: Amelia Antreas)
2. National Oceanic Resource Management Authority POHNPEI (Contact: Derek Pelep)

Fiji
1. Secretariat of the Pacific Community SUVA (Contact: Front Office)

Guam
1. Guam Fishermen's Cooperative Association GUAM (Contact: Manuel Duenas)

Indonesia
1. Research Centre for Capture Fisheries, JAKARTA (Contact: Anung Widodo)

Japan
1. National Research Institute of Far Seas Fisheries SHIMIZU (Contact: Junji Kinoshita)

Kiribati
1. Ministry of Fisheries & Marine Resource Development, Bairiki TARAWA (Contact: Mamera Afeleti / Benaia Bauro / Tataua Rabunataai)
2. Ministry of Fisheries & Marine Resource Development, CHRISTMAS ISLAND (Contact: Taratau Kirata)

Korea
1. National Fisheries Research and Development Institute BUSAN (Contact: Seon Jae Wang (황선재))

Marshall Islands
1. Marshall Islands Marine Resources Authority MAJURO (Contact: Berry Muller/Mark Bigler)

New Caledonia
1. Secretariat of the Pacific Community NOUMEA (Contact: Caroline Sanchez)

Palau
1. Bureau of Marine Resources KOROR (Contact: Kathy Sisior)

Papua New Guinea
1. National Fisheries Authority PORT MORESBY (Contact: Benthly Sabub)National Fisheries Authority LAE (Contact: Walter Rupo / Billy Pangi)
2. Frabelle PNG LAE (Contact: Celia Batobato)
3. National Fisheries Authority MADANG (Contact: Clement Kuag)
4. RD Fishing PNG VIDAR (Contact: Sammy Rivera)
5. National Fisheries Authority WEWAK (Contact: Andrew Rahiria)
6. South Sea Tuna Corporation WEWAK (Contact: Eldwin Umusig)
7. National Fisheries Authority RABAUL (Contact: Ellison Semi / Ezekiel Pue)

Palau
1. Bureau of Marine Resources KOROR (Contact: Kathy Sisior)

Philippines
1. Bureau of Fisheries & Aquatic Resources MANILA (Contact: Noel Barut / Elaine Garvilles)
2. Bureau of Fisheries & Aquatic Resources GENERAL SANTOS (Contact: Glennville Castrence / Ian Medel Lipio)
3. Bureau of Fisheries & Aquatic Resources DAVAO (Contact: Front Office)

Seychelles
1. Indian Ocean Tuna Commission SEYCHELLES (Contact: Julien Million)

Solomon Islands
1. Ministry of Fisheries & Marine Resources HONIARA (Contact: Derrick Tagosia / Harold Vilia)
2. Forum Fisheries Agency HONIARA (Contact: Ambrose Orianihaa)
3. Soltai Fishing NORO (Contact: Solomon Kakana)
4. Ministry of Fisheries & Marine Resources NORO (Contact: Derick Suimae)

Taiwan
1. Taiwan Deep Sea Tuna Purse Seiners Association KAOHSIUNG (Contact: Jason Tsai)
2. Overseas Fisheries Development Council KAOHSIUNG (Contact: Peter Ho (何勝初))

Thailand
1. Thailand Department of Fisheries, SAMUTSAKOM (Contact: Suwimon Keerativiriyaporn)

United States of America
1. Inter American Tropical Tuna Commission SAN DIEGO (Contact: Dan Fuller)
2. National Oceanic and Atmospheric Administration HONOLULU (Contact: David Itano)

Vietnam
1. Phu Yen Province (Contact: Le Duc Tuong)
2. Binh Dinh Province (Contact: Nguyen Duy Lam)
3. Khanh Hoa Province (Contact: Vo Khac En)

REVISED SPC - Feb. 2017

No. P-48854

CRITICAL TAG INFORMATION

Note the 1st date when the tag has been found.
If you dont have an exact date, place a dash in the day field and note the month and/or year.

If there is more than 1 tag recovered during the trip, number each page.

TAG NUMBER:		DATE WHEN TAG FOUND:	DD	MM	YY

WHERE FOUND:

where did you find the tagged species?

☐ Port / Fish market   ☐ Cold storage

ACTIVITY WHEN FOUND:

What were you doing when you found the tagged species?

☐ ment   ☐ Unloading at port

WELL NUMBER WHERE FISH FOUND: (If Applicable)

If a tagged fish is found during transfer/transhipment, note the well number.

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY:	☐ Confirmed	☐ Guess

Are you sure about the identification?

LENGTH 1 : (cm)	LENGTH 2 : *applicable*	NO length Information [X]	

If there is no length, place a cross and move to the next section.

For fish and turtles, note 1 length : UF for tuna species, CL for turtles.
For birds, note 2 lengths BL and WL.

If there is no weight, place a cross and move to the next section.

WEIGHT (kg)	NO weight information [X]	HOW WEIGHED? ☐

Choose one option to describe the processed state.

PROCESSED STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other…. *please specify:*

If you know exactly when and where the tagged species was caught.

If you find the tagged specie in a well composed of several sets or if the finder is not sure of position and date of catch.

DATE	Exact [X]	DD 05	MM 02	YY 11		Estimated [X]	From	DD 01	MM 03	YY 11	to	DD 15	MM 03	YY 11

Record 2 lines of latitude and 2 of longitude to form box in which tag was likely recovered

POSITION	Exact [X]		dd	mm.mmm	N/S		Estimated [X]		dd	mm.mmm	N/S		ddd	mm.mmm	E/W
		Latitude	06	02.300	N	Latitude Min Max			05°	02.500 '	N	Longitude	145 °	12.300 '	E
		Longitude	140 O	04.600 '	E				00°	50.600 '	N		150 °	20.450 '	E

Name of the vessel that caught the tagged species

Use the chart on the back of the form. Place a cross for the position of each set, then draw a box that includes all the sets. Report in the table the two longitudes and the two latitudes creating the box.

FISH

VESSEL NAME:

FISHING METHOD:

If on a PS or PL, enter the school type. If found in well with several school types, place a cross in all options.

SCHOOL TYPE:
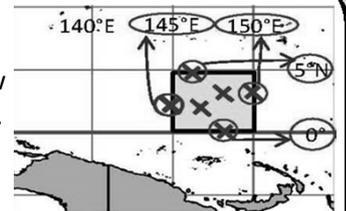
TRANSSHIPMENT INFORMATION/ Carrier only (if tag found d

If the recovery of a tagged fish involve a carrier/reefer, fill this section. If the unloading/transhipment occurs at port, note the name of the port, if it is at sea note the country code (EEZ of the country).

FROM	DD	MM	YY	to	DD	MM	YY

If transhipment/set share occur the same day, note only 1 date.

Country where the recovery will be reported or port where you desimbarked.

If you can't provide an address, note the fishing company.

FINDER ADDRESS:

COUNTRY OF RECOVERY:

RECOVERY INFORMATION

Specify if the crew keep the tag and where he will collect his reward.

TAG PROVIDED WITH THIS FORM	☐ Yes	[X] No	(tag ke for rewar

TYPE OF REWARD	[X] Not given	☐ Cash	FORM COMPLETED BY: Your name

If you or the finder haven't received a reward , cross "Not Given".

COMMENTS:

Use this section to record any relevant information not provided on the form. Example: Archival tag number/copy of the data provided to the tag finder/tag traded wirth another vessel/tags left on the released turtle .
You can attach the tag here :

No. P-48854   SPC NOUMEA - REWARD - www.spc.int/tagging No. P-48854

Type of tag	**Reward**

HOW TO FILL THE MULTIPLE TAG RECOVERY FORM

SPC MULTIPLE TAG RECOVERY FORM
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FRO~

PAGE ___ **OF** ___ /

Indicate if you have more than 1 series of multiple tag recoveries.

Where did you find the tagged fish?

DATE WHEN TAG FOUND:	DD **26**	MM **08**	YY **11**

Note the date when the tags were first found. If you don't have an exact date, place a dash in the day field and note the month and/or year.

WHERE FOUND: [X] Fishing vessel   [ ] Reefer / Transfer / Carrier   [ ]

ACTIVITY WHEN FOUND: [X] Fishing   ... at port

What were you doing when you found the tagged fish?

WELL NUMBER WHERE FISH FOUND: (If Applicable)

If the tagged fish come from a well, note the number and position (Eg; S2 for starboard well #2). It is very important to note this information first and then you can determine which sets composed this well from your logbook.

TAG NUMBER: **SPECIES:** [X] SKJ   [ ] BET   [ ] YFT   [ ]

FORK LENGTH cm   [ ] NO length Information   HOW...   Estimated   PROC WH...

Select the species code

No. P-48654

HOW WEIGHED? [ ] Measuring tool   [ ] Estimated   PRO WH...

TAG NUMBER: **P-234587**   **SPECIES:** [ ] SKJ   [ ] BET   [ ] YFT   [ ] Other please specify: **IDENTIFICATION:** [ ] Confirmed   [ ] Guessed

FORK LENGTH cm   [ ] NO length Information   HOW MEASURED? [ ] Measuring tool   [ ] Estimated   PROC WHE...

Are you sure about the identification?

FISH WEIGHT Kg   [ ] NO weight information   HOW WEIGHED? [ ] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN WEIGHED: [ ] Whole weight   [ ] Gilled & gutted   [ ] Other....

TAG NUMBER: **SPECIES:** [ ] SKJ   [ ] BET   [ ] YFT   [ ] Other please specify: **IDENTIFICATION:** [ ] Confirmed   [ ] Guessed

FORK LENGTH **65** cm   [ ] Fresh   [ ] Frozen

Note the size of the fish, round down to the nearest cm (Eg: 65.7cm=65

FISH WEIGHT **1.8** Kg   ...mated   PROCESSED STATE WHEN WEIGHED:

Note the exact weight of the fish (Eg: 1.8 kg).

Select 'Fresh' for a tagged fish caught during fishing time. Select 'Frozen' if found during well transfer/unloading.

SPECIES: [ ] SKJ   [ ] BET   [ ] YFT   [ ] Other please specify:

Were the size and weight measured with an instrument or estimated?

...W MEASURED? [ ] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN MEASURED:

FISH WEIGHT Kg   [ ] NO weight information   HOW WEIGHED? [ ] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN WEIGHED: [ ] Whole weight   [ ] Gilled & gutted   [ ] Other....

Select the processed state of the fish when weighed.

TAG NUMBER: **SPECIES:** [ ] SKJ   [ ] BET   [ ] YFT   [ ] Other please specify:

FORK LENGTH cm   [X] NO length Information

If there is no length, place a cross and move to the next section.

FISH WEIGHT Kg   [X] NO weight information   [ ] Other....

If there is no weight, place a cross and move to the next section.

TAG NUMBER: **P-195236**   **SPECIES:** [X] SKJ   [ ] BET   [ ] YFT   [ ] Other please specify: **IDENTIFICATION:** [X] Confirmed   [ ] Guessed

FORK LENGTH **46** cm   [ ] NO length Information   HOW MEASURED? [X] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN MEASURED: [X] Fresh   [ ] Frozen

FISH WEIGHT **1** Kg   [ ] NO weight information   HOW WEIGHED? [X] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN WEIGHED: [X] Whole weight   [ ] Gilled & gutted   [ ] Other....

TAG NUMBER: **P-278564**   **SPECIES:** [ ] SKJ   [ ] BET   [X] YFT   [ ] Other please specify: **IDENTIFICATION:** [X] Confirmed   [ ] Guessed

FORK LENGTH **85** cm   [ ] NO length Information   HOW MEASURED? [X] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN MEASURED: [X] Fresh   [ ] Frozen

FISH WEIGHT **5.9** Kg   [ ] NO weight information   HOW WEIGHED? [X] Measuring tool   [ ] Estimated   PROCESSED STATE WHEN WEIGHED: [X] Whole weight   [ ] Gilled & gutted   [ ] Other....

WHEN TO USE AND HOW TO COMPLETE THE MULTIPLE TAG RECOVERY FORM

This multiple tag recovery form is meant to be used when a finder recovers up to 8 tagged fish the **same day**, either from the **same set** during fishing time or from the **same well** during transfer or unloading.
The fishery information must be filled at the back of the form

Note that each fish has a different tag number, they can be different species, the size and weight can be different.
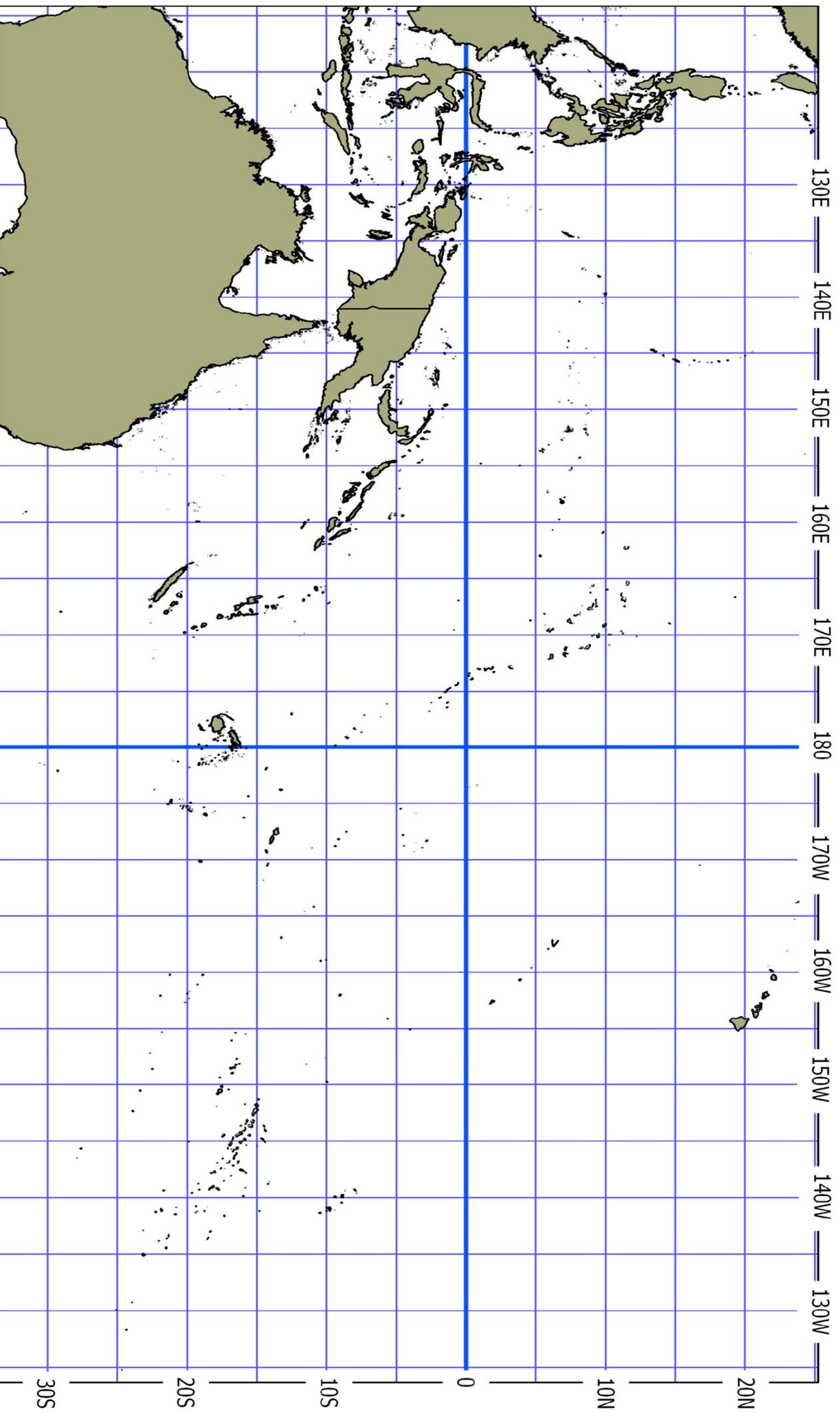
Please use this map of the Pacific Ocean with a grid of 5 squares to determine where the tagged species has been caught (Point or area)

If you have several dates and positions corresponding to sets, plot the latitude and longitude of all the sets (make a cross where each set has been deployed). Write down the set number and the date next to the set position (cross). Draw a box which includes all the sets and record the maximum and minimum latitute and longitude on the first page.

Email: tagging@spc.int
Website: www.spc.int/tagging

SINGLE TAG RECOVERY FORM

REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:		DATE WHEN TAG FOUND:	YY	MM	DD

WHERE FOUND:	☐ Fishing vessel	☐ Reefer / Transfer / Carrier	☐ Port Fish market	☐ Cold storage
ACTIVITY WHEN FOUND:	☐ Fishing ☐ Well transfer ☐ Transhipment ☐ Unloading at port		WELL NUMBER WHERE FISH FOUND:	(If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY:	☐ Confirmed ☐ Guessed

LENGTH 1 : (cm)	LENGTH 2 : *if applicable* (cm)	**NO length Information** ☐	HOW MEASURED? ☐ Measuring tool ☐ Estimated
		WHO MEASURED?	☐ Port sampler ☐ Observer ☐ Other…. *Please specify:*
Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED:	☐ Alive ☐ Fresh and dead ☐ Frozen ☐ Frozen then thawed

WEIGHT: (kg)	**NO weight information** ☐	HOW WEIGHED? ☐ Measuring tool ☐ Estimated
	PROCESSED STATE WHEN WEIGHED:	☐ Whole weight ☐ Gilled & gutted ☐ Other…. *Please specify:*

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	**Exact** ☐	YY MM DD	**Estimated** ☐ From	YY MM DD	to	YY MM DD

POSITION — **Exact** ☐

Latitude: dd mm.mmm N/S — ° . '
Longitude: ddd mm.mmm E/W — ° . '

Estimated ☐ — Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered

Latitude Min Max: dd mm.mmm N/S — ° . ' / ° . '
Longitude: ddd mm.mmm E/W — ° . ' / ° . '

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):

FISHERY INFORMATION (Catcher / Fishing vessel that caugth the tagged species)

VESSEL NAME:	FLAG:
FISHING METHOD:	☐ Longline ☐ Purse seine ☐ Troll ☐ Handline ☐ Gill net Other: _____
SCHOOL TYPE:	☐ Log ☐ Free school ☐ Anchored FAD ☐ Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transhipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY MM DD	to	YY MM DD
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):		TRANSHIPMENT POSITION:	Latitude dd mm.mmm N/S — ° . '	Longitude ddd mm.mmm E/W — ° . '	

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM: ☐ Yes ☐ No	(tag kept by finder for reward purpose) *IF NO, specify expected reward location for finder (Port/Country)* :
TYPE OF REWARD: ☐ Not given ☐ T-shirt ☐ Cap ☐ Cash - amount: _____	FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

SINGLE TAG RECOVERY FORM

REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:		DATE WHEN TAG FOUND:	YY	MM	DD

WHERE FOUND: ☐ Fishing vessel   ☐ Reefer / Transfer / Carrier   ☐ Port Fish market   ☐ Cold storage

ACTIVITY WHEN FOUND: ☐ Fishing   ☐ Well transfer   ☐ Transhipment   ☐ Unloading at port   WELL NUMBER WHERE FISH FOUND: _____ (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES: _____   **SPECIES RELIABILITY:** ☐ Confirmed   ☐ Guessed

LENGTH 1 : (cm) | **LENGTH 2 :** *if applicable* (cm) | **NO length Information** ☐   HOW MEASURED? ☐ Measuring tool   ☐ Estimated

WHO MEASURED? ☐ Port sampler   ☐ Observer   ☐ Other…. *Please specify:*

Length 1 code: _____ Length 2 code: _____   PROCESSED STATE WHEN MEASURED: ☐ Alive   ☐ Fresh and dead   ☐ Frozen   ☐ Frozen then thawed

WEIGHT: (kg)   **NO weight information** ☐   HOW WEIGHED? ☐ Measuring tool   ☐ Estimated

PROCESSED STATE WHEN WEIGHED: ☐ Whole weight   ☐ Gilled & gutted   ☐ Other…. *Please specify:*

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	**Exact** ☐	YY MM DD	**Estimated** ☐ From	YY MM DD	to	YY MM DD

POSITION   **Exact** ☐

Latitude: dd mm.mmm N / S   ° . '

Longitude: ddd mm.mmm E / W   ° . '

Estimated ☐ Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered

Latitude Min Max: dd mm.mmm N / S   ° . '   ° . '

Longitude: ddd mm.mmm E / W   ° . '   ° . '

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above): _____

FISHERY INFORMATION (Catcher / Fishing vessel that caugth the tagged species)

VESSEL NAME: _____   **FLAG:** _____

FISHING METHOD: ☐ Longline   ☐ Purse seine   ☐ Troll   ☐ Handline   ☐ Gill net   Other: _____

SCHOOL TYPE: ☐ Log   ☐ Free school   ☐ Anchored FAD   ☐ Drifting FAD   FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transhipment / unloading)

NAME OF CARRIER: _____   **FLAG:** _____   DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER: YY MM DD   to   YY MM DD

LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port): _____

TRANSHIPMENT POSITION: Latitude: dd mm.mmm N / S   ° . '   Longitude: ddd mm.mmm E / W   ° . '

FINDER INFORMATION / finder details for lottery

FINDER NAME: _____   **FINDER ADDRESS:** _____

COUNTRY OF RECOVERY: _____   RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name): _____

TAG PROVIDED WITH THIS FORM: ☐ Yes   ☐ No   (tag kept by finder for reward purpose) *IF NO, specify expected reward location for finder (Port/Country):*

TYPE OF REWARD: ☐ Not given   ☐ T-shirt   ☐ Cap   ☐ Cash - amount: _____   FORM COMPLETED BY: _____

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable): _____

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

SINGLE TAG RECOVERY FORM

REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:		DATE WHEN TAG FOUND:	YY	MM	DD

WHERE FOUND:	☐ Fishing vessel	☐ Reefer / Transfer / Carrier	☐ Port Fish market	☐ Cold storage

ACTIVITY WHEN FOUND:	☐ Fishing	☐ Well transfer	☐ Transhipment	☐ Unloading at port	WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY:	☐ Confirmed	☐ Guessed

LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)	NO length Information ☐	HOW MEASURED?	☐ Measuring tool	☐ Estimated

WHO MEASURED? ☐ Port sampler ☐ Observer ☐ Other…. *Please specify:*

Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED:	☐ Alive	☐ Fresh and dead	☐ Frozen	☐ Frozen then thawed

WEIGHT: (kg)	NO weight information ☐	HOW WEIGHED?	☐ Measuring tool	☐ Estimated

PROCESSED STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other…. *Please specify:*

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	Exact ☐	YY MM DD	Estimated ☐ From	YY MM DD	to	YY MM DD

POSITION	Exact ☐	dd mm.mmm N / S	Estimated ☐	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered

Latitude ° . '

ddd mm.mmm E / W

Longitude ° . '

Latitude Min Max: dd mm.mmm N / S ° . ' ; ° . '

Longitude: ddd mm.mmm E / W ° . ' ; ° . '

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):

FISHERY INFORMATION (Catcher / Fishing vessel that caugth the tagged species)

VESSEL NAME:		FLAG:

FISHING METHOD:	☐ Longline	☐ Purse seine	☐ Troll	☐ Handline	☐ Gill net	Other: _____

SCHOOL TYPE:	☐ Log	☐ Free school	☐ Anchored FAD	☐ Drifting FAD	FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transhipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY MM DD	to	YY MM DD

LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION:	Latitude dd mm.mmm N / S ° . '	Longitude ddd mm.mmm E / W ° . '

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):

TAG PROVIDED WITH THIS FORM:	☐ Yes	☐ No	(tag kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country) :

TYPE OF REWARD:	☐ Not given	☐ T-shirt	☐ Cap	☐ Cash - amount: _____	FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

SINGLE TAG RECOVERY FORM

REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:		DATE WHEN TAG FOUND:	YY	MM	DD

WHERE FOUND:	☐ Fishing vessel	☐ Reefer / Transfer / Carrier	☐ Port Fish market	☐ Cold storage	
ACTIVITY WHEN FOUND:	☐ Fishing	☐ Well transfer	☐ Transhipment	☐ Unloading at port	WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY:	☐ Confirmed	☐ Guessed

LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)	NO length Information ☐	HOW MEASURED?	☐ Measuring tool	☐ Estimated

WHO MEASURED?	☐ Port sampler	☐ Observer	☐ Other…. Please specify:

Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED:	☐ Alive	☐ Fresh and dead	☐ Frozen	☐ Frozen then thawed

WEIGHT: (kg)	NO weight information ☐	HOW WEIGHED?	☐ Measuring tool	☐ Estimated
	PROCESSED STATE WHEN WEIGHED:	☐ Whole weight	☐ Gilled & gutted	☐ Other…. Please specify:

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	Exact ☐	YY MM DD	Estimated ☐	From	YY MM DD	to	YY MM DD

POSITION

Exact ☐ — Latitude: dd mm.mmm N / S ° . ' — Longitude: ddd mm.mmm E / W ° . '

Estimated ☐ — Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered

Latitude (Min / Max): dd mm.mmm N / S ° . ' / ° . '
Longitude: ddd mm.mmm E / W ° . ' / ° . '

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):

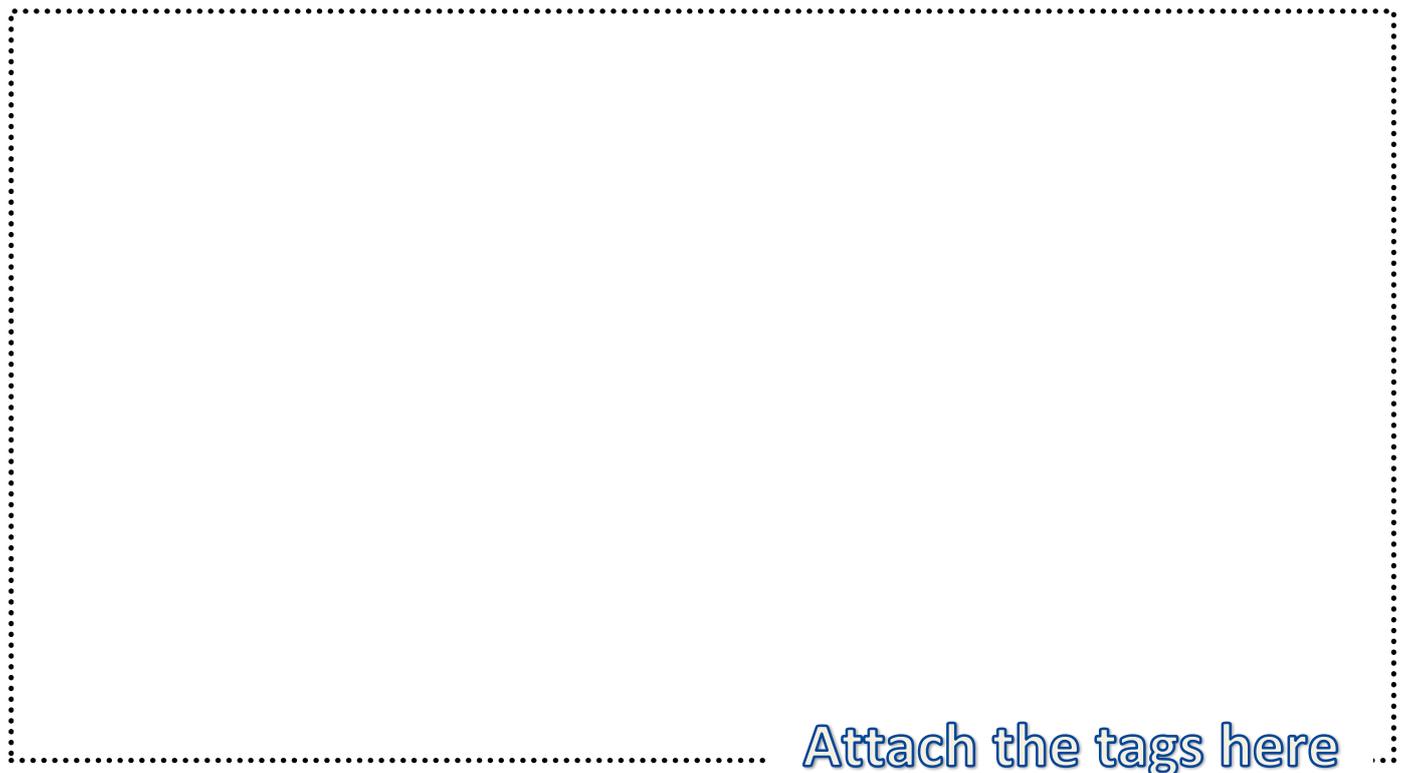## FISHERY INFORMATION (Catcher / Fishing vessel that caugth the tagged species)

VESSEL NAME:		FLAG:
FISHING METHOD:	☐ Longline ☐ Purse seine ☐ Troll ☐ Handline ☐ Gill net Other: _____	
SCHOOL TYPE:	☐ Log ☐ Free school ☐ Anchored FAD ☐ Drifting FAD FAD no: _____	

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transhipment / unloading)

NAME OF CARRIER:		FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY MM DD	to	YY MM DD
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):			TRANSHIPMENT POSITION:	Latitude dd mm.mmm N / S ° . '	Longitude ddd mm.mmm E / W ° . '	

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM: ☐ Yes ☐ No (tag kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country) :
TYPE OF REWARD: ☐ Not given ☐ T-shirt ☐ Cap ☐ Cash - amount: _____	FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

SINGLE TAG RECOVERY FORM

REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:		DATE WHEN TAG FOUND:	YY	MM	DD

WHERE FOUND:	☐ Fishing vessel	☐ Reefer / Transfer / Carrier	☐ Port Fish market	☐ Cold storage
ACTIVITY WHEN FOUND:	☐ Fishing ☐ Well transfer ☐ Transhipment ☐ Unloading at port		WELL NUMBER WHERE FISH FOUND:	(If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY:	☐ Confirmed	☐ Guessed

LENGTH 1 : (cm)	LENGTH 2 : *if applicable* (cm)	**NO length Information** ☐	HOW MEASURED? ☐ Measuring tool ☐ Estimated
		WHO MEASURED? ☐ Port sampler ☐ Observer ☐ Other…. *Please specify:*	
Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED: ☐ Alive ☐ Fresh and dead ☐ Frozen ☐ Frozen then thawed	

WEIGHT: (kg)	**NO weight information** ☐	HOW WEIGHED? ☐ Measuring tool ☐ Estimated
	PROCESSED STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other…. *Please specify:*	

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	**Exact** ☐	YY MM DD	**Estimated** ☐ From	YY MM DD	to	YY MM DD

POSITION	**Exact** ☐	dd mm.mmm N/S	**Estimated** ☐	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered
	Latitude	° . '	Latitude Min Max	dd mm.mmm N/S ° . ' ° . '
	Longitude	ddd mm.mmm E/W ° . '	Longitude	ddd mm.mmm E/W ° . ' ° . '
	or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):			

FISHERY INFORMATION (Catcher / Fishing vessel that caugth the tagged species)

VESSEL NAME:	FLAG:
FISHING METHOD: ☐ Longline ☐ Purse seine ☐ Troll ☐ Handline ☐ Gill net Other: _____	
SCHOOL TYPE: ☐ Log ☐ Free school ☐ Anchored FAD ☐ Drifting FAD FAD no: _____	

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transhipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY MM DD	to	YY MM DD
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):		TRANSHIPMENT POSITION:	Latitude dd mm.mmm N/S ° . '	Longitude ddd mm.mmm E/W ° . '	

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM: ☐ Yes ☐ No (tag kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country) :
TYPE OF REWARD: ☐ Not given ☐ T-shirt ☐ Cap ☐ Cash - amount: _____	FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

SPC MULTIPLE TAG RECOVERY FORM
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL

REVISED SPC -Feb 2017

DATE WHEN TAG FOUND: | YY | MM | DD |

"When the tag is removed from the fish, be sure none of it remains inside the fish"

WHERE FOUND: ☐ Fishing vessel ☐ Reefer / Transfer / Carrier ☐ Port Fish market ☐ Cold storage

ACTIVITY WHEN FOUND: ☐ Fishing ☐ Well transfer ☐ Transhipment ☐ Unloading at port WELL NUMBER WHERE FISH FOUND: _____ (If Applicable)

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: _____   **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:*   FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

				YY	MM	DD					YY	MM	DD		YY	MM	DD
DATE	**Exact**	☐					**Estimated**	☐	From					to			

				dd	mm.mmm	N / S										
POSITION	**Exact**	☐					**Estimated**	☐	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered							

Latitude: ° . '

Longitude (ddd mm.mmm E / W): ° . '

Estimated — Latitude Min Max (dd mm.mmm N / S): ° . ' / ° . '

Longitude (ddd mm.mmm E / W): ° . ' / ° . '

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

VESSEL NAME: **FLAG:**

FISHING METHOD: ☐ Longline ☐ Purse seine ☐ Troll ☐ Handline ☐ Gill net Other: _____

SCHOOL TYPE: ☐ Log ☐ Free school ☐ Anchored FAD ☐ Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / transhipment /unloading)

NAME OF CARRIER: **FLAG:**   DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:

		YY	MM	DD		YY	MM	DD
					to			

LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):

TRANSHIPMENT POSITION: Latitude (dd mm.mmm N / S): ° . '   Longitude (ddd mm.mmm E / W): ° . '

FINDER INFORMATION / finder details for lottery

FINDER NAME: **FINDER ADDRESS:**

COUNTRY OF RECOVERY: RECOVERY INFORMATION RECEIVED AT (Fishing Company/Agency name):

ALL TAGS PROVIDED WITH THIS FORM ☐ Yes ☐ No (tags kept by finder for reward purpose)   IF NO, specify expected reward location for finder (Port/Country):

TYPE OF REWARD ☐ Not given ☐ T-shirt ☐ Cap ☐ Cash - amount: _____   FORM COMPLETED BY:

Attach the tags here

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

Email: tagging@spc.int - Website: www.spc.int/tagging

SPC MULTIPLE TAG RECOVERY FORM
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL

PAGE ___ OF ___ /

REVISED SPC -Feb 2017

DATE WHEN TAG FOUND:	YY	MM	DD

"When the tag is removed from the fish, be sure none of it remains inside the fish"

WHERE FOUND: ☐ Fishing vessel ☐ Reefer / Transfer / Carrier ☐ Port Fish market ☐ Cold storage

ACTIVITY WHEN FOUND: ☐ Fishing ☐ Well transfer ☐ Transhipment ☐ Unloading at port

WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

| DATE | **Exact** [ ] | YY MM DD [ ][ ][ ] | **Estimated** [ ] | From | YY MM DD [ ][ ][ ] | to | YY MM DD [ ][ ][ ] |

POSITION

Exact [ ]

	dd	mm.mmm	N / S
Latitude	° [ ]	.	
	ddd	mm.mmm	E / W
Longitude	° [ ]	.	

Estimated [ ]

Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered

Latitude	Min Max	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W
		°	.			°	.	
		°	.			°	.	

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

| VESSEL NAME: | FLAG: |

FISHING METHOD: [ ] Longline   [ ] Purse seine   [ ] Troll   [ ] Handline   [ ] Gill net Other: _____

SCHOOL TYPE: [ ] Log   [ ] Free school   [ ] Anchored FAD   [ ] Drifting FAD   FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / tranhipment /unloading)

| NAME OF CARRIER: | FLAG: | DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER: | YY MM DD [ ][ ][ ] to YY MM DD [ ][ ][ ] |

| LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port): | TRANSHIPMENT POSITION: | Latitude | dd mm.mmm N / S ° . | Longitude | ddd mm.mmm E / W ° . |

FINDER INFORMATION / finder details for lottery

| FINDER NAME: | FINDER ADDRESS: |
| COUNTRY OF RECOVERY: | RECOVERY INFORMATION RECEIVED AT (Fishing Company/Agency name): |

ALL TAGS PROVIDED WITH THIS FORM   [ ] Yes   [ ] No   (tags kept by finder for reward purpose)   IF NO, specify expected reward location for finder (Port/Country):

TYPE OF REWARD   [ ] Not given   [ ] T-shirt   [ ] Cap   [ ] Cash - amount: _____   FORM COMPLETED BY:

Attach the tags here

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

Email: tagging@spc.int - Website: www.spc.int/tagging

SPC MULTIPLE TAG RECOVERY FORM
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL

PAGE ___ OF ___

REVISED SPC -Feb 2017

DATE WHEN TAG FOUND: | YY | MM | DD |

"When the tag is removed from the fish, be sure none of it remains inside the fish"

WHERE FOUND: ☐ Fishing vessel ☐ Reefer / Transfer / Carrier ☐ Port Fish market ☐ Cold storage

ACTIVITY WHEN FOUND: ☐ Fishing ☐ Well transfer ☐ Transhipment ☐ Unloading at port **WELL NUMBER WHERE FISH FOUND:** (If Applicable)

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

---

TAG NUMBER: | **SPECIES:** ☐ SKJ ☐ BET ☐ YFT ☐ Other *Please specify:* | **FISH IDENTIFICATION:** ☐ Confirmed ☐ Guessed

FORK LENGTH cm: | NO length Information ☐ | HOW MEASURED: ☐ Measuring tool ☐ Estimated | STATE WHEN MEASURED: ☐ Fresh ☐ Frozen | MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: | NO weight information ☐ | HOW WEIGHED: ☐ Measuring tool ☐ Estimated | STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

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FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

DATE	**Exact** ☐	YY	MM	DD		**Estimated** ☐	From	YY	MM	DD	to	YY	MM	DD

POSITION

Exact ☐

	dd	mm.mmm	N / S
Latitude	°	.	

	ddd	mm.mmm	E / W
Longitude	°	.	

Estimated ☐

Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered

Latitude Min Max	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W
	°	.			°	.	
	°	.			°	.	

or DESCRIBE FISHING AREA (If NO Lattitude and longitude provided above):

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

VESSEL NAME: | **FLAG:**

FISHING METHOD: ☐ Longline ☐ Purse seine ☐ Troll ☐ Handline ☐ Gill net Other: _____

SCHOOL TYPE: ☐ Log ☐ Free school ☐ Anchored FAD ☐ Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / tranhipment /unloading)

NAME OF CARRIER:	**FLAG:**	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY	MM	DD	to	YY	MM	DD

LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	**TRANSHIPMENT POSITION:**	Latitude	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W
			°	.			°	.	

FINDER INFORMATION / finder details for lottery

FINDER NAME: | **FINDER ADDRESS:**

COUNTRY OF RECOVERY: | **RECOVERY INFORMATION RECEIVED AT** (Fishing Company/Agency name):

ALL TAGS PROVIDED WITH THIS FORM ☐ Yes ☐ No (tags kept by finder for reward purpose) IF NO, specify expected reward location for finder (Port/Country):

TYPE OF REWARD ☐ Not given ☐ T-shirt ☐ Cap ☐ Cash - amount: _____ FORM COMPLETED BY:

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..................................................................
:                                                                :
:                                                                :
:                                                                :
:                                                                :
:                                                                :
:                                                                :
:                   Attach the tags here                         :
:................................................................:
```

ARCHIVAL TAG NUMBER (If applicable):

Type of tag		Reward
Yellow tag, Orange tag or Green tag	−	10$ or Cap or T-shirt
Internal archival tag	−	250$

Email: tagging@spc.int - Website: www.spc.int/tagging

Attach any loose pages here (Crew list, Well Layout, Net Plans etc)

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OBSERVERS' GUIDE TO BEAUFORT SCALE, WIND AND SEA STATE   (a rough guide for the open sea)

Beaufort number	Descriptive term	Open sea criterion	Mean wind speed (kts)	Likely wave height (m)	Observers' sea state code
0	Calm	Sea like a mirror	less than 1		C (calm)
1	Light air	Ripples with the appearance of scales are formed but without foam crests	1-3	0.1	
2	Light breeze	Small wavelets, still short but more pronounced; crests have a glassy appearance and do not break	4-6	0.2	S (slight)
3	Gentle breeze	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	7-10	0.6	
4	Moderate breeze	Small waves, becoming longer; fairly frequent white horses	11-16	1	M (moderate)
5	Fresh breeze	Moderate waves, taking a more pronounced long form; many white horses are formed (chance of some spray)	17-21	2	
6	Strong breeze	Large waves begin to form; the white foam crests are more extensive everywhere (probably some spray)	22-27	3	R (rough)
7	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	28-33	4	
8	Gale	Moderately high waves of greater length; edges of crests begin to break into spindthrift; the foam is blown in well marked streaks along the direction of the wind	34-40	5.5	V (very rough)
9	Strong gale	High seas; crests begin to topple and tumble; spray	41-47	7	
10	Storm	Very high waves; surface of sea white; visibility affected	48-55	9	Time to be concerned ! Our condolences !
11	Violent storm	Exceptionally high waves (hiding small to medium ships)	56-63	11.5	
12	Hurricane	Air filled with foam and driving spray; visibility minimal	more than 64	14	