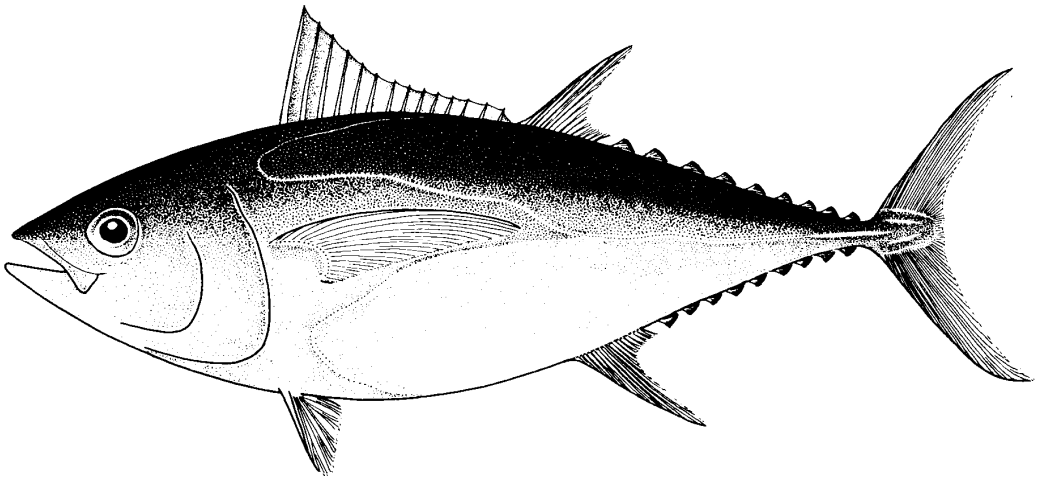
REPORT OF THE SEVENTH MEETING OF THE TUNA FISHERY DATA COLLECTION COMMITTEE

12–16 November 2007
Brisbane, Queensland
Australia



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1. PRELIMINARIES

1.1 Appointment of Chairman and Rapporteurs

1. Mr Timothy Park was elected chairman of the Tuna Fishery Data Collection Committee[1] and Mr Peter Sharples was elected vice-chairman. Mr Peter Sharples, Mr Peter Williams and Mr Timothy Lawson were appointed rapporteurs, and Ms Deirdre Brogan was appointed head rapporteur.

1.2 Adoption of Agenda

2. The agenda was adopted as presented in Appendix 1.

2. REGIONAL DEVELOPMENTS

2.1 Status of the Regional Observer Programme

3. Mr Karl Staisch updated the participants on the latest developments with the WCPFC Regional Observer Programme (ROP). He mentioned that the ROP is currently a major priority for the WCPFC and that much of the documentation to manage and support an active programme has already been drafted by the Secretariat. However, there is considerable progress yet to be made on the draft CMM before it can be fully implemented.

4. The operational jurisdiction of the ROP was outlined. Vessels fishing on (a) the high seas only, (b) on the high seas and one EEZ, and (c) in two or more EEZs, whether or not they have been fishing on the high seas, will all come under the jurisdiction of the Regional Observer Programme. No final decision has yet been made regarding ROP data standards or data collection forms; however, it is expected that the DCC forms may be used by certain SPC/FFA member countries, if they are consistent with the minimum standards adopted by the Commission.

5. DCC7 document 9 on minimum data standards which was prepared for IWG-ROP and TCC3 following on from the outcomes of SC3 was considered. The group reflected on each of the data fields on the list which were in square brackets and for which consensus had not yet been reached. The DCC has outlined below their justification for accepting, rejecting or adding items to the minimum data standards list.

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[1] The Tuna Fishery Data Collection Forms Committee was established at the Ad Hoc Meeting on Tuna Fisheries Data Collection Forms, 11–14 December 1995, Brisbane, Australia (Anonymous, 1996), which was attended by staff of the Forum Fisheries Agency and the South Pacific Commission. The Committee is an internal SPC and FFA committee responsible to the Director of FFA and to the Director of the SPC Marine Resources Division. The second meeting of the Committee was held from 11 to 13 December 1996 in Brisbane, Australia; the third meeting was held from 9 to 10 December 1998 in Brisbane, Australia; and the fourth meeting was held from 6 to 8 December 2000 in Brisbane, Australia. During the fourth meeting, the name was changed to the Tuna Fishery Data Collection Committee. The fifth meeting was held from 2 to 6 December 2002 in Brisbane, Australia and the sixth meeting was held from 16 to 24 November 2007.

Longline

- A number of the minimum data standards are related to sea bird mitigation methods as referred to in the conservation and management measure CMM 2006-02. As part of this management measure, observers will be required to report on a vessel's mitigation methods, suggesting that these data items should be considered as minimum data standards. Specifically these data items are tori pole, bird curtain, weighted branchline, blue dyed bait, underwater setting and disposal methods for offal management.

- Other data items that relate to the conservation and management measure CMM 2006-05 on sharks and should also be considered as minimum data standards include hook type, hook size and wire trace.

- It is possible to estimate the fishing depth of the hook by collecting a number of data items and producing a catenary curve of the fishing line. The essential data items are number of hooks per basket and length of the floatline, which are on the list, and vessel speed and line shooter speed, which are not. It was thought that 'TDR' should not be a minimum data standard; rather, TDRs are an essential piece of equipment for observers to determine fishing depth.

- The distance between branchlines is used to establish the total length of the fishing line.

- The total number of baskets can be used in conjunction with the number of hooks per basket to calculate the total number of hooks <u>set</u> and should also be considered a minimum standard.

- The number of hooks <u>observed</u> is essential for calculating catch rates from longline observer data; in this regard, the number of hooks observed **must** be a minimum standard. The number of baskets observed can be used to estimate the number of hooks observed and should also be considered a minimum standard.

- Targeting practices will be better documented if lightsticks are considered as a minimum data standard.

Pole-and-line

- To ascertain the amount of bait on board, which is an important component of fishing effort, it was suggested that 'the amount of bait on board at the start of the day' (or data items that could be used to calculate the amount of bait on board) should be a minimum standard.

Purse seine

- There were no data items with square brackets for purse seine or any other minimum standards that the meeting wished to add.

Species of Special Interest

- There were no data items with square brackets for species of special interest or any other minimum standards that the meeting wished to add.

Vessel and Aircraft Sightings

There were no data items with square brackets for vessel and aircraft sightings or any other minimum standards that the meeting wished to add.

- There were no data items with square brackets for observer trip monitoring summary or any other minimum standards that the meeting wished to add.

2.2 CMM 2006–05, Conservation and Management Measure for Sharks in the Western and Central Pacific Ocean

6. The DCC was briefed by the WCPFC, Regional Observer Programme Co--coordinator Mr. Karl Staisch on the WCPFC CMM for sharks (2006-05) which comes into force on 1st January, 2008. Initially this measure shall apply to vessels greater than 24m in overall length. The CMM is a policy document and for that reason participants were cautioned that the implementation of the paragraph points will be open to interpretation. The DCC discussion concentrated on point 7, which was thought to be the most relevant to the work of the DCC. It outlines a requirement for vessels, who are currently required to offload fins and carcasses at the point of first landing, to take necessary measures to ensure compliance with the 5% ratio through certification, monitoring by an observer or other appropriate measures. The WCPFC Regional Observer Programme Coordinator put forward the possibility that Commission forms to cater for this CMM may be required. The meeting noted that the DCC approved forms currently used by FFA/SPC observer sub-regional and national programmes already record most of the required details except for the fin weight.

2.3 Status of Conservation and Management Measure for Transhipment Monitoring

7. The meeting considered the proposed draft transhipment monitoring form in WCPFC-TCC3-08 [Transhipment draft CMM] and DCC7 Document 8, "Review of the WCPFC transhipment reporting form for data collection for scientific purposes".

8. DCC7 Document 8 reviews the draft WCPFC transhipment monitoring form, highlighting omissions and differences when compared to the current DCC unloading forms. The review lists 15 observations and the meeting considered the following eight to be the most important:

- The draft WCPFC form does not cater for recording the "destination" of the carrier (receiving) vessel. For example, this information is important in tracking tagged fish, which were recovered in a cannery that was supplied by a carrier vessel, back to the original catcher vessel. The "destination" of the carrier vessel is therefore important for scientific purposes.
- The draft WCPFC form does not cater for the recording of the number of fish by species which is, for example, fundamental in the longline fishery for verifying the catch on logsheets. The number of fish is not required for purse seine transhipments.
- The draft WCPFC form does not cater for species other than the main tuna species and the unloadings of other species, particularly billfish species caught by longline vessels, are required to verify with catches reported on logsheets and determine catch estimates.
- The draft WCPFC form has the provision for recording detailed information (attributes) on both the vessel transhipping from and the vessel transhipping to. It may be simpler to merely record the Vessel Name, Flag, Registration Number and IRCS, and include the WCPFC Identification Number to reference the other vessel attributes stored in the WCPFC Vessel Record.
- The draft WCPFC form does not cater for a period of transhipment between vessels that extends more than one day (i.e. transhipment day "from" and transhipment day "to" are required).
- It is not clear whether the "departure" and "return" dates on the draft WCPFC form is for the transhipping vessel (i.e. dates for the fishing trip) or the receiving vessel (dates for transhipping). Since the WCPFC form will be used to record one transhipment event, the date of

- departure for the carrier vessel may not be known at the time of completion of the form which may be problematic.
- The draft WCPFC form has provision for entering more than one "Port Name" and "Latitude/Longitude" position against each species group. If one WCPFC form covers one transhipment event, then there should be only one port or position recorded. The fields for the additional ports/positions should therefore be removed.

9. The DCC noted the fundamental importance of unloadings data as a means of verifying catches reported on logsheets and identifying IUU activities. In this regard, it was suggested that the WCPFC should consider compiling data covering all unloadings, whether transhipments in port or at sea, or deliveries to canneries, cold stores or otherwise. It was considered that the draft WCPFC transhipment monitoring form could easily be modified for this purpose.

2.4 Status of Conservation and Management Measure to reduce juvenile bigeye and yellowfin mortalities on FADs

10. The implication of the CMM 2006-01 was discussed in relation to data collection. The CMM on bigeye and yellowfin outlines a number of measures which could in principle have an impact an observer programme coverage levels and data standards. The CMM clearly calls for the number of FADs to be recorded, but there would also seem to be a need to gather information on FAD designs. A form to capture FAD design was proposed by the WCPFC Regional Observer Programme Coordinator. The WCPFC draft FAD form uses similar data fields as the IATTC FAD form, but was designed in a way that allowed more than one FAD per page to be recorded. The draft FAD form will eventually go to the SC and TCC for their consideration and approval. It was also noted that there was a proposal for changes to the CMM on Big-eye and Yellowfin Tuna to be discussed at WCPFC4.

3. REVIEW OF CATCH AND EFFORT LOGSHEETS

3.1 General

WCPFC standards for operational data

11. The DCC logsheets were cross-checked against the WCPFC standards for operational data, which are listed in an appendix of the guidelines for Scientific Data to be provided to the Commission. These were adopted by the Commission at its second regular session in December 2005 and subsequently modified at its third regular session in December 2006 in regard to the inclusion of Pacific bluefin, and are posted on the WCPFC website. The only inconsistencies were that columns for recording the catches of certain species were not included on the DCC logsheets; these include skipjack and albacore on the longline logsheet, albacore and Pacific bluefin on the pole-and-line and purse-seine logsheets, and bigeye and Pacific bluefin on the troll logsheet. However, it was considered that catches of the missing species by the fleets that use the DCC logsheet were negligible, and that the names and catches of the missing species could still be recorded in the columns for 'Other Species' on each of the logsheets, so changes to the DCC logsheets in this regard were unnecessary.

Transhipment at sea

12. It was noted that the length of trips recorded on logsheets for certain vessels, notably Korean longliners, are so long in duration that they must be transhipping at sea; however, the correct usage

of the logsheets is that a new trip, and hence and new logsheet, should be started after each unloading, whether full or partial and whether in port or at sea. It was suggested that a new activity code could be introduced for "Transhipping at sea"; however, it was felt that this would be confusing because it is not consistent with the correct usage of the logsheets and would perhaps encourage the incorrect usage of the forms. Instead, it was agreed to (a) modify the activity code on the longline, pole-and-line, handline and troll logsheets for "A day at sea not fished and not in transit" to also include "Please specify", so that vessels at least have a mechanism to record that transhipping took place, and (b) to modify the instructions regarding the definition of the start and end of a trip for those logsheets accordingly. It was also agreed to (c) add a third bullet point in the block at the top of the logsheets to specify that a new logsheet should be started after full or partial unloading. The purse-seine logsheet has a block to record unloadings data, so it was felt that these changes to the purse-seine logsheet were unnecessary.

Place of Unloading

13. It was also agreed to modify the 'Port of Unloading' field to 'Place of Unloading' to cater for any transhipment at sea, if such was the case.

FFA Regional Register Number

14. The meeting was advised that the FFA Regional Register Number is now referred to as the FFA Vessel Register Number, so this change was made on all of the logsheets.

FFA Type Approved ALC

15. It was agreed that this field, which was adopted during the initial phases of the implementation of VMS in order to monitor the level of implementation, was no longer necessary and could be deleted.

WCPFC Identification Number (WIN)

16. It was agreed that the WIN should be recorded on the logsheets in order to link the vessel to vessel attributes maintained on the WCPFC list of authorised vessels.

3.2 Longline logsheet

Recording catches of small tuna

17. The need to separate the catches of small and large tuna was discussed at several points during the meeting. Whenever small and large tuna are recorded together there is the risk of biased average weights (since catch is divided by weight) and this is best avoided, especially noting that OFP scientists have used average weight for tuna in the past. However, it was accepted that the longline logsheet was already tight for space and the best solution was to amend the instructions to clarify and encourage fishers to record small tuna < 9kg in the 'other species' column. This manner of recording small tuna is already practised by some fleets and the group agreed to endorse this method for recording catches of small tuna.

3.3 Shark longline logsheet

Instructions

18. Instructions for the shark longline logsheet are not currently available and it was agreed that instructions would be developed.

3.4 Pole-and-line logsheet

19. No changes were proposed for the pole-and-line logsheet, other than the general changes discussed above.

3.5 Purse-seine logsheet

Well mixing

20. Well mixing is common on purse seiners operating in the region, and particularly on Taiwanese vessels, and renders difficult the selection of wells for port sampling. It was therefore agreed to modify the instructions for 'Well Numbers' to record well mixing with arrows, such as "P2, P3 → S4". It was also suggested that a form for recording well mixing should be developed; however, it was considered that prior to developing a new form, an analysis to determine the extent of well mixing in the region and for each of the fleets should be conducted and that the issue should be reconsidered at a subsequent meeting of the DCC.

Recording catches of yellowfin and bigeye by small and large size categories

21. In anticipation of the fact that the analysis of species composition data collected by purse-seine observers and port samplers may, in the future, be conducted by stratifying the data into large and small size categories (i.e., greater or less than 20 lbs or 9 kg or 80 cm) to deal with the problem of selection bias, the need to record catches of yellowfin and bigeye by size category on purse-seine logsheets was considered.

22. It was noted that in some purse-seine fisheries large numbers of small fish may be taken. When small and large fish catch records are combined a biased average weight (catch divided by number) may result. Such a weight bias should be avoided, especially noting that OFP scientists have used an average weight for tuna in the past. While noting that earlier form versions and forms used by other tuna commissions have successfully catered for small and large size categories the group agreed to amend the purse-seine logsheets accordingly.

3.6 Handline logsheet

23. No changes were proposed for the handline logsheet, other than the general changes discussed above.

3.7 Troll logsheet

24. The troll logsheet was developed in February 2006 in response to a request from New Zealand and adopted as a DCC form at the current DCC meeting.

Application to North Pacific

25. The troll logsheet was developed for use in the South Pacific; hence, the inclusion of a column for recording the catches of southern bluefin. It was considered that it may be useful if the logsheet could also be used in the North Pacific. In this regard, it was agreed that a column for recording the catches of Pacific bluefin will be included since it was determined (after the meeting), that Pacific bluefin are a common catch of trollers operating in the North Pacific. With this species change the troll logsheet becomes relevant to fleets in the North Pacific and the logsheet's title was updated to read the Regional Troll Logsheet to encompass these potential users.

Hours searched

26. It was considered that 'Hours Fished' was sufficient as a measure of effort and that 'Hours Searched' was both ambiguous as a measure and unnecessary. It was therefore agreed to delete 'Hours Searched'.

3.8 Longline logbook

27. The results of trials of the longline logbook were presented in DCC7 Document 16. Further results for the trials conducted in Papua New Guinea were also made available. All captains involved in the trial stated that they were comfortable with the overall format and the data fields that were included. Any reservations that were raised were in reference to the total amount of information which they were required to fill in, or more especially the requirement to fill in a page for days not fished.

28. The future use of the logbook was considered. The global introduction of a longline logbook, either in the short or medium term, was thought too onerous a move in terms of regional data management. However, some national fishery departments expressed a preference for using the longline logbook over the standard logsheets. The logbook was also thought to have a place in specific research projects, i.e. the cetacean interaction project in Fiji.

3.9 FAD logsheets

29. The FAD logsheet was originally developed to evaluate the effectiveness of FADs in the artisanal fisheries of the Cook Islands and Niue. It was considered that these logsheets could be further developed for general use in the region and a new version of the form was developed. The new logsheet is a daily form, similar to the old logsheet, but with separate blocks to record data for periods during which different types of fishing activities are carried out. The intention is that the new logsheet either be completed by artisanal fishermen or used by fisheries officers as a survey form.

30. Suggestions to improve the new logsheet included using codes to record activities, using A5 paper to reduce the size of the form so that it will be more convenient for use onboard small vessels, and generally simplifying the form. These suggestions will be developed following DCC7 and a revised form considered at the next DCC meeting.

3.10 Implementation of DCC logsheets

31. DDC7 Document 17, "Implementation of the SPC/FFA Regional Logsheet forms," was presented. The implementation of the logsheets is summarised in the table in Appendix 4. This table includes two columns indicating the provision of DCC logsheets to SPC as at December 2004 (DCC6) compared to what had been received at SPC by October 2007, which provide an indication of progress in implementation since the last DCC meeting. There is also a column indicating the most recent version of form that has been provided by each fleet.

32. It was noted that there had been further progress in the implementation of the standard logsheets, with most fleets now using one version or another of the regional standard logsheets. However, as at October 2007, no fishing fleet had yet provided data recorded on the 2004 version of the regional standard logsheets to SPC. It was acknowledged that there were two main reasons for the absence of 2004 logsheets at this stage. Hard-copy versions of the DCC6 report, with the 2004 versions of forms, were not disseminated since it was decided to instead make the electronic versions of the forms available via the SPC/OFP web site. The electronic versions of the forms were made available in 2006, and member countries were obliged to wait until the renegotiation of

access agreements and/or new licensing periods for the opportunity to introduce the latest version of the forms. This lag meant that, while some member countries have made efforts to have the form introduced, SPC had yet to receive any 2004 version logsheets prior to DCC7. It was noted, for example, that Papua New Guinea had contacted all fishing companies during October 2007 to request that they implement 2004 versions of the logsheets as soon as possible.

33. To formalize the introduction of new versions of the standardized logsheets, it was recommended that the following areas be targeted, as has been the case in previous DCC meetings:

(i) A paper and/or presentation requesting member countries to adopt the latest version of the regional standard logsheets (with an explanation of the latest changes) should be considered for appropriate regional fora (for example, the Forum Fisheries Committee–FFC, and the SPC Heads of Fisheries Meeting–HOF),

(ii) The latest versions of the regional standardized logsheet forms should be included in National Tuna Management Plans in the future (with provision for revision when updates to these forms occur),

(iii) The latest versions of the regional standardized logsheet forms should be included in any legal (or otherwise relevant) documentation for the annual licensing of foreign and domestic fleets by each country, and

(iv) Procedures for ensuring that, at least, (ii) and (iii) above are regularly reviewed and undertaken should be included in National Tuna Fishery Data Collection, Management and Dissemination Procedures Document.

34. It was agreed that SPC and FFA should take advantage of every opportunity to raise awareness and ensure that the DCC logsheets are implemented in the future.

4. OBSERVER PROGRAMMES

4.1 The use of Observer Forms

35. Observers in Pacific Island national and sub-regional observer programmes use standard sets of data collection forms, reviewed periodically at Data Collection Committee meetings and adjusted according to recommendations emerging from those reviews. At the 7th DCC the following observer data collection forms were presented for review:

Longline

LL-1 General Information: One form per trip
On which the observer collects information about the trip details (trip dates and ports); vessel (name, owner, captain, flag, reg., call sign, license, crew number and nationality); electronics; fishing gear; refrigeration methods; safety equipment.

LL-2/3 Set and Haul Information: One form per set
On which observer collects information about the longline set specifications; bait; set times and positions, haul times and positions, unusual set details.

LL-4 Catch Monitoring: Multiple forms (one line per hooked species)
On which the observer collects details about the catch (hook number, time of observed, condition on capture (and release if released), length, weight (if possible), sex, fate and other important incidental information such as tags recovered, etc.

LL-5 Longline Conversion Factors
On which the observer collects multiple morphological details about the same fish. This information is used to generate conversion factor data.

Purse seine

PS-1 General Information: One form per trip
On which the observer collects the same as the LL-1 form but with more information recorded on crew details (names) and well storage.

PS-2 Daily Log: One form per day (a second if required, but this is rare)
On which the observer maintains a timeline of standard activities undertaken by the vessel throughout the day (that the start of one activity marks the end of the previous activity is an important concept); the behaviour and types of tuna schools encountered is also recorded on the daily log.

PS-3 Set Details: One form per set
On which the observer collects information on the set sequence (times), observed and recorded catch (species, amounts and fates) and other important incidental information such as tags recovered, etc.

PS-4 Length Measurements: One or more forms per sample type (up to four samples types possible per set, but usually only one and occasionally two are completed)
On which the observer records the species and lengths of fish that they measure, the total number of brails and their relative fullness.

PS-5 Vessel Logsheet and Well Loading Reconciliation: One to two forms per trip, optional (information used for reconciliation purposes only)
On which the observer tracks the movement of fish between wells.

Pole-and-line

PL-1 General Information: One form per trip
On which the observer collects much the same information as the LL-1 form.
PL-2 Daily Log: One form per day (as second if required, but this is rare)
On which the observer maintains a timeline of standard activities undertaken by the vessel throughout the day.
PL-3 Catch details: One form per fishing event (single continuous period of spraying, chumming and poling)
On which the observer records the total amount time fishing, the total catch and the species and the lengths of the fish they measure.

General (All gear types)

GEN-1 Vessel and Aircraft Sightings and Transfer Log: (as many forms as required during trip - usually 1-3)

On which the observer records details of other fishing related vessels and aircraft they have sighted and details about any transfers between vessels at sea that they have witnessed (transfers of anything but with strong emphasis on transfers of fish).

GEN-2 Species of Special Interest: Multiple forms, one form for each SSI encounter

On which the observer records extra details of encounters (sightings, vessel interactions or landings) of species of special interest (currently marine mammals, sea-birds, turtles and whale sharks).

GEN-3 Vessel Trip Monitoring Record: one (very important) form per trip

On which the observer ticks off whether any one of set list of incidents (with potential to be described as infringements) they witnessed during their trip.

(Currently, there are no GEN-4 and GEN-5 forms. These forms were in use previously, and the form numbers have been reserved for data which may be considered in the future.)

GEN-6 Pollution Report: Multiple forms, one form for every pollution event

On which the observer records details of polluting activities that they witness during the trip - type of pollution, amount of pollution, time and position, etc.

4.2 Review of Observer Forms

GENERAL

Workbook Insert

36. The next print of observer workbooks will contain forms that have been updated as a result of this meeting. To ensure that observers are aware of all changes an insert that describes the change and instructs the observer on any new sampling requirements and protocols associated with that change will be included.

Tagging

37. At the time of and in the year following DCC7 a major tuna tagging programme is being carried out through the WCPO. It is anticipated that the large number of tags being released could lead to substantial recaptures in the initial stages of the programme. Although observers are able to record tag re-capture details on the current set of forms it is considered the capacity to record this type of information in standard workbooks may be too limited to do justice to the tagging programme. Hence it is recommended that the next print of workbooks also contain several of the tag recapture forms that have been designed for the project.

LONGLINE OBSERVER FORMS

FORM LL–1 • LONGLINE OBSERVER GENERAL INFORMATION

Weather

38. It was agreed that the "Weather facsimile" field should be amended to reflect the fact that more vessels are now using alternative means to monitor weather patterns than the traditional weather facsimile machine. Observers will now be asked to indicate whether a weather fax and / or a satellite monitor was used onboard.

Navigation radar and bird radar

39. Observers are no longer required to collect information about navigation radar onboard longline vessels. However, on purse seiners and pole-and-line vessels they are still required to check whether there are dedicated "bird radar" units onboard and to collect make, model and usage information.

VMS

40. Discussion focussed on the need for a clearer understanding of what information was required as there is often confusion as to whether observers should be collecting information about VMS system types or information on the ALC units themselves. To ask observers to collect an ALC seal number when several seals with separate numbers are usually applied to ALCs can also be confusing. It was recommended that the appropriate section of the LL-1 form be adjusted to reduce the confusion in these areas.

41. It was further recommended that future LL-1 forms be able to cater for information on more than one VMS system, as a growing number of vessels in the region are now required to carry more than one VMS system.

Communications services

42. It was agreed to change the term "Satellite communications services" to "Communications services" to acknowledge growing use of mobile phones and to alter the field structure on the form to be able to record information on each communication service available on board.

Line materials

43. It was recommended to review and improve instructions so observers can standardise their use of terms for describing line materials. Changes have been made to form instructions and the adoption, for use by observers, of the descriptions of line materials provided in the SPC Horizontal Longline Fishing Manual for Fishermen will assist with consistency.

Hooks

44. The topic of observer collection of information on hook types was not covered during the DCC7 meeting in Brisbane. This was a definite oversight and the topic is considered important enough to make an intercessional canvas of committee members soon after the meeting to seek approval to include fields on the LL-1 form to record which of the three basic hook types was used (Japan tuna hook, circle hook or "J" (big game) hook) and what size of hook was used. These are important elements of information in studies of turtle catch and catch mitigation. Approval was

granted in this exercise, during which it was further recommended that fields to capture if other hook types were used and to indicate if more than one hook type was used should also be included.

Radio buoys

45. Whether call-up or non-call-up buoys are used on longliners has not been used in effort assessments and the need to know which is on board has been superseded by the need to know whether more sophisticated methods of line detection are now being used. Also, it is believed that observers may often err in their assessment of which is on board, as they are difficult to tell apart. Make and model names/numbers of call-up and non-call-up buoys are often not so easy to obtain, may be many and varied on the same boat and the issue may be further confused when vessels recover or exchange buoys from other vessels. Hence making good sense of the information that observers currently collect will be a difficult task for little gain in knowledge, if any. Hence it was considered that to retain fields to collect information on call-up and non-call up buoys on the LL-1 form is superfluous and recommendation was made to drop these fields from the form.

EPIRBs

46. The safety equipment section on LL-1 forms was introduced at DCC6. As a new section it was anticipated that there may be need for some revision at DCC7. However, the section seems to have functioned well with some recommendations for improvement. However, the sub-section on EPIRBs has caused some confusion with respect to understanding what EPIRB "type" referred to. This is further exacerbated by new international regulations that discourage and are gradually phasing out one of the particular types (121.5/243 MHz) that the LL-1 specifically caters for. Several observers have also mentioned that they have encountered EPIRBs that have expired battery renewal date stamps. There was consensus that this was a significant piece of information on safety capability and should be collected in a systematic manner. Simple adjustments to the LL-1 form were recommended to address all of these issues.

Life rafts

47. It was noted that sometimes observers cannot find the information on life-rafts to effectively complete the appropriate fields on the LL-1 form, particularly the expiry or inspection due dates. The information should be available and not being so may indicate general poor safety procedures. It was recommended that observers be asked to indicate when the inspection dates were clearly available on stickers or plates on life rafts and LL-1 form instructions be adjusted to facilitate this. Observers have also reported that sometimes the last inspected date is all that they can locate rather than a due date of inspection. The LL-1 form will be adjusted so that observers will indicate whether a recorded date is the last date of inspection or the due date for inspection.

Usage codes

48. There was some discussion on usage codes and different expectations expressed. Changes were made to the usage codes "ALL", OIF" and "SIF" to try to reduce some confusion. All three codes are used in relation to fishing activities. The main change was to the definition for "ALL" now reads as "used all the time in fishing". This is to counter the confusion that sometimes arises when trying to apply a usage code against a piece of equipment that gets used every time a fishing operation is carried out, but is not used at other times. The definition for OIF now reads used often in fishing and 'SIF' used sometimes in fishing'.

FORM LL–2/3 • LONGLINE OBSERVER SET AND HAUL INFORMATION

Target species

49. A small change in recording protocol to use an "X" instead of a tick in the fields for indicating target species was recommended to avoid ticks being confused with the dashes that observers are trained to record in fields for which there is no data.

Time labels for comments

50. Another small formatting change that added a column to the comments section to encourage observers to apply a suitable "ship's time" label to a comment on an event was recommended.

Number of fields for bait information

51. Adjustments to the LL-2/3 form to record information for up to five instead of the previous four bait types were asked for and accepted.

Minor formatting and instruction changes

52. A few other minor formatting and instruction changes were recommended to improve clarity. These included: a note in the instructions to remind observers to convert values recorded in knots to m/sec before calculating line length using this value; minor editing of abbreviations to bring them into line with SPC editing standards (kgs to kg, No.s to Nos).

FORM LL–4 • LONGLINE OBSERVER CATCH MONITORING

Hook numbers and direction of haul

53. The meeting was asked to consider the issue of hook numbers with respect to how they are recorded by observers and in the regional observer database and what impact the direction of haul would have on making analysis that involved hook numbers. When a set is made observers have noted the bait sequence or pattern by recording which number hook the bait is attached to. At this stage the observer has numbered hooks logically through a basket starting with the first hook set and ending with the last set before the next buoy is set. When a haul is made observers record the number for each hook an item of catch is on as a point of information relating to that item of catch. This indicates the setting depth of the hook to fisheries scientists. As such, whether the hook is counted from one end of the basket or the other doesn't matter and so whether the vessel hauls line from the first hook set or last hook set doesn't matter. Observers are now allocating hook numbers by counting from first hook hauled in a basket to the last hook hauled. Consequently, observers have raised the issue that problems may arise if any analysis is made on bait with respect to catch. If the vessel hauls from last hook set back done the line – the most common strategy – then the hook numbers for catch in a basket are reversed from the hook numbers for bait. To address this issue there was some discussion around whether a field should be made available on the LL-2/3 form for observers to indicate whether haul was in same direction of set or the reverse of set. Generally it was considered that the position data that observers collect was sufficient to establish the respective directions of set and haul but that it should that there should be some reminder tag with the data on electronic file that this situation not be overlooked and that observers should be directed to continue to record as described and not be tempted to re-number their bait pattern to match the direction of haul.

Weight columns

54. Discussion around the usefulness of removing the weight columns on the LL-4 form led to no recommended change. Although these columns have seldom been used in the past there is no pressing need for extra space on the current LL-4 form and there is probability that these columns may be useful to address some facets of conservation and measurement measures on sharks that the Commission is likely to introduce in the near future.

Codes

55. A need to capture the practice, described in other regions, of fishers deliberately cutting off species of special interest (SSI) in a manner which would thwart observers properly recording any hooked SSI, led to a discussion on the need to amend the fate codes. It was proposed to separate the DSO (discarded stuck off) fate code into two different codes; DCF (discarded cut free) or DCO (discarded cut off). While it was recognised that it will always be difficult for observers to know exactly the reason a species was struck off, and at the same time identify any SSI that have been deliberately struck or cut off, the new fate code DCF (discarded cut free or far) will be included to offer observers the opportunity to record this practice if observed.

FORM LL–5 • LONGLINE CONVERSION FACTORS

56. No changes were proposed for this form.

POLE-AND-LINE OBSERVER FORMS

FORM PL–1 • POLE-AND-LINE OBSERVER GENERAL INFORMATION

Various changes as described for LL-1

57. Various changes recommended for the LL-1 and PS-1 form, and described in the section on the LL-1 form, were also recommended for the PL-1 form. These include changes to fields that contain information for GPS units, radar, weather monitors, VMS, communications services, radio buoys, EPIRBs, life rafts and usage codes.

FORM PL–2 • POLE-AND-LINE OBSERVER DAILY LOG

Bait onboard at start of day

58. An important function of a pole-and-line vessel's ability to fish is the amount of bait onboard. Knowing the amount of bait on board at the start of each day could help interpret aspects of vessel behaviour with respect to other factors that influence effort. The PL-2 (daily log) will be modified to collect this information.

FORM PL–3 • POLE-AND-LINE OBSERVER CATCH DETAILS

59. No changes were proposed for this form.

PURSE-SEINE OBSERVER FORMS

FORM PS–1 • PURSE SEINE OBSERVER GENERAL INFORMATION

Various changes as described for LL-1

60. Various changes recommended for the LL-1 and PL-1 form, and described in the section on the LL-1 form, were also recommended for the PS-1 form. These include changes to fields that contain information for GPS units, radar, weather monitors, VMS, communications services, radio buoys, EPIRBs, life rafts and usage codes.

Electronics review

61. The 2004 version of the PS-1 form does not adequately cater for the amount of electronic equipment found on many modern purse seine vessels. Typically, there may be several colour plotters, radar units, colour and other sounders, radio direction finders and radio buoy call-up signal generators. The 2004 PS-2 form caters for just one of each. It was proposed without challenge that there is little gain from knowing the make and model of these particular items and recommended that the PS-1 form is modified along the same lines as the LL-1 form has been previously redesigned to indicate whether the particular equipment types are onboard and how they are used. More specific information about make and model need only be collected for items that are less common through the fleet or have uncertain impact on fishing effort.

Tow boats, light boats or auxiliary boats onboard

62. Because light boats and tow boats are often hard to differentiate, and often are dual purpose, how to separately count them has proved a confusing area for observers. To prevent this confusion it is recommended that a single field for auxiliary boats should replace the two fields currently employed for tow boats and light boats. This will also clear up confusion on whether other tender vessels that may function as light boats for the observer's catcher vessel but are not carried onboard by that vessel should be counted (see following paragraph).

Other tender vessels

63. It is becoming increasingly common in our region for purses seine vessels to work in conjunction with other vessels. Sometimes these other vessels take over the functions of auxiliary boats once carried on board and sometimes they have other new functions that help streamline fishing efficiency. It is important to keep track of these changes in fishing strategies. It was recommended that observers be given opportunity to record on the PS-1 form whether such extra tender craft activity is part of the fishing operation they are currently observing. They should also be encouraged to describe this activity in their trip reports.

Helicopter servicing other vessels

64. To reduce confusion when observers are on a vessel that carries a helicopter some of the time and doesn't carry it at other times because the helicopter is servicing more than one purse seiner it was recommended to instruct observers to record details of any helicopter that services their vessel, as they would record information for a helicopter that was dedicated to their vessel, but to also indicate the total number of vessels (i.e.: including their own vessel) the helicopter is servicing.

Year of revision

65. It was recommended to add the year of revision to page 2 of the PS-1 form for consistency.

Radio operator and helicopter mechanic

66. Questions were raised as to whether a dedicated field should be included in the crew list to record the radio operator, once a critical person on all purse seiners due to the importance of radio for communications to the vessel and, from an observer's perspective, the one person onboard that they could generally rely on to speak some English. Other forms of communication, most notably satellite phones, have lessened the demand for radio operators. Nevertheless, knowing that one is onboard and who they are could still benefit. Rather than recommend that a new field is re-added (there once was a dedicated field for radio operator) it was considered that the empty field amongst the dedicated positions, recently made available through the removal of helicopter mechanic, could be used to specifically record the radio operator, if one was onboard. The dedicated field for helicopter mechanic has been removed as that is also a fast disappearing onboard position. Helicopter mechanics are now usually occupied by a pilot-mechanic or a dedicated fleet mechanic.

FORM PS–2 • PURSE- SEINE OBSERVER DAILY LOG

Activity codes for searching and transiting

67. Debate about the appropriate use of the activity codes "2" and "3" for searching and transiting and the appropriate definitions of these two has been heightened because of concerns about the interpretation of the words when it comes to establish whether a vessel is legally fishing or not, which is an important consideration if the "vessel day scheme" becomes a serious management tool. However, the meeting concluded that, as it did not have mandate to define the words, it must wait until differences between "fishing, not fishing and transiting" are clearly defined through regionally agreed management frameworks. Recognising that the activity of moving from object to object, or from area to area, without using fish searching tools such as bird radar, binoculars, sonar, sounder, etc., is intuitively called "transiting" by observers and that it is not so intuitive to call such activity "searching", as is currently required, it was proposed that an alternative code associated with a more intuitive definition (not offered at the meeting) be made available that would separate this "fishing" activity from other forms of transiting in which a vessel might be considered legally "not fishing". But it was considered appropriate to wait until binding definitions in conservation and management measures that are already introduced or to be introduced in the next year or two are better understood before creating new or different observer codes. For now observers will continue to be instructed to call these transiting type activities "searching".

Activity codes for deploying and retrieving radio buoys

68. The codes 15R and 15D have been introduced earlier to cater specifically for tracking when radio buoys set on a single log or FAD were changed. Hence the protocol for using these codes was that a line recording the activity code 15R must always be followed by a line recording the activity code 15D. It was thought unnecessary to otherwise have specific codes for the retrieving and deployment of radio buoys because if a radio buoy number was recorded on a line with another activity code then the appearance of that number would indicate that a buoy was being deployed or retrieved, depending on the nature of the other activity. However, this has proved to be a confusing protocol for observers and a new recommendation to allow the use of 15R and 15D for any retrieval or deployment of radio buoys was made. This requires a minor modification to PS-2 form instructions and a different approach to observer training.

Deploying or retrieving light boats

69. A brief discussion on the usefulness of having activity codes to indicate when light boats are deployed and retrieved or the possibility of having a separate form to cater for light boat activity in recognition of the situation that some vessels operate with separate tender boast that act as light boats came up with no clear recommendation. There was insufficient experience amongst those present at the meeting to make firm recommendation but the issue is noted here in order that further attention is paid to it before the next DCC meeting.

Payao / FAD / Buoy numbers

70. In modifying PS-2 instructions to advise observers to use 15R and 15D codes whenever buoys were deployed or retrieved it became obvious that further confusion would result for observers that found themselves with several numbers to record (payao or FAD, retrieved buoy, deployed buoy). Further, recognising the high probability that conservation and management measures with respect FAD fishing will be introduced, it is important that FAD identifying information is not confusing. The form PS-2 will now have two columns to separate Payao/FAD numbers from buoy numbers. Suitable training and extra instructions will need to be provided to observers to ensure that these changes are correctly adhered to. This will commence with extra instruction provided in the notification of changes supplement to be included in all purse seine observer workbooks.

Payaos, FADs and/or buoys from other vessels

71. In discussing FAD and buoy numbers the meeting was alerted to the practice amongst vessels of poaching on other vessels' FADs. Concern that this behaviour will have greater significance if FAD fishing restrictions are introduced the meeting recommended that observers are encouraged to note in the PS-2 comments column whether any activity with FADs (and associated buoys) involved FADs or buoys from other vessels. Appropriate advice to observers will be included in the description of form changes in workbooks and in future training.

FORM PS–3 • PURSE-SEINE OBSERVER SET DETAILS

Set No.

72. On the PS-2 form observers are asked to record a set number (from a chronological count of the sets from beginning to end of the observer's trip) in the comment section of each activity line that indicates a set was made. It was recommended that a set number be recorded on every PS-3 form (set details form) so that the set number recorded on PS-2 forms can be used as a ready indicator of the PS-3 form that has the details for that set. As every set must have one and one only PS-3 form filled out for it the set number will equate to the page number for the PS-3 forms used through a trip. Hence, rather than create a new field for set numbers on the PS-3 form, it was recommended to have "Set No." in brackets beneath the field already allocated for page number to show that the one number in that field serves both purposes – to indicate the set number and to indicate the PS-3 form page number.

Was skiff used to anchor net?

73. To cater for the situation where a vessel uses another tender vessel instead of the traditional purse seine net skiff to anchor its net while it proceeds to encircle a school of tuna it was suggested that a field be added to the PS-3 to trap this information. However, the meeting concluded that more research was required, concerning the frequency of such activity within trips, boats and fleets,

to better understand the issue and thus make a useful modification to the form at this stage.

Cumulative catch adjustments for fish transferred between sets

74. The cumulative catch total calculated on the PS-3 forms is an assessment of the catch currently onboard and not necessarily an assessment of the fish caught during the observer's trip. To ensure that this is well understood it was recommended that an instruction be clearly positioned on the PS-3 form to remind observers to adjust the cumulative total carried from the previous PS-3 to reflect if any fish were brought onboard from, or transferred to, another vessel since the last set.

Indicate when a vessel's record of catch for a set includes catch from a previous set

75. Occasionally but not rarely vessels will not record a catch from a set in a separate line on their logsheet but will add the quantity of fish caught in one set to the quantity caught from another, recording the entire amount within the record of a single set. Consequently, when one glances at a PS-3 form that has both an observer's estimate of total catch from the set and the vessel's record of total catch from the same set recorded side-by-side it appears as if the observer may have under-estimated the catch. To reduce this confusion it was recommended to place an indicator (Y / N box) next to the vessel's record to indicate if the amount recorded reflects catch from only one set or not.

Assessment of tuna by species and size in catch from a set

76. In an effort to obtain information that would better characterise a set with respect to fish size and species so as to address concern about possible biases in the observer sampling data used to estimate species composition of tuna in mixed tuna sets, there was further discussion about how observers report their estimates of catch in a set. Observers were asked in DCC-6 (December 2004) to provide some indication of the tonnage of larger fish in a set and to give an eye estimate of the amount of each tuna species in a set. Observers have also been calculating the species composition of sets using the length measurements of a sample of fish collected from every set. However, the tools given for this dual assessment process have proved clumsy. To simplify and clarify the process it was recommended that observers stop the calculated assessments and that the PS-3 form be modified to provide clearer direction to record eye estimates of the proportions of different tuna species in a set.

77. Modifications to the PS-3 form to alleviate ambiguities in the process of assessing the proportion of large tuna in the catch were also recommended.

Escape code (ESC)

78. The usefulness and character of the code "ESC" was discussed with respect to its current categorising as a fate code. Overall, the meeting noted concerns that the code does not have quite the same character as other fate codes but believed that the code was necessary, did describe a unique situation with little chance of ambiguity and, although slightly different in character to the other fate codes that provide an indication of the quality of the fish involved, was nevertheless still properly placed as a fate code.

FORM PS–4 • PURSE SEINE OBSERVER LENGTH FREQUENCY

Fraction options

79. It was noted that the greater range of brail fraction options offered to observers for calculating total catch from brail contents has been very successfully received by observers.

Modification of sampling protocols and modification of PS-4

80. Due to concerns about possible biases in observer length frequency data and the potential impact such biases can have on population modelling discussion focused around how the PS-4 form could be changed so that it would trap more information about where the observer's sample was coming from through the sampling and fish landing process. In 2008 there are plans to test alternative sampling protocols for feasibility and robustness. If alternative sampling protocols are adopted it may be necessary to radically redesign the PS-4 form. In the meantime, to better analyse the intensity of observer sampling through a set, in an effort to find possible areas of bias in observer sampling, it was recommended that a count system be incorporated on the present PS-4 form that would show the number of fish drawn from each brail for sampling. The PS-4 form will be modified accordingly. It was considered appropriate not to make any other adjustments to the PS-4 form until trial sampling programmes have been reviewed.

81. A more radically redesigned trial PS-4 form that traps information using the brail as the sampling unit instead of the set, also for purpose of identifying areas that sample biases may be introduced, was presented not for approval but to be tested for its appropriateness during the sampling protocol testing described above and wherever other opportunity may arise. It is expected that a well tested new PS-4 form will be presented to the next DCC.

FORM PS–5 • VESSEL LOGSHEET and WELL LOADING RECONCILIATION

To cater for vessels with centre wells

82. The current PS-5 form was designed with the assumption that purse seine vessels have two rows of wells running down port and starboard sides and a single across vessel well in the bow. However, some purse seine vessels with centre wells down some or all of their length are now operating in our region. The meeting considered changing the format of the PS-5 form to cater for these new vessels but no solution was proposed and with the PS-5 form now an optional form it was decided to leave changes until a need is more certainly identified.

Well fill codes

83. A post DCC exercise highlighted the need to capture the origin and the final destination of the fish that were being moved between wells. New well fill codes, which make reference to the GEN-1 action codes, will help capture this essential information.

TROLL OBSERVER FORMS

FORM TR–1 • TROLL OBSERVER GENERAL INFORMATION

84. No changes were proposed for this form.

FORM TR–2 • TROLL OBSERVER DAILY LOG

85. No changes were proposed for this form.

FORM TR–1 • TROLL OBSERVER CATCH DETAILS

86. No changes were proposed for this form.

GENERAL OBSERVER FORMS

FORM GEN–1 • VESSEL AND AIRCRAFT SIGHTINGS AND FISH TRANSFER LOG

Extra fish transfer fields - supplementary form

87. It was proposed that an addendum be produced for the GEN-1 form to cater effectively for vessels that are allowed to offload fish to other vessels regularly instead returning to port to offload or tranship fish and only transferring fish at sea occasionally, usually for special circumstances. The three lines currently available in the transfer log part of the GEN-1 form are insufficient for regular at sea transfers, which appear to be an increasing activity. It was proposed and accepted that that transfer log section be continued into a supplement to form GEN-1 page. A single supplementary page added to workbooks is minimal added burden to the workbook but should easily cater for the regular at sea transfers amongst the few vessels that are practicing this strategy. The supplement to form GEN-1 was successfully trialled in PNG, where the bulk of such activity takes place. It was noted that the supplementary form may be useful in both purse seine and longline observer workbooks, as the practice of transferring fish is increasing for both gear types.

Ship's time in place of UTC time

88. In order to bring recording protocols on the GEN-1 form into line with all other observer data collection forms it was agreed that the practice of marking each recorded event with UTC time can be changed to marking it with Ship's time. Previous attempts to do this have not met with agreement because of the compliance nature of the form and the belief that the UTC time offers more precision. Now, with the rapid recent adoption of a common database (TUFMAN) amongst Pacific Island countries as well as within both major Pacific Island fisheries supporting regional organisations the capacity to convert or interpret Ship's date and time accurately from the other information that observers collect is universal. The consequent need for observers to think in only one time frame during their normal operations will reduce confusion and improve accuracy.

Capacity to handle species transfers from longliners

89. The current GEN-1 form does not cater as well for the species that may be transferred from longliners as it does for the species likely to be transferred from purse seiners. Discussion on the subject did not eventuate in a conclusion other that in the near term we should continue with the forms as they are, using the "MIXED WGT." column to record all species that are transferred. Later, when the Commission has made some decisions with respect to transfers at sea and their requirements for transhipment monitoring forms, there may be a clearer picture of what changes to the GEN-1 form may be useful to address this area of concern. It was noted that the species of concern would normally be captured in subsequent unloadings data.

FORM GEN–2 • SPECIES OF SPECIAL INTEREST

Multi-animal landing on purse seiners - supplementary form

90. Observers have previously been asked to use one GEN-2 form for every animal landed. However, this is impractical when there are several landings in a single fishing event, as can happen occasionally on purse seiners. It was recommended that extra instructions be added to GEN-2 to encourage observers to modify a PS-4 form to record the condition (caught and discarded), length and sex of animals that are landed in such a situation and to note that a modified PS-4 forms has been used for this purpose on the GEN-2 form that is being used to record all the other information on this particular species of special interest (SSI) encounter. However, in practice it proved that this was not a feasible option and an interim supplement to GEN-2 form has been designed to cater for mass landings and will be trialed before the next DCC meeting.

Multi-animal interaction with vessel

91. Less information is required from observers for reporting on SSI interactions with a vessel than for SSI landings. Hence it was recommended that the GEN-2 form be modified so that a single form can more appropriately cater for an incident where several SSI of the same species are interacting with the host vessel. Fields need to be added to cater for number of animals, and it must be possible to indicate different conditions if animals are affected differently during an interaction.

Distance from vessel

92. Observers were previously asked to record the distance from the vessel of a sighted species of special interest in nautical miles but as most sightings are within one nautical mile this forced the observer to think in fractions. It was recommended to ask observers to record distance from vessel in meters in future and to adjust the GEN-2 form accordingly.

Codes for Olive Ridley turtle, Bryde's whale and baleen whales

93. Correcting the code for Olive Ridley turtle from LEO to LKV and the Leatherback turtle from LTB to DKK was recommended. The English name for the melon- headed whale was edited. An additional code for the Bryde's whale species and a new general code for baleen whales were added. This is in recognition of previous observer reporting of the interaction between Bryde's whale and purse seine fishing vessels and the possibility that other baleen whales may similarly interact with purse seine fishing activity.

FORM GEN–3 • VESSEL TRIP COMPLIANCE RECORD

Re-work of GEN-3 form

94. As per previous DCC meetings there was discussion on the subject of reworking the PS-3 form so that it could provide an indication of quantity of incidents rather than just an indication that a type of incident has occurred during an observer's trip. As in the past the meeting agreed that this is a good idea and should be looked at in preparation for the next DCC meeting. No further recommendation on how to trap quantitative information was made.

"X" marks the box

95. A simple direction to observers to be sure to indicate yes or no by placing a bold "X" in either the Yes box or the No box for each incident type was recommended. Other marks used have led to confusion from time to time and this instruction provides another avenue to urge observers to be sure they have checked either one or the other box for ALL incident types.

Valid license document onboard

96. One added item to the incident list was asked for and accepted. Observers now must check yes or no to indicate if a valid original license document is onboard. Instructions need to be modified to ensure that observers understand what this means.

FORM GEN–5 • STOMACH CONTENTS

97. No changes were proposed for this form.

FORM GEN–6 • POLLUTION REPORT

98. The meeting acknowledged comment that the design of this form could do with changes so that it better caters for the collection of pollution data as it is encountered by observers. However, the meeting acknowledged that the information was primarily collected for use by the South Pacific Regional Environment Programme (SPREP) and as SPREP was not represented at this meeting further recommendation could not be made. It was suggested that observer coordinators work with SPREP to come up with a better design to be considered at future DCC meetings.

DE-BRIEFING FORMS

99. Debriefing forms will be upgraded to cater for all DCC7 form change recommendations.

5. PORT SAMPLING PROGRAMMES

5.1 Review of Port Sampling Forms

Instruction changes

100. The following form instruction changes were proposed to help better clarify what is required for some data fields;

i) Sampler: When there is only one sampler then that person's name and field staff code should be filled in under the 'sampler' data field and;

ii) Date of the sample: The date of the sample is always the first date the sample was taken.

LONGLINE PORT SAMPLING FORM

Questions revised

101. The question on the longline port sampling form will be split into two. This was done to emphasis the fact that it is necessary to know not only if all fish were measured, but also if all fish were unloaded. An additional question to capture the ability of port samplers to gain access to the hold (to verify if all fish were unloaded) was added.

Changes to weight records

102. The instructions were changed to reflect the fact that longline weights should now be recorded to one decimal place and not to the nearest kilogram as was done previously

New local destination codes added

103. The intention of the export column is to capture the final destination of the unloaded catch. Up to this point the export codes have catered more comprehensively for foreign market destinations. Recently port samplers were increasing voicing the need to record and capture the varied nature of the local market (produce market, cannery, local loining plant etc,) and thus new export (or local) codes have been added to the form instructions.

POLE-AND-LINE PORT SAMPLING FORM

104. No changes were proposed for this form.

PURSE-SEINE PORT SAMPLING FORM

105. No changes were proposed for this form.

TROLL VESSEL PORT SAMPLING FORM

106. No changes were proposed for this form.

6. UNLOADINGS DATA COLLECTION

6.1 General

FFA Regional Register Number

107. The meeting was advised that the FFA Regional Register Number is now referred to as the FFA Vessel Register Number, so this change was made on all of the unloadings forms.

FFA Type Approved ALC

108. It was agreed that this field, which was adopted during the initial phases of the implementation of VMS in order to monitor the level of implementation, was no longer necessary and could be deleted.

WCPFC Identification Number (WIN)

109. It was agreed that the WIN should be recorded on the unloadings forms in order to link the vessel to vessel attributes maintained on the WCPFC list of authorised vessels.

Uses of the DCC Unloading forms and the proposed FFA-version of the WCPFC Unloading form

110. DCC7 did not formally review nor discuss the proposed FFA-version of the WCPFC Transhipment Declaration Form since this form is beyond its mandate. However, in regards to the possible use of the proposed FFA-version of the WCPFC unloading form, and its relationship with the existing DCC Unloading forms, DCC7 noted the following:

- The revised FFA-version of the WCPFC Unloading form is designed to cater for all types of unloading for longline and purse seine vessels with the one form.
- If the proposed FFA-version of the WCPFC Unloading form is adopted for all types of unloadings, then there would be no strict need for SPC/FFA members to use the DCC unloading forms unless they wanted to capture additional information related to market destination for economic studies.
- If the proposed FFA-version of the WCPFC Unloading form is not adopted in some instances, then there are DCC unloading forms available to SPC/FFA members to collect data on unloadings -
    - SPC/FFA Longline Unloading Form
    - SPC/FFA Longline Unloading Destination Form (capturing more detail than the previous form)
    - SPC / FFA Regional Unloading Form For Purse Seine And Pole-And-Line Vessels

6.2 Purse seine and pole-and-line unloading form

Recording catches of yellowfin and bigeye by small and large size categories

111. It was previously decided during DCC7 that the purse seine logsheet be modified to allow for the recording of yellowfin and bigeye catches by size category, in anticipation that the analysis of species composition data collected by observers and port samplers may, in the future, be conducted by stratifying the data into large and small size categories (i.e., greater or less than 20 lbs or 9 kg or 80 cm) to deal with the problem of selection bias.

112. It was therefore decided that the DCC purse seine unloading form be modified to allow the reporting of recording of yellowfin and bigeye unloaded catch by size category.

6.3 Longline Unloading form

113. No changes were proposed for the Longline Unloading form, other than the general changes discussed above.

6.4 Longline Unloading Destination Form

114. DCC7 modified the existing "SPC/FFA Longline Unloading Destination Form" to support the collection of unloadings information from distant-water longline vessels transhipping their (frozen) catch at sea. There were no DCC forms available to cater for this type of unloading prior to DCC7.

Location of Unloading

115. The field for "PORT NAME" was changed to "LOCATION" to allow for the entry of a latitude/longitude position when transhipment of sea takes place; otherwise, the PORT where the unloading took place is entered in this field.

A block for the CARRIER VESSEL details

116. A block of fields, used to record the Carrier Name and other attributes used to identify the carrier, was added to this form to support the collection of information in instances of vessel-to-vessel transhipment.

Fresh or Frozen catch

117. A new column was added to the detail block to support the recording of "Fresh" or "Frozen" species unloadings. This information will provide an indication of the vessel's style of fishing and storage of the catch, as well as the destination market.

Processed State

118. A new column was added to the detail block to support the recording of a code referring to the "Processed State" by species. This information will provide a means for raising the unloaded catch to whole weight, which is required for the determination of annual catch estimates.

Full or Partial Unloading

119. A new field indicating whether a Full or Partial unloading had occurred, was added to this form.

7. OTHER FORMS

7.1 Gamefishing Forms

120. No changes to the gamefishing forms were considered.

7.2 Fishing Trip and Port Visit Log

Transhippment at Sea.

121. The National Tuna Data Coordinator from Palau, a country which has fully implemented this vessel activity form, requested that an additional code, which will allow fishers to record any at-sea transhippments, be added. As transhippment at sea is currently allowed within the Palauan EEZ and the practise is becoming more common around the region the 2007 edition of the form will include this new code as requested.

7.3 Logsheets developed by other agencies from DCC logsheets

122. It was noted that certain DCC forms had been adapted by a non-SPC/FFA member country (which is a member of the WCPFC), with minor modifications to suit their domestic fishery. The Philippines has modified the SPC/FFA Purse-Seine logsheet and the SPC/FFA Handline logsheet to better cater for the collection of catch of neritic tuna species which are prevalent in their domestic fisheries. They had also modified the SPC/FFA Purse-Seine and Pole-and-Line Unloading Form to capture information in unloadings to specific canneries. The title of each form has been modified to ensure it is a distinct form to the DCC forms.

7.4 MCS forms

123. Mr Scott presented a series of MCS-related forms that had been recently developed by FFA. He noted that FFA intends to encourage their member countries to adopt the standard forms, which the DCC supported, although the group did not review or comment on these forms, since it was felt to be beyond to their mandate.

124. FFA intends to adopt the PNG Port Inspection Form as the regional standard.

125. It was noted that the FFA Vessel Register and VMS Certification Forms had recently been combined into one, efficient form, since it is compulsory to hold both a Registration and VMS certificate.

7.5 WCPFC FAD form

126. Recent concern about bigeye tuna stocks have brought increased attention to the role that FADs have in enhancing bigeye catch rates. This has led to greater interest in FAD design and FAD use. To cater for this, and in anticipation of possible conservation and management measures that may focus on FAD fishing, The WCPFC Observer Manager has been adapting a FAD form based on one that is already used by IATTC observers. The meeting agreed that once fully developed this form will be trialled by Pacific Island observers and anticipate that a tried and tested new form will be presented at the next DCC meeting for approval.

8. COOPERATION BETWEEN SPC AND FFA ON DATA-RELATED ISSUES

8.1 Review of arrangements for the exchange of data between SPC and FFA

127. The meeting was referred to DCC Document 17 - Current status of the exchange of Tuna Fishery Data between OFP-SPC and FFA. It was noted that exchange agreements between the two organisations go back to the mid 1980s, but there has been requests for new categories of data from both organisations. In recent years, attempts to send high volume data over the internet have been hindered by interruptions and slow bandwidth and data provisions by CD or DVD remain the most efficient way to get data from one organisation to the other.

128. In regards to future database development within the two organisations, it was suggested that both organisations would benefit from standardised database structures, for databases that are common to the two organisations. In particular, the development of an Observer Module for the

TUFMAN database system presents an ideal opportunity for SPC and FFA to collaborate and produce a standard database structure for observer data. It was noted, however, that there are certain sub-components of observer system which are of exclusive interest to one or the other organisation, and that SPC and FFA should therefore consider standardisation of the "core" observer data only, while respective organisations will remain free to develop the structure of database tables that are considered to be of exclusive relevance to one (or the other) of the organisations only.

129. With this concept in mind, SPC and FFA will liaise with respect to the regional observer data over the coming year or two, and attempt to develop a protocol for maintaining a "core" standardised structure for their common databases. It was suggested that an open source software product called "GPL V2 with class-pass exceptions" might be a suitable tool to manage the development of a shared database system.

8.2 Facilitation by SPC and FFA of data collection by fishing companies and agent

130. It was noted that SPC and FFA should consider developing resource materials to assist member countries implement the DCC forms. The representative from PNG mentioned that they will need to enforce the collection of unloadings data in the coming year, and the availability of PowerPoint presentations that explain the purpose of the information to be collected and how to complete the form would make their job of implementing the form much easier. It was also suggested that resource materials, specifically designed to facilitation the implementation of DCC forms could be made available on SPC and FFA web sites.

131. SPC already have some material for certain forms and will look at expanding on this in the coming year.

9. OTHER BUSINESS

9.1 Other matters

132. Prior to the close of the meeting, a demonstration of the TUFMAN database system, developed by the OFP, was provided to meeting participants.

9.2 Next meeting of the DCC

133. It was recommend that, in keeping with the tradition of the meeting, the next DCC should take place after two years, unless any pressing issues, most probably outputs from the WCPFC, warranted an earlier scheduling of the meeting.

10. CLOSING

134. The meeting closed to a vigorous round of applause.

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APPENDIX 1. AGENDA

1. PRELIMINARIES

1.1 Appointment of chairman and rapporteurs
1.2 Adoption of the agenda

2. REGIONAL DEVELOPMENTS

2.1 Status of the Regional Observer Programme
2.2 CMM 2006–05, Conservation and Management Measure for Sharks in the Western and Central Pacific Ocean
2.3 Status of Conservation and Management Measure for Transhipment Monitoring
2.4 Status of Conservation and Management Measure to reduce juvenile bigeye and yellowfin mortalities on FADs

3. REVIEW OF CATCH AND EFFORT LOGSHEETS

3.1 General
3.2 Longline logsheet
3.3 Shark longline logsheet
3.4 Pole-and-line logsheet
3.5 Purse seine logsheet
3.6 Handline logsheet
3.7 Interim troll logsheet
3.8 Longline logbook
3.9 FAD logsheets
3.10 Implementation of DCC logsheets

4. OBSERVER PROGRAMMES

4.1 Status of observer programmes
4.2 Review of observer forms

5. PORT SAMPLING PROGRAMMES

5.1 Status of port sampling programmes
5.2 Review of port sampling forms

6. UNLOADINGS DATA COLLECTION

6.1 Purse seine unloading forms
6.2 Longline unloading forms

7. OTHER FORMS

7.1 Gamefishing forms
7.2 Fishing Trip and Port Visit Log
7.3 Logsheets developed by other agencies from DCC logsheets
7.4 MCS forms

8. COOPERATION BETWEEN SPC AND FFA ON DATA-RELATED ISSUES

8.1 Review of arrangements for the exchange of data between SPC and FFA
8.2 Facilitation by SPC and FFA of data collection by fishing companies and agents

9. OTHER BUSINESS

9.1 Next meeting of the DCC

10. CLOSING

APPENDIX 2. LIST OF DOCUMENTS

1	Provisional Agenda
2	Provision List of Participants
3	Report of the Sixth Meeting of the Tuna Fishery Data Collection Committee (DCC6)
4	Interim Troll Logsheet
5	ISG–WP–4 Comments of ROP Data Standards
6	WCPFC Conservation and Management Measure 2006–05 [Sharks]
7	WCPFC–TCC#–2007–08 [Transhipment Draft CMM]
8	Transhipment Form Review
9	Draft Minimum Data Standards for WCPFC Regional Observer Programme
10	Commentary on Minimum Data Standards for WCPFC Regional Observer Programme
11	Status of Logsheet Implementation
12	Draft Longline Carrier Unloading Form
13	Draft Artisanal FAD Logsheet
14	Pacific Operational Analysis Spreadsheet
15	Draft Purse-Seine Observer FAD Form
16	Report on the Trial Longline Logbook
17	Current status of the exchange of tuna fishery data between the OFP and FFA
18	Data Collection From Paper to Digital

APPENDIX 3. LIST OF PARTICIPANTS

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APPENDIX 4. STATUS OF IMPLEMENTATION OF SOUTH PACIFIC REGIONAL LOGSHEETS

INTRODUCTION

In December 1995, the Forum Fisheries Agency (FFA) and the Oceanic Fisheries Programme (OFP) of the Secretariat of the Pacific Community (SPC) established a committee to review tuna fisheries data collection forms used throughout the region.

The main objective of the committee is to ensure the standardisation of information collected throughout the region so that any analytical work (e.g. stock assessment) would not be compromised by missing information, as a result of differences in data collection forms.

Regional standardised catch logsheets forms were subsequently established as a result of the first meeting of the tuna fisheries data collection forms committee in January 1996. Subsequent meetings [December 1996, December 1998 and December 2000] resulted in minor revisions to the forms; the meeting in December 2002 resulted in no changes to the forms, but the meeting in November 2004 result in further minor revisions. Since this time, the committee has encouraged member countries to introduce the regional standardised forms for their domestic fisheries and in access agreements with foreign fishing nations.

There had been many reasons for standardising data collection forms; for example, there was a significant increase in the number of drifting-FAD sets in the western and central Pacific purse seine fishery during the late 1990s, and old logsheet forms did not have the provision to distinguish drifting-FAD sets, making comparisons between setting strategies problematic.

This paper provides an update of the implementation of these forms throughout the region, and suggests where further work is required.

2. IMPLEMENTATION OF LOGSHEETS

Table 1 describes the implementation status by member country, gear and vessel nationality, as at November 2007. There are two columns indicating the use of the DCC logsheets as at 2004 and 2007 (now), respectively, which provide an indication of progress in implementation since the last DCC meeting. There is also a column indicating the version of form that has been provided recently by each fleet.

There has been further progress in the implementation of the standard logsheets, with most fleets now using one version or another of the regional standard logsheet.

However, no fishing fleet has yet provided data recorded on the 2004-version of the regional standard logsheets. Ensuring that the latest versions of logsheets are implemented throughout the regional tuna fisheries will be the main challenge for the DCC group to address in the coming years.

3. RECOMMENDATIONS

Both FFA and SPC should continue to encourage member countries to make every effort to introduce the latest versions of the regional standardized forms for domestic and foreign fishing fleets that yet to do so. The following are considered the most important outstanding:

- At this stage, there have not been any logsheets submitted using the latest version (December 2004), so **Member countries should therefore be encouraged to introduce the latest version of the logsheet to all fleets during annual bilateral access negotiations and review of their domestic fisheries**.

- The Japanese fleets have adopted the regional standardized logsheets in FSM and PNG, but it still does not appear to have been as successful in other member countries. At this stage, Japanese fleets operate in FSM, Kiribati, Marshall Islands, Nauru, Palau, Solomon Islands and Tuvalu.

To formalize the introduction of new versions of the standardized logsheets, it is recommended that the following areas be targeted –

(i) **A paper and/or presentation requesting member countries to adopt the latest version of the regional standard logsheets (with an explanation of the latest changes) should be considered for appropriate regional fora (for example, the Forum Fisheries Committee–FFC, and the SPC Heads of Fisheries Meeting–HOF),**

(ii) **The latest versions of the regional standardized logsheet forms should be included in National Tuna Management Plans in the future (with provision for revision when updates to these forms occur),**

(iii) **The latest versions of the regional standardized logsheet forms should be included in any legal (or otherwise relevant) documentation for the annual licensing of foreign and domestic fleets by each country, and**

(iv) **Procedures for ensuring that, at least, (ii) and (iii) (above) are regularly reviewed and undertaken should be included in National Tuna Fishery Data Collection, Management and Dissemination PROCEDURES DOCUMENT.**

In order to better track the implementation of the regional standard logsheet in the future, SPC will also consider storing the **version** of the logsheet at the vessel trip level in the regional catch and effort logsheet database.

SPC/FFA MEMBER OR ARRANGEMENT	GEAR	FLEET	DCC LOGSHEETS USED ? (2004)	DCC LOGSHEETS USED ? (2007)	VERSION OF DCC form used (2007)	STATUS OF IMPLEMENTATION OF SPC/FFA REGIONAL LOGSHEETS
American Samoa	Longline	Taiwan (DWFN)	Partial	Yes	1996	Very few non-standard logsheets received
		Mainland China	Partial	Yes	1996	Very few non-standard logsheets received
		Cook Islands	Yes	Yes	1996	
		Vanuatu	Yes	Yes	1996	
Cook Islands	Longline	Locally-based fleets	Yes	Yes	1996	Local longline fleets are using Regional longline logsheet
FSM Arrangement	Purse seine	Vessels operating under the FSM Arrangement				
		FSM			1996 and 2000	Introduced during 1996. All fleets use the regional standard logsheets.
		Marshall Islands	Yes	Yes		
		Papua New Guinea	Yes	Yes		
		Solomon Islands	Yes	Yes		
		Kiribati	Yes	Yes		
		Vanuatu	Yes	Yes		
			Yes	Yes		
Fiji	Longline	Fiji (domestic fleet) + locally-based joint-venture vessels	Yes	Yes	1996	All vessels now use the regional longline logsheet.
		Mainland China (DWFN)	Partial	Yes	1996	Most vessels from this fleet provide data on regional standard (as per Pago Pago)
		Taiwan (DWFN)	Partial	Yes	1996	Most vessels from this fleet provide data on regional standard (as per Pago Pago)
	Pole-and-line	Fiji (domestic fleet)	(No)	(No)	–	This fleet use a customised form requiring baiting locations; No indication of recent fishing activities.
Federated States of Micronesia	Longline	Mainland China	Yes	Yes	1996	This fleet now uses regional logsheets, albeit a slightly modified version.
		Domestic FSM fleet	Partial	Yes	1996	
		Guam-based US fleet	Yes	(Inactive)		This fleet used regional logsheets, but is now inactive.
		Japanese longline	Yes	Yes	1996	This fleet now uses regional logsheets. This is a version that the Japanese companies have provided. (One or two non-standard logsheets used).
		Taiwanese longline	Yes	Yes	1996	This fleet now uses regional logsheets (translated).
	Pole-and-line	Japanese pole-and-line	Yes	Yes	1996	This fleet now uses regional logsheets
	Purse seine	Domestic fleet (Yap Fishing Corporation)	Yes	Yes	1996 and 2000	Introduced (see FSM Arrangement)
		Domestic fleet (CFC)	Yes	Yes	1996 and 2000	Introduced (see FSM Arrangement)
		Japanese purse seine	Yes	Yes	1996	This fleet now uses regional logsheets.
		Korean purse seine	Yes	Yes	1996 and 2000	This fleet now uses the regional logsheets. **(1996 and 2000 version forms used)**
		Taiwanese purse seine	Yes	Yes	1996 and 2000	Regional logsheet translated and distributed by the Taiwanese Deep-Sea Tuna Boat-owners Association **(1996 and 2000 version forms used)**

SPC/FFA MEMBER OR ARRANGEMENT	GEAR	FLEET	DCC LOGSHEETS USED ? (2004)	DCC LOGSHEETS USED ? (2007)	VERSION OF DCC form used (2007)	STATUS OF IMPLEMENTATION
Kiribati	Longline	Japan	No	No		No indication of introduction of new forms
		Korea	Partial	Yes	1996	In the last year, some vessels have been usi
		Taiwan	-	Partial	1996	
		Vanuatu	-	Partial	1996	
		Korea	Yes	Yes	1996 and 2000	Introduced at regional level. **(1996 and 2000 version forms used)**
		New Zealand	Partial	Yes	2000	
		Spain	Yes	Yes	1996 and 2000	This fleet uses the regional standard logshe
		Taiwan	Yes	Yes	1996 and 2000	Regional logsheet translated and distributed **(1996 and 2000 version forms used)**
Marshall Islands	Longline	Mainland China	Yes	Yes	1996	This fleet uses the regional standardized for
		Japan	Partial	Partial	1996	Very few standard forms coming through, n
		Domestic fleet			1996	Fleet not active as at November 1996
		Taiwan	Yes	Yes	1996	This fleet uses the regional standardized for
		Locally-based US fleet			1996	No US vessels active as at November 1996
	Pole-and-line	Japan	No	No		No indication of introduction of new forms
	Purse seine	Japan	Partial	Partial	1996 and 2000	Most are non-standard forms
		Korea	Yes	Yes	1996 and 2000	Introduced at regional level. **(1996 and 2000 version forms used)**
		New Zealand	Partial	Yes	2000	
		Taiwan	Yes	Yes	1996 and 2000	Regional logsheet translated and distributed **(1996 and 2000 version forms used)**

SPC/FFA MEMBER OR ARRANGEMENT	GEAR	FLEET	DCC LOGSHEETS USED ? (2004)	DCC LOGSHEETS USED ? (2007)	VERSION OF DCC form used (2007)	STATUS OF IMPLEMENTATION O
Nauru	Pole-and-Line	Japan	No	No		No indication of introduction of new forms
	Purse Seine	Japan	Partial	Partial	1996 and 2000	Most are non-standard forms. There are a few **(1996 and 2000 version forms used)**
		Korea	Yes	Yes	1996 and 2000	Introduced at regional level **(1996 and 2000 version forms used)**
		Taiwan	Yes	Yes	1996 and 2000	Regional logsheet translated and distributed by **(1996 and 2000 version forms used)**
New Caledonia	Longline	Japan	No	No	–	No activity in recent years
		Locally-based fleet	Yes	Yes	1996	French translation of regional logsheet provide
Nuie	Longline	French Polynesia	–	Yes	1996	Recently established fishing in Niue
		Niue	–	Yes	1996	Recently established fishing in Niue
		Taiwan	No	No	–	No indication of introduction of new forms. N
French Polynesia	Longline	Locally-based fleet	Yes	Yes	1996	French translation of the regional standard use
		Korea	No	No	–	No indication of introduction of new forms No
Papua New Guinea	Longline	Japan	No	No	–	No recent fishing activity
		Locally-based fleet	Yes	Yes	1996	Introduced for local longline fleet
		Taiwan	Yes	Yes	1996	Regional forms used by this fleet
	Purse seine	Korea	Yes	Yes	1996 and 2000	Introduced at regional level. **(1996 and 2000 version forms used)**
		Japan	–	Yes	2000	Japanese fishing fleet commenced operations r although there are a few non-standard forms.
		PNG (domestic)	Yes	Yes	1996 and 2000	All companies now using regional standard **(1996 and 2000 version forms used)**
		Philippines	Yes	Yes	1996 and 2000	This fleet uses the regional standard logsheet.
		Taiwan	Yes	Yes	1996 and 2000	Regional logsheet translated and distributed by Association. **(1996 and 2000 version forms used)**

SPC/FFA MEMBER OR ARRANGEMENT	GEAR	FLEET	DCC LOGSHEETS USED ? (2004)	DCC LOGSHEETS USED ? (2007)	VERSION OF DCC form used (2007)	STATUS OF IMPLEMENTATION OF SPC/FFA REGIONAL LOGSHEETS
Palau	Longline	Mainland China	Yes	Yes	1996	Regional standard used by this fleet
		Japan	Yes	Yes	1996	Regional standard now used by this fleet
		Taiwan	Yes	Yes	1996	Regional standard used by this fleet
		Guam-based US fleet	No	–	1996	No recent activity.
	Pole-and-line	Japan	No	No	–	No indication of introduction of new forms (No recent activity)
	Purse seine	Japan	Partial	Partial	1996 and 2000	Only a few trips received recently have been on regional standard forms (the rest on non-
Samoa	Longline	Locally-based fleet	No	Partial	1996	A local form is used by the fleet, but a few of the larger vessels offloading in Pago use the regional standard form.
		Taiwan	No	No	–	No indication of introduction of new forms. No recent activity by this fleet in Samoa
Solomon Islands		Locally-based fleet	No	Yes	1996	
		Taiwan	No	Yes	1996	
		Vanuatu	–	Yes	1996	
	Pole-and-line	Japan	No	No	–	No indication of introduction of new forms . No recent activity.
		Locally-based fleet + Kiribati	(No)	(No)	–	(Data processed by Solomon Islands Fisheries Division- MFMR). They will request the
	Purse seine	Korea	Yes	Yes	1996 and 2000	Introduced at regional level. **(1996 and 2000 version forms used)**
		Japan	No	Partial	1996 and 2000	Only a few logsheets provided are the regional standard.
		New Zealand	–	Yes	1996 and 2000	
		Phillippines	–	–	–	No recent activity.
		Domestic fleet	Yes	Yes	1996 and 2000	Introduced (see FSM Arrangement)
		Taiwan	Yes	Yes	1996 and 2000	Regional logsheet translated and used by Taiwanese PS fleet. **(1996 and 2000 version forms used)**
		Vanuatu	–	Yes	1996 and 2000	
Tonga	Longline	Domestic fleet	Yes	Yes	1996	Regional logsheet is used by this fleet.
Tuvalu	Longline	Japan	No	No		No indication of introduction of new forms. No recent activity by this fleet.
		Korea	Partial	Partial	1996	One standardized logsheet received from this fleet recently (the remainder are non-standard forms).
	Purse seine	Japan	Partial	Partial	1996 and 2000	An improvement on the provision of the regional standard logsheet (about 50% of logsheets), but still some logsheets are non-standard.
		Korea	Yes	Yes	1996 and 2000	Standard form used throughout **(1996 and 2000 version forms used)**
		New Zealand	Yes	Yes	1996 and 2000	Standard form provided by vessels fishing in Tuvalu waters.
		Vanuatu	–	Yes	1996 and 2000	
US Multilateral Treaty	Purse seine	US fleet	Yes	Yes	2000	Latest version introduced in June, 2002. We only have about 50% of the 2006 logsheets at this stage. **(2000 version forms used)**
Vanuatu	Longline	Fiji	Yes	Yes	1996	Regional logsheet is now used by this fleet
		Taiwan	(No)	(No)	–	No indication of introduction of new forms. Very few regional standard forms received.
		Vanuatu	Yes	Yes	1996	Domestic fleet based in Fiji and the distant-water fleet use the regional logsheet

APPENDIX 6. SPC / FFA REGIONAL LOGSHEETS AND LOGBOOK

1. **Longline Logsheet**
2. **Shark Longline Logsheet**
3. **Pole-and-Line Logsheet**
4. **Purse-Seine Logsheet**
5. **Handline Logsheet**
6. **Troll Logsheet**
7. **Longline Logbook**
8. **FAD Fishing Logsheet**

REVISED: NOV 2007

SPC / FFA REGIONAL LONGLINE LOGSHEET

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)		YEAR
NAME OF FISHING COMPANY	FFA VESSEL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PRIMARY TARGET SPECIES	TRIP NUMBER THIS YEAR
COUNTRY OF REGISTRATION	WCPFC IDENTIFICATION NUMBER		PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN		PLACE OF UNLOADING	DATE AND TIME OF ARRIVAL IN PORT

- **ALL DATES AND TIMES MUST BE UTC / GMT**
- **ALL WEIGHTS MUST BE KILOGRAMS**
- **START A NEW LOGSHEET AFTER FULL OR PARTIAL UNLOADING**

MONTH	DAY	ACTIVITY CODE	**01:00 UTC OR SET POSITION**				SET START TIME	NUMBER OF HOOKS	HOOKS BETWEEN FLOATS	ALBACORE			BIGEYE			YELLOWFIN			SHARK		STRIPED MARLIN		BLUE MARLIN		BLACK MARLIN		SWORDFISH		OTHER SPECIES		
			LATITUDE DDMM	N S	LONGITUDE DDDMM	E W				No RET	KG RET	No DISC	No RET	KG RET	No DISC	No RET	KG RET	No DISC	No RET	No DISC	No RET	KG RET	No RET	KG RET	No RET	KG RET	No RET	KG RET	NAME	No RET	KG RET
							PAGE TOTAL																								
							TRIP TOTAL																								

ACTIVITY CODES

1 A SET
2 A DAY AT SEA BUT NOT FISHED AND NOT IN TRANSIT - PLEASE SPECIFY
3 TRANSIT
4 IN PORT - PLEASE SPECIFY

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SPC / FFA REGIONAL LONGLINE LOGSHEET INSTRUCTIONS

Block One: Vessel Identification and Trip Information

Country of Registration and Registration Number in Country of Registration: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").

FFA Vessel Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Regional Register (e.g. "12345"). *WCPFC Identification Number:* Print the number issued by the Flag State.

Fishing Permit or Licence Number(s): If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.

Name of Agent in Port of Unloading: Print the name of the agency or agencies which represented the vessel in the port or ports in which the vessel unloaded the catch recorded on the logsheet. In case of transhipment at sea, print the name of the carrier and destination of the unloaded catch.

Year and *Trip Number This Year*: Print the year in which the vessel departed from port at the start of the trip and the number of trips the vessel has taken this year (including this trip). The start of a trip is defined to occur when a vessel transits to a fishing area after unloading part or all of the catch, regardless of whether the unloading took place in port or at sea. The end of a trip is defined to occur when a vessel unloads part or all of the catch, regardless of whether the unloading took place in port or at sea.

Place of Unloading: Specify the name of the port where the catch was unloaded, or the GPS position where unloading occurs at sea.

Primary Target species: Print the primary target species for this trip.

Block Two: Catches

Complete at least one line of Block Two for each set that was made during the trip. If no sets were made during the day, then provide the Month, Day, Activity Code, and the 01:00 UTC Position. If necessary, use more than one line to record the catch of other species.

Month and *Day*: The day should correspond to the day on which the crew started the set; record the day number and not the day of the week.

Activity Code: Use Activity Code 1 ('A set') if the line in Block Two corresponds to a set of the longline gear in the water. Use Activity Code 2 ('A day at sea but not fished and not in transit – please specify') if the vessel was at sea, but the longline gear was not placed in the water that day and the vessel was **not** in transit, please describe the activity on the line that refers to that day. Use Activity Code 3 ('Transit') if no sets were made and the vessel spent most of the day in transit. Use Activity Code 4 ('In port - please specify') if no sets were made and the vessel spent most of the day in port. If no code exists, please describe the activity on the form.

01:00 UTC or Set Position: If a set was made, print the position of the start of the set. If no sets were made during the day, print the position at 01:00 UTC. The position should be recorded to the nearest minute of latitude and longitude (e.g. "08–22 N" and "165–45 E").

Set Start Time: Print the UTC time when the crew started placing the longline gear in the water.

Number of Hooks: Print the total number of hooks that were set.

Hooks between Floats: Print the number of hooks used between successive two floats.

Albacore, *Bigeye* and *Yellowfin*: Print number of fish caught and retained under *No RET*. Print the total amount of the whole weights for albacore, and the gilled-and-gutted weights for bigeye and yellowfin, of all fish that were caught and retained, in kilograms, under *KG RET*. Print number of fish that were discarded under *No DISC*.

Shark: Print the number of fish caught and retained, **excluding** fish from which only the fins were retained and not the body, under *NO RET*. Print the number of fish discarded, **including** fish from which only the fins were retained and not the body, under *No DISC*.

Striped Marlin, *Blue Marlin*, *Black Marlin*, and *Swordfish*: Print number of fish caught and retained under *No RET*. Print total amount of the processed weights of all fish that were caught and retained, in kilograms, under *KG RET*.

Other Species: Print the full name of the species under *NAME*. Print the number of fish caught and retained under *No RET*. Print the total amount of the processed weights of all fish that were caught and retained, in kilograms, under *KG RET*. When more than one 'other' species occurs in a set, use additional lines on the logsheet. If a species of special interest (such as a marine turtle, marine mammal or sea bird) is caught, then record the capture on a separate line.

Vessels Sighted: If other fishing vessels are sighted, write the name of the vessel, and other identifiers, such as the vessel type, on one line of the logsheet.

Whale Predation: If any fish were predated by whales, write the number of fish predated by whales on one line of the logsheet.

REVISED: NOV 2007

SPC / FFA REGIONAL SHARK LONGLINE LOGSHEET

PAGE _____ OF _____

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)					YEAR	TRIP NUMBER THIS YEAR
NAME OF FISHING COMPANY	FFA VESSEL REGISTER NUMBER	LENGTH OF FLOAT LINE	LENGTH OF BRANCHLINE	MAINLINE MONOFILAMENT? (Y/N)	BRANCHLINE MONOFILAMENT? (Y/N)	PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE	
COUNTRY OF REGISTRATION	WCPFC IDENTIFICATION NUMBER	• **ALL DATES AND TIMES MUST BE UTC / GMT**				PLACE OF UNLOADING	DATE AND TIME OF ARRIVAL IN PORT	
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN	• **ALL WEIGHTS MUST BE KILOGRAMS**				PRIMARY TARGET SPECIES	NUMBER OF HOOKS BETWEEN FLOATS	
		• **START A NEW LOGSHEET AFTER FULL OR PARTIAL UNLOADING**						

		MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY	MONTH	DAY	ACTIVITY
START SET POSITION	LATITUDE			N/S			N/S			N/S			N/S			N/S			N/S			N/S			N/S			N/S			N/S
	LONGITUDE			E/W			E/W			E/W			E/W			E/W			E/W			E/W			E/W			E/W			E/W
START HAUL POSITION	LATITUDE			N/S			N/S			N/S			N/S			N/S			N/S			N/S			N/S			N/S			N/S
	LONGITUDE			E/W			E/W			E/W			E/W			E/W			E/W			E/W			E/W			E/W			E/W
	SET START TIME																														
	HAUL START TIME																														
	No. OF HOOKS SET																														

	CATCH INFORMATION	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC	NO RET	KG RET	NO. DISC
TARGET SPECIES	SILKY SHARKS																														
	GREY REEF SHARK																														
	OCEANIC WHITE TIP																														
	SILVERTIP SHARK																														
	BLACK TIP SHARK																														
	HAMMER HEAD SHARK																														
	BLUE SHARK																														
	BLACK TIP REEF SHARK																														
	TIGER SHARK																														
	GALAPAGOS SHARK																														
	OTHER SHARKS																														
BYCATCH SPECIES	SWORD FISH																														
	BLACK MARLIN																														
	BLUE MARLIN																														
	STRIPED MARLIN																														
	SAIL FISH																														
	ALBACORE TUNA																														
	YELLOWFIN TUNA																														
	BIGEYE TUNA																														
	OTHER FISH																														

ACTIVITY CODES

1 A SET
2 A DAY AT SEA BUT NOT FISHED AND NOT IN TRANSIT - PLEASE SPECIFY
3 TRANSIT
4 IN PORT - PLEASE SPECIFY

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SPC / FFA REGIONAL SHARK LONGLINE LOGSHEET INSTRUCTIONS

Block One: Vessel Identification and Trip Information

Country of Registration and Registration Number in Country of Registration: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").

FFA Vessel Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Vessel Register (e.g. "12345"). *WCPFC Identification Number*: Print the number issued by the Flag State.

Fishing Permit or Licence Number(s): If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.

Name of Agent in Port of Unloading: Print the name of the agency or agencies which represented the vessel in the port or ports in which the vessel unloaded the catch recorded on the logsheet. In case of transhipment at sea, print the name of the carrier and destination of the unloaded catch.

Year and *Trip Number This Year*: Print the year in which the vessel departed from port at the start of the trip and the number of trips the vessel has taken this year (including this trip). The start of a trip is defined to occur when a vessel transits to a fishing area after unloading part or all of the catch, regardless of whether the unloading took place in port or at sea. The end of a trip is defined to occur when a vessel unloads part or all of the catch, regardless of whether the unloading took place in port or at sea.

Place of Unloading: Specify the name of the port where the catch was unloaded, or the GPS position where unloading occurs at sea.

Hooks between Floats: Print the number of hooks used between successive two floats.

Primary Target species: Print the primary target species for this trip.

Block Two: Catches

Complete at least one line of Block Two for each set that was made during the trip. If no sets were made during the day, then provide the Month, Day, Activity Code, and the 01:00 UTC Position. If necessary, use more than one line to record the catch of other species.

Month and *Day*: The day should correspond to the day on which the crew started the set; record the day number and not the day of the week.

Activity Code: Use Activity Code 1 ('A set') if the line in Block Two corresponds to a set of the longline gear in the water. Use Activity Code 2 ('A day at sea but not fished and not in transit – please specify') if the vessel was at sea, but the longline gear was not placed in the water that day and the vessel was **not** in transit, please describe the activity on the line that refers to that day. Use Activity Code 3 ('Transit') if no sets were made and the vessel spent most of the day in transit. Use Activity Code 4 ('In port - please specify') if no sets were made and the vessel spent most of the day in port. If no code exists, please describe the activity on the form.

01:00 UTC or Set Position: If a set was made, print the position of the start of the set. If no sets were made during the day, print the position at 01:00 UTC. The position should be recorded to the nearest minute of latitude and longitude (e.g. "08–22 N" and "165–45 E").

Set Start Time: Print the UTC time when the crew started placing the longline gear in the water.

Number of Hooks: Print the total number of hooks that were set.

Albacore, *Bigeye* and *Yellowfin*: Print number of fish caught and retained under *NO RET*. Print the total amount of the whole weights for albacore, and the gilled-and-gutted weights for bigeye and yellowfin, of all fish that were caught and retained, in kilograms, under *KG RET*. Print number of fish that were discarded under *NO DISC*.

Shark: Print the number of fish caught and retained, **excluding** fish from which only the fins were retained and not the body, under *NO RET*. Print the number of fish discarded, **including** fish from which only the fins were retained and not the body, under *NO DISC*.

Striped Marlin, *Blue Marlin*, *Black Marlin*, and *Swordfish*: Print number of fish caught and retained under *NO RET*. Print total amount of the processed weights of all fish that were caught and retained, in kilograms, under *KG RET*.

Other Species: Print the full name of the species under *NAME*. Print the number of fish caught and retained under *NO RET*. Print the total amount of the processed weights of all fish that were caught and retained, in kilograms, under *KG RET*. When more than one 'other' species occurs in a set, use additional lines on the logsheet. If a species of special interest (such as a marine turtle, marine mammal or sea bird) is caught, then record the capture on a separate line.

Vessels Sighted: If other fishing vessels are sighted, write the name of the vessel, and other identifiers, such as the vessel type, on one line of the logsheet.

Whale Predation: If any fish were predated by whales, write the number of fish predated by whales on one line of the logsheet.

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SPC / FFA REGIONAL POLE-AND-LINE LOGSHEET

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NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)	NUMBER OF CREW	YEAR	TRIP No. THIS YEAR
NAME OF FISHING COMPANY	FFA VESSEL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE	
COUNTRY OF REGISTRATION	WCPFC IDENTIFICATION NUMBER		PLACE OF UNLOADING	DATE AND TIME OF ARRIVAL IN PORT	
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN				

- **ALL DATES AND TIMES MUST BE UTC / GMT**
- **ALL WEIGHTS MUST BE KILOGRAMS**
- **START A NEW LOGSHEET AFTER FULL OR PARTIAL UNLOADING**

MONTH	DAY	ACTIVITY CODE	BAIT ONBOARD Y / N	01:00 UTC POSITION				RETAINED CATCH					DISCARDS			
				LATITUDE DDMM.MMM	N S	LONGITUDE DDDMM.MMM	E W	SKIPJACK WEIGHT	YELLOWFIN WEIGHT	BIGEYE WEIGHT	OTHER SPECIES		TUNA SPECIES		OTHER SPECIES	
											NAME	WEIGHT	NAME	NUMBER	NAME	NUMBER
PAGE TOTAL																
TRIP TOTAL																

ACTIVITY CODES

1 A DAY FISHING OR SEARCHNG
2 NO FISHING - COLLECTING BAIT
3 NO FISHING - TRANSIT
4 NO FISHING - BREAKDOWN
5 NO FISHING - BAD WEATHER
6 IN PORT - PLEASE SPECIFY

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SPC / FFA REGIONAL POLE-AND-LINE LOGSHEET INSTRUCTIONS

Block One: Vessel Identification and Trip Information

Country of Registration and *Registration Number in Country of Registration*: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").

FFA Vessel Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Vessel Register (e.g. "12345"). *WCPFC Identification Number*: Print the number issued by the Flag State.

Fishing Permit or Licence Number(s): If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.

Name of Agent in Port of Unloading: Print the name of the agency or agencies which represented the vessel in the port or ports in which the vessel unloaded the catch recorded on the logsheet. In case of transhipment at sea, print the name of the carrier and destination of the unloaded catch.

Place of Unloading: Specify the name of the port where the catch was unloaded, or the GPS position where unloading occurs at sea.

Number of Crew: Print the total number of officers and crew, excluding observers.

Year and *Trip Number This Year*: Print the year in which the vessel departed from port at the start of the trip and the number of trips the vessel has taken this year (including this trip). The start of a trip is defined to occur when a vessel leaves port to transit to a fishing area or to transit to another port to complete unloading. The end of a trip is defined to occur when a vessel enters port to unload part or all of the catch.

Block Two: Catches and Discards

Complete at least one line of Block Two for each day at sea. If necessary, use more than one line to record the retained catch of other species and discards.

Month and *Day*: The day should correspond to the day on which the activity commenced; record the day number and not the day of the week.

Activity Code: Use Activity Code 1 ('A day fishing or searching') for days on which tuna were caught or the vessel searched for tuna. Use Activity Code 2 ('No fishing - collecting bait') for days on which no tuna were caught and the vessel collected bait. Use Activity Code 3 ('No fishing - transit') for days on which no tuna or bait were caught and the vessel spent most of the day in transit. Use Activity Code 4 ('No fishing - breakdown') for days on which no tuna or bait were caught and the vessel spent most of the day inactive due to a breakdown. Use Activity Code 5 ('No fishing - bad weather') for days on which no tuna or bait were caught and the vessel spent most of the day inactive due to a bad weather. Use Activity Code 6 ('In port - please specify') for days on which no tuna or bait were caught and the vessel spent most of the day in port. If no code exists, please describe the activity on the form.

Bait Onboard Y/N: Print 'Y' if, at any time during the day, sufficient bait was carried to chum a school of fish. Print 'N' if, during the whole day, insufficient bait was carried to chum a school of fish.

01:00 UTC Position: Print the 01:00 UTC position to the nearest thousandth of a minute of latitude and longitude (e.g. "08–22.334 N" and "165–45.556 E").

Retained Catch: *Skipjack*, *Yellowfin*, *Bigeye*, and *Other Species*: Print the amounts caught during the day (rounded to the nearest metric tonne). If a species other than skipjack, yellowfin or bigeye, was caught and not discarded, then print the full name of the species in the column under *Retained Catch*, *Other Species, Name* and print the amount caught (rounded to the nearest metric tonne) in the column under *Retained Catch, Other Species, Weight*. When more than one 'other' species occurs in a set, use additional lines on the logsheet. Do not record the amount of bait that was caught. If a species of special interest (such as a marine turtle, marine mammal or sea bird) is caught, then record the capture on a separate line.

Discards: If tuna or other species were discarded, then print the name of the species in the column under *Discards*, *Tuna Species, Name* and print the number of fish discarded in the column under *Discards, Tuna Species, Number*. If any other species was discarded, then print the name of the species in the column under *Discards*, *Other Species*, *Name* and print the number of fish discarded in the column under *Discards, Other Species, Number*. Do not record the amount of bait that was discarded.

Vessels Sighted: If other fishing vessels are sighted, write the name of the vessel, and other identifiers, such as the vessel type, on one line of the logsheet.

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SPC / FFA REGIONAL PURSE-SEINE LOGSHEET

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NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)			YEAR	TRIP No. THIS YEAR
NAME OF FISHING COMPANY	FFA VESSEL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	No. OF FADS INVESTIGATED	PORT OF DEPARTURE	PLACE OF UNLOADING	
COUNTRY OF REGISTRATION	WCPFC IDENTIFICATION NUMBER	• ALL DATES AND TIMES MUST BE UTC / GMT	TENDER VESSELS USED? (Y/N)	DATE AND TIME OF DEPARTURE	DATE AND TIME OF ARRIVAL IN PORT	
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN	• RECORD SMALL AND LARGE YELLOWFIN AND BIGEYE SEPARATELY		AMOUNT OF FISH ONBOARD AT START OF TRIP	AMT OF FISH ONBOARD AFTER UNLOADING	

MONTH	DAY	ACTIVITY CODE	01:00 UTC OR SET POSITION				SCHOOL ASSOC CODE	START OF SET TIME	END OF SET TIME	RETAINED CATCH (METRIC TONNES)								DISCARDS					
			LATITUDE DDMM.MMM	N S	LONGITUDE DDDMM.MMM	E W				SKIPJACK	YELLOWFIN		BIGEYE		OTHER SPECIES		WELL NUMBERS	TUNA SPECIES			OTHER SPECIES		
											Small ≤ 9 kgs	Large > 9 kgs	Small ≤ 9 kgs	Large > 9 kgs	NAME	TONNES		NAME	TONNES	CODE	NAME	NUMBER	TONNES
PAGE TOTAL																							
TRIP TOTAL																							

ACTIVITY CODES

- RECORD ALL SETS
- IF NO FISHING SET MADE IN A DAY, RECORD THE MAIN ACTIVITY FOR THAT DAY

1 FISHING SET
2 SEARCHING
3 TRANSIT
4 NO FISHING - BREAKDOWN
5 NO FISHING - BAD WEATHER
6 IN PORT - PLEASE SPECIFY
7 NET CLEANING SET
10 DEPLOYING OR RETREIVING RAFTS, FADS OR PAYAOS

SCHOOL ASSOCIATION CODES

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

TUNA DISCARD CODES

1 FISH TOO SMALL
2 FISH DAMAGED
3 VESSEL FULLY LOADED
4 OTHER REASON

UNLOADINGS TO CANNERY, COLD STORAGE, CARRIER OR OTHER VESSEL

START DATE	END DATE	CANNERY OR VESSEL AND DESTINATION	INTL RADIO CALL SIGN	SKIPJACK	YELLOWFIN	BIGEYE	MIXED	OTHERS	REJECTS

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SPC / FFA REGIONAL PURSE-SEINE LOGSHEET INSTRUCTIONS

Logsheets must be completed for each trip. The start of a trip is defined to occur when a vessel leaves port to transit to a fishing area or to transit to another port to complete unloading. The end of a trip is defined to occur when a vessel enters port to unload part or all of the catch.

Block One: Vessel Identification and Trip Information

Country of Registration and *Registration Number in Country of Registration*: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").
FFA Vessel Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Vessel Register (e.g. "12345"). *WCPFC Identification Number:* Print the number issued by the Flag State.
Fishing Permit or License Number(s): If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing license number issued by the coastal state.
Name of Agent in Port of Unloading: Print the name of the agency or agencies which represented the vessel in the port or ports in which the vessel unloaded the catch recorded on the logsheet. Place of Unloading Specify the name of the port where the catch was unloaded, or the GPS position where unloading occurs at sea.
Number of FADs Investigated: Print the number of individual FADs that were investigated during the trip, regardless of which vessel may have deployed the FAD. Count each FAD once, regardless of the number of times an individual FAD was investigated.
Year and *Trip Number This Year*: Print the year in which the vessel departed from port at the start of the trip and the number of trips the vessel has taken this year, including this trip. (See the definitions of the start and end of a trip above.)
Amount of Fish Onboard at Start of Trip: If any fish caught during a previous trip have not been unloaded before the departure of the current trip, then print the amount of fish onboard the vessel at the start of the current trip.
Amount of Fish Onboard After Unloading: If any fish remained onboard after the unloading of the catch from the current trip and before the departure of the next trip, then print the amount of fish onboard the vessel at the start of the next trip.

Block Two: Catches and Discards

Complete at least one line of Block Two for each set made, either fishing set or net cleaning set, even if the fishing set was unsuccessful. If no fishing sets were made during the day, then provide the Month, Day, Activity Code, and the 01:00 UTC Position. All columns must be completed for each fishing set, **including the discards columns**. If necessary, use more than one line to record the retained catch of other species, well numbers, and discards.
Activity Code: Use Activity Code 1 ('Fishing set') when a set on a school of fish was made. Use Activity Code 2 ('Searching') for days on which no fishing sets were made and the main activity was searching for schools of fish. Use Activity Code 3 ('Transit') for days on which no fishing sets were made and the main activity was transiting. Use Activity Code 4 ('No fishing - breakdown') for days on which no fishing sets were made and the main activity was being inactive due to breakdown. Use Activity Code 5 ('No fishing - bad weather') for days on which no fishing sets were made and the main activity was being inactive due to bad weather. Use Activity Code 6 ('In port - please specify') for days on which no fishing sets were made and the main activity was being in port (e.g. to disembark an injured crew member). Use Activity Code 7 ('Net cleaning set') for any sets that were not made on a school of fish. If no code exists, please describe the activity on the form. Use Activity Code 10 ('Deploying or retrieving raft, FAD or payao') for days on which no fishing sets were made and the main activity was deploying or retrieving rafts, FADs or payaos.
01:00 UTC or Set Position: If a set was made, print the position of the set. If no sets were made during the day, print the position at 01:00 UTC. The position should be recorded to the nearest thousandth of a minute of latitude and longitude (e.g. "08–22.334 N" and "165–45.556 E").
School Assoc Code: Schools of tuna are often associated with a floating object or an animal. If the school was not associated with anything, then use School Association Code 1 ('Unassociated'). If the school was associated with an object that is not on the list of School Association Codes, then use School Association Code 8 ('Other') and please describe the object.
Set Start Time: Print the UTC time at which the skiff was put in the water.
Retained Catch: Skipjack, Yellowfin, *Bigeye*, and *Other*: Print the amounts caught in the set, rounded to the nearest metric tonne. If a species other than skipjack, yellowfin and bigeye was caught and not discarded, print the name of the species in the column under *Other Species, Name,* and the amount caught under *Other Species, Weight*. If a species of special interest (such as a marine turtle, marine mammal or sea bird) is caught, then record the capture *Other Species, Name*. When more than one 'other' species occurs in a set, use additional lines on the logsheet.
Well Numbers: Print the number of the wells in which the catch from the set was stored initially and note any transfers amongst wells with arrows, for example: "S4 → P3,P2,P5" and "S4,S5 → P3".
Discards: If tuna were discarded, then print the name of the species, the amount discarded, and the Discard Code. If any other species was discarded, print the name of the species, and the total number of fish discarded or the total weight of fish discarded.
Vessels Sighted: If other fishing vessels are sighted, write the name of the vessel, and other identifiers, such as the vessel type, on one line of the logsheet.

Block Three: Unloadings

Unloadings to Cannery, Cold Storage, Carrier or Other Vessel: When fish are unloaded at the end of a trip, record the date on which unloading began, the date on which unloading ended, the name of the cannery or vessel to which the fish were unloaded, the port in which the fish were unloaded, the international radio call sign of the vessel to which the fish were unloaded, and the amount of each species unloaded. If unloading to a vessel, also record the destination of the fish beside the name of vessel. Use one line for each cannery or vessel to which the fish were unloaded. If unloadings of skipjack and yellowfin were not recorded separately, then record the total amount unloaded under *Mixed*.

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SPC / FFA REGIONAL HANDLINE LOGSHEET

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)		YEAR	TRIP No. THIS YEAR
NAME OF FISHING COMPANY	FFA VESSEL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE	
COUNTRY OF REGISTRATION	WCPFC IDENTIFICATION NUMBER	• **ALL DATES AND TIMES MUST BE UTC / GMT** • **ALL WEIGHTS MUST BE KILOGRAMS** • **START A NEW LOGSHEET AFTER FULL OR PARTIAL UNLOADING**	PLACE OF UNLOADING	DATE AND TIME OF ARRIVAL IN PORT	
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN		PRIMARY TARGET SPECIES	RANGE IN LENGTH OF HANDLINES (METRES)	

MONTH	DAY	ACTIVITY CODE	**01:00 UTC OR FISHING POSITION**				START FISHING TIME	END FISHING TIME	NUMBER OF HOOKS	BIGEYE			YELLOWFIN			SKIPJACK			SHARK		STRIPED MARLIN		BLUE MARLIN		BLACK MARLIN		SWORDFISH		OTHER SPECIES		
			LATITUDE DDMM.MMM	N S	LONGITUDE DDDMM.MMM	E W				No RET	KG RET	No DISC	No RET	KG RET	No DISC	No RET	KG RET	No DISC	No RET	No DISC	No RET	KG RET	No RET	KG RET	No RET	KG RET	No RET	KG RET	NAME	No RET	KG RET
									PAGE TOTAL																						
									TRIP TOTAL																						

ACTIVITY CODES

1 FISHING IN THE VICINITY OF A FAD/LOG
2 FISHING - TROLLING (NOT IN THE VICINITY OF A FAD/LOG)
3 FISHING, BUT NOT ON A FAD/LOG OR TROLLING, PLEASE SPECIFY
4 A DAY AT SEA BUT NOT FISHED AND NOT IN TRANSIT, PLEASE SPECIFY
5 TRANSIT
6 IN PORT - PLEASE SPECIFY PORT NAME AND ACTIVITY

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SPC / FFA REGIONAL HANDLINE LOGSHEET INSTRUCTIONS

Block One: Vessel Identification and Trip Information

Country of Registration and Registration Number in Country of Registration: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").

FFA Vessel Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Regional Register (e.g. "12345"). WCPFC Identification Number: Print the number issued by the Flag State.

Fishing Permit or Licence Number(s): If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.

Name of Agent in Port of Unloading: Print the name of the agency or agencies which represented the vessel in the port or ports in which the vessel unloaded the catch recorded on the logsheet. In case of transhipment at sea, print the name of the carrier and destination of the unloaded catch.

Year and *Trip Number This year*: Print the year in which the vessel departed from port at the start of the trip and the number of trips the vessel has taken this year (including this trip). The start of a trip is defined to occur when a vessel leaves port to transit to a fishing area or to transit to another port to complete unloading. The end of a trip is defined to occur when a vessel enters port to unload part or all of the catch.

Place of Unloading: Specify the name of the port where the catch was unloaded, or the GPS position where unloading occurs at sea.

Range in Length of Handline (s) (metres): Print the range in the lengths (metres) of the handlines used during this trip.

Primary Target species: Print the primary target species for this trip.

Block Two: Catches

Complete at least one line of Block Two for each fishing period undertaken during the trip. If no fishing was undertaken during the day, then provide the Month, Day, Activity Code, and the 01:00 UTC Position. If necessary, use more than one line to record the catch of other species.

Month and Day: The day should correspond to the day on which the crew started fishing; record the day number and not the day of the week.

Activity Code: Use either Activity Code 1 ('Fishing in the vicinity of an Anchored FAD'), Activity Code 2 ('Fishing - Trolling') or Activity Code 3 ('Fishing, but not on Anchored FAD or Trolling') in Block Two for days when the handline gear is placed in the water. If fishing is not conducted in the vicinity of an anchored FAD or trolling, please describe the fishing association (e.g. "fishing on a sea mount"). Use Activity Code 4 ('A day at sea but not fished and not in transit, please specify') if the vessel was at sea, but the handline gear was not placed in the water that day and the vessel was not in transit, please describe the activity on the form. Use Activity Code 5 ('Transit') if no fishing was undertaken and the vessel spent most of the day in transit. Use Activity Code 6 ('In port - please specify port name and activity') if no fishing was undertaken and the vessel spent most of the day in port. If no code exists, please describe the activity on the form.

01:00 UTC or Set Position: If fishing was undertaken, print the position at the start of fishing. If fishing was not undertaken during the day, print the position at 01:00 UTC. The position should be recorded to the nearest thousandth of a minute of latitude and longitude (e.g. "08–22.062 N" and "165–45.143 E").

Start and End Fishing Times: Print the UTC time when the crew started placing the handline gear in the water and when the crew finished fishing.

Number of Hooks: Print the total number of hooks that were used. This corresponds to the number of lines fishing if single-hook lines are used.

Bigeye, Yellowfin and Skipjack: Print number of fish caught and retained under NO RET. Print the total amount of the whole weights for albacore, and the gilled-and-gutted weights for bigeye and yellowfin, of all fish that were caught and retained, in kilograms, under KG RET. Print number of fish that were discarded under NO DISC.

Shark: Print the number of fish caught and retained, excluding fish from which only the fins were retained and not the body, under NO RET. Print the number of fish discarded, including fish from which only the fins were retained and not the body, under NO DISC.

Striped Marlin, Blue Marlin, Black Marlin, and Swordfish: Print number of fish caught and retained under NO RET. Print total amount of the processed weights of all fish that were caught and retained, in kilograms, under KG RET.

Other Species: Print the full name of the species under NAME. Print the number of fish caught and retained under NO RET. Print the total amount of the processed weights of all fish that were caught and retained, in kilograms, under KG RET. When more than one 'other' species occurs in a set, use subsequent lines on the logsheet.

REVISED: NOV 2007

SPC / FFA REGIONAL TROLL LOGSHEET

PAGE _____ OF _____

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)		YEAR
NAME OF FISHING COMPANY	FFA VESSEL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PRIMARY TARGET SPECIES	TRIP NUMBER THIS YEAR
COUNTRY OF REGISTRATION	WCPFC IDENTIFICATION NUMBER	**ALL DATES AND TIMES MUST BE UTC / GMT** **ALL WEIGHTS MUST BE KILOGRAMS**	PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN	**START A NEW LOGSHEET AFTER FULL OR PARTIAL UNLOADING**	PLACE OF UNLOADING	DATE AND TIME OF ARRIVAL IN PORT

MONTH	DAY	ACTIVITY CODE	**01:00 UTC POSITION**				NUMBER OF LINES	HOURS FISHED	ALBACORE			SOUTHERN BLUEFIN or PACIFIC BLUEFIN				SKIPJACK			YELLOWFIN			OTHER SPECIES		
			LATITUDE DDMM	N S	LONGITUDE DDDMM	E W			No RET	KG RET	No DISC	SPECIES CODE	No RET	KG RET	No DISC	No RET	KG RET	No DISC	No RET	KG RET	No DISC	NAME	No RET	No DISC
								PAGE TOTAL																
								TRIP TOTAL																

ACTIVITY CODES

1 FISHING OCCURRED ON THIS DAY
2 A DAY AT SEA BUT NOT FISHED AND NOT IN TRANSIT, PLEASE SPECIFY
3 TRANSIT
4 IN PORT - PLEASE SPECIFY

NAME OF CAPTAIN		SIGNATURE OF CAPTAIN	DATE

SPC / FFA REGIONAL TROLL LOGSHEET

INSTRUCTIONS

Block One: Vessel Identification and Trip Information

Country of Registration and Registration Number in Country of Registration: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").

FFA Vessel Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Vessel Register (e.g. "12345"). *WCPFC Identification Number:* Print the number issued by the Flag State.

Fishing Permit or Licence Number(s): If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.

Name of Agent in Port of Unloading: Print the name of the agency or agencies which represented the vessel in the port or ports in which the vessel unloaded the catch recorded on the logsheet. In case of transhipment at sea, print the name of the carrier and destination of the unloaded catch.

Year and *Trip Number This Year*: Print the year in which the vessel departed from port at the start of the trip and the number of trips the vessel has taken this year (including this trip). The start of a trip is defined to occur when a vessel leaves port to transit to a fishing area or to transit to another port to complete unloading. The end of a trip is defined to occur when a vessel enters port to unload part or all of the catch.

Place of Unloading: Specify the name of the port where the catch was unloaded, or the GPS position where unloading occurs at sea.

Primary Target species: Print the primary target species for this trip (assumed to be albacore).

Block Two: Catches

Complete one line of Block Two for each day during the trip. If no fishing was undertaken during the day, then provide the Month, Day, Activity Code, and the 01:00 UTC Position. If necessary, use more than one line to record the catch of other species.

Month and *Day*: The day should correspond to the day at sea; record the day number and not the day of the week.

Activity Code: Use Activity Code 1 ('Fishing occurred on this day') if any fishing occurred during this day. Use Activity Code 2 ('A day at sea but not fished or transit') if the vessel was at sea, but the troll gear was not placed in the water that day and the vessel was **not** in transit. Use Activity Code 3 ('Transit') if no fishing was undertaken and the vessel spent most of the day in transit. Use Activity Code 4 ('In port - please specify') if no fishing was undertaken and the vessel spent most of the day in port. If no code exists, please describe the activity on the form.

01:00 UTC: Print the position at 01:00 UTC. The position should be recorded to the nearest minute of latitude and longitude (e.g. "38–22 S" and "165–45 E").

Number of Lines: Print the number of lines that were used for the majority of the fishing period during this day.

Hours fished: Print the total number of hours that the troll gear was in the water during this day.

Albacore, *Southern Bluefin, Skipjack* and *Yellowfin*: Print number of fish caught and retained under *NO RET*. Print the total amount of the estimated whole weights for albacore, southern bluefin, skipjack and yellowfin, of all fish that were caught and retained, in kilograms, under *KG RET*. Print number of fish that were discarded under *NO DISC*. In the case of significant discards, write the reason for discards on a separate line.

Other Species: Print the full name of the species under *NAME*. Print the number of fish caught and retained under *NO RET*. Print the total amount of the processed weights of all fish that were caught and retained, in kilograms, under *KG RET*. When more than one 'other' species occurs in a set, use additional lines on the logsheet. If a species of special interest (such as a marine turtle, marine mammal or sea bird) is caught, then record the capture on a separate line.

SPC / FFA Regional Longline Logbook - Vessel Characteristics

Revised Nov 2007

VESSEL NAME	COUNTRY REGISTRATION NUMBER	FLAG	IRCS
YEAR BUILT	COUNTRY/ SHIPYARD WHERE BUILT		
VESSEL OWNER	OWNER'S CONTACT ADDRESS		

ALC INSTALLED ?	IMMARSAT NUMBER	VESSEL LENGTH	Circle to indicate if the length is:
Y **N**			(m) / (ft) Overall / Registered

FISHING PERMIT OR LICENCES NUMBERS: LIST ALL.

Tick ? to indicate the Hull Material.

STEEL ( ) ALUMINIUM ( ) WOOD ( ) FIBREGLASS ( )

OTHER - PLEASE SPECIFY: .....

ENGINE MODEL	TOTAL ENGINE POWER - HP / KW	VESSEL CRUSING SPEED in KNTS

TOTAL FUEL CARRYING CAPACITY - KL / GAL	FISH STORAGE CAPACITY - MT / M^3

Tick ? to indicate the Storage Method. You may tick more than one.

ICE ( ) REFRIDGERATED SEAWATER ( ) BRINE ( ) AIR (Coils) ( )

CIRCLE Y IF ONBOARD or CIRCLE N IF NOT ONBOARD

GPS BEACON	Y	N
DOPPLER CURRENT METER	Y	N
SEA SURFACE TEMP GAUGE	Y	N
SATELLITE SEA SURFACE IMAGES	Y	N
TORI POLE MITIGATION DEVICE	Y	N
LINE SHOOTER	Y	N
AUTOMATIC BRANCHLINE THROWER	Y	N
AUTOMATIC BRANCHLINE ATTACHER	Y	N
BAIT CHUTE	Y	N

MAINLINE

MATERIAL

LENGTH (NM)

FLOATLINE

LENGTH (m)

BRANCHLINE

LENGTH (m)

WIRE TRACE **Y** **N**

COMMENTS

PRINT CAPTAIN'S FULL NAME CLEARLY

CAPTAIN'S SIGNATURE

PRINT ISSUING OFFICER'S FULL NAME CLEARLY

ISSUING OFFICER SIGNATURE
(Only sign when page is complete)

Regional Longline Logbook – Vessel Characteristics

You will not be issued with your logbook until you have filled in and signed this form.

VESSEL NAME: **T**he full name of the vessel as marked on the country registration certificate.
COUNTRY REGISTRATION NUMBER: **T**he number marked on your country registration certificate.
FLAG : **T**he vessel's nationality or country of registration (sometimes a flag of convenience).
IRCS : **F**ill in your International Radio Call Sign.
YEAR BUILT : **S**tate the year the vessel was first built in.
COUNTRY / SHIPYARD WAS BUILT: **S**tate the country and the name of the shipyard in that country where the vessel was originally built.
VESSEL OWNER: **T**he full name of the vessel's owner.
OWNER'S CONTACT ADDRESS: **T**he postal address for the vessel owner.
ALC INSTALLED: **C**ircle Y(yes) if an automatic locator communicator has been installed.
IMMARSAT NUMBER: **G**ive the Immarsat contact number.
VESSEL LENGTH: **F**ill in the vessel's length and then circle to indicate if the length is in meters (m) or feet (ft) . Also circle to indicate if the vessel's length is the overall length or the registered length.
FISHING PERMIT OR LICENCES NUMBERS: **L**ist all fishing permit numbers and their expiry dates.

HULL MATERIAL: **T**ick one of the four give options to state the main type of material used in the hull.
ENGINE MODEL: **S**tate the engine make and model number.
TOTAL ENGINE POWER: **S**tate the engine power in horse-power (HP) or kilowatts (KW)
VESSEL CRUSING SPEED: **S**tate the vessel's top cruising speed in knots.
TOTAL FUEL CARRYING CAPACITY: **S**tate the vessel's total fuel carrying capacity in kiloliters (KL) or gallons (GAL).
FISH STORAGE CAPACITY: **S**tate the total storage available to store the catch in metric tonnes or cubic meters.
STORAGE METHOD: **T**ick one or more of the four options to indicate all storage methods used for the landed catch.

ELECTRONICS AND FISHING GEAR
Circle Y(yes) for every piece of equipment that is onboard the vessel.
Circle N (no) if the indicated piece of equipment is not onboard the vessel.
Please do not leave any line blank
MAINLINE
Indicate the type of material used in the mainline.
Indicate the total length of the mainline in nautical miles (nm)
FLOATLINE
Indicate the average length of the floatlines in meters (m).
BRANCHLINE
Indicate the average length of the branchline in meters (m).
Indicate if wire trace is being used in the branchline, before the hook.
COMMENTS: **U**se this area to fill any extra comments you have about the vessel, or other information required by your local Fisheries Department.
Captain's Name and Signature: **P**rint the Captain's name clearly, and then the Captain must sign this form before the logbook can be issued.

SPC / FFA Regional Longline Logbook - Daily Form

REVISED: NOV 2007

TODAY's DETAILS	Vessel Name						Trip Number / Year	
MID-DAY TIME and POSITION	SHIP'S TIME	SHIP'S DATE (DD / MM / YY)	LATITUDE (DD . MM)	N S	LONGITUDE (DDD . MM)	E W	UTC TIME (00.00 hrs)	UTC DATE (DD / MM / YY)
	12.00 hrs	/ /	°		°			/ /
CIRCLE TODAY's ACTIVITY	1. Fishing 2. Not Fishing & not in Transit (specify) 3. Transit 4. Breakown 5. Bad Weather 6. Other pls specify_____							

For days with "1. Fishing" please fill in all the fishing details below.

FISHING DETAILS	SHIP'S TIME (00.00 hrs)	SHIP'S DATE DD / MM / YY	LATITUDE (DD ° MM)	N S	LONGITUDE (DDD ° MM)	E W
START OF SET		/ /	°		°	
END OF SET		/ /	°		°	
START OF HAUL		/ /	°		°	
END OF HAUL		/ /	°		°	

TICK PRIMARY TARGET SPECIES → TUNA ⬭ SWORDFISH ⬭ SHARK ⬭

						IF ALIVE CIRCLE A
NO. OF HOOKS BETWEEN FLOATS		VESSEL SETTING SPEED (knts)		1. BAIT SPECIES		A
TOTAL NUMBER OF HOOKS SET		LINE SETTING SPEED (m/s)		2. BAIT SPECIES		A
TOTAL NO. OF LIGHTSTICKS SET		DIST. BETWEEN BRANCHLINES (m)		3. BAIT SPECIES		A

SPECIES	Number Retained	Kg. Ret.	No. Disc.	Reason Disc.	No. Rel Alive	SPECIES	Number Retained	Kg. Ret.	No. Disc	Reason Disc.	No. Rel Alive
Yellowfin ≤ 20kg **YFT**						Mahi Mahi **DOL**					
Yellowfin >20kg **YFT**						Escolar **LEC**					
Bigeye ≤ 20kg **BET**						Wahoo **WAH**					
Bigeye >20kg **BET**						Opah (moonfish) **LAG**					
Albacore **ALB**						Sunfishes **MOP**					
Skipjack **SKJ**						Pelagic Stingray **PLS**					
Striped Marlin **MLS**						Snake Mackerel **GES**					
Blue Marlin **BUM**						Barracudas **BAR**					
Black Marlin **BLM**						Breams **BRZ**					
Swordfish **SWO**						Lancetfishes **ALI**					
Bluefin tunas **TPZ**											
Sailfish **SAI**											
Shortbilled spearfish **SBS**						TURTLES: Unidentified **TTX**					
Silky Shark **FAL**						TURTLES: Green **TUG**					
Blue Shark **BSH**						TURTLES: Hawksbill **TTH**					
Oceanic Whitetip Shark **OCS**						TURTLES: Loggerhead **TTL**					
Hammerhead sharks **SPN**						TURTLES: Leatherback **DKK**					
Mako sharks **MAK**						TURTLES: Olive Ridley **LKV**					
Thresher Sharks **THR**						Marine Mammals ( )					
						Bird ( )					

Comments : Tag numbers / whale interactions or sightings / number of catch taken by whales / weather conditions.

Captain's Signature

SPC / FFA Regional Longline Logbook – Daily Form Instructions

Today's Details

Vessel Name: **T**he full name of the vessel as written on the country registration certificate.

Trip number / year **N**umber your fishing trips throughout the year. For instance, the second trip made during 2007 will be recorded as "02 / 2007.

Mid-day time and Position By completing this area will help convert the time you normally use on the boat to a more universal time i.e. UTC.

Ship's time - 12.00 hrs. **F**ill in this box at mid-day every day.

Ship's date **S**tate today's date. The date used and recognised by the crew and captain onboard.

Latitude **M**ark the latitude position of the vessel every day at mid-day.

Longitude **M**ark the longitude position of the vessel every day at mid-day.

UTC time **R**ecord the UTC time every day at mid-day. The UTC time is available on the GPS.

UTC date **R**ecord the UTC date, every day at mid-day. It is available on the GPS.

Circle today's activity ***C**ircle the main activity the vessel will do, or is doing for the day. If you have circled "1. Fishing", please continue to fill in all of the fishing details on the rest of the page.*

Fishing Details

Fill in the following details for the start and the end of each set and haul.

Ship's time **T**he ship's time at the start of each activity.

Ship's date **T**he ship's date at the time of the activity.

Latitude **T**he ship's latitude at the time of the activity.

Longitude **T**he ship's longitude at the time of the activity.

No. of hooks between floats : **T**he standard number of hooks between two floats.

Total number of hooks set : **T**he total number of hooks set.

Total no. of lightsticks set : **T**he total number of lightsticks set.

Vessel setting speed (knts) : **T**he average speed of the vessel during setting.

Line setting speed (m/s) : **I**f a line shooter is used record the speed the line was set at in meters per second. Knots per second divided by 2 is approximately give meters per second.

Dist. Between Branchlines (m): **C**alculate the distance between the branchlines by multiplying your line setting speed by the branchline set interval (or number of seconds between the branchline attachments) or give an estimate of this distance.

Bait Species :**T**he name of all bait species used. Circle 'A' if any of the bait used was live.

Species

Number Retained. **F**ill in the total number of each species retained.

Kg Retained. **R**ecord the total weight of fish in weight (kilograms).

No Disc. **F**ill in the total number of each species that was discarded.

Reason Disc **U**sing the supplied codes, note the reasons any species were discarded.

No. rel alive **F**ill in the total number of any species released alive.

Comments **U**se this area to mark down any comments about what happened during the day and which may be useful to the vessel here.

Print Captain's name clearly **P**rint the Captain's full name.

Captain's Signature **S**ignature of the Captain

INTERIM: SPC/FFA NOV 2007

REGIONAL ARTISANAL FAD FISHING LOGSHEET

PAGE_____OF _______

Location	Date	BOAT, SKIPPER and CREW	
Departure time	Return time	Fuel and amount	Engine hours

TIME		AREA FISHED OR FAD NO.	NUMBER OF		SPECIES		SPECIES		SPECIES		SPECIES	
FROM	TO		LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :												

TIME		AREA FISHED OR FAD NO.	NUMBER OF		SPECIES		SPECIES		SPECIES		SPECIES	
FROM	TO		LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :												

TIME		AREA FISHED OR FAD NO.	NUMBER OF		SPECIES		SPECIES		SPECIES		SPECIES	
FROM	TO		LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :												

TIME		AREA FISHED OR FAD NO.	NUMBER OF		SPECIES		SPECIES		SPECIES		SPECIES	
FROM	TO		LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :												

TIME		AREA FISHED OR FAD NO.	NUMBER OF		SPECIES		SPECIES		SPECIES		SPECIES	
FROM	TO		LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :												

SPC/FFA REGIONAL ARTISANAL FAD FISHING LOGSHEET Instructions

Location: ***P**rint the name of the departure port / area / or boat slip.* Date: ***P**rint the date of the fishing. Use dd/mm/yy.* Boat, Skipper and Crew*: **P**rint the full name of the boat, the skipper and all crew members.* **D**eparture time/ Return Time: ***P**rint the time the trip stated and* ended. *Use the 24hr clock (i.e. 17.00 hrs for 5 p.m.).* **F**uel and amount: *Print the total amount of fuel used during this trip and mark down the type of fuel used.* Engine hours: *Print the total number of hours the engine was running during this fishing activity.*

Fishing Activity: Fill in one box for each fishing event (i.e. any fishing that takes place in the same area with the same gear). If you change either the fishing area or fishing gear please start a new fishing activity box. Please note if you carry out more than one type of fishing at the same time you must fill in a fishing activity box for each type of fishing. More than one box may be required (example below).

Time *(From To): **P**rint the start and end time of the fishing activity.* Area fished or FAD No.*: **P**rint the name of the areas fished. Use well-known local names or print the FAD number if the fishing was done on a FAD.* Number of (Lines / Hooks). ***P**rint the total number of fishing lines used during this fishing activity and print the total number of hooks used.* **A**ctivity*: **P**rint the type of fishing activity. See the list below.* Bait used: ***P**rint the name of all of the bait species and the total number or total weight in kgs of each species used. See species list below.* Species: ***P**rint the English name or the code for each landed species. See the list of common species and codes below. Refer to your species guide for other species.* NO. ***P**rint the total number of this species landed.* KGS ***P**rint the total weight (in kgs) of each species that was landed.*

- *(Note the Artisanal logsheet will be printed on A5. The following will be inserted for reference)*

TIME			NUMBER OF		SPECIES YFT		SPECIES SKJ		SPECIES WAH		SPECIES	
FROM	TO	AREA FISHED OR FAD NO.	LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
0530	0600	FAD 1	3		2	8	4	12	1	15		
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
Trolling, inshore FAD					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :		10 Opulu										

TIME			NUMBER OF		SPECIES WAH		SPECIES		SPECIES		SPECIES	
FROM	TO	AREA FISHED OR FAD NO.	LINES	HOOKS	NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
0600	0700	2 mile off	3		2	22						
ACTIVITY					SPECIES		SPECIES		SPECIES		SPECIES	
Trolling, open-water					NO.	KGS	NO.	KGS	NO.	KGS	NO.	KGS
BAIT USED :		5 Opulu										

Activity	Trolling	Vertical longline	Mid-water handline
Single hook drift line	Jigging	Tuna-hole fishing	Other ……..(please specify)

Common species and codes		Yellowfin	YFT	Albacore	ALB	Bigeye	BET
Skipjack	SKJ	Rainbow Runner	RRU	Wahoo	WAH	Mahi Mahi	DOL
Barracuda	BAR	Marlin	MAR	Sailfish	SAI	Shark	SKH
Mackerel Scad	MSD	Bigeye Scad	BIS	Triggerfish	TRI	Others……please specify	

APPENDIX 7. SPC / FFA REGIONAL OBSERVER FORMS

- **LL–1** • **Longline General Information**
- **LL–2 /3** • **Longline Set and Haul Information**
- **LL–4** • **Longline Catch Monitoring**
- **LL–5** • **Longline Conversion Factors**
- **PL–1** • **Pole-and-line General Information**
- **PL–2** • **Pole-and-line Daily log**
- **PL–3** • **Pole-and-line Catch Detail**
- **PS–1** (pg1) • **Purse-Seine General Information**
- **PS–1** (pg2) • **Purse-Seine General Information**
- **PS–2** • **Purse-Seine Daily log**
- **PS–3** • **Purse-Seine Set Details**
- **PS–4** • **Purse-Seine Length Measurement**
- **PS–5** (pg1) • **Purse-Seine Well Loading**
- **PS–5** (pg2) • **Purse-Seine Well Loading**
- **TR-1** • **Troll General Information**
- **TR-2** • **Troll Daily Log**
- **TR-1** • **Troll Catch Details**
- **GEN–1** • **Vessel and Aircraft Sightings / Fish, Bunkering and Other Transfers Logs**
- **GEN–1*** • **Vessel and Aircraft Sightings / Fish, Bunkering and Other Transfers Logs**
- **GEN–2** • **Species of Special Interest**
- **GEN–2*** • **Species of Special Interest - multi-landings**
- **GEN–3** • **Vessel Trip Compliance Record**
- **GEN–6** • **Pollution Report**

*Supplementary form

SPC/FFA REGIONAL LONGLINE OBSERVER GENERAL INFORMATION

FORM LL-1

REVISED DEC. 2007

TRIP DETAILS

OBSERVER NAME	DEPARTURE (SHIP DATE AND TIME) D D / M M / Y Y / h h / m m	DEPARTURE PORT
OBSERVER TRIP ID NUMBER	RETURN (SHIP DATE AND TIME) D D / M M / Y Y / h h / m m	RETURN PORT

VESSEL

VESSEL NAME	COUNTRY REGISTRATION No.	
VESSEL OWNER	FLAG	INTERNATIONAL RADIO CALLSIGN
VESSEL CAPTAIN	FISHING MASTER	
FISHING PERMIT OR LICENCE NUMBER(S)		

CREW NATIONALITY

CAPTAIN	FISHING MASTER	
OTHER CREW:		How many ?
OTHER CREW:		How many ?
OTHER CREW:		How many ?

ELECTRONICS

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

			USAGE	MAKE	MODEL	COMMENTS
*	*NEW*	Y / N				
*	*NEW*	Y / N				
	SONAR	Y / N				
	RADIO BEACON DIRECTION FINDER	Y / N				
	GPS BUOYS	Y / N				How many ?
	DOPPLER CURRENT METER	Y / N				
	XBT (BATHYTHERMOGRAPH)	Y / N				
	VMS - 1 System:	Y / N	ALC			Seals intact Y / N
	VMS - 2 System:	Y / N	ALC			Seals intact Y / N

COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone #	MOBILE: Y / N	Phone #
	OTHER	FACSIMILE:	Y / N	Fax #	EMAIL: Y / N	Email:
INFORMATION SERVICES	WEATHER	WEATHER FAX	Y / N	SATELLITE MONITOR	Y / N	
	OTHER	Y / N	Phytoplankton Y / N	SST Y / N	Sea Height Y / N	

FISHING GEAR

		USAGE
MAINLINE HAULER	Y / N	
BRANCHLINE HAULER	Y / N	
LINE SHOOTER	Y / N	
AUTOMATIC BAIT THROWER	Y / N	
AUTOMATIC BRANCHLINE ATTACHER	Y / N	
WEIGHING SCALES	Y / N	
* *NEW*		

MAINLINE:	MATERIAL	LENGTH	DIAMETER
		nM	mm

BRANCHLINE MATERIALS:		WIRE TRACE:
	1)	
	2)	
	3)	Y / N

HOOKS	JAPAN size	JAPAN %	CIRCLE size	CIRCLE %	"J" size	"J" %	OTHER type	OTHER size	OTHER %

SAFETY EQUIPMENT

LIFE JACKET

AVAILABILITY (circle one)

PROVIDED FOR OBSERVER:	Y / N / O
SUITABLE SIZE:	Y / N
Easy / Moderate / Hard	

No. of **LIFE BUOYS / LIFE RINGS**

EPIRBs (No)	Total	Exp.
406		
other		

LIFE RAFTS — No. of people and Inspection due date (D) or last date of inspection (L) (**D**-mm/yy or **L**-mm/yy)

1	2	3	4

REFRIGERATION METHOD

BLAST FREEZE	Y / N	REFRIGERATED SEA WATER / BRINE	Y / N	OTHER STORAGE (describe in trip report)
ICE	Y / N	CHILLED SEA WATER	Y / N	Y / N

OBSERVATIONS / COMMENTS
OTHER GEAR
UNUSUAL USE OF GEAR
(write brief notes here along with a reference page number to a full description written in diary and trip report)

USAGE CODES (for "USAGE" columns)

- 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

GENERAL INFORMATION

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'.

If an observer trip is not over a normal complete fishing trip the reasons why must be in the trip report - also see "*Partial trips* " notes, below.

TRIP DETAILS

Observer Name : Print first name and family name in full (e.g. "John Masa").

Observer Trip ID Number : 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").

Departure (Ship Date and Time) } Print date using "day day/ month month / year year" format.
Return (Ship Date and Time: } Print time using 24 hour "hour hour : minute minute" format.
USE SHIP'S TIME

also read ***N.B.*** *for departure/return port*

(e.g. Print five past one on the afternoon on 3rd of January, 1996 as "03/01/96 - 13:05").

Departure Port / Return Port : Record in both boxes even if it is the same port.

N.B.: an observer trip starts only once the actual vessel to be observed is boarded and ends when disembarking that vessel.

Partial trips - If you meet your boat at sea, departure day / time is when transfering between boats. Departure port is "At sea".
If you transfer off your boat to another, day and time of return is when you transfer. Return port is "At sea".

Multiple trips - treat work on 2 (or more) different vessels while at sea as 2 (or more) trips, each with its own forms.

VESSEL *and* CREW NATIONALITY

Vessel Name, Vessel Owner, Vessel Captain, Fishing master : Print full names whenever possible.

Country Registration : Number issued by country in which the vessel is registered (e.g. "ME1-808").

Flag : Name of country in which vessel is registered (e.g. "Belize") even if it comes from another country, such as Korea.

International radio call-sign (IRCS) : Do not confuse with Registration No. Note in report if vessel has no proper IRCS.

Fishing Permit or Licence Number(s) : If vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip.
If vessel fished under a multilateral treaty, then print the permit number issued to vessel under the multilateral treaty
If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.

Captain and *Fishing Master* (under "Nationality"): Record the nationality of the Captain and/or the Fishing Master (eg: Taiwan).

Other Crew : For each nationality of crew (not Captain or Fishing Master) report nationality and how many of that nationality.

ELECTRONICS (**circle "Y" or "N" (yes or no) to show if each item is present or not present on board**)

* *New* : Empty lines are to record new equipment not listed. Write about new equipment in "Comments" and trip report.

Usage : use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used

VMS - 1 and *VMS - 2* : Record system type (e.g.: FFA approved, Argos) for each "vessel monitoring system" used by the vessel.
System type : If only 1 system record next to VMS-1. If 2 systems record FFA approved at VMS-1 and other system at VMS-2.
ALC make and model : Record manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model, if possible.
Seal intact ? A good (intact) seal is bright silver. A seal that has been interferred with has black crinkly lines through it.

Communication services : If vessel uses satellite and/or mobile phone and/or fax and/or email address, record contact details.

Fishery Information Services : Vessels may receive real-time information on some oceanographic features.
Circle Y or N to show if they get information on sea-surface temperature (SST), phytoplanton densities or sea height.
If they are receiving another type of information record that in "Comments" and write about it in your trip report.
If "Y", record the *url* (website address) below the "Y / N" and write more about the website in your written report.

FISHING GEAR (**circle "Y" or "N" (yes or no) to show if each item is present or not present on board**)

Weighing scales : If weighing scales used to weigh retained fish are on-board, circle "Y" (yes)

Mainline : Write down the material the mainline was made out of i.e monofilament or tarred rope
Write down the total length of the mainline in nautical miles. You will need to ask the Captain to get this information.
Get the diameter of the mainline. Use small callipers to measure the width of the mainline.

Branchline : Record all types of material used in branchline - could include: monofilament, coloured polyester, tarred rope,

Wire trace : Indicate if wire trace (wire just before the hook) was used in the branchline. sekiyama wire, etc.

Hooks : Show type (Japan tuna, circle or "J" (big game)), size and an approximation of the usage (as % of total hooks used).

SAFETY EQUIPMENT (**obtain as much information as possible without intruding**)

Life jacket : if observer's (or fisheries') own, circle "**O**". Else circle "**Y**" or "**N**" to show if vessel showed one for observer's use.
Was it a good size ? Was it (*easy*) available, available but not easy (moderate) to get to, or (*hard*) to find

Lifebuoys/life rings - count all to be found *EPIRBS* - count total and count any with expired battery renewal dates.

Life rafts - find info on labels on life-rafts. If, **after careful check**, dates are not found, record "ND" for 'not displayed'.

REFRIGERATION METHOD (**circle "Y" or "N" (yes or no) to show if each item is present or not present on board**)

N.B.: There may be more than one refrigeration method so record yes or no for each one.

Other storage : If another refrigeration or other storage method is observed descibe as much as possible about it in the trip report.

OBSERVATIONS / COMMENTS, OTHER GEAR, UNUSUAL USE OF GEAR

Write notes on anything special observed about this boat, its various equipment, or crew, when compared to other boats.
Comment if equipment is not working, not used or is used in an unusual way. Describe any fishing gear that is different equipment you see on other longliners and record make, model, special characteristics and usage of this new gear.
If there is lots to write about (good) write it in the observer diary and in a special section in the trip report then write just brief notes here and along side write in references to the relevant page numbers in the diary and observer trip report.

SPC/FFA REGIONAL LONGLINE OBSERVER - SET and HAUL INFORMATION — FORM LL - 2 / 3

REVISED DEC. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	SET No.	PAGE OF

LONGLINE SET SPECIFICATIONS

No. OF HOOKS PER BASKET		LINE SETTING SPEED - m/s kts (circle one)		VESSEL SPEED FOR SETTING (kts)	
TOTAL No. OF BASKETS		BRANCHLINE SET INTERVAL (s)		**SHARK LINES on floats (Hook No.99s)**	
TOTAL No. OF HOOKS		BETWEEN BRANCHLINES (m)		Number.:	LENGTH (m):
LENGTH OF FLOATLINE (m)		LENGTH OF BRANCHLINES (m)		WERE TDRs DEPLOYED ?	Y / N

TARGET SPECIES ('X' to indicate)	
TUNA	
SWORDFISH	
SHARK	

ALL MUST BE RECORDED

START OF SET

SHIP'S DATE AND TIME D D	M M	Y Y	h h	m m

UTC DATE AND TIME D D	M M	Y Y	h h	m m

SET LOG

	SHIP'S TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W
START SET					
Were all "Start" and "End" positions observed directly? Y / N — If "N" explain in comments					
END SET					

UNUSUAL SET DETAILS

BAIT USED (total weight for EACH species)

SPECIES						
(KG)						
HOOK NOs						

LIGHT STICKS No. USED:

HAUL LOG

	SHIP'S TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W
START HAUL					
END HAUL					

COMMENTS *- use for comments from both setting and hauling. Use lower portion for personal workings if necessary.*

Ship's time	

TOTAL BASKETS OBSERVED DURING HAUL (add up the total baskets monitored from the bottom of each Form LL-4 used in this set)

DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ? YES NO (circle one)

reported in diary pg #

SET and HAUL INFORMATION

Use as many Form LL-2/3s per set and haul as necessary (usually one). N.B. (***VERY IMPORTANT***) - if there is a species target change part way through setting (e.g. completely different branchlines or very different setting depths are used) even if still using the same mainline, then start a new Form LL-2/3 for the different section of the set. (For clear and major changes only !) **This will be a new set with new *Start of Set Time* and *Set #***. Be careful, **during haul**, to change to the second Form LL-2/3 and start a new Form LL-4 for the different set, at the correct place.

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 H. Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

Set No.: (for observer use only) - start at "Set No. 1", "Set No. 2", etc., all through a trip.

Page of: Number Form LL-2's through trip as Page 1, Page 2, Page 3, etc. At end of trip, check all pages are there (again). Put the last page number on every page (e.g. if 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").

No. of hooks per basket: See the basket diagram in bottom right for example

Total No. of Baskets, *Total No. of Hooks*: These are the totals for the entire set.
<*Total No. of Hooks*> = <*Total No. of Baskets*> × <*No. of Hooks per Basket*>

Length of Floatlines (m), *Length of Branchlines (m)*: See diagram opposite

Vessel Speed (kts): Watch the GPS or speed log over several seconds to estimate average speed of vessel. Record to one decimal point (e.g. "9.7 " knots).

Line Setting Speed - m/s kts (circle one): Record only if the vessel has a line shooter - must **circle** correct "m/s" or "kts". N.B.: (m/sec = kts/2) and (length = sec **x** m/sec)

Branchline Set Interval (s): Recorded only from vessels with branchline timers.

Between branchlines (m): Distance *between branchlines* may be hand measured (in metres) or calculated by the observer using the formula: *Line Setting Speed* x *Branchline Set Interval*, or if these not available, ask captain, fishing master or bosun for the distance *between branchlines*)

Shark lines on floats (Hook No.99s): If vessel has special lines tied directly to the floats to catch extra sharks, count the total *Number* used in the set. What is their usual *Length (m)*? N.B. Do not count a shark line on a float as one of the "*hooks per basket*" (see basket diagram)

Were TDRs deployed ? Y / N: Circle Y (yes) if one or more temperature depth recorders are deployed at any time during the set

Target Species - Cross the box/es next to the main species the vessel is targeting during this set. It is usually just one species but it could be more than one. **N.B.** to target a species gear must be set especially to catch that species. Because bycatch is retained does not mean it was targetted.

Unusual Set Details: The information that has been recorded in the "Longline Set Specifications" fields should represent the most common or average occurrence in the set. If this changes by much, sometimes, record the what the change is under "Unusual Set Details". Also note if the branchlines in the same basket are of different lengths.

Start of Set, *Ship's date*, *Ships time*, *UTC date*, *UTC time*: At the start of each set you must record the time and date that the ship's clock (and your watch) are set to, and the UTC time and date as read from the GPS. At all other times use only Ship's time.
Remember UTC date can be different from the Ship's date.

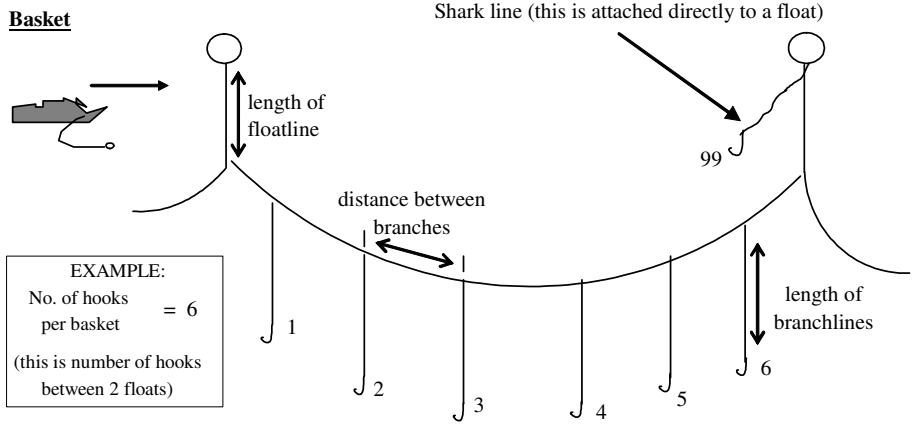
Set Log and *Haul Log* - this form has some **very important** changes to the pre-2004 forms
Start and *End* of *Set* and *Haul* to be completed for every single set even if not fully monitored.
The observer should read the GPS directly and must **explain** in "*Comments*" if they have not.
The remaining lines in the *Haul Log* must be filled at approximately every hour.
Latitude, *Longitude*, *N*, *S*, *E*, *W*: Record GPS positions in degrees, minutes and decimals, to three decimal places. Do not forget to enter north or south and east or west correctly

Bait Used - *Species*, *Kg*: Record species and weight (in kg) of each bait used.
Bait Used - *Hook Nos*: Usually, if a boat uses more than one bait species it will put the same bait on the same hook numbers (see diagram) in each basket (e.g.: squid might go on hooks 3 and 4 while sardines go on hooks 1, 2, 5 and 6). Record the hooks for each bait under "hook nos" alongside that bait species.
No. of Light Sticks Used: If lightsticks were used record the total number used in the set.

Comments: Note significant conditions that affect set strategy or cause problems - unusual wind/sea state; SSI contacts; accidents; any unexpected event.
Include events from *Soak Time*, even if asleep but found out from crew later.
Record reasons that observer monitoring stopped for 30 minutes or more.

If appropria
record ship's t
in column
next to comm

Total Baskets Observed and *Events on FORM GEN-3* - These fields must be completed.



SPC/FFA REGIONAL LONGLINE OBSERVER CATCH MONITORING

FORM LL - 4

REVISED DEC. 2007

OBSERVER NAME	OBSERVER TRIP ID NUMBER	SET No.	PAGE OF

VESSEL NAME	MEASURING INSTRUMENT	SHIP'S START OF SET DATE AND TIME					START OF HAUL DATE		
		D D	M M	Y Y	h h	m m	D D	M M	Y Y

CATCH DETAILS

SHIP'S TIME	HOOK No.	SPECIES CODE	CONDITION CODE CAUGHT	DISCARD	LENGTH (cm)	CODE	WEIGHT (kg)	CODE	FATE CODE	SEX M, F, I, U		COMMENTS and TAG NUMBERS

← Tally area | Baskets monitored while filling this page: | Total:

CATCH MONITORING

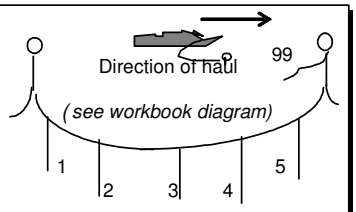
Notes on FORM LL - 4

OBSERVER NAME	OBSERVER TRIP ID NUMBER	SET No.:	PAGE OF
VESSEL NAME	SHIP'S START OF SET DATE AND TIME D D M M Y Y h h m m	START OF HAUL DATE D D M M Y Y	

This header should be filled in completly, as described in the notes for FORM LL-2/3

CATCH DETAILS

SHIP'S TIME	HOOK No.	SPECIES CODE	CONDITION CODE CAUGHT	CONDITION CODE DISCARD	LENGTH (cm)	LENGTH CODE	WEIGHT (kg)	WEIGHT CODE	FATE CODE	SEX M,F,I,U		COMMENTS and TAG NUMBERS
1720	1	BET	A1		152	UF	85	WW	RGG	F		Gonad sample No.3
*							7	GG				example of 2 weights *



1st hook hauled after a float is No.1.

Accurate **Hook number** is not easy when there are more than 8 hooks in a basket or fishing is very busy. An estimate is O.K. in such situations.

For shark hooks record hook number 99.

Record only when scales onboard.
Weight codes describe the state of a fish at the time it was weighed. This can be different to the state of the fish recorded as part of fate code.

Code	Description
WW	Whole weight
GG	Gilled and gutted
GH	Gutted and headed
GT	Gilled, gutted and tailed
GX	Gutted, headed and tailed
GO	Gutted only (gills left in)
FW	Fillets weight
TW	Trunk weight

* If possible, weigh before and after processing. Put 2nd weight and code on a 2nd line (as in example).

Sex: **M** = male, **F** = female, **I** = indeterminate (**I** - you inspected the gonads but could not decide what sex it is) **U** = unknown (**U** - the gonads were not checked)

Empty column is to be used for extra information when specially requested. Fill in the title before using this column.

Use the **COMMENTS** column for other information you think important about a particular catch item e.g. - to record sample numbers if collecting samples, or to record number of photograph if taking photos .

Hook No: **99**. All lines that are attached to floats to catch sharks must be recorded as Hook No. 99

SHIP'S TIME	HOOK No.	SPECIES CODE	CONDITION CODE CAUGHT	CONDITION CODE DISCARD	LENGTH (cm)	LENGTH CODE	WEIGHT (kg)	WEIGHT CODE	FATE CODE	SEX M,F,I,U		COMMENTS and TAG NUMBERS

Condition codes which describe the animal's health, are needed for when it is first **CAUGHT** and **again** if it is **DISCARDED** (released, thrown away, escaped).

Code	Description
A0	Alive (not categorized into A1, A2, or A3)
A1	Alive, healthy
A2	Alive - injured, distressed
A3	Alive, but dying
D	Dead
U	Condition unknown

Length code describes what part of the fish or animal is being measured

Code	Description
TL	- tip of snout to end of tail
UF	- upper jaw to fork in tail
LF	- lower jaw to fork in tail
PF	- pectoral fin to fork in tail
TW	- total width (tips of wings - rays)
CL	- carapace length (turtles)
NM	- not measured

Fate codes descibe whether the fish was kept (retained) or thrown away / released (discarded). Also - how and/or reason processed / discarded
Important to select one **most informative** code !

Code
RGG - Retained - gilled and gutted (for sale)
RGT - Retained - gilled gutted and tailed (for sale)
RWW - Retained - whole
RPT - Retained - partial (e.g. fillet, loin, trunk)
RFR - Retained - both fins and trunk (sharks)
RHG - Retained - headed and gutted (billfish)
RSD - Retained - but shark damaged
RCC - Retained - for crew consumption
RGO - Retained - gutted only.
ROR - Retained - other reason (specify)

DFR - Discarded trunk - fins retained (sharks)
DGD - Discarded - gear damage (tuna only)
DSD - Discarded - shark damage
DWD - Discarded - whale damage
DUS - Discarded - uneconomic species
DDL - Discarded - too difficult to land
DSO - Discarded - (struck off close)
DCF - Discarded - (cut free or far)
DTS - Discarded - too small (target species)
DPQ - Discarded - poor quality
DPA - Discarded - species of special interest - **alive** (DPA)
DPD - **dead** (DPD)
DPU - **unknown condition** (DPU)
DOR - Discarded - other reason (specify)
ESC - Escaped

Species codes. Use the FAO 3-letter codes.
Most commonly caught longline species are listed here but you should always carry a full list of FAO species codes.

Code	Common Name
YFT	- Yellowfin
BET	- Bigeye
ALB	- Albacore
SKJ	- Skipjack
MLS	- Striped Marlin
BUM	- Blue Marlin
BLM	- Black Marlin
SWO	- Swordfish
SFA	- Sailfish
SSP	- Short-billed Spearfish
WAH	- Wahoo
DOL	- Mahi mahi
LAG	- Moonfish (Opah)
OIL	- Oilfish
LEC	- Escolar
RRU	- Rainbow runner

Code	Common Name
FAL	- Silky shark
LMA	- Long finned Mako shark
SMA	- Short finned Mako shark
OCS	- Oceanic white-tip shark
PTH	- Pelagic Thresher shark
BTH	- Bigeye Thresher shark
BSH	- Blue shark
TST	- Sickle pomfret
BRZ	- Pomfrets and Breams
BIZ	- Birds

N.B. Avoid using group codes if a species code will work

Baskets monitored while filling this page

Count (tally) the baskets (floats) that come aboard as you monitor the catch. This is important to calculate percentage of hooks monitored.

The perfect observer will monitor every hook in every basket hauled on board. However, observers are human so when monitoring stops record time and reason on a line of FORM LL-4. Record time and "returned to monitoring" on the next line when observer returns. The *basket count* is to calculate % of hooks actually monitored by observers to give scientists a true picture of how efficiently the vessel catches fish. **DO NOT count unmonitored baskets.**

Tally area	Baskets monitored while filling this page:	Total: 53

SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS

FORM LL- 5

REVISED DEC. 2007

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	PAGE OF
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	SHIP'S START OF TRIP DATE	SHIP'S END OF TRIP DATE

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 97-03* — This is page 7 → *7* *19*	
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	Don't forget !	Total number of LL-5s 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	PROCESSED WGT.		LANDED WEIGHT		COMMENTS
				UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS	FIN	(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

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

Both **Ship's Time** and **Species Code** must be recorded exactly as they are on Catch Monitoring Form (LL-4).

If using Form LL-5 but not using Form LL-4 (see * below), record sex in the comments field.

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 fin
LF	Lower jaw to fork in tail
PF	Pectoral fin to fork in tail
PS	Pectoral fin to second dorsal fin
TL	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)

Form LL-5 is to be used closely with the Catch Monitoring Form LL-4 but can be used to cover 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 on all catch. Usually only the more experienced and proven obsevers 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 LL-5.

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 POLE-AND-LINE OBSERVER GENERAL INFORMATION

FORM PL-1

REVISED DEC. 2007

TRIP DETAILS

OBSERVER NAME	DEPARTURE PORT	DEPARTURE (SHIP DATE AND TIME) D D	M M	Y Y	h h	m m
OBSERVER TRIP ID NUMBER	RETURN PORT	RETURN (SHIP DATE AND TIME) D D	M M	Y Y	h h	m m

VESSEL

VESSEL NAME	COUNTRY REGISTRATION No.	
VESSEL OWNER	FLAG	INTERNATIONAL RADIO CALLSIGN
VESSEL CAPTAIN	FISHING MASTER	
FISHING PERMIT OR LICENCE NUMBER(S)		

CREW NATIONALITY

CAPTAIN	FISHING MASTER
OTHER CREW:	How many ?
OTHER CREW:	How many ?
OTHER CREW:	How many ?

ELECTRONICS

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

			USAGE	MAKE	MODEL	COMMENTS
*	*NEW*	Y / N				
	NEW	Y / N				
	BIRD RADAR	Y / N				
	SONAR	Y / N				
	RADIO BUOY DIRECTION FINDER	Y / N				How many ?
	GPS BUOY	Y / N				
	DOPPLER CURRENT METER	Y / N				
	XBT (BATHYTHERMOGRAPH)	Y / N				
	VMS - 1 System:	Y / N	ALC			Seals intact Y / N / N/A
	VMS - 2 System:	Y / N	ALC			Seals intact Y / N / N/A

COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone #	MOBILE:	Y / N	Phone #
	OTHER	FACSIMILE:	Y / N	Fax #	EMAIL:	Y / N	Email:

INFORMATION SERVICES	WEATHER	WEATHER FAX	Y / N	SATELLITE MONITOR	Y / N			
	OTHER	Y / N	*url*:	Phytoplankton	Y / N	SST	Y / N	Sea Height Y / N

FISHING GEAR

		USAGE
AUTOMATIC POLING DEVICES	Y / N	
MAKE	MODEL	

OBSERVATIONS / COMMENTS

SAFETY EQUIPMENT

LIFE JACKET	PROVIDED FOR OBSERVER:	Y / N / O	No. of **LIFE BUOYS** / **LIFE RINGS**
	SUITABLE SIZE:	Y / N	
AVAILABILITY (circle one)	Easy	Moderate	Hard

EPIRBs (No)	Total	Exp.
406		
other		

LIFE RAFTS	1	2	3	4
No. of people and Inspection due date (D) or last date of inspection (L) (**D**-mm/yy or **L**-mm/yy)				

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

USAGE CODES (for "USAGE" columns)

- 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

N.B. - fishing can be searching, bait or tuna fishing, investihgating, etc.

GENERAL INFORMATION

Trip Details

Observer Name : Print name in full - first name first and family name last (e.g. "John Masa").
Observer Trip ID Number : 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").
Departure Port / Return Port : Record in both boxes even if it is the same port.
Departure (Ship date and time) : Date and time that vessel let go of mooring ropes or hauled anchor to leave port.
Return (Ship date and time) : The date and time when the vessel ties up or drops anchor in port.

(DD = Day) - (MM = Month) - (YY = Year) - (hh = hour) - (mm = minute)

For dates and times use SHIP'S DATES AND TIMES

Vessel and Crew Nationality

Vessel Name : Full name of vessel including a number if appropriate - No abbreviations ! (e.g. "*The Lucky* ")
Vessel owner, Vessel Captain, Fishing master : Print full names whenever possible.
Country Registration : Number issued by country in which the vessel is registered (e.g. "ME1-808").
Flag : Name of country in which the vessel is registered (e.g. "Japan").
International radio call-sign (IRCS) : The call sign the vessel uses for communications. It is sometimes painted on the side of the vessel but do not confuse it with a license number which may also be painted on the side of the vessel. Note in your report if this vessel has not got a proper IRCS.
Fishing Permit or Licence Number(s) : If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state. If the vessel fished under one or more bilateral access agreements, then record the fishing permit number issued by each of the coastal states. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty.
Captain and *Fishing Master* (under "Nationality"): Record the nationality of the Captain and/or the Fishing Master (eg: Taiwan).
Other Crew : For each nationality of crew (not Captain or Fishing Master) report nationality and how many of that nationality.
Observations / Comments : Record a few notes if you think there is anything uniquely different about this vessel or its crew. If you need to write more you should do so in a separate section of your trip report then only put a brief note here and a reference to a page number in your trip report.

Electronics

* ***new*** : empty lines are to record new equipment not listed. Write about new equipment in "Comments" and trip report.
Usage : use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used
Y / N : (Circle **"Y"** or **"N"** (yes or no) to show if each item is present or not present on board)
Comments (equipment usage) : Make a note about each piece of equipment's use during the trip (sometimes, never, very old, out of order etc.) Make a comment if it is used in an unusual way.
Binoculars : Number /Power .Write down the different powers of binoculars used and the amount in each category (example : 2 x 8 x 50, 2 x 10 x 50 and 1 x 15 x 70)
VMS - 1 and *VMS-2* : Record system type (e.g.: FFA approved, Argos) for each "vessel monitoring system" used by the vessel.
System type : If only one system record next to VMS-1. If two systems record FFA approved at VMS-1 and the other next to VMS-2.
ALC make and model : Record manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model, if possible.
Seal intact ? A good (intact) seal is bright silver. A seal that has been interferred with has black crinkly lines through it.
Communication services : If vessel has satellite and/or mobile phone and/or fax and/or email address, record contact details.
Information services : Weather info may be faxed. Weather and/or other info may be sent in other ways to onboard computer monitors. Circle Y or N to show if they get information on sea-surface temperature (SST), phytoplanton densities or sea height. If they are receiving another type of information record that in "Comments" and write about it in your trip report. If "Y", record the url (website address) below the "Y / N" and write more about the website in your written report.

Fishing Gear

Automatic Poling devices : Record the number of automatic poling devices onboard the vessel. Mention in the comments column if they were all being used or if they were still in good working order.

Safety Equipment (obtain as much information as possible without intruding)

Life jacket : if your own (or fisheries) circle "**O**". Else circle "**Y**" or "**N**" to show if vessel showed you one for your own use Was it a good size ? Was it (*easy*) available, available but not easy (moderate) to get to, or (*hard*) to find
Lifebuoys/life rings - count all to be found *EPIRBs* - count total and count any with expired battery renewal dates.
Life rafts - find info on labels on life-rafts. If, **after careful check**, dates are not found, record "DND" for 'dates not displayed'.

Observations / Comments, Other Gear, Unusual Use of Gear

Record notes if you think there is anything special about this boat or its crew compared to others.
Comment if equipment is not working, not used or used in an unusual way. Describe fishing gear if different to equipment you see on other longliners and record make, model, special characteristics and ***usage*** of this new gear.
If you have lots to write about (good) do so in your diary and in a special section in your trip report then only put a brief note here with a reference to page numbers in your diary and trip report.

SPC/FFA REGIONAL POLE AND LINE OBSERVER DAILY LOG

FORM PL - 2

REVISED DEC. 2007

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	ACTIVITY CODE	SCHOOL ASSOC.	SCHOOL DETECT	BAIT SPECIES 1	BAIT SPECIES 2	BAIT SPECIES 3	No. of BUCKETS	BEACON / PAYAO #	COMMENTS
.													

START OF DAY

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

ALL MUST BE RECORDED

BUCKETS OF BAIT ONBOARD:

ACTIVITY CODES

1 Spraying, chumming or poling
2 Searching
3 Transit
4 No fishing - breakdown
5 No fishing - bad weather
6 In port - please specify
7 Anchored in bait grounds
8 Investigate free school
9 Investigate floating object
10D Deploy- raft, FAD or payao
10R Retrival - raft, FAD or payao
11 No fishing - drifting at day's end
12 No fishing - drifting with log
13 No fishing - other (please specify)
14 Bait fishing
15R Retrieve - Beacon (change only)
15D Deploy - Beacon (change only)

SCHOOL ASSOCIATION

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

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

FLOATING OBJECT AND SCHOOL SIGHTINGS	FLOATING OBJECT AND SCHOOL SIGHTINGS *Example* Tally / Total	Anchored floating objects (with **NO** school) Tally / Total	Anchored floating objects (with school) Tally / Total	Free floating objects (no anchor) (with **NO** school) Tally / Total	Free floating objects (no anchor) (with school) Tally / Total	Free schools Tally / Total
	𝍸 6					

DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?

YES NO *(circle one)*

OBSERVERS DAILY LOG

Notes on FORM PL-2

OBSERVER NAME	First name first and last name last. Be sure to print full name.
VESSEL NAME	Vessel's full name with no abbreviations. E.g., the "Captain Kalahari 3" should not be abbreviated to the "Capt. Kalahari".
OBSERVER ID NUMBER	This number is issued to you before you leave port and should be used on all forms. The number will not change for the entire trip. Place at the top of every Form or other paper collected.
PAGE OF	Number each Form PL - 2 sequentially. Continue until trip is completed. The last page number will be number for the "of" field. For example: If a total of 36 PL -2's forms were used during a trip, the fifth page used would be written as "page 5 of 36"

START OF DAY

SHIP'S DATE	Write the date that the officers and crew use on the vessel
SHIP'S TIME	Write the time that the officers and crew are using (the time that is on the ship's clock).
UTC DATE	Get the date from the GPS at the same time as you record the date the vessel is using. Note that the date on the GPS (UTC) could indicate a different date. Still report this date.
UTC TIME	Get "UTC time" from the GPS at the same time as you record "Ship's time". Note that "UTC time" (from GPS) will usually differ from "Ship's time" unless the vessel is using
SHIPS TIME	Record the "Ship's time" every time the activity changes (as often as necessary). Record all codes and other details for each activity.

BUCKETS OF BAIT ONBOARD

At start of day assess amount of bait onboard available for fishing (left over from previous day plus bait caught last night).

ACTIVITY LOG

LATITUDE and LONGITUDE	Get this from the GPS and always record in degrees, minutes and minutes to 3 decimal places. This is how it is usually shown on the screen. If the GPS shows seconds instead of 3 decimal places of minutes, then record the seconds but note that you recorded seconds in the comments column.
Latitude	dd = degrees; mm = minutes; mmm = decimal minutes. If less than 10 degrees, always put zero in front of number (e.g.: "5" is written "05")
Longitude	ddd = degrees; mm = minutes; mmm = decimal minutes.
N / S and E / W	Check the GPS . This is very important ! Never forget to record N, S, E or W beside the position.
ACTIVITY CODE	These codes are on the front. Only use one activity code at a time even if two codes seem to fit. Choose the best one.. If there are two possible activities for the same time, record the code for the main activity on the sheet, then comment on the other activity in the comments column.
(Activity Code "1")	"Spraying, Chumming or Poling" starts when the vessel starts trying to attract fish by chumming bait, using sprayers or other means "Spraying, Chumming or Poling" ends when no more fish are being caught and vessel starts searching for another school or starts another activity (new Activity Code). Small periods (minutes) of not fishing are common (when vessel moves to catch up with fish for example) and should not mark the end of a Code "1" period.
SCHOOL ASSOC.	The "SCHOOL ASSOCIATION" codes are used to show if the school with a floating object, a marine mammal or whale shark or is a free school. If it is a free school then the "SCHOOL ASSOCIATION" codes show if it is feeding on a school of baitfish (not the vessel's bait) or not associated with anything.
DETECT	Use "HOW DETECTED" codes to **best** describe how your boat found the fish. If more than one code fits use the one that best describes how the fish were found.
BEACON/PAYAO #	Record the beacon or payao number used to mark a log, payao or FAD. Write a 'B' before a beacon number and write a 'P' before a payao number.
COMMENTS	Make notes about anything that you think has something to do with information on the daily log. If you need more room for writing this information put it in your diary and write "see Diary page no ??" in the comments.

BAIT FISHING

SPECIES 1, 2, 3	When the activity code is "14" (Bait fishing) record the three most common species that are caught. Use FAO species codes which should be provided. Only use the family group codes provided if you are unable to identify the bait down to species level.
NO. OF BUCKETS	Record the total number of buckets of bait that are lifted on to the boat to put into the bait wells.
IMPORTANT NOTES !	If the boat has run out of bait and so the boat changes activity, record "No More Bait" in the comment column in the line that you record the activity. The Activity Code "Bait fishing" starts when the vessel first starts to set any gear (not counting the lights) to catch bait. Bait fishing ends (the next Activity starts with a new code) when the bait catching gear is pulled back on board again.

FLOATING OBJECTS AND SCHOOL SIGHTINGS

IMPORTANT NOTES !	A floating object can be a tree, log, drum, FAD, payao or any other floating debris. Fish not associated with a floating object are free schools. Free schools can be either "feeding on bait fish" or completely on their own "unassociated".
Tally Total	During the day make a stroke every time you see something. At the end of the day add the strokes and write in the total.
Floating objects (with no school)	Make a stroke here every time you see a floating object that doesn't seem to have tuna with it.
Schools under floating objects	Make a stroke here every you see a floating object with tuna swimming around it.
Free schools	Make a stroke when you see tuna that has no floating object with it. These tuna may or may not be feeding on bait fish.

SPC/FFA REGIONAL POLE-AND-LINE OBSERVER CATCH DETAILS

FORM PL - 3

REVISED DEC. 2007

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SHIP'S DATE DD	MM	YY	SPRAYING, CHUMMING and POLING time:	START h h	m m	FINISH h h	m m	No. POLES OPERATING CREW	AUTO	MEASURING INSTRUMENT

COMMENTS

TARGET SPECIES				OTHER SPECIES				
SPECIES CODE	FATE CODE	CATCH mT	CATCH No.	SPECIES CODE	FATE CODE	CATCH mT	CATCH No.	COMMENTS
SKJ								
YFT								
BET								

How many tags were recovered ?		TAG #	SPECIES	SEX	LENGTH (cm)	WEIGHT (kg))

SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)
1		21		41		61		81	
2		22		42		62		82	
3		23		43		63		83	
4		24		44		64		84	
5		25		45		65		85	
6		26		46		66		86	
7		27		47		67		87	
8		28		48		68		88	
9		29		49		69		89	
10		30		50		70		90	
11		31		51		71		91	
12		32		52		72		92	
13		33		53		73		93	
14		34		54		74		94	
15		35		55		75		95	
16		36		56		76		96	
17		37		57		77		97	
18		38		58		78		98	
19		39		59		79		99	
20		40		60		80		100	
∑ lengths		∑ lengths		∑ lengths		∑ lengths		∑ lengths	

	TARGET SPECIES			OTHER SPECIES			
	SKJ	YFT	BET				
Number Sampled:							
Sum of lengths:							
Average length:							

CATCH DETAILS

Use a new Form PL-3 for each continuous period of "SPRAYING, CHUMMING and POLING".

"SPRAYING, CHUMMING and POLING" includes any activity directly related to getting fish on board. Spraying, chumming and poling occurs only after the fish are found by searching or at an anchored FAD. Short times (minutes) not spraying, chumming or poling are still part of the same Activity Code "1" period.

There is no need to complete this form if no fish are caught, but **be sure** to record the details (start time, position, activity code "1", etc.) on Form PL-2 (Daily Log). Don't forget to correct the "START TIME" on this Form PL-3 if you then use it for the next period of "spraying, chumming and poling" activity.

Details

VESSEL NAME	Full name. E.g., don't abbreviate the "*Captain John Smith"* to the "*Capt J. Smith"*.
OBSERVER NAME	First name first, last name last, make sure to print full name.
OBSERVER ID NUMBER	This number is issued before you leave port and should be used on all forms. The number will not change for entire trip. Place wherever required on all forms.
PAGE OF	Number each Form PL-3 sequentially through trip. The last page number will be number for the "of " field. E.g., if a total 26 Form PL -3's were used, first form would be "Page 1 of 26", 16th "Page 16 of 26" and the last "Page 26 of 26".
SHIPS DATE	The date that is being used on the vessel by officers and crew.
SPRAYING, CHUMMING, POLING } times: START -	When the vessel starts trying to get fish to bite by chumming bait, using sprayers It is very **Important** to record the start time exactly the same as you record it under "SHIP'S TIME" when entering activity code "1" (Spraying, chumming and poling) on Form PL-2, the Daily Log.
FINISH -	When no more fish are being caught and the vessel starts another activity. The same time as "SHIP'S TIME" for start of next activity recorded on Form PL-2. Short times of no spraying, chumming or poling are included in the same period.
No. OF CREW POLING	This should be one count taken when the fishing activity is well established (not right at the beginning or right at the end).
No. OF FISH SAMPLED	Try to measure at least 50 fish per fishing period and up to 100 fish for big catches. Grab any fish, regardless of species or size, that is in your **random** sampling area.
MEASURING INSTRUMENT	And its size, e.g.: 1m measuring board, 1.5m calipers, 2m deck tape, etc.
COMMENTS	Use this especially to describe how you sampled and for notes about discards.

Catch and Sample

SPECIES CODE	Use an FAO three letter code. Main species are listed on the bottom of the form. Important ! Use a separate line to record discards amounting to more than just a few (5 or 6) fish. Give the reason for discard in the "COMMENTS" section above.
CATCH (mt) / (number)	Put the number or weight of fish whichever is appropriate, or both if available. All weights must be written as "mt" (metric tonnes). E.g.: 200kg is 0.2 mt.
FATE CODE	Shows what happened to the fish. Most common fate codes are in the table below.
NUMBER OF TAGS RECOVERED	Record all details, as requested, for any tags recovered in this set

Sampling

SPECIES CODE (1- 100)	Record species code for each fish you measure in the same order they are sampled.
LENGTH	The length of tuna (Upper jaw to fork length - UF) is measured from the tip of the upper jaw to the fork in the tail (caudal fork). Keep the mouth closed if possible.
∑ LENGTHS (= sum of lengths)	Only add up the lengths in the column above. This is used for data entry checking.

A Number Sampled: Write the total individual species sampled in the appropriate boxes
B Sum of Lengths: Add all the length for each species and enter in the boxes under the headings
C Average Length: Sum of lengths sampled divided by sum of number sampled for each species. C = A / B (to the nearest cm.)

Important points

1. Spread your sampling throughout the entire fishing period.
2. Always get a random sample.
3. Do not let crew select fish for you even though they are trying to assist.
4. **Be sure to separately Identify Yellowfin and Big-eye when sampling**
5. Do not measure damaged fish.
6. If using a deck tape, make sure fish is on the tape straight when measuring
7. If using a deck tape ensure the **"0"** end of the tape is placed against a flat surface or has a nose block.
8. **Record length to the nearest centimetre below down. E.g.: a 69.9 cm fish is recorded as 69 cm.**
9. Make sure that you take good notes of other species and discards while you are measuring fish.
10. Don't forget to note species code, especially when there is a change of species while you are measuring.

Fate codes:

RWW - Retained - whole weight
RGG - Retained - gilled and gutted (kept for sale)
RCC - Retained - crew consumption (onboard)
ROR - Retained - other reason (specify)
DTS - Discarded - too small
DGD - Discarded - gear damage
DUS - Discarded - undesirable species
DOR - Discarded - other reason (specify)

SPC/FFA REGIONAL PURSE SEINE GENERAL INFORMATION

FORM PS-1 (pg 1)

REVISED NOV. 2007

TRIP DETAILS

OBSERVER NAME	DEPARTURE PORT	DEPARTURE (SHIP'S DATE AND TIME) D D / M M / Y Y / h h / m m
OBSERVER TRIP ID NUMBER	RETURN PORT	RETURN (SHIP'S DATE AND TIME) D D / M M / Y Y / h h / m m

VESSEL CHARACTERISTICS

VESSEL NAME	COUNTRY REGISTRATION NUMBER		FISHING PERMIT(S) OR LICENCE NUMBER(S)
VESSEL OWNER	VESSEL FLAG	INTERNATIONAL RADIO CALLSIGN	

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

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

FISHING GEAR

MAKE / MODEL POWER BLOCK:	MAKE / MODEL PURSE WINCH:	BRAIL CAPACITY (of first brail) **BRAIL 1** mT

NET - MAX. DEPTH: **M** **Y** **F**	NET - MAX. LENGTH: **M**etres **Y**ards **F**athoms	NET - No. of STRIPS:	NET - MESH SIZE (of main body) CM IN	BRAIL CAPACITY (of second brail) **BRAIL 2** mT

BRAILING TYPE DESCRIPTION:

ELECTRONICS

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

			USAGE	MAKE	MODEL	COMMENTS
NEW -		Y / N				
NEW -		Y / N				
NEW -		Y / N				
BIRD RADAR		Y / N				
SONAR		Y / N				
GPS BUOYS		Y / N				How many ?
ECHO SOUNDING BUOY		Y / N				How many ?
NET DEPTH INSTRUMENTATION		Y / N				
DOPPLER CURRENT METER		Y / N				
VMS - 1	System:	Y / N	ALC			Seals intact Y / N / N/A
VMS - 2	System:	Y / N	ALC			Seals intact Y / N / N/A

COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone No.	MOBILE:	Y / N	Phone No.
	OTHER	FACSIMILE:	Y / N	Fax No.	EMAIL:	Y / N	Email:
INFORMATION SERVICES	WEATHER	WEATHER FAX:	Y / N	SATELLITE MONITOR	Y / N		
	OTHER	Y / N	*url*:	Phytoplankton Y / N	SST Y / N	Sea Height Y / N	

OBSERVATIONS / COMMENTS / OTHER GEAR / UNUSUAL USE OF GEAR

(write brief notes here and a full description in trip report)

USAGE CODES (for "USAGE" columns)

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

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

GENERAL INFORMATION

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	Print first name and family name in full and in correct order (e.g. "John Masa" and not "Masa, John").
OBSERVER 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").
DEPARTURE (SHIP'S DATE and TIME)	} Print date using "day day/ month month / year year" format.
RETURN (SHIP'S DATE and TIME)	} 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 "03/01/96 - 13:05").

USE SHIP'S TIME (and DATE)

also read notes below

DEPARTURE PORT / RETURN PORT: Record in both boxes …….. even if it is the same port.

N.B.:
an observer trip officially starts and ends only when the vessel on which the catch is actually observed is boarded and disembarked.

Partial trips
- If boat is met at sea "Departure Date and Time" is day of transfer from transit vessel to observed boat. "Departure Port" is "At sea".
- If transferred off observed boat to another vessel to return to port "Return Date and Time" is day of transfer. Arrival port is "At sea".

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 Characteristics

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.
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
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 OWNER	Name of Company or Person who owns the vessel. This should be in the Registration Papers.
VESSEL FLAG	Country where vessel is registered. E.g.: Japanese longliners are usually registered in Japan so their Flag State is Japan. But sometimes a vessel comes from one country and registers in another so has a different "Flag State" - known as a flag of convenience.
INTERNATIONAL RADIO CALL SIGN	This is the radio signature the vessel uses when contacting other vessel radios or shore based radios. The call sign usually should be the main number on the **hull** or side of the vessel. Try to confirm this before recording it.
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	The brand of the engine used in the net skiff and the power (horsepower - hp) of the engine. Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp)
VESSEL CRUISING SPEED	Ask the captain for the cruising speed of the vessel. Remember it is not the top speed.
HELICOPTER MAKE/MODEL	Brand name and model of the helicopter. Ask the pilot if you need to.
REGISTRATION NO.	Registration No. of the helicopter. Written on the side or pontoons or ask the pilot for it.
EFFECTIVE RANGE of HELICOPTER	The distance the helicopter can fly from the vessel and return safely, without running out of fuel.
COLOUR of HELICOPTER	Main colour or colours of the helicopter

Fishing Gear

POWER BLOCK - Make	Brand of main power block on the vessel.	If these can not 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.
- Model	The model of the block.	
PURSE WINCH - Make	Brand of main purse winch on the vessel.	
- Model	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 the 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, taking strips away 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. The mesh size required here is 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	
CAPACITY OF BRAIL	The capacity in **metric tonnes**. This is needed for the observer to estimate the catch brought onboard. **N.B.**: call these **BRAIL 1** and If there is a second brail onboard (mostly on Japanese vessels) also record capacity of second brail. **BRAIL 2** - referred to in PS-4s	
BRAIL TYPE	Describe the brailing operation **exactly**. This should include: how the mouth of the net was held open (i.e. with the skiff or by a boom); design of the actual brail (long or short handle, no handle, x-shaped, etc.); is the brail linked to a boom or the purse davit; etc. A full description of the brail type should be included in the observer's written report.	

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
MAKE & 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 - 1 and VMS - 2 **System type:** **ALC make and model:** **Seal intact ?**	Record system type (e.g.: FFA approved, Argos) for each "vessel monitoring system" used by the vessel. If only one system record next to VMS-1. If two systems record FFA approved system next to VMS-1 and the other system next to VMS-2. Record the manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model of the ALC unit, if possible.
INFORMATION SERVICES	Vessels may access "Fishery information services" to get instant or daily information on oceanographic features that affect fishing. Commonly accessed info., includes phytoplanton density, sea-surface temperature (SST) and sea height. Describe in written report.

Observations / Comments, Other gear, Unusual use of gear

Record notes if you think there is anything special about this boat compared to others. Comment if equipment is not working, not used or used in an unusual way.
Describe fishing gear if different to equipment you see on other longliners and record make, model, special characteristics and usage of this new gear.
If lots to write about (good) do so in diary and in a special section of the trip report. Only put brief note here with a reference to page numbers in diary and trip report.

SPC/FFA REGIONAL PURSE SEINE OBSERVER GENERAL INFORMATION

FORM PS - 1 (pg 2)

REVISED NOV. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER

WELL CONTENTS (if wells also used to store fuel, water or some item, other than fish, at some time in trip)

FUEL

WELL No.	P or S	CAPACITY (mT)	COMMENTS

WATER

WELL No.	P or S	CAPACITY (mT)	COMMENTS

OTHER

TOTAL POSSIBLE FISH STORAGE CAPACITY (in metric tonnes): → mT

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

CREW	NAME	YRS.EXP	NATIONALITY

CREW	NAME	P	NATIONALITY

Total: ← **TOTAL NUMBER OF CREW (include Captain and officers)**

SAFETY EQUIPMENT

LIFE JACKET				No. of LIFE BUOYS / LIFE RINGS
	PROVIDED FOR OBSERVER:	Y / N / O		
	SUITABLE SIZE:	Y / N		
AVAILABILITY (circle one)	Easy	Moderate	Hard	

EPIRBs (No)	Total	Exp.
406		
other		

LIFE RAFTS	1	2	3	4
No. of people and Inspection due date (D) or last date of inspection (L) (D-mm/yy or L-mm/yy)				

GENERAL INFORMATION

OBSERVER NAME	Print your name in full. Put your first name, or Christian name, first and lyour 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.

WELL CONTENTS (if wells also used to store fuel, water or some other item at some time in trip)

FUEL **WATER** **OTHER**	Record all the well numbers and capacity of the wells which contain fuel under the "FUEL" section. Record the well numbers and capacity of the wells which contain water under the "WATER" section. Record the well numbers and capacity of the wells which contain other items (not fish) under the "OTHER" section.
WELL No.	Record the vessel's well number here. Ask the Chief Enginner or have a look at the vessel's well plan.
P or S	Indicate whether the well was on the port (P) or starboard (S) side.
WELL CAPACITY	State the fish carrying capacity of this well in metric tonnes. Ask the Chief Enginner to help you if necessary.
COMMENTS	If wells contain items other than fuel, water or fish state what those items are in the "Comments" section. If wells start with fuel or water but are then cleaned fish storage, state this in the comments column (include dates).
TOTAL POSSIBLE FISH STORAGE CAPACITY (in metric tonnes):	Add up the total possible fish storage capacity for all the vessel's storage wells put together, whether or not the well is also sometimes used for other things (fuel, water, etc.). Place the vessel's total fish carrying capacity in metric tonnes here. This is important information. Ask to see the vessel's well plan or get the Chief Enginner to help you if necessary.

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. (Captain's)	To be recorded if readily available but not necessary if obtaining it will in any way hinder other observer activities on board.
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 !

SAFETY EQUIPMENT (obtain as much information as possible without

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

COMMENTS or DRAWING of WELL PATTERN

SPC/FFA REGIONAL PURSE-SEINE OBSERVER DAILY LOG

FORM PS - 2

REVISED NOV. 2007

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)	WIND (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	FAD / PAYAO #	BUOY #	COMMENTS (and **Set No.** - from PS-3)
-	-													

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 No fishing - Drifting at day's end
12 No fishing - Drifting with floating object
13 No fishing - Other reason (specify)
14 Drifting -With fish aggregatting lights
15R Retrieve radio buoy
15D Deploy radio buoy
16 Transhipping or bunkering
H1 *Helicoptor takes off to search*
H2 *Helicopter returned from search*
---

record FAD, payao or buoy number if any

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

Activity code 3 - "Transit"
Use this code carefully - see form change notes in front of workbook. Transit cannot be used for any fishing related activity.

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

OBSERVER'S DAILY LOG

Notes on FORM PS-2

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 the 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")

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.

Beacon / payao #: Record the number off any beacon used to mark a log, payao or FAD.
Record number of an anchored FAD or payao whenever a boat investigates or sets on it.
Write a "B" before a beacon number and write a "P" before payao numbers.

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

Floating object and school sightings: Through each day try to keep count of 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 significant 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.

Start of day: At the start of each day you must match the date and time on the ship's clock
(and observer's watch) to the UTC time and date as read from the GPS.

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 that scientists use to make corrections
to Ship's date and time when it is used incorrectly, as it often is. Once a day, record Ship's
and UTC date and time at the same moment. UTC time is normally got from the GPS.
Remember that UTC date is **sometimes** different from the 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 *activity code* "1", "8" or "9" also use *school association* (*tuna*) and *how detected* codes,
otherwise the school association (tuna) and how detected code fields must be dashed !
U**se codes 15R and 15D whenever a vessel retrieves or deploys a buoy set** on a FAD or log
- if changing buoys use 15R on one line and 15D on the next and record both buoy numbers.
If using **code 16** remember that **transhipment** includes any transfer between vessels
Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main
activity for each take off and each 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.)
Depth sounder/sonar - **do not** use *code 5* when investigating an already found object or fish
Anchored FAD / payao - use *code 7* only if FAD/payao found because its position is recorded

School Association (***tuna***): Use the "School Association" code that best describes whether
tuna being targetted are with floating object, animal, feeding on baitfish or unassociated.
If it is an unusual **tuna** association please comment and make notes in your diary.

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 diary; record your diary page No. on this PS-2 form.
If there was no incident for the day circle **No**.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REVISED NOV. 2007

OBSERVER NAME	VESSEL NAME	PAGE OF (SET No.)

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

SET SEQUENCE TIMES

EVENT:	START OF SET (SKIFF OFF)	BEGIN PURSING (WINCH ON)	END PURSING (RINGS UP)	BEGIN BRAILING	END BRAILING	END OF SET (SKIFF ON BOARD)
TIME:						

CUMULATIVE CATCH ONBOARD (mT)

(a) ONBOARD TOTAL BEFORE THIS SET — obs / ves

(c) from previous PS-3

+ / - fish transfers onto or off vessel between sets

+ (b) TOTAL TONNAGE RETAINED THIS SET — obs / ves

Is this vessel tonnage only from this one set ? **Y / N**

= (c) NEW ONBOARD TOTAL ((a) + (b)) — obs / ves

OBS

TOTAL TUNA THIS SET total catch minus other species — mT

SUM OF ALL BRAILS (see PS-4)

BRAIL 1

BRAIL 2

TOTAL / DISCARDED / RETAINED — SKJ - YFT - BET

SPECIES	SKJ	YFT	BET
YES / NO			
approx. %			
OBS (mT)			
DISCARDED SKJ - YFT - BET			
YES / NO	SKJ	YFT	BET
FATE			
OBS (mT)			
FATE			
OBS (mT)			
VES (mT)	SKJ	YFT	BET
RETAINED SKJ - YFT - BET			
FATE	RWW	RWW	RWW
OBS (mT)			
VES (mT)	SKJ	YFT	BET

OTHER SPECIES

SPECIES CODE	FATE CODE	OBSERVER (mT)	OBSERVER NUMBER	VESSEL LOG (mT)	VESSEL LOG NUMBER	COMMENTS

LARGE TUNA IN CATCH

> 80 cm (> 9kg / > 20lb)

SPECIES:

approx. — % of wgt. of all tuna: **%** — No.

TOTAL CATCH (all species, including discards): **mT**

TAGS How many tags were recovered ?

(Record sp. & tag Nos below in comments Fill tag recovery forms!)

COMMENTS

SPECIES CODES

SKJ	Skipjack	ABU	Sergeant major	OCS	Oceanic whitetip
YFT	Yellowfin tuna	AMX	Amberjack	BSH	Blue whaler shark
BET	Bigeye tuna	BAR	Barracudas	FAL	Silky shark
		BAT	Batfishes	MAK	Mako shark
FRI	Frigate tuna	CXS	Bigeye trevally	SPN	Hammerhead sharks
BLT	Bullet tuna	DOL	Mahi mahi	THR	Thresher sharks
KAW	Kawakawa	RRU	Rainbow runners	RHN	Whale shark
		FLF	File fish	MAN	Manta ray
ALB	Albacore	TRI	Trigger fishes	MOX	Sunfish
		KYC	Drummer	SQU	Squid
WAH	Wahoo	MSD	Mackerel scad	FRZ	Frigate and bullet tuna
		PSC	Man - o - war fish	TUN	Tuna (unidentified)
BUM	Blue marlin	LOB	Triple tail	TRE	Trevally (unidentified)
BLM	Black marlin	BRZ	Pomfrets / ocean breams	UNS	Fish (unidentified)
MLS	Striped marlin				
SFA	Sailfish				
SSP	Short billed spearfish	Marine mammal and turtle codes are available on Form GEN-2		BIZ	Bird (unidentified)
SWO	Broadbill swordfish				

FATE CODES

RWW	Retained - whole weight
RHG	Retained - headed and gutted (billfish only)
RGG	Retained - gilled and gutted (kept for sale)
RPT	Retained - partial (e.g. fillet, loin)
RCC	Retained - crew consumption (onboard)
ROR	Retained - other reason (specify)
RFR	Retained trunk - fins retained (shark only)
DFR	Discarded trunk - fins retained (shark only)
DTS	Discarded - too small (tuna only)
DGD	Discarded - gear damage (tuna only)
DVF	Discarded - vessel fully loaded
DUS	Discarded - unwanted species
DSD	Discarded - shark damage
DWD	Discarded - whale damage
DPQ	Discarded - poor quality
DPA -	Discarded - alive (DPA)
DPD -	- species of special interest - dead (DPD)
DPU -	- unknown condition (DPU)
DOR	Discarded - other reasons (specify)

ESC = Escaped

PURSE SEINE LOG - SET DETAILS

Notes on FORM PS-3

Important (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 a 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 number 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
	Vessel (logsheet)	The exact date and time that the vessel has recorded for this set in their Regional Purse Seine Log Sheet.
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, above.
	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.
	END BRAILING	Record the time when the vessel finishes brailing (put in a dash if no fish are caught).
	END SET (SKIFF ONBOARD)	When the skiff comes on board the set is over. Record the time. Also remember to record the activity change on PS -2.
CUMULATIVE CATCH ONBOARD (from both the observer (obs) records and the vessel (ves) records) Must include fish from at sea transfers		Observer cumulative total provides an up-to-date total of the catch on board. Vessel total gives a useful comparison. (a) Go to box (a) of this PS-3 form and copy in the total catch before this set. Find this in box (c) of the last PS-3 form. (b) for box (b) observer adds together the weights of all species on PS-3 that have a fate code starting with "R". To get vessel total add tonnes of each species of retained catch on the logsheet line for this set. If, on the one line, vessel has only recorded catch from one set circle **Y** ... but if two or more sets have been combined in a single logsheet entry, circle **N**. (c) Add box (a) and box (b) together to get a new total catch on board after this set. Record it in box (c) of this PS-3.
OBS. TOTAL TUNA THIS SET		All tuna caught, including discards. It is the total catch (from brail calculations) minus the total of all other species.
SUM of ALL BRAILS (*see PS-4*)		After calculating the total number of brails on PS-4S transfer your answer here.
SKJ / YFT / BET	**TOTAL** YES / NO, approx. %, OBS (mT), VES (mT)	Observers are asked to give an approximate but careful eye estimate of each tuna species that is in the catch as follows: 1. Note whether each species is in the catch with a simple yes or no in the approriate field 2. Give a careful approximation of the percentage (by weight not numbers) of the total catch for each species that is in the set 3. Convert percentages to metric tonnes and record in the "OBS (mT)" fields for each species. 4. Copy the weights, as recorded for each species in the vessel logsheet, into the "VESS (mT)" fields (vessel weights may need to be converted to metric tonnes if the vessel uses another unit of weight, e.g.: short tons)
	DISCARDED YES / NO, FATE, OBS (mT), VES (mT)	For each species note if any were discarded for any reason with a simple yes or no in the approriate field If a yes has been recorded for a species indicate the reason it was discarded by using a suitable "Fate code" If some fish of a single species are discarded for different reasons record each reason (fate). E.g.: In the same set, some SKJ could be DTS and others may be DGD. If more than two fates for one species record the fates with most fish discarded in the two available fields for SKJ/YFT/BET and the others in the "Other Species" section. Always use only one (the best - most informative) "fate code" when two codes could apply to the same group of fish. If tuna ESCAPE from net, record species = SKJ, YFT or TUN (if mixed or unknown); fate = "ESC"; and estimate of mT. For each species and fate record the metric tonnes discarded. Record in the observer trip report how estimates are made. Check logsheet and copy weight of each species that vessel has recorded as discards. If no discards are recorded, enter "**0**". (only record a dash if unable to check logsheets --- then also explain in comments and the observer trip report)
	RETAINED OBS and VES (mT)	OBS (mT) = TOTAL OBS (mT) - DISCARDED OBS (mT). VES (mT) = as recorded on logsheets Note - in rare trip that some catch is RETAINED for other reasons (e.g.: RCC, RGG) record under other species
	LARGE TUNA IN CATCH approx % / No.	It is very important to estimate the percentage of the weight of the total catch that is made up of large tuna. If possible (if not so many large tuna in the catch) try to estimate the number of large tuna that are in the set. Else record a dash.
	> 80 cm (> 9kg / > 20lb)	Tuna are considered large if they are over 9 kg (20 lb), which is approximately 80 cm long - use this as a guideline just.
OTHER SPECIES	**SPECIES CODE**	Record every species that lands on deck with the three letter FAO species code.
	FATE CODE	Use fate codes provided to say what happened to each species landed. Rememeber 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. **E.g.:** Use one line per species or 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 of DOL and 0.04 mt WAH
	Number	Only record 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 CATCH		Everything that was caught in the net and lifted onboard - from brail count calculations on PS-4. Record in metric tonnes
TAGS	**How many tags were recovered ?**	Number of tags found from the set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	TAG #, SPECIES, LENGTH, WEIGHT SEX	When a tag is recovered, record the **tag number** and the **species** name. Measure the correct **length** (see form PS-4). If possible, **weigh**. If possible, obtain the **sex** (cut it open **if appropriate**). Note tag colour, tagging organisation and any unusual features about the specimen condition in comments section..

tags are not seen often but are very important!

SPC/FFA REGIONAL PURSE-SEINE OBSERVER
LENGTH MEASUREMENT

FORM PS - 4

REVISED NOV. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NO.	PAGE OF

SAMPLING DETAILS

SAMPLE TYPE — *Tick only one circle:* NORMAL *(random)* ( ) OTHER *(see back of form)* ( ) *if other please specify:*

BRAIL TIMES — start / end

START OF SET DATE AND TIME (see PS-2): D D | M M | Y Y | h h | m m

Which brail size was sampled on this form ? (*circle one - see PS-1*) — BRAIL 1 BRAIL 2

PS-4 FORMS USED FOR THIS ONE SAMPLE: ____ of ____ (1, 2, 3) (total)

Target No. of SAMPLES from each BRAIL

MEASURING INSTRUMENT

COMMENTS ON SAMPLING PROTOCOL

MEASUREMENTS FOR EACH SPECIES

UF - UPPER JAW TO FORK IN TAIL (TUNA, SHARK)
LF - LOWER JAW TO FORK IN TAIL (BILLFISH)
TW - TOTAL WIDTH (TIPS OF WINGS - RAYS)
TL - TOTAL LENGTH - TO END OF TAIL (FISH WITH NO FORK IN TAIL)
CL - CARAPACE LENGTH (TURTLES)

BRAIL — tallies: Full (**1**) | 7/8 brails (**2**) | 3/4 brails (**3**) | 2/3 brails (**4**) | 1/2 (**5**) | 1/3 (**6**) | 1/4 (**7**) | 1/8 (**8**) | TOTAL BRAILS | SUM OF ALL BRAILS (*see back of form*)

	No.	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*		
Pattern	1 2	3 4 5	6 7	8 9 10 11	12 13 14 15	16 17 18 19	20 21 22	23 24 25	26 27 28 29 30
fullness									
samples									

SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)
1		21		41		61		81		101	
2		22		42		62		82		102	
3		23		43		63		83		103	
4		24		44		64		84		104	
5		25		45		65		85		105	
6		26		46		66		86		106	
7		27		47		67		87		107	
8		28		48		68		88		108	
9		29		49		69		89		109	
10		30		50		70		90		110	
11		31		51		71		91		111	
12		32		52		72		92		112	
13		33		53		73		93		113	
14		34		54		74		94		114	
15		35		55		75		95		115	
16		36		56		76		96		116	
17		37		57		77		97		117	
18		38		58		78		98		118	
19		39		59		79		99		119	
20		40		60		80		100		120	

	No. / sum of lengths		No. / sum of lengths		No. / sum of lengths		No. / sum of lengths		No. / sum of lengths		No. / sum of lengths
column totals		SKJ		*column totals*		SKJ		*column totals*		SKJ	
		YFT				YFT				YFT	
		BET				BET				BET	

	TARGET SPECIES			OTHER SPECIES							
	SKJ	YFT	BET								

LENGTH MEASUREMENT — Notes on FORM PS - 4

Observer Name	Put first name first and last name (family name as it would be recorded in a passport) last.
Vessel Name	Full name of vessel (no abbreviations)
Observer Trip ID	Use number assigned to the observer by the Observer Programme, for this trip. E.g.: AZA 03-01
Page of	Number all the PS-4 forms in sequence from the start until the end of the trip.
Start Set Date & Time	Record the date and time that the ship is using, exactly as it is recorded on Forms PS-2 and PS-3.

SAMPLING DETAILS

Sample type - Normal	For standard species and length composition samples, tick normal. Species and size must be randomly collected. Target an average of 5 fish from every brail. If not possible then make sure average number is steady all through the set. For normal sampling do not measure fish collected from the net during net rolling and stacking.
(**tick in only one circle**) - Other	If sampling is not **normal** species and size composition (usually on request), tick "Other" and explain what the other is. Examples of "other" could be: BET / YFT composition; large only YFT; all discards; discards-too small; etc; only BET; etc; only bycatch; only BRAIL 1; etc. (also see 10 below).
Brail times (*start* and *end*)	Record when first brail came onboard (*start*) and when last brail came onboard (*end*) for transfer to Form PS-3.
Which brail size ?	Usually BRAIL 1., but sometimes a vessel uses two different sized brails (see PS-1). Sample one brail size on one form.If two brail sizes are used: always prepare two forms, even if only measuring from one brail size, as the "sum of all brails" must be calculated for each brail size separately! (Note: it is preferable to sample both brail sizes on to their own forms)
Forms used this sample:	Record forms used only for this sample as "number of the form used" out of "total used". Eg.: "1 of 1", "1 of 2", "2 of 3".
Target samples per brail	If "normal" sampling record No. of fish observer tried to measure from each brail. If not normal sampling record a dash.
Measuring instrument	Record whether callipers, flat ruler or deck tape was used. N.B. - do not use tape measures.
Comments on Protocol	Explain why you sampled as you did, especially if you tick "Other" or collect two samples. Were their any problems? If conditions allow, competent observers are encouraged to maintain two forms during brailing of mixed tuna sets - one for "normal" species composition and the second for "other", non-SKJ tuna species composition.
Brail *tallies*	Record a tally mark for every full, 7/8, 3/4, etc., brail that comes onboard. Count marks and write totals in corner boxes.
Total No. *of Brails*	a **simple** count of all the brails that came onboard, whether full or not full. Add numbers in all corner boxes together.
Sum of ALL Brails	must be **calculated** using the work area below. If two brail sizes are used, calculate each one on a separate form.
Brail pattern - fullness and samples - record a fullness code (1-8) and the number of fish measured for every brail that comes on board	

MAIN BLOCK

Species Code 1- 120	Record species code (see the codes on form PS-3) of fish measured in the same order they are sampled.
Column totals	To ease adding the lengths of each species in the entire sample first count each species and add the lengths of each species in each column, then add totals from each column together before making the average length calculations.

AVERAGE LENGTH CALCULATIONS (these totals are also used to check data entry, so must be accurately added)

A Number Sampled	Write in the total number of each species that were sampled in this set (add the column totals for a species).
B Sum of Lengths	Add lengths of each species sampled in each column then add the column totals for each species together.
C Average Length	To get the "average length" (C) of each species in the sample divide the "sum of lengths" (B) by the "number sampled" (A).

IMPORTANT POINTS ON THE SAMPLING PROTOCOL

1	For most sets carry out a "**Normal**" sample. Sample five **random**ly collected tuna from every brail that is brought onboard.
2	Spread your sampling throughout the entire brailing process. Try to take 5 tuna from every brail. If a specimen is missed occasionally try to get an extra one from the next brail but in general try hard to keep the number of tuna steady throughout the sampling process. If brailing is too fast measure less than 5 tuna per brail but try to sample the same number from every brail. If there are problems mention it in the comments section.
3	Always get a random sample and don't choose fish just because they are the easiest size to handle or because you haven't had one like that yet.
4	Do not include measurements from fish that crew select even though they are trying to help.
5	IT is very, very important to correctly identify juvenile yellowfin and bigeye tuna!
6	If using a deck tape, ensure one end is placed against a flat surface or has a nose block. Make sure the end of the tape starts at 0 cm. If using a deck tape, make sure the fish is on the tape straight when measuring. Never bend tail down to measure. Look directly over top of tail.
7	Do not measure damaged fish.
8	Record lengths to the nearest centimetre below e.g. a 69.9 cm fish will be recorded as 69 cm.
9	Record the species code in the columns provided, especially when there is a change in species type. Do not use ditto marks !
10	If taking an "Other" sample, start a new PS-4 page, tick "**Other**" and write what that other is. Most often this will be lengths from <u>every species</u> still on deck, ready to throw away after brailing is ended. Record this as "all discards". Remember to still collect specimens at random, as trained. Do not be tempted to choose different (or same) sizes. N.B. – "all discards" includes any target catch discards (SKJ-YFT-BET) if discarded for any reason. But you may have just "all discard bycatch". Usually an "Other" sample is collected after, or along with, a "Normal" sample but it could also be collected as an only sample.
11	Competent observers are encouraged to evaluate mixed tuna sets and, if possible, carry out two samplings simultaneously. Do this by either: (1) first pulling 5 tuna from each brail for "normal" sampling followed by up to 5 more YFT/BET for "other - BET/YFT composition" sampling; or (2) sampling 5 tuna from every 2nd brail for "normal" sampling and 5 YFT/BET from the other brails for "other" sampling, all through the set. The 1st method is preferable but the second may be more practical on larger sets, which are those most likely to be sampled in this way.

CALCULATING SUM OF ALL BRAILS

How many ?	Full	7/8	3/4	2/3	1/2	1/3	1/4	1/8	
Full and part brails - get these numbers from the "No." boxes in the bottom right corner of each tally box on the front of this form									SUM OF ALL BRAILS
	x 1	x 0.875	x 0.75	x 0.667	x 0.5	x 0.333	x 0.25	x 0.125	
Equivalent full brails (use a calculator!)		+	+	+	+	+	+	+	=

SPC/FFA REGIONAL PURSE SEINE OBSERVER
VESSEL LOGSHEET and WELL LOADING RECONCILIATION

FORM PS - 5 (pg 1)

REVISED NOV. 2007

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE OF

OBSERVER (SEE NOTES) DATE	OBSERVER (SEE NOTES) TIME	LOGSHEET SET TIME DATE	LOGSHEET SET TIME TIME	WELL FILL CODE	PORT WELLS 12	11	10	9	8	7	6	5	4	3	2	1	STARBOARD WELLS 1	2	3	4	5	6	7	8	9	10	11	12	OBSERVER'S TOTAL	CUMUL. TOTAL	COMMENT
TOTALS:																														

Record ALL fish going into wells in metric tonnes. Use whole numbers (e.g.: 25).
Also record ALL fish removed from wells in negative metric tonnes in brackets (e.g.: (- 30)).

Well Fill Codes

FS	from set	TR	received into well from another vessel's hold (transhipment in)
WT	transferred between wells	TG	given from well in transfer to another vessel's hold (transhipment out)
UL	unloaded to cannery or cool store	SR	received into well from another vessel's net (set sharing)

VESSEL LOGSHEET and WELL LOADING RECONCILIATION

Notes on FORM PS-5 (Page 1)

Form PS -5 is used by scientists to match vessel logsheet data with observer data and to improve port sampling strategy by letting scientists understand how fishermen move fish between wells. Be watchful tracking transfer of catch around wells. Record all transfers if possible, even if a well has fish mixed from more than one set. The information could still be useful.

Records are made on this form by an observer when there is any movement of fish (caught in set; transferred between wells or vessels) and whenever catch is recorded on a vessel logsheet.

For each set record the start "DATE" and "TIME" of set exactly as it is recorded on observer forms PS-2 and PS-3 ***AND*** exactly as it is recorded on the vessel logsheet. Record metric tonnes (mT) of catch that go in each well. (N.B. There are port and starboard wells and Well No.1 may be one central well or separate port and starboard wells **- EXAMPLE 1**

If vessel does not record catch at time of set the observer makes their own record on Form PS-5 and must check the logsheet for later records that they think match with this set.

Be alert to what happens on the bridge and on logsheets. The vessel may be waiting until end of day to record sets. ***If a vessel records nothing for a set*** write "No record" - **EXAMPLE 2**

If the vessel has one logsheet entry for two or more sets the observer must bracket his set details to the vessel set details. Record exactly as on forms and logsheets - **EXAMPLE 3**

It may get difficult to match a vessel logsheet record with observer records. The observer must then make a separate Form PS-5 entry just to cover the vessel logsheet record. In PS-5 "DATE" and "TIME" columns: score out the observer column, enter details from the vessel's logsheet in the logsheet column and add a brief comment along that line. **- EXAMPLE 4**

For ***movements of fish between wells or between vessels*** record the date in the observer column, leave the time blank (line through it) and note time in comments. **- EXAMPLE 5**
Note that when transfers of fish are made from well to well the "OBSERVER'S TOTAL" for that line should equal zero and the "CUMUL. TOTAL" remains the same. **- EXAMPLE 6**

Observer's Total**:** The observer calculated total. The amounts recorded as going into each well should add up to this total. If not explain why not on the line immediately underneath.

Cumulative total (CUMUL. TOTAL) should equal the total amount of fish on board. It is calculated by adding the observer's total to the previous cumul. Total on the line above.

Comment: Any comments about the transfer or loading of the catch in the wells and any reason given for transferring fish from one well to another.

OBSERVER (SEE NOTES) DATE	OBSERVER TIME	LOGSHEET SET TIME DATE	LOGSHEET SET TIME TIME	WELL FILL CODE	STARBOARD WELLS ~	10	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	10	~	~	OBSERVER'S TOTAL	OBSERVER'S CUMUL. TOTAL	COMMENTS
18/03	0530	03/02	0600	FS				40			Example 1														30		70	70	
19/03	0545	No record		FS					8		Example 2																8	78	
20/03	0840 }	04/03 }	1500	FS					12		Example 3																12	90	Logsheet entry
21/03	1740 }			FS					20	28										40					10		98	188	was 100 mT
24/03	1635	No record		FS							Example 4												5				5	193	
—		15/03	1635	FS	Vessel recorded 30 mT of SKJ in its logsheet today with no sensible set ID information and tonnage doesn't match previous sets																								from Lady Mac
25/03	—	15/02	—	TR		50					Example 5				80									32			162	355	(because it is full) 0930
26/03		—		WT						-40	Example 6														(-40)		-80	275	transfer approx. 2100
TOTALS						50		40	40	-12					80					40			5	32	0		—	275	

Record ALL fish going into wells in metric tonnes. Use whole numbers (e.g.: 25).
Also record ALL fish removed from wells in negative metric tonnes in brackets (e.g.: (- 30)).
Well fill codes - there must be one line for each well fill code

FS	from set
WT	transferred between wells
UL	unloaded to cannery or cool store

Well Fill Codes

TR	received into well from another vessel's hold (transhipment in)
TG	given from well in transfer to another vessel's hold (transhipment out)
SR	received into well from another vessel's net (set sharing)

SPC/FFA REGIONAL PURSE SEINE OBSERVER
VESSEL LOGSHEET and WELL LOADING RECONCILIATION

FORM PS - 5 (pg 2)

REVISED NOV. 2007

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE OF

OBSERVER (SEE NOTES)		LOGSHEET SET TIME		WELL FILL CODE	PORT WELLS												STARBOARD WELLS												OBSERVER'S		COMMENT (Diary pg. No.)
DATE	TIME	DATE	TIME		24	23	22	21	20	19	18	17	16	15	14	13	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL	CUMUL. TOTAL	
TOTALS:																															

Record ALL fish going into wells in metric tonnes. Use whole numbers (e.g.: 25).

Also record ALL fish removed from wells in negative metric tonnes in brackets (e.g.: (- 30)).

Well Fill Codes

FS	from set	TR	received into well from another vessel's hold (transhipment in)
WT	transferred between wells	TG	given from well in transfer to another vessel's hold (transhipment out)
UL	unloaded to cannery or cool store	SR	received into well from another vessel's net (set sharing)

VESSEL LOGSHEET and WELL LOADING RECONCILIATION

Notes on FORM PS-5 (Page 2)

(Use Page 2 if your vessel has more than 12 starboard and 12 port wells)

Form PS -5 is used by scientists to match vessel logsheet data with observer data and to improve port sampling strategy by letting scientists understand how fishermen move fish between wells. Be watchful tracking transfer of catch around wells. Record all transfers if possible, even if a well has fish mixed from more than one set. The information could be useful

Records are made on this form by an observer when there is any movement of fish (caught in set; transferred between wells or vessels) and whenever catch is recorded on a vessel logsheet.

For each set record the start "DATE" and "TIME" of set exactly as it is recorded on observer forms PS-2 and PS-3 ***AND*** exactly as it is recorded on the vessel logsheet. Record metric tonnes (mT) of catch that go in each well. (N.B. There are port and starboard wells). **- EXAMPLE 1**

If vessel does not record catch at time of set the observer makes their own record on Form PS-5 and must check the logsheet for later records that they think match with this set.

Be alert to what happens on the bridge and on logsheets. The vessel may be waiting until end of day to record sets. ***If a vessel records nothing for a set*** write "No record" - **EXAMPLE 2**

If the vessel has one logsheet entry for two or more sets the observer must bracket his set details to the vessel set details. Record exactly as on forms and logsheets - **EXAMPLE 3**

It may get difficult to match a vessel logsheet record with observer records. The observer must then make a separate Form PS-5 entry just to cover the vessel logsheet record. In PS-5 "DATE" and "TIME" columns: score out the observer column, enter details from the vessel's logsheet in the logsheet column and add a brief comment along that line. **- EXAMPLE 4**

For ***movements of fish between wells or between vessels*** record the date in the observer column, leave the time blank (line through it) and note time in comments. **- EXAMPLE 5**
Note that when transfers of fish are made from well to well the "OBSERVER'S TOTAL" for that line should equal zero and the " CUML. TOTAL" remains the same. **- EXAMPLE 6**

Observer's Total**:** The observer calculated total. The amounts recorded as going into each well should add up to this total. If not explain why not on the line immediately underneath.

Cumulative total (CUMUL. TOTAL) should equal the total amount of fish on board. It is calculated by adding the observer's total to the previous cumul. Total on the line above.

Comment**:** Any comments about the transfer or loading of the catch in the wells and any reason given for transferring fish from one well to another.

OBSERVER (SEE NOTES) DATE	OBSERVER (SEE NOTES) TIME	LOGSHEET SET TIME DATE	LOGSHEET SET TIME TIME	WELL FILL CODE	STARBOARD WELLS ~	22	21	20	19	18	17	16	15	14	13	14	15	16	17	18	19	20	21	22	~	~	OBSERVER'S TOTAL	OBSERVER'S CUMUL. TOTAL	COMMENTS
18/03	0530	03/02	0600	FS				40			Example 1														30		70	70	
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21/03	1740			FS					20	28										40					10		98	188	was 100 mT
24/03	1635	No record		FS							Example 4												5				5	193	
—	—	15/03	1635	FS	Vessel recorded 30 mT of SKJ in its logsheet today with no sensible set ID information and tonnage doesn't match previous sets																						—	—	from Lady Mac
25/03	—	15/02	—	TR		50					Example 5				80									32			162	355	(because it is full) 0930
26/03				WT						-40	Example 6														(-40)		-80	275	transfer approx. 2100
TOTALS						50		40	40	-12					80					40			5	32	0		—	275	

Record ALL fish going into wells in metric tonnes. Use whole numbers (e.g.: 25).
Also record ALL fish removed from wells in negative metric tonnes in brackets (e.g.: (- 30)).
Well fill codes - there must be one line for each well fill code

Well Fill Codes

FS	from set
WT	transferred between wells
UL	unloaded to cannery or cool store
TR	received into well from another vessel's hold (transhipment in)
TG	given from well in transfer to another vessel's hold (transhipment out)
SR	received into well from another vessel's net (set sharing)

SPC/FFA REGIONAL TROLL OBSERVER GENERAL INFORMATION

FORM TR - 1

REVISED DEC. 2007

TRIP DETAILS

OBSERVER NAME	DEPARTURE PORT	DEPARTURE (SHIP DATE AND TIME) D D M M Y Y h h m m
OBSERVER TRIP ID NUMBER	RETURN PORT	RETURN (SHIP DATE AND TIME) D D M M Y Y h h m m

VESSEL

VESSEL NAME	COUNTRY REGISTRATION No.
VESSEL OWNER	FLAG
VESSEL CAPTAIN	INTERNATIONAL RADIO CALLSIGN
FISHING PERMIT OR LICENCE NUMBER(S)	

CREW NATIONALITY

CAPTAIN	FISHING MASTER

	How many ?
OTHER CREW:	
OTHER CREW:	
OTHER CREW:	

ELECTRONICS

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

Please circle "Y" or "N" for every item

		USAGE	MAKE	MODEL	COMMENTS
BIRD RADAR	Y / N				
SONAR	Y / N				
NEW -					
SST GAUGE	Y / N				

VMS - 1	System:	Y / N	ALC			Seals Intact	Y / N
VMS - 2	System:	Y / N	ALC			intact	Y / N

COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone	MOBILE:	Y / N	Phone #
	OTHER	FACSIMILE:	Y / N	Fax #	EMAIL:	Y / N	Email:

INFORMATION SERVICES	WEATHER	WEATHER FAX	Y / N	SATELLITE MONITOR	Y / N		
	OTHER	Y / N	Phytoplankton	Y / N	SST	Y / N	Sea Height

CODE GROUP

Is this vessel part of a code group ?	Y / N	*Comments / other vessels:*
Total other vessels in code group =		

FISHING GEAR

		USAGE	*Comments:*
MECHANICAL HAULERS	Y / N		
WEIGHING SCALES	Y / N		

No. of LINES USED	STERN	AFT OUTRIGGERS Port	AFT OUTRIGGERS *Stbd.*	FWD OUTRIGGERS Port	FWD OUTRIGGERS Stbd.
USUAL					

REFRIGERATION METHOD

BRINE	Y / N	BLAST FREEZER	Y / N
ICE	Y / N	REFRIGERATED SEA WATER	Y / N

OBSERVATIONS / OTHER GEAR / UNUSUAL USE OF GEAR

(write brief notes here and a full description in trip report).

SAFETY EQUIPMENT

LIFE JACKET	PROVIDED FOR OBSERVER:	Y / N / O	No. of **LIFE BUOYS / LIFE RINGS**
AVAILABILITY (circle one)	SUITABLE SIZE:	Y / N	
Easy	Moderate	Hard	

EPIRBs (No)	Total	Exp.	**LIFE RAFTS**	1	2	3	4
406			No. of people and inspection due date(d) or last date L)				
other							

USAGE CODES (for "USAGE" columns)

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

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

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

Observer Name : Print first name and family name in full (e.g. "John Masa").
Observer Trip ID Number : 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").
Departure (Ship Date and Time) } Print date using "day day/ month month / year year" format.
Return (Ship Date and Time: } Print time using 24 hour "hour hour : minute minute" format. } use SHIP'S TIME
(e.g. Print five past one on the afternoon on 3rd of January, 1996 as "03/01/96 - 13:05").
Departure Port / Return Port : Record in both boxes even if it is the same port.

Vessel and Crew

Vessel Name, Vessel Owner, Vessel Captain, Fishing master : Print full names whenever possible.
Country Registration : Number issued by country in which the vessel is registered (e.g. "ME1-808").
Flag : Name of country in which vessel is registered (e.g. "Belize") even if it comes from another country, such as Korea.
International radio call-sign (IRCS) : Do not confuse with Registration No. Note in report if vessel has no proper IRCS.
Fishing Permit or Licence Number(s) : If the vessel fished under one or more bilateral access agreements, then print the fishing permit number issued by each of the coastal states in whose waters the vessel fished during the trip. If the vessel fished under a multilateral treaty, then print the fishing permit number issued to the vessel under the multilateral treaty. If the vessel is registered in the coastal state, then print the fishing licence number issued by the coastal state.
Crew : Report the nationality of each crew member.
Total number of crew : This is to include the Captain and Fishing master.
Observations / Comments : Record notes if you think there is anything special about this boat or its crew compared to others. If you need to write more about this do it in your diary and a special section in your trip report then only put a brief note here with a reference to page numbers in your diary and trip report.

Electronics (**circle "Y" or "N" (yes or no) to show if each item is present or not present on board**)

Empty rows : These are to record equipment you think are important but are not listed in this section. If nothing, circle "N".
Usage : Use the "**Usage codes**" listed at the bottom of the form to record how much use each item gets during your trip. As for all codes select the best (most informative) code when it seems that more than one code can work. "**UU**" always gets first priority if appropriate. Be sure to add *Comment s* on new equipment or new use of equip.
Comments : If equipment is new or used differently write brief notes here and a reference to more in your diary and/or report.
VMS type: If only 1 system record next to VMS-1. If 2 systems record FFA approved at VMS-1 and other system at VMS-2.
ALC make and model: Record manufacture's name (e.g. Thrimble, Thrane and Thrane, Furno, etc) and the model if possible
Seal intact ?: A good (intact) seal is bright silver. A seal that has been interferred with has black crinkly lines through it.
Communication services: If vessel uses satellite and/or mobile phone and/fax and /or email address, record contact details.
Fishery Information Services : Vessels may receive real-time information on some oceanographic features.
Circle Y or N to show if they are getting information on sea-surface temperature, phytoplanton densities or sea height.
If they are receiving another type of information record that in the blank field.
Record the name and/or address (url) of the website from which their information is received.

Code groups (**Vessels may fish in groups, sharing information that helps improve catch and safety.**)

Scientists working in stock assessment need to know which vessels make up code groups at different times.
Circle Y or N to show if this vessel is part of a code group. Enter the total number of vessels in the code group.
Use *comments* section to record names (if possible) of other boats in the code group and note how the code group cooperates.

Fishing Gear (**circle "Y" or "N" (yes or no) to show if each item is present or not present on board**)

Comments / other gear : Comment if equipment is not working, not used or used in an unusual way. Also comment if fishing gear is a different design to equipment you are used to seeing on other longliners and record the make, model and special characteristics of this new gear.
Weighing scales : If there is any weighing scales on-board that is used to weigh the retained fish circle Y (yes)
Empty rows : These are to record equipment you think are important but are not listed in this section. If nothing, circle "N".
Line distribution : What are the usual (during the trip) and maximum number of lines trolled from each area of vessel ?

Refrigeration Method (**circle "Y" or "N" to show which refrigeration systems are used on board**)

Methods : N.B.: There may be more than one refrigeration method
Refrigerated seawater : N.B.: This may also be called "Chilled seawater"

Safety Equipment (obtain as much information as possible without intruding)

Life jacket : if your own (or fisheries) circle "**O**". Else circle "**Y**" or "**N**" to show if vessel showed you one for your own use Was it a good size ? Was it (*easy*) available, available but not easy (moderate) to get to, or (*hard*) to find
Lifebuoys/life rings - count all to be found. *EPIRBS* - count total and count any with expired battery renewal dates.
Life rafts - find info on labels on life-rafts. If **after careful check**, dates are not found, record "ND" for not displayed'.

Observations / Comments, Other Gear, Unusual Use of Gear

Record notes if you think there is anything special about this boat or its crew compared to others.
Comment if equipment is not working, not used or used in an unusual way. Describe fishing gear if different to equipment you see on other longliners and record make, model, special characteristics and ***usage*** of this new gear.
If you have lots to write about (good) do so in your diary and in a special section in your trip report then only put a brief note here with a reference to page numbers in your diary and trip report.

SPC/FFA REGIONAL TROLL OBSERVER DAILY LOG

FORM TR - 2

PAGE OF

REVISED DEC. 2007

VESSEL NAME:	OBSERVER NAME:	OBSERVER TRIP ID NUMBER:

SHIP'S DATE and TIME at START of FISHING

D D	M M	Y Y	h h	m m

UTC DATE and TIME at START of FISHING

D D	M M	Y Y	h h	m m

Target species:
(in order of priority)

1.
2.
3.

Lure / bait arrangement
(in order of priority)

1.
2.
3.

Total bait used = kg.

SHIP'S TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	WIND (kts)	WIND (°)	SEA (C-S-M-R-V)	CLOUD (%)	SST	No. of LINES	OTHER VESSELS	NO. of FISH	
START													
END													

DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?

YES **NO** *(circle*

Reported in diary pg # ____

OBSERVER'S DAILY LOG

Notes on FORM TR-2

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 the 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 ").

Target Species: Record the main species being targeted by the vessel here. If there is only one target specis put a line through the other data fields.

Lure / bait arrangement (in order of priority): Record the main type of lure used. If only one type of lure or bait arrangement is used put a dash through the other lines. You can describe the lure more comprehensively in the written report.

Total Bait Used: Record the total amount of bait used during the day.

Ship's Date and Ship's Time at start of Fishing: 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 at start of Fishing: is standard data and time that scientists use to make correcions to Ship's data and time when it is used incorrectly, as it often is. Once a day, record Ship's and UTC date and time at the same moment. UTC time is normally got from the GPS. Remember that UTC date is **sometimes** different from the Ship's date. Observers should record Ship's time on all other forms and paperwork.

DAILY LOG RECORD: Try to take an hourly record from the start of fishing to the end of fishing each day. However, checking the catch comes first, so if fishing a delayed record is acceptable.

Ship's Time: Make a record hourly. Fill in the ship's time

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 fron 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)

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 meters 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 at the same pace for awhile then 0-5 kts is calm; 5-10 knts is slight;, 10-20 kts is moderate; 20-40 kts is rough; and anything over 40 kts is usually very rough.

Cloud (%). Estimate the total amount of the sky overhead that is covered with cloud.

SST: Record the sea surface temperature every time you make a record. Make sure you use the same instrument every time to record the temperature. If you use a different instrument at any time make a note in the comments.

No. of lines: Count the number of lines out fishing.

Other Vessels: Count the number of other troll fishing boats that you can see when making your hourly record.

No. of Fish: Make a record of the number of fish that were landed since the last record. The first record should obviously be zero.

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 note on Form GEN-3 and in diary; record your diary page No. on this TR_2 form. If there was no incident for the day circle **No.**

SOUTH PACIFIC REGIONAL TROLL OBSERVER CATCH MONITORING

FORM TR - 3

REVISED DEC. 2007

OBSERVER NAME	OBSERVER TRIP ID NUMBER	PAGE OF

VESSEL NAME	SHIP'S DATE AND TIME - START OF FISHING - END OF FISHING						
	D D	M M	Y Y	h h	m m	h h	m m

CATCH DETAILS

	SHIP'S TIME	SPECIES CODE	LENGTH (cm)	LENGTH CODE	CONDITION CODE CAUGHT	CONDITION CODE LET GO	WEIGHT (kg)	WEIGHT CODE	FATE CODE	GIRTH (to 0.5 cm)		COMMENTS / TAG NUMBERS
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

Period sampled Tally of species not sampled

from:		Comments:
to:		

Page total for each species caught:	*Sp. code*	*No.*	*Sp. code*	*No.*	*Sp. code*	*No.*	*Sp. code*	*No.*	*Sp. code*	*No.*

NOTES ON TR - 3

CATCH MONITORING

OBSERVER NAME	OBSERVER TRIP ID NUMBER	PAGE OF
VESSEL NAME	SHIP'S DATE D D M M Y Y	AND TIME - START OF FISHING h h m m - END OF FISHING h h m m

This header should be filled in completly, as described in the notes for FORM TR-2.

CATCH DETAILS

	SHIP'S TIME	SPECIES CODE	LENGTH (cm)	LENGTH CODE	CONDITION CODE CAUGHT	CONDITION CODE LET GO	WEIGHT (kg)	WEIGHT CODE	FATE CODE	GIRTH (to 0.5 cm)		COMMENTS / TAG NUMBERS
	0700	ALB	102	UF	A1		25	WW	RGG	67.5		Gonad sample No.3
1							72	GG				example of 2 weights *
2		ALB										
3		ALB										
4		ALB										
5		ALB										
6		ALB										
7		ALB										
8		SBF										
9		SBF										
10		ALB										
11		ALB										
	SHIP'S TIME	SPECIES CODE	LENGTH (cm)	LENGTH CODE	CONDITION CODE CAUGHT	CONDITION CODE LET GO	WEIGHT (kg)	WEIGHT CODE	FATE CODE	GIRTH (to 0.5 cm)		COMMENTS / TAG NUMBERS
12		ALB										
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

Record only when there are weighing scales onboard.
Weight codes describe the state of a fish at the time it is weighed.

Code	Description
WW	Whole weight
GG	Gilled and gutted
GH	Gutted and headed
GT	Gilled, gutted and tailed
GX	Gutted, headed and tailed
GO	Gutted only (gills left in)
FW	Fillets weight
TW	Trunk weight

* If possible weigh before and then again after processing. Put second weight and code on a second line (as in example).

Record regularly when fish are biting and at least at the beginning of each period of biting.

This time is correlated with the fishing data recorded on Form TR-2

Girth: measured **w**ith a tape measure aro**u**nd deepest part of the body

Empty column is to be used for extra information when specially requested. Fill in the title before you use this column.

Use the **COMMENTS / TAG NUMBERS** column for other information you think important about a particular catch item e.g. - to record sample numbers if collecting samples, or to record number of photograph if taking photos, or, most importantly, to record released or captured tag numbers.

Length codes describe the actual measurement being collected from a fish.

Code	Description
TL	- tip of snout to end of tail
UF	- upper jaw to fork in tail
LF	- lower jaw to fork in tail
US	- upper jaw to 2nd dorsal fin
PF	- pectoral fin to fork in tail
PS	- pectoral fin to 2nd dorsal fin
TW	- total width (tips of wings - rays)
CL	- carapace length (turtles)
NM	- not measured

Condition codes describe the health of a fish when it first gets **CAUGHT** and again if it is **LET GO** or is thrown away.

Code	Description
A0	Alive (not categorized into A1, A2, A3)
A1	Alive, healthy
A2	Alive - injured, distressed
A3	Alive, but dying
D	Dead
U	Condition unknown

Fate codes descibe whether the fish was kept (retained) or thrown away / released (discarded). Also - how and/or reason processed / discarded Important to select one **most informative** code !

Code
RGG - Retained - gilled and gutted (for sale)
RGT - Retained - gilled gutted and tailed (for sale)
RWW - Retained - whole
RPT - Retained - partial (e.g. fillet, loin, trunk)
RFR - Retained - both fins and trunk (sharks)
RHG - Retained - headed and gutted (billfish)
RSD - Retained - but shark damaged
RCC - Retained - for crew consumption
RGO - Retained - gutted only.
ROR - Retained - other reason (specify)

DFR - Discarded trunk - fins retained (sharks)
DGD - Discarded - gear damage (tuna only)
DSD - Discarded - shark damage
DWD - Discarded - whale damage
DUS - Discarded - uneconomic species
DDL - Discarded - too difficult to land
DSO - Discarded - (struck off before landing)
DTS - Discarded - too small (target species)
DPQ - Discarded - poor quality
DPA - Discarded - species of special interest - **alive** (DPA)
DPD - - **dead** (DPD)
DPU - - **unknown condition** (DPU)
DOR - Discarded - other reason (specify)
ESC - Escaped

Species codes. Use the FAO 3-letter codes. Common species are listed here but you should carry a full list of FAO species codes.

Code	Common Name	Code	Common Name
SBF	Southern bluefin	LMA	Long finned Mako shark
PBF	Pacific bluefin	SMA	Short finned Mako shark
YFT	Yellowfin	BSH	Blue shark
BET	Bigeye	RRU	Rainbow runner
ALB	Albacore	WAH	Wahoo
SKJ	Skipjack	DOL	Mahi mahi
MLS	Striped Marlin	SFA	Sailfish
BLZ	Blue Marlin	SSP	Short-billed Spearfish
BLM	Black Marlin		

Tally species not sampled:

Attempt to measure all fish caught.
If this is not possible, during periods of high catch rates or bad weather, choose four periods during the day to collect lengths, girths and weights of at least 25 randomly collected of the principal fish species being caught.
Also record relevant data of all incidental species caught..
Tally fish caught but not sampled, as shown in example at left.

Period sampled	Tally of species not sampled:
from: 0930	ALB
to: 1055	

Page total for each species caught:	ALB	113	SBF	2

Page totals - get these by adding the sampled fish (in lines 1 to 30) to the tallied fish shown in this example.

SPC/FFA REGIONAL OBSERVER
VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS

FORM GEN - 1

REVISED DEC. 2007

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	TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE					

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED				ACTION CODE (host vess)	Tick box if also using supplementary GEN-1:
DATE	TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT.	YFT WGT.	BET WGT.	MIXED WGT.		COMMENTS

VESSEL AND AIRCRAFT TYPE CODES

1 SINGLE PURSE SEINE
2 LONGLINE
3 POLE AND LINE
4 MOTHERSHIP
5 TROLL
6 NET BOAT
7 BUNKER
8 SEARCH, ANCHOR OR LIGHT BOAT
9 FISH CARRIER
10 TRAWLER
21 LIGHT AIRCRAFT
22 HELICOPTER
31 OTHER - please specify: _____

FLAG COUNTRY CODES

• IF COUNTRY IS NOT IN LIST WRITE NAME OF COUNTRY

CN CHINA
JP JAPAN
TW TAIWAN
KR KOREA
US USA
PH PHILLIPINES
PA PANAMA
HN HONDURAS
BZ BELIZE
RU RUSSIA
SG SINGAPORE
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

VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS

Notes on FORM GEN - 1

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 particular box you are trying to complete.

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
	Mixed Weight	Some wells may be mixed and so it will be impossible to get separate species weights. Then get total weight of species. Indicate in comment s what the main species in the mix is.
	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 describes 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.

Telex Format Example.

To FFA Observer Co-ordinator
***sighting** - Jun. 23-1400Z- - **Pos.** 0512345S -15612233E Moon-shadow -Q2344*
***flag** KO - **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

DESIGNED DEC. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE 1 OF 1

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED				ACTION CODE (host vess)	COMMENTS
DATE	TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT.	YFT WGT.	BET WGT.	MIXED WGT.		
															pto.

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED				ACTION CODE (host vess)	COMMENTS
DATE	TIME	LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT.	YFT WGT.	BET WGT.	MIXED WGT.		

SPC/FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST

FORM GEN - 2

REVISED DEC. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

The species was: Tick to indicate — LANDED ON DECK ☐ | INTERACTED WITH VESSEL'S GEAR ONLY ☐ | SIGHTED ONLY ☐

		Tick one !	SHIP'S DATE AND TIME DD	MM	YY	hh	mm	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W
TIME OF LANDING (see PS-2, PL-2, LL-4)											
TIME OF INTERACTION / SIGHTING											

SPECIES CODE	SPECIES DESCRIPTION

SPECIES LANDED ON DECK:

	CONDITION CODE	CONDITION DESCRIPTION
LANDED:		

DESCRIBE ONBOARD HANDLING	LENGTH (cm)	LENGTH CODE	SEX (M-F-I-U)

	CONDITION CODE	CONDITION DESCRIPTION
DISCARDED		

TAGS

RETRIEVED			*PLACED*		
TAG NUMBER	TYPE	ORGANISATION	TAG NUMBER	TYPE	ORGANISATION

INTERACTIONS WITH VESSEL OR VESSEL GEAR:

VESSEL ACTIVITY DURING INTERACTION: → SETTING ☐ HAULING ☐ SEARCHING ☐ TRANSITING ☐ OTHER (specifiy) ☐ .....

CONDITION

START OF INTERACTION: No.	CODE	DESCRIPTION	*END OF INTERACTION:* No.	CODE	DESCRIPTION

DESCRIBE THE INTERACTION

SPECIES SIGHTED

VESSEL ACTIVITY WHEN SIGHTED: → SETTING ☐ HAULING ☐ SEARCHING ☐ TRANSITING ☐ OTHER (specifiy) ☐ .....

NUMBER SIGHTED	NUMBER OF ADULTS	NUMBER OF JUVENILES	ESTIMATE THE OVERALL LENGTH(s) (From the head to the tail)

DISTANCE FROM VESSEL	SPECIES BEHAVIOUR WHEN SIGHTED
m nM	

SPECIES OF SPECIAL INTEREST

TTL	LOGGERHEAD TURTLE	FAW	FALSE KILLER WHALE	DBO	BOTTLENOSE DOLPHIN
DKK	LEATHERBACK TURTLE	SHW	SHORT-FINNED PILOT WHALE	DCO	COMMON DOLPHIN
TUG	GREEN TURTLE	KPW	PYGMY KILLER WHALE	DRR	RISSO'S DOLPHIN
LKV	OLIVE RIDLEY TURTLE	MEW	MELON-HEADED WHALE	DSI	SPINNER DOLPHIN
TTH	HAWKSBILL TURTLE	HUW	HUMPBACK WHALE	DSP	SPOTTED DOLPHIN
KEZ	EASTERN PACIFIC GREEN TURTLE (BLACK TURTLE)	SIW	SEI WHALE	DST	STRIPED DOLPHINS
		MYS	BALEEN WHALES	RTD	ROUGH-TOOTHED DOLPHIN
FBT	FLATBACK TURTLE	ODN	TOOTHED WHALES		
		MAM	ALL MARINE MAMMALS	DLP	ALL DOLPHINS
TTX	ALL TURTLES	BRW	BRYDE'S WHALE		
		RHN	WHALE SHARK	BIZ	ALL BIRDS

SPECIES OF SPECIAL INTEREST Notes for GEN -2

Observer Name	Print your name in full. First name first, then your family name (e.g "John Masa").
Vessel Name	Print the vessel's name in full. Do not use abbreviations.
Observer Trip ID Number	This is the number issued by your observer programme. It will be the same all trip.
Page__of ____	Number all the GEN-2 forms together,in sequence. Continue until the trip is complete.

THE SPECIES WAS:

*Tick one box only - to indicate the **FINAL** encounter the species of special interest had with the vessel.*
For instance, if you sighted a species that was subsequently landed, tick landed only.

Time of landing (see PS-2, PL-2, LL-4)	For species landed on deck note start of set time recorded on PS- 2 or PL-2 forms. If on a longliner note the actual time of landing as noted on the LL-4.
Time of Interaction / Sighting	For species which were not landed on deck, note the time of the interaction or sighting.
Position (latitude / longitud	Note start of set position for species landed on deck. If a species was only sighted or only interacted with gear, note position the vessel was in when species was first seen.
Species Code	Use the three-letter FAO species code.
Species Description	Use this field to describe some of the identifying features of the species. This may help us to correctly identify the species. Consider the colour, any distinctive markings, the shape of the head, fins, tail, the position of the blow hole and the place of the fins in relation to other body parts.

SPECIES LANDED ON DECK:

USE THESE CONDITION CODES

A0 - Alive but unable to describe condition.
A1 - Alive and healthy.
A2- Alive, but injured or distressed.
A3 - Alive, but unlikely to live.
A4 - Entangled, okay.
A5 - Entangled, injured.
A6 - Hooked, externally, injured.
A7- Hooked, internally, injured.
A8 - Hooked, unknown, injured.

D - Dead
D1 - Entangled, dead
D2 - Hooked, externally, dead.
D3 - Hooked, internally, dead.
D4 - Hooked, unknown, dead.

U - Condition unknown.
U1 - Entangled, unknown condition.
U2 - Hooked, externally, condition unknown
U3 - Hooked, internally, condition unknown.
U4 - Hooked, unknown, condition unknown.

Normally use one GEN-2 for every animal landed, but if many animals land in a PS set use the GEN-2 supplement to record condition, length, sex of up to 30; then use a PS-4 to record lengths only if more than 30.

Condition description	Write a description of the condition of the species when landed / discarded. This may help to further assess the condition of the landed / discard species.
Length / Length code	Measure the species using the regular length codes as outlined in your workbook.
Sex (M-F-I-U)	M-male, F-Female, I -Indeterminate (checked but unsure), U -unknown (not checked).

TAGS

Record all details about any tags placed or found on the species here.

Type of Tags	Record if it was a common dart, an archival (stitched inside body), or a pop-up (stiched to the outside of the body) tag.

INTERACTIONS WITH VESSEL OR VESSEL GEAR:

For all interactions with the vessel or with the vessel's gear - use one form per species per incident
For instance, you may note whales or dolphins trapped inside a purse seine net or riding the bow waves of a vessel.
Another type of interaction to be considered are species hooked on longlines but not landed onboard.

Vessel's Activity	Tick to indicate the vessel's activity when the interaction was first noted.
Condition - No. - Code	Use **GEN-2 condition codes,** above, to describe how many of a species are in each condition, at start, and again at end, of the interaction with the vessel or vessel gear.
- Description	add any notes (words) that may help **further define** condition.
Describe the Interaction	Make detailed notes on the interaction. If more space is needed use the observer's diary and mark the page number here.

SPECIES SIGHTED:

Vessel's Activity	Tick to indicate the vessel's activity when the interaction was first noted.
Number Sighted	Record the total number of species sighted for this date and time.
Number of Adults	If more than one animal is involved, record the number of adults you can see.
Number of Juvenilles	If you can see juvenilles with the pod of whales or dolphins record the number here. Otherwise record all animals under "number of adults".
Species Behaviour	Describe the behaviour of the animal in the water. Use own words but some technical terms that may be helpful include: *wake riding* (swimming close behind boat); *bow riding* (swimming off the bow of the boat); *logging* (floating motionless in a group); *breaching* (launching themselves into the air head first and then falling back into the water with a splash); *lobtailing* (tail slapping); *playing* (having fun !); etc.
Distance from Vessel (m /NM)	Estimate the distance the species was from the vessel.

SPC/FFA REGIONAL LONGLINE OBSERVER SPECIES OF SPECIAL INTEREST - multi-landings

Supplement to FORM GEN-2

DESIGNED DEC. 2007

OBSERVER NAME	OBSERVER TRIP ID NUMBER	SUPPLEMENT TO GEN-2 FORM:	PAGE	OF
		(from GEN-2 form)		

VESSEL NAME	MEASURING INSTRUMENT	START OF SET DATE AND TIME				
		D D	M M	Y Y	h h	m m

	SPECIES AND **SEX**		LENGTH	CONDITION CODE	CONDITION DESCRIPTION *- any extra words that will help describe condition (landed and discarded)*
	Use condition codes from back of GEN-2 form !				
1	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
2	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
3	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
4	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
5	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
6	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
7	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
8	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
9	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
10	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
11	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
12	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
13	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
14	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	
15	SP. CODE		(cm)	LANDED	
	SEX (M-F-I-U)		CODE	DISCARD	

16	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
17	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
18	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
19	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
20	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
21	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
22	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
23	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
24	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
25	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
26	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
27	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
28	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
29	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	
30	SP. CODE	(cm)	LANDED	
	SEX (M-F-I-U)	CODE	DISCARD	

If more than 30 animals landed in a single purse seine set then record only the lengths of the remaining animals on a PS-4 form associated with the set. Try to sample animals on this form randomly without favour to size, sex or condition. If this is not possible for any reason, please explain below:

Further comment on sampling procedures:

Are more measurements of these animals recorded on a PS-4 form: Yes / No

SPC/FFA REGIONAL OBSERVER VESSEL TRIP MONITORING RECORD

FORM GEN - 3

REVISED DEC. 2007

This form must be filled in for every trip

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER

During the trip did the Master or crew of the vessel attempt or do any of the following:

*(mark "**X**" for either yes or no for **every** item)*

		Yes	No
a)	*Record inaccurate positions on the vessel logsheet*		
b)	***Fish in areas that were not covered by any licence or access agreement***		
c)	*Mis-report catch in the vessel logs or weekly reports.*		
d)	***Not report catch of commercial species (including discards)***		
e)	*Not record bycatch and discards*		
f)	***Record bycatch and discards inaccurately***		
g)	*Target species other than those they are licenced to target*		
h)	***Use a fishing method other than the method they are licenced to use***		
i)	*Record one species as a different species.*		
j)	***Catch species of special interest***		
k)	*Breach MARPOL Regulations*		
l)	***Bunker or not report bunkering to national authorities***		
m)	*Transfer fish from or to another vessel at sea*		
n)	***Request that an event not be reported***		
o)	*Mistreat other crew*		
p)	***Hinder the observer in the carrying out of their duties***		
q)	*Not supply reasonable accomodation, food and facilities to the observer onboard the vessel*		
r)	***High grade or cull the catch***		
s)	*Not report position to countries when crossing from one zone to another*		
t)	***Not display or present a valid (and current) licence document onboard***		

IF YOU ANSWERED YES TO ANY OF THE ABOVE PLEASE EXPLAIN BRIEF DETAILS IN THE AREA BELOW
INDICATE THE PAGE NUMBER OF YOUR DIARY OR REPORT IN WHICH A MORE COMPREHENSIVE EXPLANATION IS WRITTEN.

date	
date	
date	

	OBSERVER SIGNATURE

Vessel Trip Compliance Record

This check form must be completed at the end of every trip. It is important to ensure the information you collect is kept confidential from the vessel and any one else except officers authorised to receive observer reports back in port.

If unsure that a violation has been committed but suspect a vessel has violated its license agreement, write a full account of the incident, including all evidence that aroused suspicion. The officers you report to on return to port will determine if your suspicions are valid and may order further investigation. Although gut feelings on board are often correct, these, unfortunately are not enough to prosecute a vessel. There must be some incident or evidence to back up any suspicions.

Be friendly on board and have a harmonious trip if possible, but remember an observer must put new friendships aside when reporting on vessel compliance. Any attempt by the vessel to corrupt an observer is illegal and should be noted and reported. Whether money or gifts it is still bribery. If a vessel is caught fishing illegally and an observer has accepted gifts from that vessel then the observer could be accused of taking a bribe to not report the illegal fishing, which could land them in prison.

Observer Name	The observer must print their first name first and last name (family name) last
Vessel Name	Full name - not abbreviated. E.g.: F/V *Ivan Grimsby Korsakov* must not be abbreviated to *I.G.Korsakov*
Observer ID Number	Same number used on all forms and issued before leaving port. It will not change for the whole trip.

During the trip did the Master or crew of the vessel attempt or do any of the following:

~ Record inaccurate positions on the vessel logsheet	The vessel log sheet should be filled out by the vessel captain or a designated officer daily or after each set. The observer has the right to ask to see this log at anytime (inspect this log at least once a day). Check if the vessel recorded position is the same as that recorded for the same time on observer daily logs. Discrepancies of more than 3 miles should be reported and the distance noted in the observer report.
~ Fish in areas that were not covered by any licence or access agreement	Be aware of areas within EEZs that a vessel is not permitted to fish - internal waters, territorial seas, and archipelagic waters are usually off limits to purse seiners (some exceptions occur). Some countries (e.g.: PNG) have areas where only specific types of vessel are permitted to fish. Local fishery divisions and FFA will help by listing appropriate closure areas.
~ Mis-report catches 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. Check vessel logs to ensure all sets are recorded and the catch has been logged correctly every day. If vessel and observer estimates are very different, be suspicious, watch carefully and report it on return.
~ Not report catch of commercial species **~ Not record catch of bycatch and discards** **~ Record bycatch and discards inaccurately**	Report any attempt by the vessel to not report any fish, shark and mammal species - retained or discarded. Record if retained **or** discarded bycatch are not reported even if all target species are reported correctly. Record if vessel does not report target species rejected due to damage, too small, or otherwise undesirable. Recording discards may not be important to the vessel but it is a requirement that all species (not only commercial species) caught must be recorded correctly, whether they are retained or discarded. Also note if bycatch are recorded but recorded inaccurately.
~ Target species other than those they are licenced to target	Target species are mentioned on vessels' fishing permits. Usually "Tuna" is the target species. Note if time is spent targeting a species other than what is marked on their permit. Did a vessel licensed for “Tuna” target sharks for instance. Did they target reef fish?
~ Use fishing method other than method licenced to use	The licensed fishing method is marked on vessels' fishing permits. Note if a fishing method other than that on the permit is used (most commonly, hand lining near a reef). Fully describe the type of gear used and what species, if any, were caught.
~ Record one species as a different species	Vessels may record one species as another, to lower catch value to try to negotiate lower licence fees. Also, purse seiners commonly record BET as YFT; and sometimes record both YFT and/or BET as SKJ. Mixed small BET and YFT are often recorded as just YFT because they fetch the same cannery price, but information on BET is lacking so it is VERY IMPORTANT to report if this occurs. Good observer reporting of these species is essential.
~ Catch or attempt to catch species of SPECIAL **interest (SSI)**	Whales, dolphins, turtles, whale sharks, birds, dugongs and seals, whether set on or caught by accident. Report at length if marine mammals are deliberately set on. Describe if an animal: managed to escape by own means; was hauled onboard distressed or dead; was released; and, if released or escaped, was it injured or unharmed and on vessel attitude to SSIs. Also report all catch of species of special interest on PS-3 and GEN-2 forms.
~ Breach MARPOL regulations	MARPOL is an international Convention for the prevention of pollution from ships. All mariners should be aware of the two basic principles. It is illegal to: 1. discharge any plastic product, netting, nylon line into the ocean anywhere; 2. discharge any garbage, perishable or other, within 12 nautical miles of land or a reef. An exception is that perishables processed with a grinder may be dumped no closer than 3 miles from land. Report in comments what vessel does with its rubbish and whether it has an incinerator on board.
~ Valid license document onboard	Licensing arrangements usually require the official license document to be maintained on board, ready for inspection on request by suitable people, including observers. Record "X" in NO **only** if an original such document is available. Record "X" in YES if: no document; or if copy or faxed document; outdated document; or cover letter; is shown - report which and why, if possible.

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REVISED DEC. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF

- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME DD	MM	YY	hh	mm	LATITUDE (dd°mm.mmm')	N / S	LONGITUDE (ddd°mm.mmm')	E / W	EEZ / HARBOUR

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			
Old Fishing gear			
General Garbage (within 12 miles of shoreline)			

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			

Other comments:

Were there any stickers / posters displayed to remind the vessel about the MARPOL Regulations ? **Y / N**

Was the Captain aware of the MARPOL Regulations ? **Y / N**

If there were any infringements to the MARPOL Regulations did you advise the Captain of these infringements ?

N.B.: Observers are not expected to advise. Usually they only observe and report.

Y / N / NP

(NP = Not Possible due to language barrier)

Did you take any photos ? **Y / N**

If yes state the photo frame number -

MARPOL Regulations - 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 at anytime.

It is illegal for any vessel to dump any form of rubbish into the sea within 12 nautical mile of the sea shore.

Notes on FORM GEN-6

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 (dd/mm/yy)	Date pollution seen in day, month and year.	*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 offending vessel from host vessel. The radar can be used to get an extact distance in nautical miles. Otherwise give best estimate and note if it is the observer's or someone else's.

WASTE DUMPED OVERBOARD	
Material	Tick each correct box to show which types of materials were dumped. Only tick two or more materials if vessel has dumped more than one material type 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 separately.
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; etc.
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 distance.

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.

Supplementary notes on Marpol Regulations

Note: Vessels may dump garbage as close as 3 nautical miles to the shore if they have a 'comminuter' onboard (a machine that shreds garbage to tiny pieces).

Otherwise they cannot dump garbage within 12 nm of the coast. Report on all vessels dumping within 12nm of the coast. We can check if they have a comminuter onboard later.

Country Codes

AS	American Samoa	NR	Nauru
AU	Australia	NC	New Caledonia
CK	Cook Islands	NZ	New Zealand
FM	Fed. States of Micronesia	NU	Niue
FJ	Fiji Islands	MR	Northern Mariana
FR	France	PW	Palau
PF	French Polynesia	PG	Papua New Guinea
GU	Guam	PH	Philippine
ID	Indonesia	RU	Russia
IW	International Waters	SB	Solomon Islands
JP	Japan	TW	Taiwan
TO	Kingdom of Tonga	TK	Tokelau
KI	Kiribati	TV	Tuvalu
KR	Korea	US	United States
CN	Mainland China	VU	Vanuatu
MY	Malaysia	WS	Samoa
MH	Marshall Islands		

APPENDIX 8. SPC / FFA REGIONAL UNLOADING FORMS

1. **Longline Unloading Form**

2. **Longline Unloading Destination Form**

3. **Purse-Seine and Pole-and-Line Unloading Form**

SPC / FFA REGIONAL LONGLINE UNLOADING FORM

REVISED: DEC 2007

PORT	COMPLETED BY	MONTH	YEAR	PAGE OF

UNLOADING DATE	INFORMATION ON THE VESSEL			NUMBERS AND WEIGHT OF EACH SPECIES IN CATCH							OTHER 1	OTHER 2	OTHER 3	OTHER 4
				YFT	BET	ALB	BUM	MLS	BLM	SWO				
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											
	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
	FFA VID No	WIN No	Wt.											

Notes on LONGLINE UNLOADING FORM

The Longline Unloading Form records how much fish is unloaded from longliners at end of each trip.

On each form, or forms if necessary, only record data for unloadings that begin in the same month.

GENERAL INFORMATION

PORT	The port of unloading.
YEAR	The calendar year (e.g. 1999).
MONTH	The month during which each unloading began.
COMPLETED BY	The first and last name of the person who completed the form.
PAGE OF	The PAGE number of this form OF the total number of pages used for the month.

UNLOADING DATE

Place the first date of unloading here. Write the date as dd / mm / yy.

INFORMATION ON THE VESSEL

NAME	Full name of the longliner, including number if it has one (e.g., *Catchit No. III*).
FLAG	The vessel nationality or country of registration (sometimes a flag of convenience).
AGENT	The agent for the longliner, who is usually based in the port of unloading.
REG. No.	Registration number issued by the country of registration (flag country) of the longliner N.B.: this is not the fishing permit or license number and not usually the radio call sign.
FFA VID	Print the number issued by the Forum Fisheries Agency.
WIN No	Print the number issued by the Flag State.

HOW MUCH FISH IS GOING WHERE ?

Export	Fish that are being transhipped for export.
Local	Fish that are rejected or not needed for export and unloaded for the local market.
No.	Number of fish.
Wt.	Total weight of fish in kilograms.

SOME COMMON SPECIES CODES (Check your FAO species codes list for others.)

YFT	Yellowfin tuna, *Thunnus albacares*
BET	Bigeye tuna, *Thunnus obesus*
ALB	Albacore tuna, *Thunnus alalunga*
BFT	Bluefin tuna, *Thunnus thynnus*
BUM	Blue marlin, *Makaira mazara*
BLM	Black marlin, *Makaira indica*
MLS	Striped marlin, *Tetrapturus audax*
SWO	Broadbill swordfish, *Xiphias gladius*
SFA	Indo-Pacific sailfish, *Istiophorus platypterus*
BIL	Marlins, sailfish and spearfishes (unidentified)
SKH	Unspecified sharks
OTHER	Other species (please write in the code for the other species)

If a vessel is known to have unloaded, but the amounts are not available, then *the first date of unloading, the vessel name, registration, flag and agent* **should still be recorded.**

SPC / FFA REGIONAL LONGLINE UNLOADING DESTINATION FORM

REVISED: NOV 2007

LOCATION (Enter the PORT NAME or at-sea POSITION)	
FIRST DAY OF UNLOADING	LAST DAY OF UNLOADING
AGENT / COMPANY	

FISHING VESSEL			
FISHING VESSEL NAME			FIRST DATE ON LOGSHEET
FLAG		FFA VESSEL REGISTER No.	LAST DATE ON LOGSHEET
REGIST. NO.	IRCS	WCPFC IDENTIFICATION No.	FULL OR PARTIAL UNLOAD

CARRIER VESSEL (if not unloading to an on-shore facility)		
CARRIER NAME		
FLAG		FFA VID
REGIST. NO.	IRCS	WIN NO.

SPECIES	Fresh (FR) / Frozen	Weight Code	FOREIGN MARKET DESTINATION								LOCAL, CANNERY OR OTHER PROCESSING MARKETS					
			JAPAN		OTHER		OTHER		OTHER		LOCAL MARKET		CANNERY NAME / COUNTRY		OTHER	
			NO.	KG / LB	NO.	KG / LB	NO.	KG / LB	NO.	KG / LB	NO.	KG / LB	NO.	KG / LB	NO.	KG / LB
TOTAL																

Notes on the LONGLINE UNLOADING DESTINATION FORM

The Longline Unloading Destination Form records the amount of fish unloaded from a longline vessel as well as the final destination of the unloaded fish. All fish unloaded from the vessel should be accounted for.
Fill in a form for every unloading. Use more than one form if required.

GENERAL INFORMATION

LOCATION	**T**he name of the port where the unloading took place, or the latitude/longitude position if the unloading took place at sea.
FIRST DAY OF UNLOADING:	**T**he first date that fish were unloaded from the vessel.
LAST DAY OF UNLOADING:	**T**he last date that fish were unloaded from the vessel.
COMPANY OR AGENT:	**T**he full name of the company or agent handling the unloading.

FISHING VESSEL INFORMATION

VESSEL NAME:	**W**rite in the full name of the vessel as recorded on the country registration certificate.
FLAG:	**T**he name of the country issuing the registration certificate.
REGISTRATION NUMBER:	**T**he vessel's registration number as written on the county registration certificate.
FFA VESSEL REGISTER NUMBER {FFA VID}:	**P**rint the number issued by the Forum Fisheries Agency.
WCPFC IDENTIFCATION NUMBER {WIN NO}:	**P**rint the number issued by the Flag State.
FIRST DATE ON LOGSHEET:	**T**he first date that appears on the logsheet for the most recent trip (corresponding to this unloading).
LAST DATE ON LOGSHEET :	**T**he last date that appears on the logsheet for the most recent trip (corresponding to this unloading).
FULL//PARTIAL UNLOADING	Indicate (Y or N) whether the vessel unloaed all catch (Y) or the vessel return to fish without unloading all of its catch (N).

CARRIER VESSEL INFORMATION (if not unloading to an on-shore facility)

(CARRIER) VESSEL NAME:	**W**rite in the full name of the vessel as recorded on the country registration certificate.
FLAG:	**T**he name of the country issuing the registration certificate.
REGISTRATION NUMBER:	**T**he vessel's registration number as written on the county registration certificate.
FFA VESSEL REGISTER NUMBER {FFA VID}:	**P**rint the number issued by the Forum Fisheries Agency.
WCPFC IDENTIFCATION NUMBER {WIN NO}:	**P**rint the number issued by the Flag State.

SPECIES UNLOADED AND DESTINATION

SPECIES: On the same line as the species name (or species code) show the final destination of the fish by placing the total number and the total weight unloaded under the appropriate final destination columns. *Both* the weight and the number should be stated. See the example above. Use the FAO species codes when known.

SPECIES CODES			
YFT	YELLOWFIN	**SWO**	SWORDFISH
BET	BIGEYE	**SFA**	SHORT BILLED - SPEARFISH
ALB	ALBACORE		
BUM	BLUE MARLIN	**WAH**	WAHOO
MLS	STRIPED MARLIN	**DOL**	MAHI MAHI
BLM	BLACK MARLIN	**LAG**	OPAH

FRESH or FROZEN (FR / FZ) : **M**ark the code (FR) if the unloaded fish are <u>not</u> frozen (i.e. in a "fresh" state), or mark the code (FZ) if the unloaded fish are frozen.

WEIGHT CODE : **I**ndicate the state of the fish when unloaded, use the <u>weight codes</u> below.
No. : **R**ecord the total number of the species sent to this destination .
Kg / lb: **R**ecord the total weight of the species sent to this destination. *Circle* the appropriate unit of weight. Kg for kilograms and lb for pounds.

WEIGHT CODES			
WW	WHOLE WEIGHT	GX	GUTTED, HEADED, TAILED
GH	GUTTED, HEADED	GO	GUTTED ONLY, NOT GILLED
GG	GILLED & GUTTED	SF	SHARK FINS
GT	GILLED, GUTTED, TAILED	NM	NOT MEASURED

FOREIGN MARKET DESTINATIONS:
Use these columns if the unloaded fish are exported from the country or transported by carrier for the fresh or frozen sashimi-grade market. You may also use the two blank fields to fill in a country name if any fresh sashimi-grade exports are sent to countries other than Japan and USA.

LOCAL, CANNERY or other PROCESSING MARKETS:
Use these columns if the fish are sold locally, or processed locally for other export markets, for example, canneries, loining etc.
Cannery: For fish sent to canneries please state the name and the country of the cannery.
Other: Fill in the name of any other final destination for unloaded fish which are not for the sashimi markets and canneries.

SPC / FFA REGIONAL UNLOADING FORM FOR PURSE SEINE and POLE-AND-LINE VESSELS

REVISED: NOV 2007

PORT	COMPLETED BY	MONTH	YEAR	PAGE OF

LOADING DATES FIRST DAY	LOADING DATES LAST DAY	NAME OF CARRIER, COOLSTORE OR CANNERY	DETAILS OF CARRIER VESSEL			
			FLAG	REGISTRATION No.	SHIPPING COMPANY	DESTINATION
			WCPFC IDENTIFICATION No.	FFA VESSEL REGISTER No.	PERMIT No.	CAPTAIN

IF ANSWER IS YES FILL THE OTHER FIELDS IN THAT LINE.	YES or NO	PORT OF LOADING / COOLSTORE NAME	LOADING DATES START	LOADING DATES END	WEIGHT OF EACH SPECIES (mT) SKJ	YFT ? 9 kgs	YFT > 9 kgs	BET ? 9 kgs	BET > 9 kgs	YFT/BET	SKJ / YFT BET	OTHER Sp.	TOTAL
1. WERE ANY FISH ON BOARD WHEN VESSEL ARRIVED ?													
2. WERE FISH LOADED FROM A COOLSTORE AT THIS PORT ?													

UNLOADING DATES FIRST DAY	UNLOADING DATES LAST DAY	DETAILS OF UNLOADING VESSEL VESSEL NAME REGISTRATION No.	FLAG	WIN No. FFA VID	TRIP DATES START	TRIP DATES END	WEIGHT OF EACH SPECIES (mT) SKJ	YFT ? 9 kgs	YFT > 9 kgs	BET ? 9 kgs	BET > 9 kgs	YFT / BET	SKJ / YFT BET	OTHER Sp.	TOTAL	FULL OR PARTIAL

Notes on UNLOADING FORM FOR PURSE SEINE AND POLE-AND-LINE VESSELS

- Use this Unloading Form to record amounts of fish delivered to canneries, cold stores or carrier vessels from purse seine or pole-and-line boats. Use one (or more) page per MONTH for each carrier vessel, coolstore or cannery.
- All dates should be recorded using the first three letters of the month, e.g. 26 Jul or Jul 26.

HEADER INFORMATION

PORT	The port of unloading
COMPLETED BY	The first and last name of the person who was mainly responsible for filling out this form
MONTH	The month during which unloading took place
YEAR	The calendar year
PAGE ? OF ??	? = The page number and ?? = the total number of pages for the month

LOADINGS (in to a Carrier Vessel, Coolstore or Cannery)

LOADING DATES FIRST / LAST DAYS	The day the carrier, cannery or coolstore (that is named in this section) started loading and the day they finished loading fish from all the unloading vessels that are listed on this form
NAME OF CARRIER, COOL STORE OR CANNERY	Full name with no abbreviations
CARRIER VESSEL'S DETAILS	
FLAG	The country that the vessel is registered in (also called Vessel Nationality)
REGISTRATION No.	The registration number of the fishing vessel given by the FLAG country
FFA VESSEL REGISTER No	Print the Regional Vessel Register number as issued by the Forum Fisheries Agency
WCPFC IDENTIFCATI0N N	Print the WCPFC identification number as issued by the Flag State.
SHIPPING COMPANY	The name of the shipping company that owns or charters the carrier to load fish
CAPTAIN	The full name of the Captain of the carrier vessel
PERMIT No.	The number of the permit under which the carrier is allowed to tranship fish in this port
DESTINATION	The final destination for the fish on board the carrier

FISH ON BOARD or FISH FROM COOL STORE

Answer YES or NO to both question 1. and 2. (If the answer is yes then complete rest of information in that row)

PORT OF LOADING / COOLSTORE NAME	Name of port where the fish that is already on carrier was picked up …. or Name of the coolstore that is loading fish on to the carrier in this port
LOADING DATES START / END	(of fish that were loaded at another port or were loaded from a coolstore at this port) The day the carrier started and the day it finished loading fish in the previous port …. or The day the cool store started and the day it finished loading fish on to the carrier at this port.
WEIGHT OF EACH SPECIES (mT)	
SKJ, YFT, BET	The amount (metric tonnes) of skipjack, yellowfin and bigeye already on board when carrier arrived in this port, or that the carrier loaded from a cool store in this port
YFT / BET, SKJ / YFT / BET	Use only when separate weights (mT) of each of YFT and BET on board are not known.
OTHER Sp.	The amount (metric tonnes) of any other species already on board or loaded from cool store. Write the name of the species (or FAO 3-letter code) at the top of each of this column.
TOTAL	The total amount (metric tonnes) of fish previously on board or being loaded from cool store

DETAILS OF VESSEL UNLOADINGS TO CARRIER, COOL STORE or CANNERY

UNLOADING DATES FIRST / LAST DAYS	First day is the day fish first start moving onto the carrier from this fishing boat. The last day is the last day that any fish were moved from this fishing boat onto the carrier	
DETAILS OF UNLOADING VESSELS (**purse seiners and pole-and-line boats**)		
NAME	The name of the unloading vessel	
FLAG	The county that the unloading vessel is registered in (also called Vessel Nationality)	
REGISTRATION No.	The registration number of the unloading vessel given by the FLAG country	
TRIP DATES	START	Start of the fishing trip that has just finished catching fish for this unloading
	END	End of fishing trip that has just been completed (day of arrival in this port)
WEIGHT OF EACH SPECIES (mT)		
SKJ, YFT, BET	The amount (metric tonnes) of skipjack, yellowfin and bigeye loaded on to the carrier vessel.	
YFT / BET, SKJ / YFT / BET	Use only when the separate weights of unloaded YFT and BET species are not known.	
OTHER Sp.	The amount (metric tonnes) of each other species being loaded on to carrier. Write the name of the species (or FAO 3-letter code) at the top of this column.	
TOTAL	The total amount (metric tonnes) loaded on to carrier vessel	
FULL OR PART UNLOADING	If fishing vessel unloads all fish write "FULL" unloading If fishing vessel only unloads some of its catch write "PART" unloading	

- Each line represents a single port of call by a vessel. If a vessel unloads all its catch in one day, then the first day and last day are the same. If a vessel takes more than one day to unload you should still record total amounts unloaded.
- Vessel registration should be completed whenever possible (particularly important for identifying Taiwanese vessels).
- If a vessel is known to have unloaded, but the amounts unloaded are not available, the dates, vessel name, registration number and nationality should still be recorded on the form.

APPENDIX 9. SPC / FFA REGIONAL PORT SAMPLING FORMS

1. **Longline Port Sampling Form**

2. **Purse-Seine Port Sampling Form**

3. **Pole-and-Line Port Sampling Form**

4. **Troll Port Sampling Form**

SPC / FFA REGIONAL LONGLINE PORT SAMPLING FORM

REVISED: DEC 2007

PORT:	SAMPLER:	STAFF ID Code	ASSISTANT:	STAFF ID Code	PAGE OF

VESSEL NAME:	COUNTRY OF REGISTRATION:	REGISTRATION NUMBER:

DATE - START OF TRIP: (DEPARTED PORT)	D D	M M	Y Y	DATE - END OF TRIP: (ARRIVED IN PORT)	D D	M M	Y Y	DATE OF SAMPLE:	D D	M M	Y Y

FISHING AREA	FROM LATITUDE (**or code**/s)	N / S (circle)	TO LATITUDE	N / S (circle)	FROM LONGITUDE	E / W (circle)	TO LONGITUDE	E / W (circle)

	SPECIES	LENGTH CM	LENGTH CODE	WEIGHT KG	WEIGHT CODE	EXPORT CODE	OTHER		SPECIES	LENGTH CM	LENGTH CODE	WEIGHT KG	WEIGHT CODE	EXPORT CODE	OTHER
1								26							
2								27							
3								28							
4								29							
5								30							
6								31							
7								32							
8								33							
9								34							
10								35							
11								36							
12								37							
13								38							
14								39							
15								40							
16								41							
17								42							
18								43							
19								44							
20								45							
21								46							
22								47							
23								48							
24								49							
25								50							

Indicate by circling on all forms.	TUNA	BIL
WERE ALL THE FISH UNLOADED?	Y / N	Y / N
WE ALL THE UNLOADED FISH ALL MEASURED?	Y / N	Y / N
DID THE SAMPLER CHECK THE FISH HOLD?	Y / N	

COMMENTS: IF UNABLE TO RECORD UNMEASURED FISH ABOVE then TALLY and TOTAL THOSE FISH HERE:
and other COMMENTS

Eg: FSH 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 / = 41

Table of fish counts (for unmeasured fish only)

SPECIES								
NUMBER								

BILLFISH LENGTH CODES	
LF	LOWER JAW TO CAUDAL FORK
PF	PECTORAL TO CAUDAL FORK
PS	PECTORAL TO SECOND DORSAL
NM	NOT MEASURED

OTHER SPECIES LENGTH CODES	
UF	UPPER JAW TO CAUDAL FORK
US	UPPER JAW TO SECOND DORSAL
PS	PECTORAL TO SECOND DORSAL
NM	NOT MEASURED

WEIGHT CODES			
WW	WHOLE WEIGHT	GX	GUTTED, HEADED, TAILED
GH	GUTTED, HEADED	GO	GUTTED ONLY, NOT GILLED
GG	GILLED & GUTTED	SF	SHARK FINS
GT	GILLED, GUTTED, TAILED	NM	NOT MEASURED

SPECIES	YFT	BET	ALB	SWO	MLS	BLZ	BLM	SFA	OTHER SPECIES
NUMBER									
SUM LENGTHS									
SUM WEIGHTS									

NOTES ON LONGLINE PORT SAMPLING FORM

PORT:	SAMPLER: STAFF ID Code	ASSISTANT: STAFF ID Code	PAGE OF
VESSEL NAME:	COUNTRY OF REGISTRATION:	REGI:	
DATE - START OF TRIP: (DEPARTED PORT) D D M M Y Y	DATE - END OF TRIP: (ARRIVED IN PORT) D D M M Y Y		
FISHING AREA FROM LATITUDE (or code/s)	N/S (circle) TO LATITUDE	N/S (circle) FROM LONGITUDE	

PAGE OF Number pages in order, as used to sample each boat.

If one page is used per boat that page must be "PAGE 1 OF 1".

If three pages, they are "PAGE 1 OF 3", "PAGE 2 OF 3" and "PAGE 3 OF 3 ".

This header should be filled in completly.
If more than 50 fish are sampled from a single unloading, use additional forms and be sure to fill in all fields on the additional pages. Especially fill in the port, vessel name and date of sample, which must be re-entered exactly as they appear on the first page.

Port = port of unloading

Sampler and Assistant: Always use the full (first and last) name of the sampler (person measuring the fish), also when there is only one person and assistant (person writing measurements on form).
Staff id code : Fill in the sampler's and the assistant's unique Field Staff ID Code as issued by your supervisor.

Date at Start of Trip }
Date at End of Trip } all dates must have two digits for days
Date of Sample } two digits for month and 2 digits for year
put a "0" in front of single digit dates
E.g.: February 3rd, 1997 is written as "03 02 97"

Fishing Area: Record the limits of latitudes and longitudes to the nearest whole degree, if possible.
If using a **FISHING AREA code or codes**, place them in the "FROM LATITUDE" box and dashes in the other 3 position boxes.

Country of Registration (flag) and **Registration Number**: The country in which the vessel is registered and registration number that the country issued to the vessel. This may be on the vessel bow. If not then check the registration papers somewhere on the . . .

SPECIES	LENGTH CM	CODE	WEIGHT KG	CODE	EXPORT CODE	OTHER *Specify here*

Length: (cm) must be rounded down to whole centimentres (e.g. 69.9cm is recorded as 69 cm). (See "Length Codes" on front of form.)

For exported fish use the *country codes (see below)* **Local:**
LL: Local loining
LC: Local canning
LM: Local market
LC: Local crew use
LO: Local other pls specify (in comments)

Species

Code	Common Name
YFT	Yellow fin
BET	Bigeye
ALB	Albacore
SKJ	Skipjack
MLS	Striped marlin
BUM	Blue marlin
BLM	Black marlin
SWO	Swordfish
SFA	Sailfish
SSP	Short-billed spearfish
MAK	Mako sharks
FAL	Silky shark
DOL	Mahimahi
RRU	Rainbow runner
LAG	Opah
WAH	Wahoo
COM	Spanish mackerel
TST	Sickle pomfret

Group codes

BRZ	Breams and pomfrets
BIL	Marlins, spearfish, sailfish
SKH	Sharks
SHF	Shark fins (bags)

N.B. Avoid using group codes if a species code will work

Weight: (kg) in kilograms must be recorded to the first decimal place (e.g. 58.79kg is written as 58.8kg, 55.55kg as 55.6kg, 52.31kg as 52.3kg) See "Weight Codes" on front of form.

Country codes:
AS - American Samoa
AU - Australia
EU - Europe
HK - Hong Kong
HI - Hawaii
JP - Japan
NZ - New Zealand
TW - Taiwan
US - Mainland US
OT - Other

Important !

Try to record every fish even if you are unable to measure it. If possible also check the vessel for fish that are kept back for crew's use. Record fish not sampled in the space provided below **(see example* below, to the right)**

The **"Other"** column at far right is for extra information you may be asked to collect. E.g.: an extra measurement for conversion factor purposes

Typical example of a record for yellowfin landed for export to Japan

25	YFT	125	UF	56	GG	JP	

Indicate by circling on all forms.	TUNA	BIL
Were they all unloaded ?	Y / N	Y / N
Were all the unloaded fish all	Y / N	Y / N
Did the sampler check the fish hold?		Y / N

COMMENTS: IF UNABLE TO RECORD UNMEASURED FISH ABOVE then TALLY and TOTAL THOSE FISH HERE: and other COMMENTS

Eg: *FSH* 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 / = 41

Eg: *When asked why no marlin unloaded the Captain said it was unloaded to Grabit Co.,*

Table of fish counts (for unmeasured fis

SPECIES			
NUMBER			

Fish counts (first page only): - Display the sum of your fish tallies for all unmeasured fish neatly in this table on the first page that you use .

Circle "Y" (yes) or "N" (no) for all questions. for tuna and billfish (BIL). If a few fish are kept back for the crew and not unloaded you can answer "Y". Only circle "N" when several fish are being kept on board to be off-loaded at another place, time or market. All of these questions must be answered on all submitted forms. **Hint**: You will give the exact same answer on every form used for the same unloading, and you won't be able to answer these questions until the end of sampling.

***Example**: Forty-one of these low valued species were rapidly unloaded to bins while other export species were being measured.

	YFT	BET	
NUMBER			
SUM LENGTHS			
SUM WEIGHTS			

Number (Port sampler should always add these)
Sum of Lengths and **Sum of Weights**
(The results are used by staff who enter data into computers, to check that they have made no mistakes. Some countries also now use this information to add directly to TUFMAN)

Only add up for the species measured on **this** form Don't include counts that are in the "Record Counts of Fish Not Sampled and Comments" box.

SPC / FFA REGIONAL PURSE SEINE PORT SAMPLING FORM

REVISED: DEC 2007

PORT	SAMPLER'S NAME	Staff id code	ASSISTANT'S NAME	Staff id code	PAGE OF

CARRIER OR CANNERY	VESSEL NAME	COUNTRY OF REGISTRATION	REGISTRATION No.

DATE AT START OF TRIP (departed from port)	D D	M M	Y Y	DATE AT END OF TRIP (arrived in port)	D D	M M	Y Y	DATE OF SAMPLE	D D	M M	Y Y

SET DETAILS (to be obtained from Vessel Logsheets)

MONTH	DAY	LATITUDE ddmm.mmm	N S	LONGITUDE dddmm.mmm	E W	SCHOOL ASSOC.	SET START TIME	SKIPJACK WEIGHT	YELLOWFIN WEIGHT	BIGEYE WEIGHT	OTHER SPECIES NAME	OTHER SPECIES WEIGHT	WELL NUMBERS

SAMPLING STRATEGY (very important)

Please tick correct box		
		RANDOM SPECIES - species composition and length frequency sample
		NON-RANDOM SPECIES - length frequency sample only

N.B. Record all weights in metric tonnes (MT)

SAMPLED WELL

WELL NUMBER	
WEIGHT OF FISH IN WELL	

SPECIES and LENGTH DATA

SPECIES CODE	LENGTH	SPECIES CODE	LENGTH	SPECIES CODE	LENGTH	SPECIES CODE	LENGTH	SPECIES CODE	LENGTH	SPECIES CODE	LENGTH
1		26		51		76		101		126	
2		27		52		77		102		127	
3		28		53		78		103		128	
4		29		54		79		104		129	
5		30		55		80		105		130	
6		31		56		81		106		131	
7		32		57		82		107		132	
8		33		58		83		108		133	
9		34		59		84		109		134	
10		35		60		85		110		135	
11		36		61		86		111		136	
12		37		62		87		112		137	
13		38		63		88		113		138	
14		39		64		89		114		139	
15		40		65		90		115		140	
16		41		66		91		116		141	
17		42		67		92		117		142	
18		43		68		93		118		143	
19		44		69		94		119		144	
20		45		70		95		120		145	
21		46		71		96		121		146	
22		47		72		97		122		147	
23		48		73		98		123		148	
24		49		74		99		124		149	
25		50		75		100		125		150	

DATA ENTRY VERIFICATION

	SKJ	YFT	BET	OTHER
NUMBER OF EACH SPECIES				
∑ LENGTHS FOR EACH SPECIES				

SCHOOL ASSOCIATION CODES

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 marine mammal
7 Live whale shark
8 Other

Notes for PURSE SEINE PORT SAMPLING FORM

The Purse Seine Port Sampling Form is used to record lengths of fish that are unloaded from purse-seiner vessels at the end of a trip. Only use the form to sample fish from wells where the set details for every set loaded into the well can be obtained. Also, these set details must include the date, the position and the school association, and meet the selection criteria as outlined below.

HEADER INFORMATION **I**f you measure more than 150 fish, use extra forms. Every form you submit must have all the header details filled in entirely. All dates should be recorded using the 2-digit number format for each of day 'D D', month 'M M' and year 'Y Y' in that order.

PORT	**T**he name of the port where the vessel unloading took place.
SAMPLER: STAFF ID CODE	**T**he first and last name of the person measuring the fish, and their 3 (or 2) letter staff id code. If only one person is doing the sampling then mark that person's name here.
ASSISTANT: STAFF ID CODE	**T**he first and last name of the person recording the data, and their 3 (or 2) letter staff id code.
PAGE _ OF _	**N**umber your pages in sequence until you have finished your sample. A sample includes all the fish you will sample from the same well using the same sampling protocol. If you change wells or change your sampling protocol, start a new page 1 and number your pages in sequence until you have finished your sample. When your sample is finished, go back and fill in the total number of pages in that sample i.e. page 1 of 5, where 5 is the total number of pages for the sample.
COUNTRY OF REGISTRATION	**T**he nationality of the vessel as noted on the county registration certificate or license.
DATE OF DEPARTURE	**T**he date the vessel left port at the beginning of its last trip.
DATE OF ARRIVAL	**T**he date the vessel returned to port at the end of the trip.
DATE OF SAMPLE	**I**f the well unloading takes place over more than one day put the first date of unloading

SET DETAILS - **Get this information from vessel logsheets.**

For selected wells that meet the appropriate selection criteria, transcribe every line with that well number from the logsheet.
It is very important that you write out <u>all the logsheet details</u> from the logsheet straight onto your port sampling form. Don't forget the well numbers at the end. If there is no information for a data field on the logsheet, place a dash on your form.

SAMPLING STRATEGY - ***(Hint: Only do a non-random sample when directed to do so by your supervisor.)***

RANDOM SPECIES Tick when there is no pre-selection of species by the sampler, the most common type of sample.
NON-RANDOM SPECIES Tick when the sampler pre-selects the type of species they intend to sample.
SAMPLED WELL Record the 'WELL NUMBER' that was sampled and the 'WEIGHT OF FISH IN WELL'. Record all weights in metric tonnes.

Random Sampling
Five fish must be taken from ***every*** net unloaded from the well, until

<u>SPECIES AND LENGTH DATA</u> - *Take length measurements from the tip of the upper jaw to the fork in the tail.*

SPECIES Species codes, for example: SKJ; DOL; YFT; RRU.
LENGTH The length, in centimetres, rounded down to the nearest centimetre (e.g. 67.9 cm will be recorded as 67 cm).

<u>DATA ENTRY VERIFICATION</u> (D*o this to help check that your data has been entered properly.)*

NUMBER OF EACH SPECIES Add up the total number of each species recorded on this form.
∑ LENGTHS FOR EACH SPECIES (∑ = sum of) Add up the lengths of each species separately. Don't mix them.

A Sampler's Guide to Selecting Appropriate Wells for Sampling

• Secure a copy of the vessel logsheet and, if available, the vessel well plan. • Ensure the well numbers are recorded on the vessel's logsheet. If they are not, return the logsheet to the captain, and ask that they are filled in. • You can use the 'Well Loading Worksheet' to select an appropriate well or follow the numbered steps below. The best approach is to check the set detail information for every well before the vessel starts unloading. Alternatively, you can check the set details of the next well to be unloaded. Wells filled with fish from just one set are good wells to sample, but the sampler should try to

1. Decide which well you want to sample, then glance down the 'well numbers' column on the logsheet.
2. When you spot the well number of the well you want to sample, highlight it. Then, highlight that entire line on the logsheet. Check to see if the same well number is written on any other lines on the logsheet. Highlight those lines also.
3. You can now see all the set details for the well clearly.
4. Check to see if the set details of the well indicate it is an appropriate well for sampling.

<u>WELL SELECTION CRITERIA FOR HIGHLIGHTED SET DETAIL INFORMATION</u>

School Association: *Only* sample wells where all the set details show the same school association.
Date of Set: <u>First Choice</u>: Sample wells where all the set details show the same calender month.

<u>Second Choice:</u> Sample wells where all the set details have dates 7 days before or 7 days after the same calender month.

<u>Third Choice</u>: Sample wells where all the set details have the dates from the same calender quarter (i.e Jan.–March).

Fishing Area:<u>First Choice</u>: Set details showing sets made in the same 5° x 5° area.

<u>Second Choice</u>: Set details showing sets made in the same 5° x 10° or 10° x 5° area.

<u>Third Choice</u>: Set details showing sets made in the same 10° x 20° or 20° x 10° area.

SPC / FFA REGIONAL POLE-AND-LINE PORT SAMPLING FORM

REVISED: DEC. 2007

PORT:	SAMPLER:	Staff ID Code	ASSISTANT:	Staff ID Code	PAGE OF

VESSEL NAME:	COUNTRY OF REGISTRATION:	REGISTRATION NUMBER:

DATE AT START OF TRIP: (departed from port)	D D	M M	Y Y	DATE AT END OF TRIP: (arrived in port)	D D	M M	Y Y	DATE OF SAMPLE:	D D	M M	Y Y

FISHING AREA	FROM LATITUDE	N S	TO LATITUDE	N S	FROM LONGITUDE	E W	TO LONGITUDE	E W

SORTING - VERY IMPORTANT !

TICK ONE BOX BELOW

	Not sorted before sample	⇨
	Sorted by species only	⇨
	Sorted by size and species	⇨
Record weight of each species landed. Record size class of sorted fish at right.		⇨ ⇨

WEIGHT OF CATCH (KG) from unloadings records after sampling

SKJ	YFT	BET	YFT & BET	MIXED TUNA	OTHER SPECIES	SIZE SORTED FISH SIZE CLASSES
						Eg: *3 to 6 kg.*
						1
						2
						3

IF MEASURING SORTED CATCH

- Record only ONE size class of fish in each column. Use two or more columns for each size class if necessary.
- AT THE TOP OF EACH COLUMN write in the size class which is recorded in that column

IF MEASURING CATCH THAT HAS NOT BEEN SORTED

- Be sure that the fish you measure are collected RANDOMLY from throughout the unloading.

SIZE CLASS =		SIZE CLASS =		SIZE CLASS =		SIZE CLASS =		SIZE CLASS =		SIZE CLASS =	
SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)
1		26		51		76		101		126	
2		27		52		77		102		127	
3		28		53		78		103		128	
4		29		54		79		104		129	
5		30		55		80		105		130	
6		31		56		81		106		131	
7		32		57		82		107		132	
8		33		58		83		108		133	
9		34		59		84		109		134	
10		35		60		85		110		135	
11		36		61		86		111		136	
12		37		62		87		112		137	
13		38		63		88		113		138	
14		39		64		89		114		139	
15		40		65		90		115		140	
16		41		66		91		116		141	
17		42		67		92		117		142	
18		43		68		93		118		143	
19		44		69		94		119		144	
20		45		70		95		120		145	
21		46		71		96		121		146	
22		47		72		97		122		147	
23		48		73		98		123		148	
24		49		74		99		124		149	
25		50		75		100		125		150	
Σ lengths		Σ lengths		Σ lengths		Σ lengths		Σ lengths		Σ lengths	

Notes for POLE-AND-LINE PORT SAMPLING FORM

Use Pole-and line Port Sampling Forms to record lengths of fish unloaded from pole-and-line vessels at end of a trip.
Only sample fish for which you can obtain good information about area caught and time period of fishing.
Most pole-and-line vessels trips are short and there is enough information in basic trip details. If sampling a large, distant water, pole-and-line boat, try to sample fish from a 5-degree by 5-degree square, landed during the same month.

If the sample from a single sampling session has more than 150 fish, use additional Pole-and-line Port Sampling Forms. *Port, vessel name and date of sample* must be re-entered on each extra page exactly as they appear on the first page.

*All dates to be recorded using 2-digit number for each of day "*D D*", month "*M M*" and year "*Y Y*" in that order.*
To do this put a "0" in front of single digit numbers. E.g.: write the "3rd of January", 1996 as 03 01 96.

HEADER INFORMATION

PORT ..... The port of unloading
SAMPLER ..... The first and last name of the person measuring the fish. If only one person sampling fill in 'sampler'.
ASSISTANT ..... First and last name of person writing measurements, if different from the sampler
VESSEL NAME ..... Full name of boat (no abbreviations), with number if there is one (e.g.: *Skippy 3*)
COUNTRY OF REGISTRATION. The vessel nationality
REGISTRATION NUMBER ..... A number issued to the vessel by the country of registration (flag country)
DATE AT START OF TRIP ..... The date the vessel left port at the beginning of the trip
DATE AT END OF TRIP ..... The date the vessel returned to port at the end of the trip
DATE OF SAMPLE ..... The day the sample was taken. The first date of sampling if sampling was over several

FISHING AREA - **get this information from vessel logsheets !**

Write down the two lines of latitude and the two lines of longitude between which fishing took place . Usually this is a box which surrounds the area that the fishing took place throughout a trip but if sampling a large, distant water, pole-and-line boat this will be the 5° x 5° square or other area identified as being where the sampled fish came from.

SORTING - **Only ONE box must be ticked.**

Normal practice is to try to sample the fish before they get sorted during the unloading process.
To do this collect specimens entirely at random spread all through the unloading.
This will give a good sample to be used for species composition and length frequency analyses.
TICK THE UPPER BOX in this case.

Sometimes fish is sorted into different species before the port sampler can collect specimens to measure.
The sampler must collect specimens of each species from all through the catch but must TICK THE SECOND BOX.
The sampler must also be sure to collect the unloading weight of each species when unloading is complete.

If sorting is also by size class before measuring, sample fish from each size class separately. TICK THE THIRD BOX.
The sampler must be sure to collect the total unloading weight of each size class and species at the end of unloading.

Always try to measure fish before they are sorted if possible !

WEIGHT OF CATCH. The weight of all fish unloaded must be obtained and recorded in this table.

Try to get the unloading weight of each individual species.

If the catch has bigeye tuna that is **not separated** from yellowfin tuna, record the combined YFT & BET weight.
If skipjack and other tunas are not sorted during unloading then the MIXED TUNA weight will need to be recorded.
Recording weight of MIXED TUNA should only be a last resort if individual species weights cannot be obtained.
If there are difficulties with weights then write a brief note about it in the spare lines on the table.

SIZE CLASS

If fish can only be measured after it has been sorted then there are TWO IMPORTANT REQUIREMENTS.

1. Each size class must be recorded in the right hand column of the WEIGHT OF CATCH table.
   The weight of each size class must then be recorded in the correct species columns alongside the recorded size class.
2. The lengths of fish from only one size class should be entered in each column when recording measurements.
   Each column must have the size class of the fish in it noted at the top of the column.

SPECIES and LENGTH DATA Take length measurements from the tip of the upper jaw to the fork of the tail.

SPECIES Species codes, for example: SKJ; DOL; YFT; RRU

LENGTH The length, in centimetres, rounded to the nearest centimetre down. I.e.: 67.9 cm becomes 67 cm.

∑ LENGTHS (= sum of lengths): - Add up lengths in the column directly above. This is used for data entry checking.

SPC / FFA REGIONAL TROLL VESSEL PORT SAMPLING FORM

REVISED DEC 2007

PORT:	SAMPLER: Staff id Code	ASSISTANT: Staff id Code	PAGE OF
VESSEL NAME:	COUNTRY OF REGISTRATION:	REGISTRATION NUMBER:	
DATE AT START OF TRIP: (DEPARTED FROM PORT) D D M M Y Y	DATE AT END OF TRIP: (ARRIVED IN PORT) D D M M Y Y	DATE OF SAMPLE: D D M M Y Y	

FISHING AREA: FROM LATITUDE		N S	TO LATITUDE		N S	FROM LONGITUDE		E W	TO LONGITUDE		E W

SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)	SPECIES CODE	LENGTH (cm)
1		26		51		76		101		126	
2		27		52		77		102		127	
3		28		53		78		103		128	
4		29		54		79		104		129	
5		30		55		80		105		130	
6		31		56		81		106		131	
7		32		57		82		107		132	
8		33		58		83		108		133	
9		34		59		84		109		134	
10		35		60		85		110		135	
11		36		61		86		111		136	
12		37		62		87		112		137	
13		38		63		88		113		138	
14		39		64		89		114		139	
15		40		65		90		115		140	
16		41		66		91		116		141	
17		42		67		92		117		142	
18		43		68		93		118		143	
19		44		69		94		119		144	
20		45		70		95		120		145	
21		46		71		96		121		146	
22		47		72		97		122		147	
23		48		73		98		123		148	
24		49		74		99		124		149	
25		50		75		100		125		150	

SPECIES:						
NUMBER:						
SUM OF LENGTHS:						

COMMENTS

SPC / FFA REGIONAL TROLL VESSEL PORT SAMPLING FORM INSTRUCTIONS

If more than 150 fish are sampled from a single unloading, use additional forms. If using additional forms be sure to fill in all fields on the extra pages, **especially fill in the port, vessel name and date of sample,** which must be re-entered exactly as they appear on the first page.

GENERAL INFORMATION

PORT	The port of unloading
SAMPLER	First and last name of person measuring the fish
Staff ID Code	Fill in your three (or two) letter staff id code. If only one person is doing the sampling then fill that person's name in here.
ASSISTANT	First and last name of person recording measurements, if different from the sampler
Staff ID Code	Fill in your three (or two) letter staff id code.
PAGE OF	Number forms (pages) out of the total that are used each sampling session. If only one page is used in a session that page should be " PAGE ***1*** OF ***1*** " but three will be " PAGE ***1*** OF ***3***, PAGE ***2*** OF ***3*** and PAGE ***3*** OF ***3*** "
VESSEL NAME	Name of the fishing vessel
COUNTRY OF REGISTRATION	Country that the vessel is registered in (also known as "Flag" country)
REGISTRATION NUMBER	The number allocated to the fishing vessel by country of registration
DATE AT START OF TRIP	Record dates using two digits for each of day, month and year, in that order
DATE AT END OF TRIP	(DD MM YY). Do this by placing a "0" in front of single digit numbers.
DATE OF SAMPLE	**E.g.: write the 3rd of January, 1996 as "03 01 96".** The date of the sample is the first date of the sample
FISHING AREA	Record the northern and southern most limits of latitude and eastern and western most limits of longitude to the nearest whole degree if possible.

SAMPLING DATA

SPECIES The following species codes are used:

ALB	Albacore tuna, *Thunnus alalunga*	MLS	Striped marlin, *Tetrapturus audax*
SKJ	Skipjack, *Katsuwonus pelamis*	BUM	Blue marlin, *Makaira mazara*
YFT	Yellowfin tuna, *Thunnus albacares*	BLM	Black marlin, *Makaira indica*
BET	Bigeye tuna, *Thunnus obesus*	SFA	Sailfish, *Istiophorus platypterus*
WAH	Wahoo, *Acanthocybium solandri*	SSP	Shortbill spearfish, *Tetrapturus angustirostris*
DOL	Mahimahi, *Coryphaena hippurus*		

LENGTH The length (in centimetres) must be **rounded down** to whole centimetres
(e.g. 69.9cm is to be recorded as 69cm)

(**All species** should be measured "from the tip of the upper jaw to the fork of the tail"
except billfish which should be measured "from the tip of the lower jaw to the fork of the tail".)
N.B. Only entire specimens (not headed and/or tailed) are to be measured.

SUM OF LENGTHS Is the sum of the lengths of each species that are recorded on that form (page) only.
(This figure is used to verify that sampling data has been correctly entered)

APPENDIX 10. OTHER FORMS

1. **Gamefish Tournament Data Sheet**

2. **Gamefishing Individual Vessel Logsheet**

3. **Fishing Trip and Port Visit Log**

4. **Papua New Guinea Compulsory Vessel Inspection and Checklist**

5. **WCPFC Regional Fish Aggregating Device (FAD) – Information Record**

Tournament - Individual Fish Weights

Competition Name

Weight please circle appropriate box: kg / lbs

Day and date	Striped marlin	Black marlin	Blue marlin	Sailfish	Wahoo	Dolphin fish	Shortbill spearfish	Spanish mackerel	shark (sp?)	Yellowfin tuna	Dogtooth tuna	Skipjack tuna	Bigeye tuna	Other
../../..														
../../..														
../../..														
../../..														
../../..														

Gamefishing Individual Vessel Logsheet - Troll (5 days)

Please complete - even if no fish are caught

Name, address and port of person filling out data sheet:	Please record Kept / Released	Vessel Name:	Units of weight: kg / lbs

DATE dd/mm/yy	Time start fishing	Number of lines fished	Hours fished	Number of strikes	Catch totals - Number by species									
					Species	Number caught (Kept / Rel)	Species	Number caught (Kept / Rel)	Species	Number caught (Kept / Rel)	Species	Number caught (Kept / Rel)	Species	Number caught (Kept / Rel)

DATE dd/mm/yy	Species	Weight	DATE dd/mm/yy	Species	Weight	DATE dd/mm/yy	Species	Weight	DATE dd/mm/yy	Species	Weight	DATE dd/mm/yy	Species	Weight

Species codes

ALB	Albacore
BLZ	Blue marlin
BLM	Black marlin
SFA	Sailfish
SSP	Shortbilled spearfish
MLS	Striped marlin
SWO	Swordfish
WAH	Wahoo
COM	Spanish mackerel
DOL	Mahi mahi (dolphin fish)
TRE	Trevally
SNK	Barracouta
RRU	Rainbow runner
SKJ	Skipjack tuna
DOT	Dogtooth tuna
YFT	Yellowfin tuna
BET	Bigeye tuna
SHK	Shark
OTH	Other

Please post results to:
Oceanic Fisheries Programme,
Secretariat of the Pacific Community,
PO Box D5 98848, Noumea Cedex,
New Caledonia.
or Fax to: 687 263818

REV: NOV 2007

SPC / FFA REGIONAL FISHING TRIP AND PORT VISIT LOG

PAGE_____OF ______

NAME OF VESSEL	GEAR TYPE	COUNTRY OF REGISTRATION	YEAR
NAME OF FISHING COMPANY		REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN

PERIOD OF ACTIVITY		FISHING TRIP AND PORT VISIT CODE	IF FISHING TRIP:				IF PORT VISIT:	COMMENTS
DATE FROM DD / MM / YYYY	DATE TO DD / MM / YYYY		LOGSHEET PROVIDED ?	OBSERVER ONBOARD?	TOTAL NUMBER OF CREW	NUMBER OF PACIFIC ISLAND CREW	NAME OF PORT	

FISHING TRIP AND PORT VISIT CODES

1 FISHING TRIP
2 IN PORT - UNLOADING CATCH
3 IN PORT - PREPARING FOR NEXT TRIP
4 IN PORT - MAINTENANCE
5 IN PORT - REPAIRS
6 IN PORT - BAD WEATHER
7 IN PORT - OTHER (PLEASE SPECIFY)
8 IN TRANSIT TO ANOTHER PORT
9 AT SEA - TRANSHIPPMENT

SPC / FFA REGIONAL FISHING TRIP / PORT VISIT LOG - INSTRUCTIONS

Block One: Vessel Identification

Country of Registration and Registration Number in Country of Registration: Print the name of the country in which the vessel is registered (e.g. "Japan") and the registration number issued by the country in which the vessel is registered (e.g. "ME1-808").

Year: Print the year in which the vessel departed from port at the start of the trip.

Block Two: Vessel Fishing Trip / Port Visit

Periods when the vessel was at sea fishing or was in port must be completed in this block covering the entire year.

IT IS FUNDMENTAL THAT PERIODS WHEN THE VESSEL WAS NOT FISHING ARE LISTED ON THIS FORM.

Please note that a fishing trip is terminated when a full or partial unloading is undertaken, and that this therefore includes any at-sea transhipments

The period the vessel was in port and the main reason for remaining in port must be specified in the space provided.

Period – Date from and *Date to*: Print the date that either (i) the fishing trip commenced (i.e. departure from port) and the date of return to port, or (ii) when in port, the date that a specific "in-port" activity began and ended (for example, unloading the catch). Note that the first day on this form for a vessel must be January 1st and the last day must be 31st December for any given year. All days in the year must be accounted for in the periods recorded.

Fishing Trip and Port Visit Code: Use Activity Code 1 ('Fishing Trip') for periods when the vessel undertook a fishing trip. Use the appropriate Activity Code between 2 and 8 (as listed) for any period that the vessel was in port (i.e. not undertaking a fishing trip).

Logsheet provided ?: For periods when the vessel was fishing (i.e. on a "fishing trip"), indicated whether the a catch logsheet was provided.

Comments: Print any comments relevant to this period of activity.

Example :

REV: SPC/FFA DEC 2004

SPC / FFA REGIONAL FISHING TRIP AND PORT VISIT LOG

PAGE_____OF _____

NAME OF VESSEL	GEAR TYPE	COUNTRY OF REGISTRATION	YEAR
Great Ocean	*Longline*	*Fiji*	*2002*

NAME OF FISHING COMPANY	REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN
JIKO FISHING COMPANY LTD	*Fiji*	

PERIOD OF ACTIVITY		FISHING TRIP AND PORT VISIT CODE	IF FISHING TRIP:				IF PORT VISIT:	
DATE FROM DD / MM / YYYY	DATE TO DD / MM / YYYY		LOGSHEET PROVIDED ?	OBSERVER ONBOARD?	TOTAL NUMBER OF CREW	NUMBER OF PACIFIC ISLAND CREW	NAME OF PORT	COMMENTS
1/1/2002	*05/01/2002*	*3*						
06/01/2002	*21/1/2002*	*1*	*Yes*	*No*	*15*	*11*	*Suva*	
22/1/2002	*22/01/2002*	*2*						
23/1/2002	*25/01/2002*	*5*						
26/01/2002	*31/1/2002*	*3*						
01/02/2002	*18/2/2002*	*1*	*Yes*	*No*	*15*	*10*	*Suva*	

.....

23/12/2002	*23/12/2002*	*2*						
24/12/2002	*31/12/2002*	*7*						*Christmas - New Year break*

.....

FISHING TRIP AND PORT VISIT CODES

1 FISHING TRIP
2 IN PORT - UNLOADING CATCH
3 IN PORT - PREPARING FOR NEXT TRIP
4 IN PORT - MAINTENANCE
5 IN PORT - REPAIRS
6 IN PORT - BAD WEATHER
7 IN PORT - OTHER (PLEASE SPECIFY)
8 IN TRANSIT TO ANOTHER PORT
9 AT SEA - TRANSHIPPMENT

NATIONAL FISHERIES AUTHORITY

PO Box 2016, Port Moresby, National Capital District, Papua New Guinea
Telephone: 3090444, Facsimile: 320 2061, Email: nfa@fisheries.gov.pg

Division of Monitoring, Control and Surveillance

COMPULSORY VESSEL INSPECTION and CHECKLIST

PNG Licence No: | Date:

A: VESSEL VERIFICATION

Vessel Name:		Type:
Flagging Arrangement:	Country Registration number:	International radio call sign (IRCS):
Company owner:	Country:	
Charterer:	Country:	
Vessel captain:	Nationality	
Type of licensing arrangement:		
Vessel ownership arrangement		

B: VESSEL MARKINGS

1. PNG license No. is clearly displayed on both sides and top of wheelhouse ? **Yes** **No**

Remarks:

2. All utility boats (e.g.: skiffs, dinghies, speedboats, towboat) that are carried by the licensed vessel to support its fishing operations properly comply with the license marking requirements ?

Skiff **Yes** **No** **n/a**	Dinghies (No. =) **Yes** **No** **n/a**	Helicopter **Yes** **No** **n/a**
Tow boat **Yes** **No** **n/a**	Speed boats (No .=) **Yes** **No** **n/a**	Other **n/a** ( ) **Yes** **No**

3. Are this vessel's payaos all clearly and permanently marked correctly ? **Yes** **No**

For the options: **Yes**, **No**, or **n/a** please circle the appropriate response

C: ASSOCIATED SUPPORT CRAFT (including carrier vessels)

List support boats:	Name	Usage	Size: Capacity if a fish carrier	Size: GRT	Size: LOA (m)
	a)				
	b)				
	c)				
	d)				
	e)				

Helicopter:	**Yes** **No**	Make:	Model:	Year:

D: SIZE CHARACTERISTICS

Gross registered tonnage:	Net tonnage:	Maximum loading capacity: mT	Total well volume: (m3)	Vessel cruising speed: kts.

Well (hold) capacity and usage (also get Captain to have the attached **well layout map** filled out)

	Port or Centre "P" or "C" (eg: 1C)	m3	USAGE If fish storage note type of cooling and optimum temperature (°C) (ice, chilled seawater, brine, blast freezing, dry freezer hold)	Star-board	m3	USAGE
Main deck	1			1S		
	2			2S		
	3			3S		
	4			4S		
	5			5S		
	6			6S		
	7			7S		
	8			8S		
	9			9S		
	10			10S		
Upper deck or more wells				S		
				S		
				S		
				S		
				S		

E: ELECTRONICS

		MAKE	MODEL	COMMENTS (use code - see * below)	USE CODE
NAVIGATIONAL RADAR # 1	Y N				
NAVIGATIONAL RADAR # 2	Y N				
BIRD RADAR	Y N				
DEPTH SOUNDER # 1	Y N				
DEPTH SOUNDER # 2	Y N				
SONAR	Y N				
GPS	Y N				
TRACK PLOTTER	Y N				
RADIO BEACON DIRECTION FINDER	Y N				
RADIO BUOYS - NON CALL-UP	Y N			How many ?	
RADIO BUOYS - CALL-UP	Y N			How many ?	
SATELLITE BUOYS	Y N			How many ?	
REMOTE ECHO SOUNDING BUOYS	Y N			How many ?	
DOPPLER CURRENT METER	Y N				
SEA SURFACE TEMP. GAUGE	Y N				
WIND SPEED / DIRECTION FINDER	Y N				
WEATHER FACSIMILE	Y N				
NOAA WEATHER SATELLITE MONITOR	Y N				
VMS (FFA TYPE-APPROVED)	Y N			Seal intact ? Y N	
FIXED BINOCULARS	Y N				
SATELLITE / HF TELEX	Y N			Telex number:	

Please circle "**Y**" or "**N**" for every item

FISHERY INFORMATION SERVICES		DATA SOURCE	USE CODE
BATHYTHERMOGRAPH DATA USED	Y N		
ALTIMETRY DATA USED	Y N		
OTHER #1	( )		
OTHER #2	( )		

*** USE CODES**

Ask Captain to indicate how much each instrument or service is used. Use the following one-letter usage codes to show the response:

I = Intensive
O = Occassional
R = Rarely
N = Not used or not working

INMARSAT SYSTEM	Y N	Phone number:	Fax number:	Email:

F: FISHING GEAR SPECIFICATIONS

F1: PURSE SEINE	YES NO	- if "NO" then skip the rest of section "F1"

SINGLE SEINER **GROUP SEINER** (circle one)

If this vessel is a group seiner then ensure that the names and the capacity of the associated carrier vessels are included in the ASSOCIATED SUPPORT CRAFT section (section C).

POWER BLOCK	Make:	Model	Rated power	Sheave diamet cm
PURSE WINCH	Make:	Model	Rated power	Hauling speed m/sec
PURSE CABLE	Section length (m): m m m Skiff end — Seiner end Section diameter (mm): mm mm mm			
NET SKIFF ENGINE	Make:	Model	Horsepower:	

NET	Maximum net depth m	Maximum net depth m	No. of net strips	Hanging ratio %:
	Average mesh size of body mm	Net material:		
	Average mesh size of bunt mm	Mesh type: (circle one) **knotted** **unknotted**		

BRAILER	Type:	Capacity 1 mT	Capacity 2 mT
FADs	Maximum No. of FADs used:	FAD materials:	
LIGHTS	Number used:	Type:	Power: kWt

HELICOPTER	Make:	Model	Registration number:
	Effective range: kms.	Colour:	

COMMENTS:

F2: LONGLINE

YES NO - if "NO" then skip the rest of section "F2"

MAINLINE

Possible materials include: nylon, kuralon,

Material:	Type:	Diameter: mm	Length m

Mainline storage: (circle one) **vessel bin** **baskets** **drum**

Possible types include: monolfilament, multi-strand twisted monofilament, braided

Branchline average length m	Number of sections: **1 2 3 4** (circle one)	Trace type: **monofilament** **wire** (circle one)

MAKE-UP of BASKET (BRANCH LINES and FLOATS)

Please circle "**Y**" or "**N**" wherever possible

Description of multi-section branchlines

Mainline end — Section 1. — Section 2. — Section 3. — Section 4. — Hook end

	Section 1.	Section 2.	Section 3.	Section 4.
Material:				
Type:				
Length:	m	m	m	m

Maximum No. of hooks set:	Maximum No. floats set:	Average length of float lines: m

MAINLINE HAULER	**Y N**	**MAINLINE SHOOTER**	**Y N**	**BAIT CHUTE USED**	**Y N**
BRANCH LINE HAULER	**Y N**	**AUTOMATIC BAIT THROWER**	**Y N**	**TORI POLES USED**	**Y N**
TIME / DEPTH / TEMPERATURE RECORDERS (TDRs or MINILOGS) USED	**Y N**			**SHARK LINES ON FLOATS**	**Y N**

F3: PRAWN TRAWL

YES NO - if "NO" then skip the rest of section "F3"

WINCH

Make:	Model	Rated power	Hauling speed m/sec

NET

Warp length: m	No. of trawls towed:	Total No. trawl nets on board:

Average mesh size of body mm	Material of net body:

Average mesh size of codend mm	Material of codend:

F4: OTHER FISHING GEAR SPECIFICATIONS - please specify (.....)

GILLNETS	**Y N**	**VERTICAL LONGLINES / DROPLINES**	**Y N**	**OTHERS**	
BOTTOM LONGLINES	**Y N**	**FISH TRAPS**	**Y N**	(.....)	**Y N**
HANDLINES	**Y N**	**TRAWL NETS**	**Y N**	(.....)	**Y N**

Brief description of gear including numbers of each type, basic materials and lengths, depths, if appropriate:

Name of Captain or Person-in-Charge, if not the Captain	Position of Person-in-Charge, if not the Captain	
I, as the above named Captain / Person-in-Charge, agree that the above details are an accurate description of this vessel at time of this inspection.	**Yes No** (circle one)	Signature of Captain or Person-in-Charge

G: AWARENESS of PNG LICENSING CONDITIONS, REQUIREMENTS and PROHIBITIONS

1. License on board - Is the original or is a copy of the current license on board ? **original** **copy** **none** (circle one)

2. Crew Vessel licensed to carry total of: ____ Number of citizens (PNG Nationals): ____ Vessel's crew number at inspection time: ____

3. License conditions and endorsements - Has the Captain / Person-in-Charge read and understood ……

a) the Conditions on the back of the license ?

b) the Special Conditions, Prohibited Areas (attachment B) ?

c) the Endorsement to License (attachment G) ?

d) the Requirements for Markings ?

Yes **No** (circle one)	Signature of Captain or Person-in-Charge

4. Transhipment - Is the Captain Person-in-Charge aware that the license conditions require

a) the Captain / Person-in-Charge to request permission to tranship fish or to re-provision 72 hours in advance ? (Condition 5 - Attachment D)

b) that once permission has been granted then an Observer or NFA Fishery Officer must be on board the vessel before transhipment or re-provisioning can start ?

Yes **No** (circle one)	Signature of Captain or Person-in-Charge

5. Catch recording - Does the Captain / Person-in-Charge know he is responsible to ensure all catch is recorded

a) daily on the Logsheets supplied by NFA ?

b) using his own or his Master Fisherman's best estimate of total catch and of the catch composition

Yes **No** (circle one)	Signature of Captain or Person-in-Charge

6. Formal Clearance - Does the Captain / Person-in-Charge know he must report to port for formal clearance:

a) on entering PNG waters before meeting any other vessel

b) before departing the country, after the last transhipment, reprovisioning or other meeting with any other vessel

Yes **No** (circle one)	Signature of Captain or Person-in-Charge

7. Offences and Penalties - Is the Captain Person-in-Charge aware that:

a) failure to comply with these and any other terms and conditions of the License, National Laws and Regulations may, in addition to any judicial penalties that may be incurred, result in the suspension or loss of the license either temporarily or permanently.

b) as Captain / Person-in-Charge of the vessel he will be charged for offences under the Fisheries Management Act if found in breach of any of these conditions.

Yes **No** (circle one)	Signature of Captain or Person-in-Charge

ACTIONS TAKEN

1. Major discrepancies identified

2. Corrective actions taken

CERTIFICATION

In accordance with section 48 of the Fisheries Management Act, 1

I, ……..……, a gazetted Fisheries Officer of the National Fisheries Authority, do declare

that I have inspected the vessel, ……..……..……, on ……..…..…… at ……..…..…..……..
and I am satisfied that all necessary requirements have been met.

All the conditions of the license were fully explained to the Captain / Person-in-Charge of the F/V ……..
who signed the below statement to the effect that the license conditions were fully understood and that they would be complied with.

This vessel was ……..…… on ……..……..…….. at ……..……
(write in "cleared" or "not cleared") (date) (port)

(signature of Fisheries Officer)

(signature of Witness)

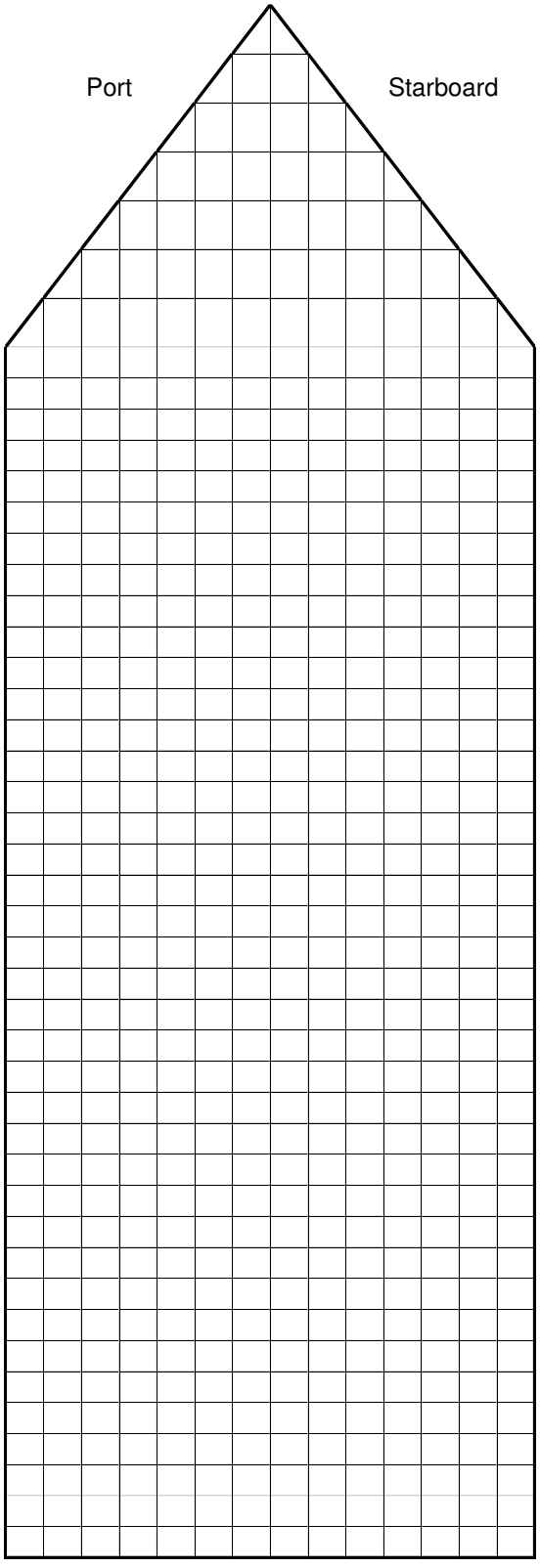
STATEMENT

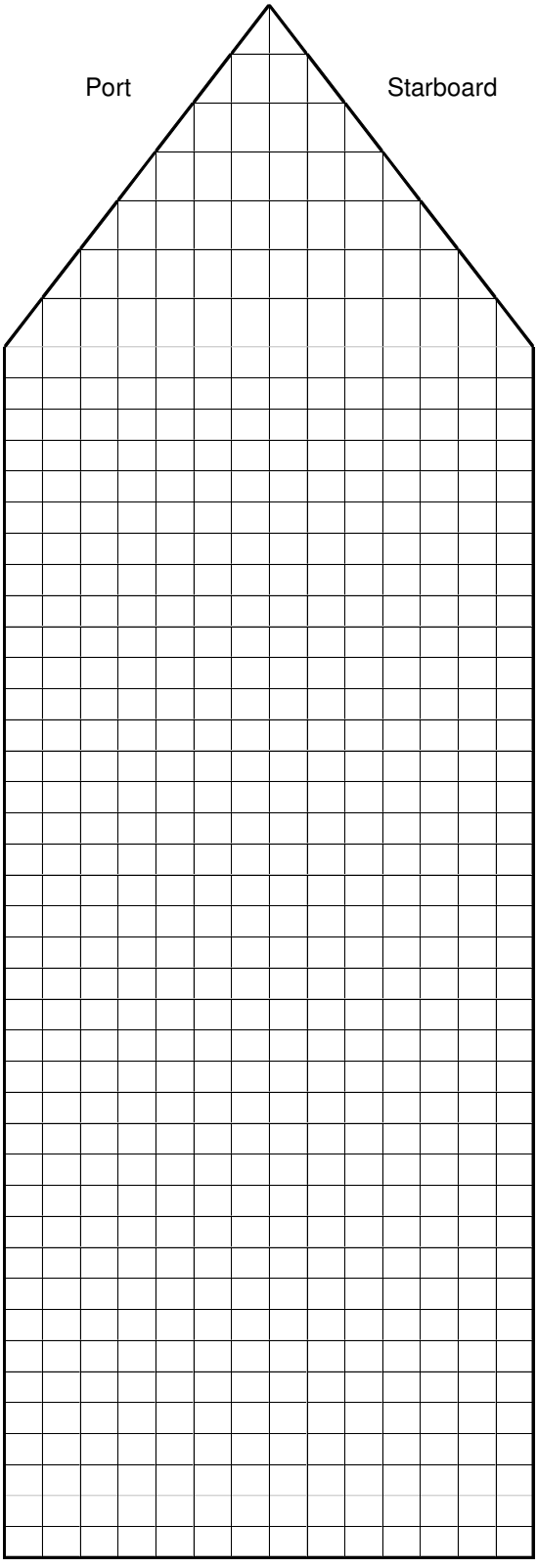
I, ……..……, ...……..……
(name of Captain or Person-in-Charge) (title / position held)

of the fishing vessel, ……..……..……..……., do declare that I fully understand what the Fishery Officer has explained today and will comply with the conditions of the license.

(signature of Captain or Person-in-Charge)

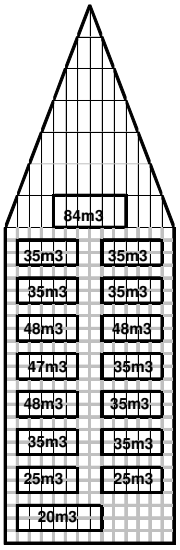
(date)





Level 1. upper / lower / only
(circle one)

Level 2. upper / lower
(circle one)



Example:
Deck 1. upper / lower / only

1. Mark (outline) each well (hold) in its position on the vessel.
2. Indicate the capacity for each well in cubic metres (m3).
3. If there is one level of wells (most vessels) use "**Level 1**" maps above and circle "only".
   If some wells (holds) are over the top of other wells use "**Level 1**" and the "**Level 2**" maps.
   Circle the word "upper" or "lower" on each map to show if wells are on top or underneath.

WCPFC REGIONAL FISH AGGREGATING DEVICE (FAD) INFORMATION RECORD

Form WCPFC - XX

WCPFC Draft DCC. 2007

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

Record No.	Date DD MM YY	Time hh mm	Latitude dd°mm.mmm'	N S	Longitude ddd°mm.mmm'	E W	Object number	Set No.	How detected	FAD as found	FAD as left	Comments

FAD Materials										Max est. depth	FAD length	FAD width	Origin of FAD	Animals entrapped (*circle one*)
Main materials						FAD attachments								
1	2	3	4	5	6	1	2	3	4	M F	M	M		YES NO

Record No.	Date DD MM YY	Time hh mm	Latitude dd°mm.mmm'	N S	Longitude ddd°mm.mmm'	E W	Object number	Set No.	How detected	FAD as found	FAD as left

FAD Materials										Max est. depth	FAD length	FAD width	Origin of FAD	Animals entrapped (*circle one*)
Main materials						FAD attachments								
1	2	3	4	5	6	1	2	3	4	M F	M	M		YES NO

Record No.	Date DD MM YY	Time hh mm	Latitude dd°mm.mmm'	N S	Longitude ddd°mm.mmm'	E W	Object number	Set No.	How detected	FAD as found	FAD as left

FAD Materials										Max est. depth	FAD length	FAD width	Origin of FAD	Animals entrapped (*circle one*)
Main materials						FAD attachments								
1	2	3	4	5	6	1	2	3	4	M F	M	M		YES NO

Record No.	Date DD MM YY	Time hh mm	Latitude dd°mm.mmm'	N S	Longitude ddd°mm.mmm'	E W	Object number	Set No.	How detected	FAD as found	FAD as left

FAD Materials										Max est. depth	FAD length	FAD width	Origin of FAD	Animals entrapped (*circle one*)
Main materials						FAD attachments								
1	2	3	4	5	6	1	2	3	4	M F	M	M		YES NO

How Detected (FAD)

1 Seen from Vessel (no other method)
2 Seen from Helicopter
3 Marked with Radio beacon
4 Bird Radar
6 Info. from other vessel
7 Anchored (GPS)
8 Marked with Satellite beacon
9 Navigation Radar
10 Lights
11 Flock of Birds sighted from vessel
12 Other (please specify)
13 Vessel deploying FAD (not detected)

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 logs (converted into FAD)
5 Debris (flotsam bunched together)
6 Dead Animal (specify; i.e whale, horse
7 Anchored Raft Fad or Payou
8 Anchored Tree or Logs
9 Other (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
5 Metal drums (i.e 44gal)
7 Philippines design drum FAD
8 Bamboo / Cane
9 Floats / Corks
10 Unknown (describe)

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*)

Origin of Fad

1 Your vessel deployed this trip
2 Your vessel deployed previous trip
3 Other vessel's (owner consent)
4 Other vessel's (no owner 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 in comments section*)

FAD INFORMATION INFORMATION

Observer Name, Vessel Name
Always print each of these names out in full (e.g. observer name "John Smith", and a vessel name "Mahino no 8")
Observer Trip ID Number: - Number issued by the authority you are working for. ROP numbers will be made up of ROP Observer authorisation number, type of vessel, year and trip number in that year. i.e. John Smith (ID ROP#023) boards a long line vessel in 2007 and this is the 10th ROP trip for the year.
Trip number would be **ROP23LL-07/10**

Page of :
Number the "FAD Information Forms" throughout the trip as Page 1, Page 2, Page 3, etc. At end of trip put the last page number on every page (e.g. if there are 10 "FAD Information Form" pages filled out) then the first page will be " Page 1 of 10 ", the fourth page, " Page 4 of 10 " and the last page will be " Page 10 of 10 ").

Date & Time - Record the time when the vessel is close enough to the object to begin collecting data. Use the date and time on the ship's clock - The Ship's Date and Ship's Time is the date and time used by crew on board. Normally the observers will set their watches to this date and time as soon as they board the vessel.

Latitude & Longitude - Record the position of the FAD, using the Latitude and Longitude that is obtained from the GPS. Record to three decimal places if possible, if not possible place 000 in the decimal minutes field.

Object Number - The observer will assign consecutive numbers to each floating object as they are found. Starting with 001; If an object has been bought on board it will still be assigned an Object No. If it is returned to the water at the same location, the number will remain the same. However if the object is moved to a different area a new number will be asisgned to the object.

Set Number - If the object is involved in a set, **t**he set number will be identical to the Set Number that you record on the daily activity sheet. If no set is made on the object, leave this space blank.

How Detected - Record the primary method used to locate the object. If the object is a FAD being deployed use code for being deployed since it was not located.

FAD as Found As found is used to identify equipment present before and after the vessel encounters the object. Note: Complete this column only for objects found in the water; if the object is a FAD being deployed, leave this column blank.

FAD as Left - Check all of the equipment attached to the object when the vessel leaves it adrift. If no modifications were made to the object, the "As found and As Left" fields should be identical. If the object is brought aboard the vessel and moved to another area leave this field blank.

FAD Materials - This section is used to record the components that make up a floating object, The most common materials which make up the majority of floating objects are listed in the FAD material code column, If there are many materials making up the FAD; list in order up to 5 components starting with the most abundant material - If the object has a component not included in the list use other and describe it in the comments column, if not sure of the material use unknown and describe it .

FAD Attachments -
Same instructions as for Fad Materials - Record if there is any attachments to the main floating device
Max Est Depth - Record the maximum estimated depth in metres or yards (Circle the measurement you use) below the surface of the water, of the object or any equipment attached to the object, including flags and beepers, at the time the object is found or deployed. If unable to estimate place "Unknown" in the field.

Fad Length & Fad Width
Record the dimensions of the object and any attached equipment, (circle metres or yards) from the longest dimension to the shortest, at the time the object is found or deployed. If the object has an irregular shape or is made up of multiple components, draw an imaginary box around the object and all components, including hanging netting, flags and beepers, and record the length and width dimensions of the imaginary box,

Origin of FAD Try to find out the origin of the object prior to the current encounter. Use comments for any additional details of the origin of the object. Use the code to best describe the origins of the FAD. If you can not find out where the FAD came from, use the code for "unknown", if the origin is not listed use "other" and describe in the comments area.

The object was set adrift by your vessel during a previous fishing trip. This information must be obtained from the crew.

The object is either (a) being placed in the water for the first time, or (b) returned to the water after being taken aboard the vessel and moved to another area (see Section 1.1).
Other vessel – with owner consent
The object belongs to another vessel, and its location has been given to your vessel with the owner's permission.
Other vessel – no owner consent
The object belongs to another vessel, and has been found by your vessel without the permission or collaboration of the owner.
Drifting object found
The object was not previously involved in fishing activity. If the object has signs of previous fishing activity, such as a flag or beeper attached, record it as Other vessel – no owner consent.
Unknown
You cannot determine the prior origin of the object. Note any details in Section J,

Fauna Entrapped - Circle YES if any fauna, dead or alive, is trapped in the object whether with webbing, ropes, cloth, buckets, or between the bars in a rack. Write the name of the trapped species in the in theComments area. If the object has no entrapped Fauna circle NO.

Comments
Please write as much info on each FAD as you can. Drawings or extra comments can be recorded in your diary. Record the diary page number under the comments area.