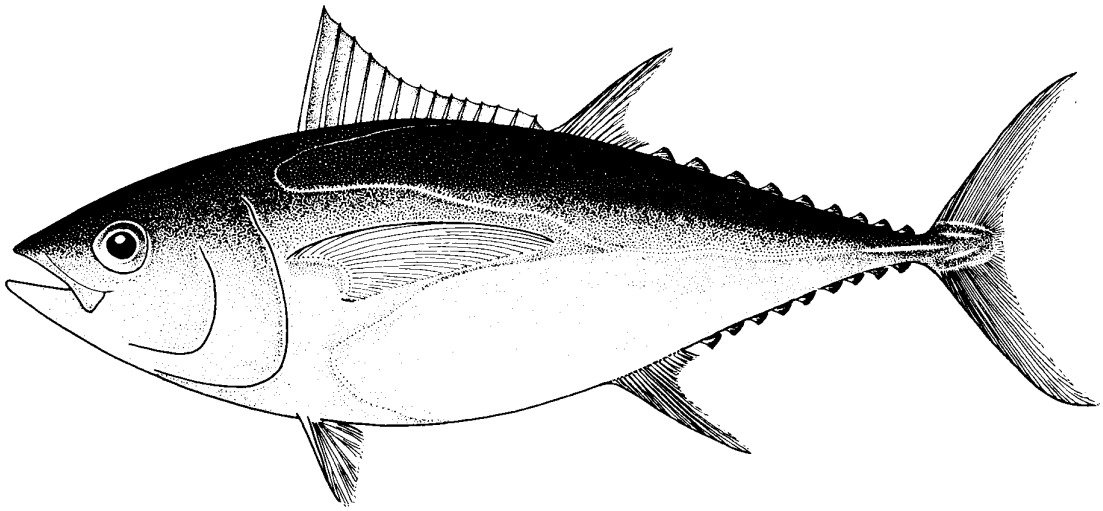
REPORT OF THE FOURTH MEETING OF THE TUNA FISHERY DATA COLLECTION COMMITTEE

6–8 December 2000
Brisbane, Queensland
Australia



Oceanic Fisheries Programme
Secretariat of the Pacific Community
Noumea, New Caledonia

Forum Fisheries Agency
Honiara
Solomon Islands

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1. PRELIMINARIES

1.1 Appointment of Chairman and Rapporteurs

1. Mr Felix Panjuboe was reappointed chairman of the Tuna Fishery Data Collection Committee1 (hereafter 'the Committee') and welcomed the participants. He noted that the work of the Committee was essential for the collection of catch and effort data, observer data and port sampling data from tuna fisheries in the region. It was also noted that in the two years since the last meeting, there has been considerable experience gained in the national observer programmes, so it was now particularly appropriate to conduct a thorough review the observer forms. It was considered that changes in the purse-seine fishery, such as the increased use of drifting FADs and the introduction of tender vessels, may have implications for the purse-seine logsheet. It was also noted that the meeting would have to take into account the increasing concern with bycatch, especially species of special interest, such as marine turtles.

2. Mr Tim Lawson and Ms Deirdre Brogan were appointed rapporteurs.

1.2 Adoption of Agenda

3. The agenda (Appendix 1) was adopted with the addition of an item on data management issues.

2. REVIEW OF PROPOSED CHANGES TO LOGSHEETS

2.1 General

4. The discussion held at the third meeting of the Committee concerning the logsheets was reviewed. Regarding the discussion concerning the fact that United States purse seiners do not usually complete the unloadings block on the purse-seine logsheet because (a) the logsheets must be submitted to FFA within 14 days of their arrival in port, (b) there are often lengthy delays in unloading, and (c) they use a separate unloadings form, Mr Panjuboe stated that he may propose at the next annual US Treaty consultation that (i) the separate unloadings form no longer be used, (ii) unloadings be recorded on the purse-seine logsheet, and (iii) the purse-seine logsheet be submitted within 14 days after the completion of unloading, rather than 14 days after arrival in port.

SCTB13 Review of Committee Logsheets

5. Mr Lawson introduced Working Paper 1, SCTB13 Review of Forms Committee Logsheets, which formed the basis of most of the proposed changes to the logsheets considered at the present meeting. The review was undertaken by the Statistics Working Group (SWG) of the Standing Committee on Tuna and Billfish (SCTB). In June 1998, during SCTB11, the Statistics Working Group established procedures for achieving its objectives of coordinating data collection, data

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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 took place from 11 to 13 December 1996 in Brisbane, Australia (Anonymous, 1997) and the third meeting took place from 9 to 10 December 1998 in Brisbane, Australia (Anonymous, 1999a). During the fourth meeting, the name was changed to the Tuna Fishery Data Collection Committee.

compilation and dissemination of data (Anonymous, 1998). It agreed that two of the procedures for coordinating data collection would be to establish minimum standards for data collection forms and to review data collection forms used in the region. At the SWG Session on Data Collection Forms that was held in June 1999, immediately prior to SCTB12, minimum standards for catch and effort logsheets were established and the logsheets of the Australian Fisheries Management Authority and the New Zealand Ministry of Fisheries were reviewed (Anonymous, 1999b). A second SWG Session on Data Collection Forms was held on 3 July 2000, immediately prior to SCTB13, to review the logsheets developed by the SPC/FFA Tuna Fishery Data Collection Committee. Following SCTB13, the SWG also reviewed the longline, pole-and-line and purse-seine logsheets of the Fisheries Agency of Japan.

Vessel and Gear Attributes

6. In its review, the SWG noted that several vessel and gear attributes were missing from the Committee logsheets. The vessel and gear attributes were not included on the logsheets because they are available from the FFA Regional Register. However, the completeness and reliability of vessel and gear attributes of the Regional Register have been questioned by members of the Committee; therefore Working Paper 2, Review of Vessel Attributes in the FFA Regional Register, was prepared prior to the present meeting. The working paper is discussed in section 2.6 below. The Committee noted that if the vessel and gear attributes on the Regional Register were incomplete and/or unreliable, it would be problematic to include the vessel and gear attributes on the logsheets due to lack of space.

Major Non-Target Species, Species of Special Interest and Discards

7. In its review, the SWG also noted that there was only partial information on the logsheets concerning catches of major non-target species and discards of target species. The SWG was particularly concerned with the absence of data items on the longline logsheet for catches of species of special interest, such as turtles, birds, marine mammals and certain sharks. The SWG also noted that the tendency of fishermen is not to record catches if the name of species is not on the form, which is a problem for several major non-target species. The Committee again noted that it would be problematic to include additional information concerning major non-target species and discards on the logsheets due to lack of space.

Structure of Logsheets

8. The SWG recognised the problem of lack of space on the Committee logsheets and suggested that it may be preferable to change the structure of the logsheets. The current logsheets have one line for each longline or purse-seine set, or the 01:00 UTC position if no sets were made during the day. Hence, data for several days fishing can be recorded on a single page. The SWG suggested that it may be preferable to have one page per day in order to include more complete information.

9. The Committee agreed in principle with this suggestion, noting that an appropriate format may be a logbook containing one page for vessel identification, vessel and gear attributes, and other trip-related information, followed by pages on which the daily or set information was recorded. Instructions for completing the logbook, as well as a species identification guide and other information, could also be included in a logbook.

10. The Committee also agreed with the SWG's comment that it may be preferable to have a detailed form for certain fleets of larger vessels and a simple sheet for smaller vessels. The Committee considered that a logbook might be appropriate for distant-water longliners, certain local longline fleets, and purse seiners, while logbooks would probably not be appropriate for certain

offshore longline fleets due to the lower capability of those fishermen for completing data collection forms.

11. There was considerable discussion regarding the practical aspects of implementing logbooks in the region, in place of the logsheets currently in use. There would probably be resistance to adopting logbooks from vessel owners and operators, from both local fleets and distant-water fishing fleets. Governments of SPC and FFA member countries may not be willing to modify access agreements with foreign fleets or modify current data collection practices with local fleets. On the other hand, the Committee recognised that its role was to anticipate data requirements with regard, for example, to major non-target species, species of special interest, discards, and changes in gear technology. Rather than being primarily concerned with the implementation of the logbooks, the Committee's role should be to develop data collection forms taking into account the recommendations of scientists, such as those who participated in the SCTB13 review of the Committee logsheets, and then make the forms available to the SPC and FFA member countries.

12. It was therefore agreed that the Committee would develop prototype logbooks, initially for longliners and purse seiners, and possibly other gear types at a later date, if necessary. The logbooks will be developed by the SPC Oceanic Fisheries Programme (OFP), in close collaboration with FFA, and in collaboration with colleagues in both member and non-member countries. It was considered that it would be particularly important to seek input from colleagues in the distant-water fishing nations. It was also agreed that attempts should be made to test the prototype logbooks with vessels that are willing to do so on a voluntary basis and then revise the prototype logbooks before final versions are issued by the Committee.

Transcription of Vessel's Log to Committee Logsheets

13. The Committee also noted the comments made during the SCTB13 review concerning data errors resulting from the transcription of data from national forms of foreign fleets to the Committee logsheets. The solution to the problem would be for foreign fleets operating under access agreements to use the Committee forms (logsheet or logbook, as the case may be), suitably translated, as the vessel's log. If the forms were printed on self-copying paper, then identical copies of each form would be easily made available to the operators, the government of the fishing nation, the government of the coastal state (or states, if the fleet operates under agreements with more than one coastal state), and perhaps other parties, as appropriate. This would eliminate the need for transcription and, hence, data errors, as well as save the operators the considerable cost that is currently being expended on transcription. It was considered that the current Committee logsheets would not be appropriate as a vessel's log, since they are not detailed enough for most large vessels, but that the prototype logbooks, which *will* contain detailed information, could be developed with this usage as one of the objectives.

Activity Code for 'Vessel Sighted'

14. The SCTB13 reviewers suggested that an activity code for 'vessel sighted' be included on each of the logsheets in order to identify vessels for which logsheets may not have been provided. The Committee considered that including an activity code for sighting a vessel would not be consistent with the other activity codes, which refer to the main activity during the day. On the other hand, it was agreed to modify the instructions to state that information on vessels sighted could be hand-written on the logsheet.

15. The Committee considered other suggestions made during the SCTB13 review. These are addressed in the sections for longline, pole-and-line and purse-seine logsheets below.

Compliance

16. The Committee briefly considered the problem of compliance regarding the completion of logsheets or logbooks and verification of the data. It was suggested that greater effort could be made by SPC and FFA member governments to ensure that vessels are collecting the appropriate logsheet or logbook data when the vessels are in port. This may require additional training of compliance officers in use of Committee forms.

Computer Versions of the Logsheets

17. It was noted that about ten United States purse seiners have been provided with computer spreadsheet versions of the purse-seine logsheet, so that the forms can be completed on computer, rather than on hardcopy. The original spreadsheet, however, was designed to be printed and not to be used for data entry. It was agreed that the OFP would develop, as time permits, user-friendly versions of the spreadsheets for data entry.

'South Pacific' in the Title

18. It was suggested that the words 'South Pacific' in the name of the logsheets, e.g. "South Pacific Regional Longline Logsheet", may not be appropriate, given that certain SPC and FFA member countries are located in the north Pacific. The words 'Western and Central Pacific' were suggested, but, after some discussion, it was agreed that this problem would be reconsidered in the future, perhaps after the establishment of the new tuna commission, such that the title of the logsheets reflect the same area referred to in the name that may be adopted for the new commission.

2.2 Longline Logsheet

Hooks Between Floats

19. The SCTB13 reviewers noted that the 'number of hooks between floats' is included on the form in the header, such that one value is recorded for the entire trip, whereas certain fleets, e.g. Taiwanese offshore longliners in the Indian Ocean and possibly in the Pacific, vary the number of hooks between floats while searching for concentrations of fish. These vessels make multiple sets per day, using fewer hooks, until concentrations are localised, whereupon full sets are made. They therefore suggested that it may be appropriate to record the number of hooks between floats for each set. On the other hand, they also noted that there have been some logsheets provided to the OFP in the past on which the number of hooks per basket or the number of hooks between floats were recorded for each set, but the values recorded almost never change during the entire trip. The Committee suggested that 'hooks between floats' could be included for each set in the prototype logbook.

Whale Predation

20. The SCTB13 reviewers were concerned about the high levels of predation of tuna by false killer whales that have been reported in the Indian Ocean and suggested that consideration be given to recording information on the incidence of predation by false killer whales on the longline logsheet. However, the Committee considered that it was not appropriate to record information on the reasons for discards on the logsheet, due to lack of space, but also because no other information on the reasons for discards (e.g. gear damage, shark damage, too small, poor quality, etc.) was recorded on the form. On the other hand, it was suggested that the instructions for the longline logsheet could be modified to state that the number of fish predated could be hand-written on the form. In fact, this is already done on certain longliners in Tonga. It was also suggested that the proposed prototype logbook could include information on the reasons for discarding.

Units of Weight

21. The SCTB13 reviewers noted that the units of weight, i.e. whole weight or processed weights, are not given on the longline logsheet. However, the SCTB13 reviewers also noted that the practices of each of the fleets was consistent and known, so that it was not necessary to include the units on the form. For example, most fleets land albacore whole, while bigeye and yellowfin are gilled and gutted, and marlin are headed and tailed. On the other hand, one participant at the Committee meeting suggested that this may not be the case for albacore landed by the American Samoan and Samoan longline fleets. Mr Yamasaki and Ms Brogan agreed to investigate the extent to which albacore were landed whole or gilled and gutted in American Samoa and Samoa, respectively. Subsequently, Mr Yamasaki reported that almost all albacore landed by the domestic longline fleet in American Samoa are gilled and gutted. Ms Brogan reported that, according to observer data held by the OFP, almost all albacore landed by the domestic longline fleet in American Samoa are gilled and gutted. This should be taken into account when logsheet data are processed and annual catch estimates are determined.

Number of Sharks Finned

22. The SCTB13 reviewers suggested that consideration be given to including a data item on the number of sharks that were finned. The Committee considered that it would not be feasible to do so because of lack of space, but that data items on finning could perhaps be included in the prototype logbook. It was noted that in the instructions for the longline logsheet, it states that sharks that are finned and the trunk discarded should be recorded as discarded, rather than retained.

Number of Lines on the Logsheet

23. It was noted that some local fishermen have complained that the lines on the longline logsheet were not high enough. It was suggested that the number of lines on the form could be reduced from 23 to 16, such that vessels that make one set per day would use two logsheets per month. On the other hand, increasing the height of each row would result in larger writing, which might be a problem because of the narrow width of the columns. It was agreed that the OFP would produce a draft longline logsheet with fewer lines, for consideration by the Committee.

Shark Catches, by Species

24. Shark catches are recorded on the longline logsheet under ‘Shark’, i.e. they are not recorded by species. It was suggested that the form be modified to record catches of certain shark species, similar to the longline forms of the Fisheries Agency of Japan. However, it was noted that the Japanese forms lack information on certain billfish species and discards. The Committee again recognised that the development of a prototype longline logbook, with one page per day or set, would allow detailed information on catches of sharks, by species.

2.3 Pole-and-Line Logsheet

Units of Tuna Discards

25. The SCTB13 reviewers noted that the units of tuna discards is ‘number of fish’ and that consideration should be given to having units of weight. The Committee noted that observer data indicated that there were so few discards from pole-and-line that ‘number of fish’ was appropriate.

Unloadings Data

26. The SCTB13 reviewers discussed the problem of verifying logsheet data with unloadings data. Japanese distant-water pole-and-line vessels land their catch in Japan; hence no unloadings data are available from the ports of other coastal states in the region. The SCTB13 reviewers therefore suggested that consideration be given to including data items on unloadings. On the other hand, they recognised that, for verification purposes, it is better to obtain an independent estimate of unloadings. The Committee agreed with the latter point, i.e. that an independent estimate of unloadings was necessary for verification purposes.

27. It was noted that the inclusion of unloadings data on the purse-seine logsheet was to enable tracking of the unloading process, given that purse-seine unloading can be full or partial, to a cannery, a transhipment vessel or both. Tracking the unloading process on the purse-seine logsheet is useful for verifying logsheet data with independent unloading data. Pole-and-line unloading, in contrast, is usually complete, rather than partial; therefore, there is less need for tracking the unloading process.

2.4 Purse Seine Logsheet

Activity Code for Deploying FADs and Drifting

28. The SCTB13 reviewers suggested that consideration be given to including activity codes for deploying FADs and for drifting, since the use of FADs has increased considerably and these are now distinct activities for many vessels. The Committee noted that including an activity code for deploying FADs and drifting would not be consistent with the current codes, which refer to either a set or the main activity during the day on days during which no set is made, unless the intention was to monitor days during which no set was made, but on which the main activity was deploying FADs or drifting. It was noted that when purse seiners arrive in the region, they can, in fact, spend several days deploying FADs. It was therefore agreed that an activity code for deploying FADs should be included, but that it should be consistent with the code used on Form PS–2, Purse-Seine Observer Daily Log, i.e. ‘deploy / retrieve – raft, FAD or payao’.

29. It was also agreed that the number of the new activity code on the purse-seine logsheet should be consistent with PS–2, i.e. ‘10’, rather the next sequential code on the purse-seine logsheet, which would be ‘8’. Observers quite often check the activity codes on logsheets and it would be confusing if the code numbers were different.

30. The Committee considered that drifting was rarely the main activity during days on which no sets were made; therefore, it would not be appropriate to include an activity code for drifting.

Number of FADs

31. Given the increased importance of FADs, the Committee agreed that a data item on the number of FADs used during a trip should be included on the purse-seine logsheet. There was considerable discussion regarding the wording of the data item, e.g. whether it should refer to the number of FADs carried by the vessel, the number deployed by the vessel, the number of FADs investigated regardless of whether they were deployed by the vessel, etc. It was agreed that the item would be ‘Number of FADs Used’ and that the instructions will state that the number of FADs that were used by the vessel during the trip, regardless of whether they were deployed by the vessel, should be recorded.

32. The SCTB13 reviewers noted that the use of FADs that employ echo-sounders and satellite tracking is becoming increasingly common. The Committee questioned whether this was in fact the

case. In any case, it was felt that detailed information on the type of FADs used would be more appropriate in a prototype logbook than on a logsheet.

Environmental Data

33. The SCTB13 reviewers noted that no environmental data, such as sea surface temperature, are included on the logsheet. Environmental data are known to be correlated to catch rates and so this information may be useful in explaining variation in catch rates. The Committee considered that there were calibration problems with the collection of sea surface temperature data on logsheets and that better sources of oceanographic and meteorological data were currently available.

End of Set Time

34. The SCTB13 reviewers noted that the 'set start time' is included on the form, but not the time at which the skiff is onboard, i.e. the time of the end of the set. This information is useful for calculating the searching time and thus to determine a more accurate measure of fishing effort. The Committee recalled that when the purse-seine logsheet was originally designed, the inclusion of 'end of set time' was considered, but it was felt that with the use of GMT / UTC time, confusion would be introduced if the end of set time occurred on the next GMT / UTC day. It was also felt that set times can be estimated from the catch. Nevertheless, the Committee felt that 'end of set time' should be considered for the prototype logbook.

Tender Vessels

35. The SCTB13 reviewers noted that Spanish purse seiners in the Indian Ocean make use of tender vessels to improve searching and to attract fish with lights at night. Some of these vessels are now operating in the Pacific and so consideration should be given to including information on tender vessels. The Committee agreed to include a data item in the header of the purse-seine logsheet concerning tender vessels. The wording of the data item was discussed and, in this regard, it was noted that tender vessels can operate in a variety of ways, with one or more tender vessels assisting one or more purse seiners. It was agreed that the wording for the data item should simply be 'Tender Vessel Used? (Y/N)', recognising that more detailed information could be provided by observers.

Presence of an Observer

36. The SCTB13 reviewers suggested that a data item concerning the presence of an observer onboard should be included, to allow the logsheet data to be cross-referenced to the observer data. The Committee noted that the cross-referencing of observer data and logsheet data was already conducted as a matter of course using logsheet and observer databases maintained by the OFP and by SPC and FFA member countries.

Problems With GMT / UTC Time

37. Working Paper 4, Problems Encountered With the 'Set Start Time' on the Regional Purse-Seine Logsheet, was considered. Some vessels ignore the requirement to record times in GMT and instead record times in local time or ship's time. It is often possible to determine whether GMT or local time has been used during a trip – sets on drifting FADs, for example, are usually made in the early morning – but sometimes it is not possible. Examination of sets on drifting FADs indicate that the United States purse-seine fleet always uses GMT time, while 60 percent of times recorded by the Taiwanese fleet are in GMT and only 2 percent of times recorded by the Korean fleet are in GMT.

38. Another problem occurs when GMT times are used, but the dates are in local time. If the vessel is in the GMT+11 time zone and a set is made at 11:05 am local time, the GMT time may be recorded as 00:05, but the GMT date is not always incremented.

39. It was suggested that an additional field be included to record the period of the day, e.g. early morning, mid morning, noon, mid afternoon, late afternoon, and night. However, it was considered that the additional field would be too confusing. It was recognised that flag states are responsible for ensuring that the forms are completed correctly. It was agreed that in order to educate the fishermen and persons responsible for transcription, a handout that clearly explains how GMT times and dates should be recorded would be prepared by the OFP and distributed.

2.5 Draft Shark Longline Logsheet

40. The draft Shark Longline Logsheet (Appendix 5) was developed by SPC for use by a Taiwanese longliner licensed by the Micronesian Maritime Authority. The vessel intended to target sharks in the Federated States of Micronesia EEZ. The following points were noted:

- Blue sharks are almost never retained by longliners targeting sharks; therefore the column for the number of blue sharks retained is unnecessary.
- The 'Primary Target Species' box could be separated into boxes for oceanic sharks and reef sharks. The columns for shark catches should be grouped into areas for oceanic sharks and reef sharks.
- The columns for bigeye, yellowfin, blue marlin, swordfish and other species could be combined into 'Tuna' and 'Other Species', with a column for the name of the species, the number retained and the weight in kilograms retained.
- Mako sharks and thresher sharks are usually retained, but there are no columns for those species. The shark species included on the logsheet should be compared to the OFP observer data, which were collected during five trips on shark longliners, if this has not already been done.
- When shark longliners catch tuna, they always keep the tuna for bait; therefore, the columns for the number of bigeye and yellowfin discarded are unnecessary.
- Fishermen generally have problems identifying sharks; therefore, a species guide should accompany the logsheet. It was noted that a prototype longline logbook would include several sharks species and a species guide. Hence a separate longline logbook for shark longliners will not be necessary.

41. Following the meeting, Peter Williams advised that the selection of species for the Shark Longline Logsheet was based on an analysis of observer data. The frequency of capture of the individual species, based on observer data held by the OFP covering 343 sets made during 23 trips in the Federated States of Micronesia, Palau, Papua New Guinea and Solomon Islands, during which sharks were targeted, is presented in the table below. He advised that the high number of blacktip shark may be due to a problem with species identification and needs to be confirmed.

SPECIES	CATCH		RETAINED	DISCARDED	ALIVE	DEAD
	NO	%	%	%	%	%
SILKY SHARK	6,204	41.2	91	9	84	15
OCEANIC WHITE-TIP SHARK	1,650	10.9	92	8	91	8
BLUE SHARK	1,216	8.0	9	89	91	8
YELLOWFIN	965	6.4	92	8	46	51
SWORDFISH	593	3.9	75	24	21	78
BLACKTIP SHARK	463	3.0	95	5	81	19
BIGEYE	401	2.6	95	5	69	27
BLUE MARLIN	355	2.3	96	4	57	43

2.6 Review of Vessel Attributes on the FFA Regional Register

Vessel Attribute Data Errors

42. The meeting considered Working Paper 2, Review of Vessel Attributes in the FFA Regional Register. The conclusions of the paper were that there are problems with the vessel attribute data on the Regional Register that must be resolved before the data can be considered useful. The main problems are as follows:

- There are different spellings of the same item in text fields.
- Different units are used for certain fields.
- There are no values indicating 'no information' or 'not applicable', resulting in confusion between null values and zero or blank values.
- There would appear to be data entry errors, wherein the same vessel has been entered more than once, each time with slightly different values of vessel attributes.

43. FFA considers that the vessel attribute data are important; however, if information that is consistent with FAO standards for vessel identification are provided on the Application for Registration, then the vessel will be registered. Many of the vessel and gear attributes included on the Application for Registration are supplemental to the FAO standards and, hence, they are not necessary for registration. If the supplemental information are missing or obviously in error, FFA does not request further information, since it is not necessary for registration. It was reported that several vessel attributes had been removed from the most recent edition of the Regional Register application form.

44. It was suggested that a solution to the problem of missing or problematic vessel attribute data would be for FFA to include a separate sheet for vessel and gear attributes with the Regional Register application form and renewal form, and to send the separate vessel attribute form directly to SPC. SPC could then follow-up problems as appropriate. It was agreed that SPC would provide FFA with a list of vessel and gear attributes that should be included on a proposed separate vessel attribute form to accompany the Regional Register application form and renewal form.

Regional Register Application Form

45. Certain problems with the Regional Register application form (Appendix 9) were noted, e.g. the problem of null versus zero or blank values, and it was considered that FFA should be able to improve the form's layout, formatting and instructions.

Historical Vessel Attribute Data

46. FFA does not maintain a database of historical vessel attributes; however, the historical data are available in hardcopy on Regional Register application forms. The licensing databases in SPC/FFA member countries may also contain vessel attribute data, although this information is incomplete.

Observer Verification of Vessel Attributes

47. It was agreed that the OFP would compile a database of vessel and gear attributes from the Regional Register, logsheet data and observer data. Subject to considerations of confidentiality, these data will be made available to observers in regional and national observer programmes in order to assist observers with collecting missing vessel and gear attribute data and verifying the compiled data.

3. REVIEW OF IMPLEMENTATION OF THE LOGSHEETS

Implementation

48. Working Paper 3, "Implementation of the South Pacific Regional Logsheet forms," which was prepared by Mr Peter Williams, SPC Fisheries Database Supervisor, was presented. The implementation of the logsheets is summarised in the table in Appendix 4. The following points were noted:

- As the Japanese fleets have adopted the regional standardised logsheets in the Federated States of Micronesia, other member countries, where these fleets operate, should encourage the introduction of the regional standardised logsheets. At this stage, Japanese fleets also operate in Kiribati, Marshall Islands, Nauru, Palau, Solomon Islands and Tuvalu.
- There are only a few remaining vessels in the Korean purse-seine fleet that appear not to have adopted the regional standardised logsheet, and they should be encouraged to do so. These vessels have been identified as Deolinda/Olympus Kim, Eastern Kim, Elspeth/Oasis Kim, Ocean Master and Shilla Pioneer.
- Several vessels in the Vanuatu purse-seine fleet still submit old forms. These vessels are Chance 1, Niugini 101, Niugini 102, Niugini 103, Niugini 106, Niugini 107. Every effort should be made to encourage them to use the regional standardised logsheets.
- The Korean distant-water longline fleet operating in Kiribati and French Polynesia do not appear to be using the regional standardised logsheet.

49. While considerable progress in implementation has been achieved with the Japanese fleets using the regional logsheets in the Federated States of Micronesia, Mr Park advised that Japan continues to submit longline logsheets to the Micronesian Maritime Authority with significant delays.

50. The meeting considered that significant progress had been made with the implementation of the regional logsheets since the last meeting of the Committee in December 1998. There are now fewer non-standard logsheets in circulation, and this has simplified data collection by the fleets and data processing by SPC and FFA.

51. Certain fleets, such as the New Caledonia longline fleet and the Taiwanese distant-water fleet, continue to use logsheets on which information not included on the regional logsheets are collected. The forms used by the New Caledonia longline fleet contain detailed information on set positions

that are used to study the relationship between catch rates and oceanographic conditions. The forms used by the Taiwanese distant-water longline fleet include length data.

52. However, vessels of some fleets continue to use non-standard logsheets that are similar to the regional logsheets, e.g. Japanese fleets (except in the waters of the Federated States of Micronesia), some Korean purse seiners, some Fijian longliners, mainland Chinese and Taiwanese longliners operating in the Marshall Islands, and some Korean longliners operating from Kiribati. It has been noted at previous meetings of the Committee that the logsheets used by these vessels could be replaced with the regional logsheets without a loss of information. Concern was expressed at the delay in implementing the regional logsheets for these fleets. SPC and FFA member countries were strongly encouraged to implement the regional logsheets as soon as possible.

Report on Implementation to FFC

53. The report of the third meeting of the Committee was presented to FFC and the implementation of the regional logsheets was discussed.

54. The participants agreed to continue to work towards facilitating the implementation the regional logsheets, by contacting fisheries officers; by presenting the report of the meeting of the Committee at meetings of the Forum Fisheries Committee and other meetings; and by contacting fishing associations on behalf of coastal states. In particular, it was agreed that the report of the Committee meetings would be presented at the fourth meeting of the FFC Monitoring, Control and Surveillance (MCS) Committee, which will be held in Honiara in March 2001 and at FFC48, which will be held in Rarotonga from 7 to 11 May 2001.

Availability of Regional Logsheets on the SPC Web Site

55. In response to a recommendation made at the third meeting of the Committee in December 1998, the regional logsheets, and other regional forms, have been made available on the SPC Internet site – http://www.spc.int/oceanfish .

Translation of the Regional Logsheets

56. At present, all of the logsheets have been translated into the major languages used by fishing vessels in the region. The translated logsheets consist of French longline logsheets; Japanese longline, pole-and-line and purse-seine logsheets; Korean longline logsheets; and Mandarin longline and purse-seine logsheets. The translated logsheets are available on the SPC web site.

4. REVIEW OF PROPOSED CHANGES TO OBSERVER FORMS

Revision Dates

57. Mr Tim Park requested a change in the dating of the forms. Until now the forms have noted the last date of amendment, on the upper left-hand corner. Mr. Park felt that this procedure was confusing as current forms may have a revision date of 1996 while others would be marked 2000. He would prefer to have all forms dated with the date of last revision, i.e. 2000. This proposal was accepted.

Report Template

58. For the observer written reports, standard templates are available. During the discussion on forms the Committee noted several different areas where compilation of information may be

gathered with fewer complications in the observer's written report as opposed to the actual data forms. The significant interaction between the observer's report and the data forms was highlighted by the group. Noting this, it was felt that the report templates should be reviewed by the group in the future, but it was also felt that any amendments to the report templates should not be confined to the biennial Committee Meeting alone.

59. Items to be recorded in the written report are as follows:

- Training of Pacific Island Nationals. Employment and training of marine personnel is targeted by many organisations within the region. While SPC is involved in training in the marine area, FFA is regularly asked to identify persons who are able and available for employment on vessels in the region, they are now setting up a personnel database to fill that need. Asking observers to record the attained level of training of any Pacific island national they meet onboard and even any expressed interest in further training or employment will feed nicely into this process.
- Fishery Information Services. Increasingly vessels are turning to sophisticated software and Internet services in an effort to have the latest and most up-to-date information to hand. It was recognised by the group that the changing nature of such technology and software packages does not lend itself easily to the concrete format of the data forms. The term 'Fishery Information Services' will cover all these services and observers will be asked to record the specific details of any software or internet services to their written report.
- Tender Vessels. Purse Seiners are often helped in their effort to check FADs and logs by auxiliary vessels. These 'tender vessels' are presently confined to the Solomon Island and Papua New Guinea domestic fisheries. It was noted however, that the European fleets favour this method and the use of tender vessel may become more wide spread in the future. The wide variety in both type and number of these vessels is more easily recorded within the written report.
- Use of equipment. Forms PS–1, LL–1, PL –1, i.e. the general information forms, are used to collect information on both the electronics and the fishing gear onboard the vessel. The presence of a certain type of equipment onboard does not, however, indicate whether it was actually used. When attempting to correlate the use of technology to landed catches, the use and or the amount of usage of a particular piece of equipment is important to scientists. Previously the instructions advised observers to record this in the comments section. The forms will now be changed to emphasis the importance of this exercise and observers will be urged to expand on equipment usage in their report.
- Net diagrams. At the moment observers are given the option to provide a diagram to explain unusual features of the net on the form. This is not an easy task, but should the need arise, observers will be directed to do so in the written report. They will also be advised in the report's template to see if they can get the vessel's net plan, as long as such an action does not compromise their relationship onboard.
- Brailer Type. Although the Committee agreed to move towards recording a code instead of a name for the brailer type, in correspondence afterwards it was felt that the names for brailer types and indeed the various variations in brailer type were not in common usage. For this reason it was thought best to ask the observers to give a descriptive report of the brailer type. Space for this will be made available on form PS–1, although the observer will be urged to turn to their notebooks to expand on any details they feel is necessary.

Shark Measurement

60. The fact that the standard shark measurement is now an upper fork measurement, i.e. UF (upper jaw to fork in tail), as opposed to the previous standard measurement, i.e. TL (tip of snout to end of tail) was highlighted. Conversion factor data continue to be collected to smooth the transfer between these two measurement standards.

Observer Database

61. It was noted that neither the PS–1 or LL–1 form have, as of yet, been integrated into the observer database. It was also noted that the changes to the observer database often lag behind the implementation of new forms. It was agreed that both the new forms and the upgraded database would be made available simultaneously.

Observer Longline Manual

62. No observer longline manual is presently available or in production. The Committee registered the need for such a manual.

Calculation worksheet.

63. When the landed tuna catch onboard a purse seiner is mixed, observers must make a number of calculations to determine the correct proportion of each species in the catch. A comprehensive worksheet to guide observers through these various calculation is available. The addition of this worksheet into all purse seine form booklets is required.

LONGLINE OBSERVER FORMS

FORM LL–1 • LONGLINE OBSERVER GENERAL INFORMATION

Ship's Departure Date and Time

64. The instructions clearly explain what is required, but the group agreed that new wording was appropriate, i.e. 'Departure (Ship date and time), Return (Ship date and time)'.

New Longline Electronics

65. The recent appearance the new 'GPS Beacon' an electronic line buoy whose position can be monitored by GPS reading is to be added to the list of Electronics.

New Longline Fishing Gear

66. The new 'Automatic Branchline Attacher' is to be added to the list of Fishing Gear.

Old longline gear.

67. There are only a few, if any, records by observers of the automatic bait thrower being used onboard. The equipment still exists however, especially on some of the larger Japanese longline vessels and therefore it will remain under the Fishing Gear section.

Weighing Scales

68. It is valuable to know whether a vessel has a weighing scales onboard or not. Observers have been known to collect eye-estimates or length conversion weights by mistake, while onboard longline vessels. Recording the presence or absence of a weighing scales with allow better review of observer data quality.

Use of equipment

69. Observers will be reminded – on the form, to record whether an individual piece of equipment is actually used or not in the comments field of the Electronics section. They will also be reminded to expand on the use of equipment in their written report.

Communication Section

70. Expanding on the present request for phone and fax numbers, an email address will now be requested. These requests will be grouped together as a 'communication section'. Fishery Information Services will be added to this section.

Gen–3 Compliance issues

71. A check box similar to that used at the end of the Purse Seine Daily Log, form PS-1, i.e. 'Did you observe any events today that require Form Gen-3? Yes / No' should be added.

FORM LL–2 • LONGLINE OBSERVER SET INFORMATION

Set Specifications

72. It was noted that many of the previous changes to the set specifications were positively received. Although there has been only scant use of the 'Unusual Set Details' field, its presence was understood to be necessary and valuable.

Time Depth Recorders

73. Observers are now utilising electronic temperature depth recorders (TDRs) on longline gear to record accurate depth and temperature profiles. Therefore, a check box to determine whether a TDR has been deployed or not, during the set, will be added.

Soak Time

74. Soak time was also discussed. It was pointed out, once again, that this is an optional area for observers to fill in. They are not required to break their sleep to record the information. That said, environmental information can often be useful to scientists and as soak time can extend for an appreciable periods, on some vessels, allowing space for observers to compile this information when possible is desirable.

Environmental Data

75. The Committee recognised the need to collect a variety of environmental data. It also recognised that certain environmental data, e.g. SST, moon phase etc., can be more accurately or more easily collected on land than at sea.

Hourly Positions

76. All observers are trained to take hourly setting positions (or as close to an hourly position as is possible). However, this is not explained in the instructions, so it will be added.

FORM LL–3 • LONGLINE OBSERVER HAUL INFORMATION

Extra Lines

77. It was suggested that extra lines be included, but the Committee felt that this was not necessary.

FORM LL–4 • LONGLINE OBSERVER CATCH MONITORING

Instructions

78. The instructions suggest that an observer needs to begin a new Form LL–4 every time they leave deck. It was felt that this was excessive and that all stoppages could be recorded in the same manner, i.e. using two lines to record the start and end of the stoppage. The instructions will be amended accordingly.

FORM LL–5 • LONGLINE CONVERSION FACTORS

Change in title

79. It was pointed out that this form is never used on purse-seiners or pole-and-line vessels and therefore should be renamed from GEN–4 to LL–5. In fact, the form potentially has value onboard purse seiners or pole-and-line vessels, but it is only ever used on longliners. A change in title of the form was accepted.

Wet fin weight.

80. A new column will be inserted for the wet weight of shark fins.

POLE-AND-LINE OBSERVER FORMS

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

Ship's Departure Date and Time

81. The instructions clearly explain what is required, but the group agreed that new wording was appropriate, i.e. 'Departure (Ship date and time), Return (Ship date and time)'.

Communication Section

82. Expanding on the present request for phone and fax numbers, an email address will now be requested. These requests will be grouped together as a 'communication section'. Fishery Monitoring Services will be added to this section.

Binoculars

83. Previously, the number of binoculars in each power category was recorded in the comments section. The form has been reformatted to include specific fields to collect this information.

Use of equipment

84. Observers will be reminded- on the form, to record whether an individual piece of equipment is actually used, or not, to the comments field of the Electronics section. They will also be reminded to expand on the use of equipment in their written report.

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

Beacon / Payao Number

85. As many pole-and-line boats fish on floating objects, it was felt appropriate to add the same field for 'Beacon/Payao #' that features on the purse seine daily log.

N / S Alignment

86. It was pointed out that the alignment of the symbols for north and south was different to that of the symbols for east and west. In fact, this layout problem had already been resolved on the printed and distributed forms.

Gen–3 Compliance issues

87. A check box similar to that used at the end of the Purse Seine Daily Log, form PS-1, i.e. 'Did you observe any events today that require Form Gen-3? Yes / No' should be added.

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

Addition of Target Species Fate Code

88. It is unusual to have target species discards on a pole-and-line vessel, but some have been recorded. A fate code column under 'Target Species' will be added to catch such discards.

PURSE-SEINE OBSERVER FORMS

FORM PS–1 • PURSE SEINE OBSERVER GENERAL INFORMATION

Ship's Departure Date and Time

89. The instructions clearly explain what is required, but the group agreed that new wording was appropriate, i.e. 'Departure (Ship date and time), Return (Ship date and time)'.

Vessel speed

90. The difference between the Regional Register, which requests a vessel's maximum speed, and the observer data forms, which requests the cruising speed, was highlighted. The differences between these two requests was noted and explained. Maximum speed is important to the Regional Register for compliance and enforcement reasons, but actual speed or cruising speed is more

pertinent to observer work and the assessment of fishing effort. The observer forms will continue to ask for cruising speed.

Fishing gear

91. Once the model and serial number of both the power block and the purse winch are known, the rated power and hauling speeds can be easily obtained from the manufacturer. As this information was often difficult for the observer to obtain, these queries will now be deleted.

Net hanging ratio

92. The range in values for the net hanging ratios is small. Therefore, the use of this data field will be discontinued.

Mesh Size

93. Mesh size data have not been used. However, the participants recognised the possibility that mesh size could be used as a management tool at some point in the future and so this field will remain on the forms.

Brailer Types

94. There are four known brailer types. At present, the observers are asked to write the name of the brailer on the form. A better system would be to code for the four different brailer types and ask the observer to add the appropriate code. Appropriate diagrams of the four different types will need to be made available on the instructions and during training.

Description of the Net

95. The request to describe the features of the net and to draw a diagram of the net was deemed more appropriate for the written report.

Communication Section

96. Expanding on the present request for phone and fax numbers, email address will now be requested. These requests will be grouped together as a 'communication section'. Fishery Monitoring Services will be added to this section.

Depth Sounder

97. As to the reason for two depth sounders under Marine Devices, it was explained that many boats still have one old paper type, along with the more modern electronic version.

Wind Speed / Direction

98. The wind speed direction gauge is often hooked into the GPS, which in turn may be directly connected to the track plotter or a sounder. Observers should be alerted to the fact that the wind speed and direction may often be found on other pieces of electronic equipment . They should note which pieces of equipment these are.

NOAA Weather Satellite Monitor

99. As there are now other brands of weather satellite monitors, the term 'NOAA' will be removed.

Binoculars

100. Previously, the number of binoculars in each power category was recorded in the comments section. The form has been reformatted to include specific fields to collect this information.

Use of equipment

101. Observers will be reminded on the form to record whether an individual piece of equipment is actually used in the comments field of the electronics section. They will also be reminded to expand on the use of equipment in their written report.

GPS Beacon

102. Some purse seiners were recently noted by observers to have GPS beacons onboard. This new piece of equipment will be added to the electronics list.

Crew Details (Page 2)

103. The number of fields available to record crew details (names, number of years of experience and nationality) will be increased.

FORM PS–2 • PURSE- SEINE OBSERVER DAILY LOG

School Association

104. When a free school is associated with baitfish, it is still described as a free school. This idea has often confused new observers. It was felt that by listing school associations 'unassociated' and 'feeding on baitfish' together, as has been done previously on the pole-and-line daily log form, the observers could mange this concept better.

Activity Code 14, Drifting – with fish aggregating lights

105. In the evening a vessel may set strong lights off the side of the boat to attract fish. At present, the only available activity code is 13, 'No fishing – Other reason (please specify)'. It was agreed that a new activity code would be added: 14, 'Drifting – with fish aggregating lights'. It was noted that appropriate school association and detection codes already exist.

Activity Code 12, No fishing – Drifting with log

106. This activity code will be re-worded to read 'No fishing – Drifting with floating object'.

FORM PS–3 • PURSE-SEINE OBSERVER SET DETAILS

Brails Brought on Board

107. The line for tallying the total number of brails will be removed from PS–3 and re-located onto PS–4. As the observer tallies the number of brails during the sampling period, it was felt that this section would be better placed on the actual sampling sheet.

Begin and End Brailing Times

108. The 'Begin and End Brailing Time' is another data field that is actually recorded when an observer is out on deck during sampling. Therefore, these data fields will now be placed on PS-4. However, the begin and end brailing times will not be removed from PS-3 as they fit comfortably into the event time sequence on that sheet and are added to the database from PS- 3. Their appearance on PS-4 is intended only as an aid to the observer during sampling.

Sunfish

109. A request from an observer to add the species code for sunfish, 'MOX', to PS- 3 was accepted.

School Association Check Box

110. When checking the data quality of PS-3 Set Details, it is helpful to know the school association of the set. Typically sets on floating objects produce a significant amount of bycatch, while sets on free schools have little or no bycatch. A quick check box on PS–3 showing the school association of the set would assist with data quality checking.

Cumulative landings

111. As PS–5, Well Loading, will now become optional (see below), it was thought beneficial to add a field where observers can keep a running cumulative total of the catch. PS–3 was thought to be the best form for this.

FORM PS–4 • PURSE SEINE OBSERVER LENGTH FREQUENCY

Brails Brought on Board

112. As mentioned above, as the number of brails brought on board is tallied by the observer while on deck, the line for tallying the number of brails will be added to PS–4.

Start and End of Brail Times

113. As above, since the observer records the start and end of brail time while sampling it was thought more appropriate to add this to PS–4.

Length Weight Conversion Table

114. A table exists on the back of PS–4 for the conversion of tuna lengths to approximate weights. At present, this table only covers lengths up to 110 cm. As larger tuna are regularly landed on purse-seine vessels, a request was made to extend the table to encompass these larger tuna.

FORM PS–5 • PURSE-SEINE OBSERVER WELL LOADING

Optional Form

115. The well loading reconciliation sheet generated a great deal of discussion. The difficulty some observers had using the form was noted and it was questioned whether the form had any valid use. Movement of fish between wells during a trip is common. This form was created to monitor such movement. Unfortunately, many observers have encountered difficulty keeping up with these fish

transfers. Difficulties in communication seem to be the greatest barrier for recording information on this form.

116. After discussing the difficulties in using the form, the group discussed the value of the form. The main intention of this form was to help port samplers identify the most suitable well for sampling. In fact, it was noted that the number of times port samplers sample vessels that have already been boarded by observers is minimal. For this reason, and with consideration of the relative difficulty observers have with the form, it will now become optional.

GENERAL OBSERVER FORMS

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

117. No changes were proposed.

FORM GEN–2 • VESSEL REPORTING COMPLIANCE LOG

Use of form suspended

118. With the increased use of VMS by vessels in the region, the value of this form has diminished. It will be withdrawn from use.

FORM GEN–3 • VESSEL TRIP COMPLIANCE RECORD

Addition of new line

119. A new question will be added, i.e. ‘Did the captain or crew hinder or intimidate the observer in anyway’.

FORM GEN–4 • CONVERSION FACTORS

Change in title

120. It was pointed out that this form is never used on purse-seiners or pole-and-line vessels and therefore should be renamed from GEN–4 to LL–5. In fact, the form potentially has value onboard purse seiners or pole-and-line vessels, but it is only ever used on longliners. A change in title of the form was accepted.

FORM GEN–5 • STOMACH CONTENTS

New form

121. Mr Sharples noted that a form to record stomach contents is being developed. It was felt that the final format of the this form will require considerable input from the newly-recruited OFP Fisheries Research Scientist (Ecosystems).

FORM GEN–6 • POLLUTION REPORT

New form

122. The Committee was presented with a draft Pollution Report form (POLPREP) created by SPREP (Working Paper 5). This form addresses itself to the growing concern regarding marine debris and pollution by fishing vessels within the region. Initially the group reviewed the form with the hope of integrating it into GEN –3, but it was agreed this was not possible and it would have to be a separate form.

123. The contents of the form were judged for style, format and suitability to observer work. The merits of the form were acknowledged, but overall it was felt that the form needed some revision before it could be accepted by the Committee. Mr Staisch agreed to discuss the form with SPREP and work in conjunction with them to create a suitable Pollution Report form.

5. PORT SAMPLING FORMS

LONGLINE PORT SAMPLING FORM

Country Codes

124. As a considerable amount of albacore from the region is exported to American Samoa, it was felt that the addition of the country code, 'AS', for American Samoa was appropriate.

LONGLINE UNLOADING FORM

125. No changes were proposed.

POLE-AND-LINE SAMPLING FORM

126. Although the Pole-and-Line Sampling Form and the Purse-Seine Port Sampling Form were noted to be sound, one situation in the Pacific led the group to believe that the two forms could actually be combined. In Noro, Solomon Islands, three purse seine vessels unload their catch directly to the cannery. The tuna are sorted before the port sampler can begin his sampling. In this situation the Pole-and-Line Port Sampling Form is probably a better choice for the port sampler because of the pre-sorting of the fish. Up until now, the port sampler has been asked to use the pole-and-line form, crossing out the word 'pole-and-line' and inserting the word 'purse-seine'. However, it was felt that perhaps the purse-seine and the pole-and-line form could actually be combined into one form. It was agreed that this would be examined following the meeting.

127. Upon examination it was found that it was not possible to integrate the two forms. The requirement to raise the length frequencies of size-sorted samples to the total catch demands that the unloading weights of each species be recorded. This section, presently recorded on the pole-and-line-sampling sheet, where sorting occurs, is large. The same section would take up considerable space on the purse-seine sheet, where it is not needed. Secondly, the pole-and-line logsheet does not record the latitude and longitude of each chummed school, but rather a 01.00 UTC position. This is not compatible with the purse-seine logsheets, which record the actual fishing position. As this information is vital to the port sampling sheets, it was felt that the two different logsheets styles could not easily be accommodated on one port-sampling sheet.

PURSE-SEINE WELL LOADING FORM

128. No changes were proposed.

PURSE-SEINE AND POLE-AND-LINE UNLOADING FORM

129. No changes were proposed.

PURSE-SEINE SAMPLING FORM

130. See Pole-and-Line Sampling Form, above.

TROLL VESSEL PORT SAMPLING FORM

131. No changes were proposed.

6. OTHER FORMS

GAMEFISH TOURNAMENT AND CHARTER VESSEL DATA FORMS

132. The Committee considered the Gamefish Tournament Data Sheet, the Tournament – Individual Fish Weights form, and the Gamefishing Individual Vessel Logsheet – Troll Form, which were presented in Working Paper 6, Gamefish Tournament and Charter Vessel Data Forms.

133. Concerning the Gamefish Tournament Data Sheet, the following points were noted:

- The word ‘competition’ is misspelled in ‘Competion name’ and in ‘Catch by day of competiton’.
- The use of both the words ‘programme’ and ‘program’ is inconsistent.
- The capitalisation of column labels is inconsistent, e.g. ‘Species’ and ‘species’ or ‘Sailfish’ and ‘shark’.
- The phrase “Please ensure all tag release data is sent…” should be “Please ensure all tag release data are sent…”
- It was not clear what was meant by ‘(sp?)’ in the column label ‘shark (sp?)’.
- It would be more legible if ‘15kts’ were written as ‘15 kts’.
- In the Federated States of Micronesia, barracuda is the largest catch in gamefishing tournaments, but there is no column for barracuda on the form.
- It was felt that the column labels for released or retained, i.e. ‘rel’ and ‘ret’, appeared to be too similar and it was suggested that some other label or labels be used.

134. Concerning the Gamefishing Individual Vessel Logsheet, the following points were noted:

- The capitalisation in the title of the form, i.e. ‘Gamefishing Individual vessel Logsheet’ is inconsistent.
- ‘Waho’ should be ‘Wahoo’.
- ‘Dolpin’ should be ‘Dolphin’.

- The FAO three-alpha code for unidentified trevally is ‘TRE’ and not ‘TREV’.
- It was felt that consideration should be given to listing important trevally species separately, such as bluefin trevally and giant trevally.
- Consideration should be given to a column in the upper block for the number of fishing lines deployed.
- There are no species codes for barracuda or albacore.
- In the upper block, there are five sets of columns for total catches for five species. The label for the block, which is currently ‘Catch – Number by species’ should be modified to ‘Catch totals – number by species’.
- The tic box for units of weight, i.e. ‘kg’ or ‘lbs’ could be better formatted, with ‘Units of Weight’ instead of ‘Record whether weights in kg or lbs’ and more space in the tic boxes for ‘kg and ‘lbs’.
- It was not clear why there are three rows at the bottom of the lower block that are lower in height than the other rows.
- Consideration should be given to including a data item on bait, such as live bait, dead bait or lure, since this information may be of interest to the fishermen.
- Consideration should be given to including species codes for common shark species.
- The word ‘caught’ is too close to the bottom line in the column labels in the upper block.

135. It was suggested that the formatting could be more consistent among the forms. For example, the tic boxes for ‘kg’ or ‘lbs’ on the Individual Vessel Logsheet are different from those on the Tournament – Individual Fish Weights form. On the Gamefish Tournament Data Sheet, retained catches are recorded on the left and released catches on the right, whereas on the Individual Vessel Logsheet, released catches are recorded on the left and retained catches on the right.

136. The forms were revised following the meeting and are presented in Appendix 8.

PAPUA NEW GUINEA PRAWN TRAWL FORMS

137. Mr Sharples advised the meeting that he had developed four data collection forms for the Papua New Guinea Trawl Fishery that are based in certain respects on forms maintained by the Committee. These include Form PT–1, Prawn Trawl Observer General Information; PT–2, Prawn trawl Observer Daily Log; PT–3, Prawn Trawl Observer Catch Details; and PT–4, Prawn Trawl Catch Details.

7. DATA MANAGEMENT ISSUES

Harmonisation of SPC and FFA Databases

138. The meeting recognised the need to harmonise certain databases that are maintained separately by SPC and FFA. For example, vessel attribute and gear attribute data are available on the FFA Regional Register, in the SPC vessel database, and in SPC observer data. It was agreed that vessel and gear attribute data will be harmonised by SPC and made available to FFA.

139. It was also noted that FFA Regional Register and the SPC vessel database should be exchanged on a regular basis. An extract from the FFA Regional Register has been provided to SPC on a monthly basis since August 2000. It was noted that SPC recently provided a list of vessels in

the SPC vessel database, which includes vessels for which SPC holds logsheet data, observer data, port sampling data and unloading data, to the member agencies of the Coordinating Meeting of Secretariats of Tuna Fishery Agencies and Programmes, which includes FFA. It was considered that provision of the SPC vessel database to FFA on a regular basis would be useful, since the SPC vessel database contains many vessels that are not listed on the Regional Register. SPC agreed to provide the vessel database, initially on an annual basis.

140. The meeting considered that issues concerning the harmonisation and exchange of data between SPC and FFA would be raised from time to time and that the present meeting was a good venue to discuss these issues, since issues concerning the harmonisation and exchange of data were often closely related to issues concerning data collection forms.

8. FUTURE OF THE COMMITTEE

Data Management Issues

141. As discussed under the previous agenda item, the meeting agreed that data management issues should be considered at future meetings of the Committee.

Sampling Protocols

142. The issue of the sampling protocols that are currently being used in the observer programmes and port sampling programmes in the region were raised several times during the meeting. It was considered that a review of sampling protocols would be a useful exercise to conduct on a regular basis, given that the sampling programmes in the SPC and FFA member countries may change due to various circumstances, such as changes in the fisheries, changes in sampling personnel, or changes in protocols implemented by national colleagues. It was therefore agreed that a review of sampling protocols would be conducted at the next meeting of the Committee.

Change of Name of the Committee

143. The meeting recognised that since issues of data management and sampling protocols would be considered at future meetings of the Committee, the current name of the Committee, i.e. the Tuna Fishery Data Collection Forms Committee may no longer be appropriate. It was therefore agreed that the word ‘Form’ would be dropped from the name, such that the Committee would henceforth be known as the Tuna Fishery Data Collection Committee.

Next Meeting of the Committee

144. It was noted that the Preparatory Conference of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean would be held in from 3 to 7 April 2001, in Christchurch, and that it was possible, though unlikely, that data issues would be considered. The Committee agreed to hold its next meeting in two years, i.e. December 2002, subject to events that might possibly occur in the context of the preparatory conference or the interim commission, which could necessitate a meeting at an earlier date.

9. CLOSING

145. The Chairman thanked the participants for their considerable efforts, in particular Mr Chand for his first participation at a meeting of the Committee and Mr Lawson for organising the meeting. He acknowledged the extremely valuable input that has been provided by Mr Sharples during his

six years with SPC and wished him well in his future endeavours. He also acknowledged the valuable input that was provided by the invited participants, Mr Park from the Micronesian Maritime Authority and Mr Yamasaki from the United States National Marine Fisheries Service. In this regard, he stressed that it was essential for the Committee to draw on the expertise of colleagues outside of SPC and FFA. The meeting was then closed with a vigorous round of applause.

REFERENCES

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Anonymous. 1998. Report of the Eleventh Meeting of the Standing Committee on Tuna and Billfish, 28 May – 6 June 1998, Honolulu, Hawaii, United States of America. Secretariat of the Pacific Community, Noumea, New Caledonia. 108 pp.

Anonymous. 1999a. Report of the Third Meeting of the Tuna Fishery Data Collection Forms Committee, 9–10 December 1998, Brisbane, Australia. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia, and Forum Fisheries Agency, Honiara, Solomon Islands. 84 pp.

Anonymous. 1999b. Report of the Twelfth Meeting of the Standing Committee on Tuna and Billfish, 16–23 June 1999, Papeete, Tahiti, French Polynesia. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 125 pp.

APPENDIX 1. AGENDA

1. PRELIMINARIES
   - 1.1 Appointment of Chairman and Rapporteurs
   - 1.2 Adoption of Agenda
2. REVIEW OF PROPOSED CHANGES TO LOGSHEETS
   - 2.1 General
   - 2.2 Longline
   - 2.3 Pole-and-Line
   - 2.4 Purse Seine
3. REVIEW OF IMPLEMENTATION OF THE LOGSHEETS
4. REVIEW OF PROPOSED CHANGES TO OBSERVER FORMS
5. PORT SAMPLING FORMS
6. OTHER FORMS
7. DATA MANAGEMENT ISSUES
8. FUTURE OF THE COMMITTEE
9. CLOSING

APPENDIX 2. LIST OF WORKING PAPERS

WP 1 Anonymous. 2000. SCTB13 Review of Forms Committee Logsheets. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 4 pp.

WP 2 Millar, C. 2000. Review of Vessel Attributes in the FFA Regional Register. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 9 pp.

WP 3 Williams, P. 2000. An Update on the Implementation of the South Pacific Regional Logsheet in Western and Central Pacific Tuna Fisheries. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 4 pp.

WP 4 Williams, P. 2000. Problems Encountered With the 'Set Start Time' on the Regional Purse-Seine Logsheet. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 2 pp.

WP 5 Nawadra, S. 2000. Draft Pollution Report (POLREP). South Pacific Regional Environmental Programme, Apia, Samoa. 1 p.

WP 6 Whitelaw, W. 2000. Gamefish Tournament and Charter Vessel Data Forms. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 19 pp.

APPENDIX 3. LIST OF PARTICIPANTS

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APPENDIX 4. STATUS OF IMPLEMENTATION OF SOUTH PACIFIC REGIONAL LOGSHEETS

SPC/FFA MEMBER OR ARRANGEMENT	GEAR	FLEET	LOGSHEETS RECEIVED?	STATUS OF IMPLEMENTATION OF SOUTH PACIFIC REGIONAL LOGSHEETS
Cook Islands	Longline	Locally-based fleet	No	No indication of recent fishing activity
FSM Arrangement	Purse seine	Vessels operating under the FSM Arrangement	Yes	Introduced during 1996. All fleets except cerain Vanuatu purse seine vessels use the regional standard logsheets.
Fiji	Longline	Fiji (domestic fleet) + Korean vessels	Partial	Partial success. There are some vessels that are still using alternative forms.
		Taiwan	No	No indication of introduction of new forms
	Pole-and-line	Fiji (domestic fleet)	No	This fleet use a customised form requiring baiting locations; No indication of recent fishing activities
Federated States of Micronesia	Longline	Mainland China	Yes	We have only just started to receive regional logsheets
		Domestic FSM fleet	Partial	Partial success. There are some vessels that are still using alternative forms.
		Guam-based US fleet	Yes	This fleet now uses regional logsheets
		Japanese longline	Yes	This fleet now uses regional logsheets
		Taiwanese longline	Partial	Polar International vessels use a version that they have translated, but there are problems with the translation (action required). Some other Taiwanese vessels use the regional logsheet without any problems.
	Pole-and-line	Japanese pole-and-line	Yes	This fleet now uses regional logsheets
	Purse seine	Domestic fleet (Yap Fishing Corporation)	Yes	Introduced (see FSM Arrangement)
		Domestic fleet (CFC)	Yes	Introduced (see FSM Arrangement)
		Japanese purse seine	Yes	This fleet now uses regional logsheets
		Korean purse seine	Partial	FSM instructed Korean PS vessels to use forms, but there are several vessels (related to fishing company) using a non-standard (i.e. old) logsheet.
		Taiwanese purse seine	Yes	Regional logsheet translated and used by Taiwanese PS fleet
Kiribati	Longline	Japan	No	No indication of introduction of new forms
		Korea	No	Regional logsheet form translated into Korean and provided to Kiribati. Indication from Kiribati that they will forward the logsheet to the Koreans and reiterate the requirement to introduce the form at their next access arrangement meeting (May 1999). No indication that the form has been introduced as yet.
	Pole-and-line	Japan	No	No indication of introduction of new forms
	Purse seine	Japan	No	No indication of introduction of new forms
		Domestic PS vessel	Yes	Introduced (see FSM Arrangement)
		Korea	Partial	Introduced at regional level, but there are several vessels (related to fishing company) using a non-standard (i.e. old) logsheet.
		Spain	Yes	This fleet uses the regional standard logsheet.
		Taiwan	Yes	Regional logsheet translated and used by Taiwanese PS fleet.
Marshall Islands	Longline	Mainland China	No	No indication of introduction of new forms
		Japan	No	No indication of introduction of new forms
		Domestic fleet		Fleet not active as at November 1996
		Taiwan	No	No indication of introduction of new forms
		Locally-based US fleet		No US vessels active as at November 1996
	Pole-and-line	Japan	No	No indication of introduction of new forms
	Purse seine	Japan	No	No indication of introduction of new forms
		Korea	Partial	Introduced at regional level, but there are several vessels (related to fishing company) using a non-standard (i.e. old) logsheet.
		Taiwan	Yes	Regional logsheet translated and used by Taiwanese PS fleet.
Nauru	Pole-and-Line	Japan	No	No indication of introduction of new forms
	Purse Seine	Japan	No	No indication of introduction of new forms
		Korea	Partial	Introduced at regional level, but there are several vessels (related to fishing company) using a non-standard (i.e. old) logsheet.
		Taiwan	Yes	Regional logsheet translated and used by Taiwanese PS fleet.

Appendix 4 (continued)

SPC/FFA MEMBER OR ARRANGEMENT	GEAR	FLEET	LOGSHEETS RECEIVED?	STATUS OF IMPLEMENTATION OF SOUTH PACIFIC REGIONAL LOGSHEETS
New Caledonia	Longline	Japan	No	No activity in recent years
		Locally-based fleet		French translation of regional logsheet provided, but local fleet now
			No	use their own form
Niue	Longline	Taiwan	No	No indication of introduction of new forms
French Polynesia	Longline	Locally-based fleet	Yes	French version required, data processed by Service de la Mer et Aquaculture (SMA), Papeete.
		Korea	No	No indication of introduction of new forms (Data are processed locally).
Papua New Guinea	Longline	Japan	No	No recent fishing activity
		Locally-based fleet	Yes	Introduced for US vessels and local longline fleet
		Taiwan		No recent fishing activity
		Korea		
	Purse seine		Partial	Introduced at regional level, but there are several vessels (related to fishing company) using a non-standard (i.e. old) logsheet.
		PNG (domestic)	Partial	Some joint-venture vessels (R&D Fishing Company) still using a different form)
		Phillippines	Yes	Some vessels use the regional standard logsheet, but there are several vessels using a non-standard (i.e. old) logsheet.
		Taiwan	Yes	Regional logsheet translated and used by Taiwanese PS fleet.
Palau	Longline	Mainland China	No	No indication of introduction of new forms
		Japan	No	No indication of introduction of new forms
		Taiwan	Partial	Some vessels using old forms.
		Guam-based US fleet	No	No recent activity.
	Pole-and-line	Japan	No	No indication of introduction of new forms
	Purse seine	Japan	No	No indication of introduction of new forms
Solomon Islands	Longline	Japan	No	No indication of introduction of new forms
		Locally-based fleet	Yes	Regional logsheet form used (data processed in Solomon Islands)
		Taiwan	Partial	Regional logsheet form used by offshore fleet, but distant-water fleet appear to still use old forms.
	Pole-and-line	Japan	No	No indication of introduction of new forms
		Locally-based fleet + Kiribati		(Data processed by Solomon Islands Fisheries Division)
		Korea		
	Purse seine		Partial	Introduced at regional level, but there are several vessels (related to fishing company) using a non-standard (i.e. old) logsheet.
		Phillippines		No recent activity
		Domestic fleet	Yes	Introduced (see FSM Arrangement)
		Taiwan	Yes	Regional logsheet translated and used by Taiwanese PS fleet.
Tonga	Longline	Domestic fleet	Yes	Regional logsheet is used by this fleet.
Tuvalu	Pole-and-line	Japan	No	No indication of introduction of new forms
US Multilateral Treaty	Purse seine	US fleet	Yes	Latest version introduced in June, 1997
Vanuatu	Longline	Locally-based fleet	No	No recent activity
		Taiwan	No	No indication of introduction of new forms
Western Samoa	Longline	Locally-based fleet	No	Regional logsheet translation into local language. No logsheets received to date.
		Taiwan	No	No indication of introduction of new forms

APPENDIX 5. SOUTH PACIFIC REGIONAL LOGSHEETS

1. **Longline Logsheet**

2. **Pole-and-Line Logsheet**

3. **Purse-Seine Logsheet**

4. **Draft Shark Longline Logsheet**

REV: SPC/FFA DEC 1996

SOUTH PACIFIC REGIONAL LONGLINE LOGSHEET

PAGE _____ OF _____

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)	YEAR
NAME OF FISHING COMPANY	FFA REGIONAL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PORT OF DEPARTURE / DATE AND TIME OF DEPARTURE
COUNTRY OF REGISTRATION	FFA TYPE APPROVED ALC (Y/N) ?		PORT OF UNLOADING / DATE AND TIME OF ARRIVAL IN PORT
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN		PRIMARY TARGET SPECIES / NUMBER OF HOOKS BETWEEN FLOATS

- **ALL DATES AND TIMES MUST BE UTC / GMT**
- **ALL WEIGHTS MUST BE KILOGRAMS**

MONTH	DAY	ACTIVITY CODE	01:00 UTC OR SET POSITION				SET START TIME	NUMBER OF HOOKS	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 OR TRANSIT
3 TRANSIT
4 IN PORT - PLEASE SPECIFY

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SOUTH PACIFIC 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 Regional Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Regional Register (e.g. "12345").

FFA Type Approved ALC (Y/N) ?: Print "Y" if the vessel has an FFA Type Approved Automatic Location Communicator (ALC) onboard. Print "N" if the vessel does not have an FFA Type Approved ALC onboard.

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.

Year: Print the year in which the vessel departed from port at the start of the trip.

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 started the set.

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 or transit') 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. 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 kilogrammes, 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 kilogrammes, 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 kilogrammes, under *KG RET*. When more than one 'other' species occurs in a set, use additional lines on the logsheet.

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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SOUTH PACIFIC REGIONAL POLE-AND-LINE LOGSHEET

PAGE _____ OF _____

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)	NUMBER OF CREW	YEAR
NAME OF FISHING COMPANY	FFA REGIONAL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE
COUNTRY OF REGISTRATION	FFA TYPE APPROVED ALC (Y/N) ?		PORT 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 METRIC TONNES**

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

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SOUTH PACIFIC 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 Regional Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Regional Register (e.g. "12345").

FFA Type Approved ALC (Y/N) ?: Print "Y" if the vessel has an FFA Type Approved Automatic Location Communicator (ALC) onboard. Print "N" if the vessel does not have an FFA Type Approved ALC onboard.

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.

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

Year: Print the year in which the vessel departed from port at the start of the trip.

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.

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.

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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SOUTH PACIFIC REGIONAL PURSE-SEINE LOGSHEET

PAGE _____ OF _____

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)			YEAR
NAME OF FISHING COMPANY	FFA REGIONAL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING		PORT OF DEPARTURE	PORT OF UNLOADING
COUNTRY OF REGISTRATION	FFA TYPE APPROVED ALC (Y/N) ?	NUMBER OF FADS USED	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	• **ALL DATES AND TIMES MUST BE UTC / GMT** • **ALL WEIGHTS MUST BE METRIC TONNES**		AMOUNT OF FISH ONBOARD AT START OF TRIP	AMOUNT OF FISH ONBOARD AFTER UNLOADING

MONTH	DAY	ACTIVITY CODE	01:00 UTC OR SET POSITION				SCHOOL ASSOC CODE	SET START TIME	RETAINED CATCH						DISCARDS					
			LATITUDE	N	LONGITUDE	E			SKIPJACK WEIGHT	YELLOWFIN WEIGHT	BIGEYE WEIGHT	OTHER SPECIES		WELL NUMBERS	TUNA SPECIES			OTHER SPECIES		
			DDMM.MMM	S	DDDMM.MMM	W						NAME	WEIGHT		NAME	WEIGHT	CODE	NAME	NUMBER	WEIGHT
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
7 LIVE WHALE SHARK
8 OTHER

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	INTERNATIONAL RADIO CALL SIGN	SKIPJACK	YELLOWFIN	BIGEYE	MIXED

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

SOUTH PACIFIC 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 Regional Register Number: Print the number issued by the Forum Fisheries Agency for inclusion of the vessel on the FFA Regional Register (e.g. "12345").

FFA Type Approved ALC (Y/N) ?: Print "Y" if the vessel has an FFA Type Approved Automatic Location Communicator (ALC) onboard. Print "N" if the vessel does not have an FFA Type Approved ALC onboard.

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.

Number of FADs Used: Print the number of all FADs used during the trip, regardless of which vessel may have deployed the FAD.

Year: Print the year in which the vessel departed from port at the start of the trip.

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 at 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. 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*. 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.

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 number of fish discarded or the weight of fish discarded, whichever is appropriate.

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 callsign 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*.

REV: SPC/FFA DEC 2000

REGIONAL SHARK LONGLINE LOGSHEET (interim)

PAGE _____ OF _____

NAME OF VESSEL		FISHING PERMIT OR LICENCE NUMBER(S)		YEAR
NAME OF FISHING COMPANY	FFA REGIONAL REGISTER NUMBER	NAME OF AGENT IN PORT OF UNLOADING	PORT OF DEPARTURE	DATE AND TIME OF DEPARTURE
COUNTRY OF REGISTRATION	FFA TYPE APPROVED ALC (Y/N) ?		PORT OF UNLOADING	DATE AND TIME OF ARRIVAL IN PORT
REGISTRATION NUMBER IN COUNTRY OF REGISTRATION	INTERNATIONAL RADIO CALLSIGN		PRIMARY TARGET SPECIES	NUMBER OF HOOKS BETWEEN FLOATS

- **ALL DATES AND TIMES MUST BE UTC / GMT**
- **ALL WEIGHTS MUST BE KILOGRAMS**

MONTH	DAY	ACTIVITY CODE	**01:00 UTC OR SET POSITION**				SET START TIME	NUMBER OF HOOKS	BLUE SHARK		SILKY SHARK		OCEANIC WHITETIP SHARK		OTHER SHARK SPECIES			BIGEYE			YELLOWFIN			BLUE MARLIN		SWORDFISH		OTHER SPECIES		
			LATITUDE DDMM	N S	LONGITUDE DDDMM	E W			No RET	No FINS only	No RET	No FINS only	No RET	No FINS only	SHARK NAME	No RET	No FINS only	No RET	KG RET	No DISC	No RET	KG RET	No DISC	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 OR TRANSIT
3 TRANSIT
4 IN PORT - PLEASE SPECIFY

NAME OF CAPTAIN	SIGNATURE OF CAPTAIN	DATE

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

FFA Type Approved ALC (Y/N) ?: Print "Y" if the vessel has an FFA Type Approved Automatic Location Communicator (ALC) onboard. Print "N" if the vessel does not have an FFA Type Approved ALC onboard.

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.

Year: Print the year in which the vessel departed from port at the start of the trip.

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 started the set.

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 or transit') 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. 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.

Blue shark, *Silky shark* and *Oceanic whitetip shark*,: Print the number of shark caught for which the fins **and body** were retained under *NO RET*. Print the number of shark for which only the fins were retained, **and not the body**, under *NO FINS only*.

Other shark species: Print the full name of the species under *SHARK NAME*. Print the number of shark caught for which the fins **and body** were retained under *NO RET*. Print the number of shark for which only the fins were retained, **and not the body**, under *NO FINS only*.

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 kilogrammes, under *KG RET*. Print number of fish that were discarded under *NO DISC*.

Blue 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 kilogrammes, 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 kilogrammes, under *KG RET*. When more than one 'other' species occurs in a set, use additional lines on the logsheet.

APPENDIX 6. SOUTH PACIFIC REGIONAL OBSERVER FORMS

Form LL-1 • **Longline General Information**

Form LL-2 • **Longline Set Information**

Form LL-3 • **Longline Haul Information**

Form LL-4 • **Longline Catch Monitoring**

Form LL-5 • **Longline Conversion Factors**

Form PL-1 • **Pole-and-line General Information**

Form PL-2 • **Pole-and-line Daily log**

Form PL-3 • **Pole-and-line Catch Detail**

Form PS-1 • **Purse-Seine General Information**

Form PS-2 • **Purse-Seine Daily log**

Form PS-3 • **Purse-Seine Set**

Form PS-4 • **Purse-Seine Length Frequency**

Form PS-5 • **Purse-Seine Well Loading**

Form GEN-1 • **Vessel and Aircraft Sightings and Fish Transfer Log**

Form GEN-3 • **Vessel Trip Compliance Record**

Form GEN-6 • **Pacpol Regulation Form**

SOUTH PACIFIC REGIONAL LONGLINE OBSERVER FORM LL - 1
GENERAL INFORMATION

REVISED SPC/FFA DEC. 2000

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)					RETURN PORT

VESSEL			CREW	
VESSEL NAME	COUNTRY REGISTRATION No.		NATIONALITY	How many ?
VESSEL OWNER	FLAG	INTERNATIONAL RADIO CALLSIGN	NATIONALITY	How many ?
VESSEL CAPTAIN	FISHING MASTER		NATIONALITY	How many ?
FISHING PERMIT OR LICENCE NUMBER(S)			TOTAL NUMBER OF CREW	
OBSERVATIONS / COMMENTS				

ELECTRONICS

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

MARINE DEVICES		MAKE	MODEL	COMMENTS (equipment usage)
RADAR # 1	Y / N			
RADAR # 2	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 ?
GPS BEACON	Y / N			How many ?
DOPPLER CURRENT METER	Y / N			
BATHYTHERMOGRAPH / XBT	Y / N			
SEA SURFACE TEMP. GAUGE	Y / N			
WIND SPEED / DIRECTION FINDER	Y / N			
WEATHER FACSIMILE	Y / N			
VMS (FFA TYPE-APPROVED)	Y / N			Seal intact ? Y / N
IMMARSAT SERVICES	Y / N	Phone#	Fax #	Email :
FISHERY INFORMATION SERVICES	Y / N	# 1	# 2	# 3

FISHING GEAR

		COMMENTS / OTHER GEAR	
MAINLINE HAULER	Y / N		
BRANCH LINE HAULER	Y / N		
LINE SHOOTER	Y / N		
AUTOMATIC BAIT THROWER	Y / N		
AUTOMATIC BRANCHLINE ATTACHER	Y / N		
WEIGHING SCALES	Y / N		
LINE COMPOSITION LINE MATERIAL (S) / DIAMETER, OR STRENGTH		Mainline	Branchline

NOTES ON FORM LL - 1

GENERAL INFORMATION

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 of 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 how many of each different nationality on board.
Total number of crew: This is to include the Captain and Fishing master.
Comments (equipment usage): Is each piece of equipment used during the trip? Is it broken and never used, or is it only used on rare occassions. Record this information here.
Observations / Comments: Record a few 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

Marine devices: All of these (except the radio buoys) are found on the bridge or in the radio room.
Empty lines: These are to record equipment you think are important but are not listed in this section.
Y / N: Circle (Y) / N if "yes", the vessel does have this device or Y / (N) if "no", it does not.
Comments (equipment usage): Make a note about each piece of equipment's use during the trip (sometimes, never its very old, out of order etc.). Make a comment if it is used in an unusual way.
VMS (FFA type-approved): Is there a "vessel monitoring system" or ALC "automatic location communicator" on board.
Seal intact ? Does the FFA seal that is fixed to the VMS unit look like it has been interfered with ?
Telephone / Facsimile / Email: If the vessel has an InMarSat phone and/or fax/ email address, record them here.
Fishery Information Services: Note down the names of any computer software the vessel uses to enhance its fishing. These may be updated internet services - ie about the weather/fishing grounds, or stand alone packages ie sea bed mapping.

Fishing Gear

Y / N: Circle (Y) / N if "yes", the vessel does have this gear or Y / (N) if "no", it does not.
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)
Line Compostion : Line Material (s) / Diameter, or Strength
Mainline: (e.g. 1: "tarred kuralon / 7mm")
(e.g. 2: "40m lengths of mono / 400lb. test, joined by 1m lengths of 8-strand braided polypropylene / 10mm")
Branchline: Describe each part (usually there can be up to three different parts)
(e.g. "3-strand polypropylene / 3mm")
(e.g. 10 meters of 2mm diameter monofilament attached to 1/2 meter of shark wire

SOUTH PACIFIC REGIONAL LONGLINE OBSERVER SET INFORMATION

FORM LL - 2

REVISED SPC/FFA DEC. 2000

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

LONGLINE SET SPECIFICATIONS				UNUSUAL SET DETAILS			BAIT USED			START OF SET
No. OF HOOKS PER BASKET		VESSEL SPEED (kts)					SPECIES	(KGS)	HOOK No's	SHIP'S DATE AND TIME D D M M Y Y h h m m
TOTAL No. OF BASKETS		LINE SETTING SPEED (m/s)								
TOTAL No. OF HOOKS		BRANCHLINE SET INTERVAL (s)								UTC DATE AND TIME D D M M Y Y h h m m
LENGTH OF FLOATLINE (m)		BETWEEN BRANCHLINES (m)		TDR DEPLOYED ?	Y / N					
LENGTH OF BRANCHLINES (m)		No. OF SHARK LINES (on floats) IN SET			LENGTH (m)					**ALL MUST BE RECORDED**

SET LOG

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 (%)	COMMENTS
START SET									
END SET									

SOAK TIME

Record times and environmental conditions when suitable and comment generally on conditions throughout soak time.

SHIP'S TIME	WIND (kts)	WIND (°)	SEA (C-S-M-R-V)	CLOUD (%)	COMMENTS

SET INFORMATION

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

Set No.: Start at "Set No. 1", "Set No. 2", "Set No. 3", etc. for each trip.

Page of : Number Form LL-2's through trip as Page 1, Page 2, Page 3, etc. At end of the trip, check all pages are there (again) then 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").

No. of Hooks per Basket: See diagram to the right.
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 the diagram to right.

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

Between branchlines (m): Distance between branchlines may have to be actually measured (in metres (m)) or can be calculated by the observer using the formula:*Line Setting Speed* x *Branchline Set Interval*, otherwise it can be obtained from the captain, fishing master or bosun if line setting speed and branchline set interval can't be found.

No of shark lines (on floats) in set ? If your vessel has special lines tied directly to the floats to catch extra sharks count the total number set in the set.
N.B. Do not count a shark line on a float as one of the hooks per basket
Length (m): The length (in metres) of the shark line
TDR deployed ? Y / N : Circle Y (yes) ever time you use a temperature depth recorder - supplied by your observer programme - during a set

Bait Used - Species, Kgs Record species and weight (in kgs) of each bait used.
Bait Used - Hook No's Unusally, 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 No's" alongside that bait species.

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.

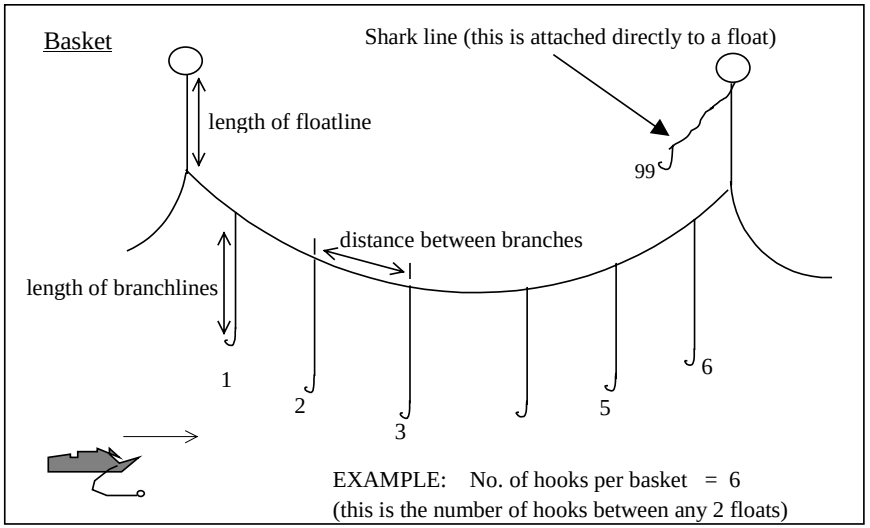
Start Set and *End Set*: Always fill all fields in the "Start" and "End" set lines.
Hourly Positions. Ideally you should try to take the position on the hour every hour. If this is not possible, do your best to record the position as close to every hour, as possible.

Latitude, *Longitude*, *N*, *S*, *E*, *W*: Record GPS positions in degrees, minutes and minutes to three decimal places. Do not forget to enter north or south and east or west correctly (e.g. "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")

Comments: Special circumstances that affect setting strategy or cause problems.

Soak Time: Even if you are asleep throughout this time make an effort to learn what the conditions were (notably cloud cover) and describe under *"Comments"*



SOUTH PACIFIC REGIONAL LONGLINE OBSERVER
HAUL INFORMATION

FORM LL - 3

REVISED SPC/FFA DEC. 2000

OBSERVER NAME	OBSERVER TRIP ID NUMBER	SET No.	PAGE OF

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

HAUL LOG

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 (%)	COMMENTS
START HAUL									
END HAUL									

DID YOU OBSERVE ANY EVENTS TODAY THAT REQUIRE FORM GEN-3? **YES** / **No**

COMMENTS

NOTES ON FORM LL - 3

HAUL INFORMATION

OBSERVER NAME	OBSERVER TRIP ID NUMBER	SET No.	PAGE	OF
JOHN MASA	JHM 96-03	10	10	29

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

VESSEL NAME	START OF SET DATE AND TIME					START OF HAUL DATE AND TIME				
	D D	M M	Y Y	h h	m m	D D	M M	Y Y	h h	m m
HAI HSIANG No. 959	10	02	93	04	25	10	02	93	15	10

HAUL LOG

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 (%)	COMMENTS
START HAUL 15 10	10°52.939'	N	152°37.140'	W	25	090	M	10	Example of a comment: *Started one hour late due to problems hauling sea anchor.*
16 00									
17 00									
18 05									
19 00									
20 10									
21 10									
22 00									
23 15									
00 05									
01 00									
02 00									
END HAUL 02 10	10°54.139'	N	153°02.925'	W	135	10	S	10	

Positions are to be recorded in degrees, minutes and to three decimal places of minutes, as read from the GPS.
It is very important not to forget to mark **Latitude** as **N** or **S** and **Longitude** as **E** or **W** .

Wind speed recorded in knots.
Wind direction recorded in degrees of compass (e.g. an easterly wind is 90°).

Cloud cover estimated as 10%, 20%, 30%, etc., to 100%

Approximately every hour record **position** and try to record environmental conditions

Sea: **C**alm
Slight
Moderate
Rough
or **V**ery rough

See observer guide to sea conditions

Always record **START HAUL** and **END HAUL** positions and times **!**

Start haul and **End haul**
You should fill every field on the first and last lines of the Haul Log at the start of hauling and at the end of hauling.

COMMENTS *N.B. Use 24-hour clock when writing times. Use two digits for each of the day (DD), month (MM), year (YY), hours (hh) and minutes (mm). To do this put a* "0" *in front of single digit dates and times to make them into double digits.*
E.g.: 8 minutes past 2, morning, is 02 08; *8 minutes past 2, afternoon, is* 14 08; *and the 3rd of January, 1996 is* 03 01 96.

Observer Name , *Vessel Name* and *Trip ID No.*
Always print each out in full.

Set No .: Number sets from start to end of trip as Set No. 1, Set No. 2, Set No. 3, etc.
Page of :
Number Form LL-3's from the beginning to the end of a trip as Page 1, Page 2, Page 3, etc.
At end of the trip check all pages. Put the last page number on every page (e.g. if there are 36 pages then the 1st page will be " Page 1 of 36 ", the fourth page, " Page 4 of 36 " and the last page will be " Page 36 of 36 ").

Note: All dates and times on this form are to be Ship's date and Ship's time.

Start of Set Date and Time (Very important !)
Exactly as on FORM LL-2 and FORM LL-3.
Ship's Start of Haul Date and Time :
Date and time that first buoy is lifted on board.

Comments :
Mention problems that cause delays in hauling and any other unusual events that affect fishing.

Events requiring Gen - 3

Circle Y if any infringements as stated in form GEN- 3 were observered. Record notes in your diary.

SOUTH PACIFIC REGIONAL LONGLINE OBSERVER CATCH MONITORING

FORM LL - 4

REVISED SPC/FFA DEC. 2000

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

VESSEL NAME	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	LET GO	LENGTH (cm)	CODE	WEIGHT (kg)	CODE	FATE CODE	SEX M - F - I		COMMENTS

Baskets observed on this form:	Tally:	Total:

NOTES ON FORM LL - 4

CATCH MONITORING

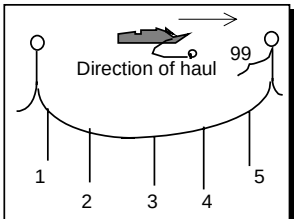
OBSERVER NAME	OBSERVER TRIP ID NUMBER	SET No.:	PAGE OF

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

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

CATCH DETAILS

SHIP'S TIME	HOOK No.	SPECIES CODE	CONDITION CODE CAUGHT	CONDITION CODE LET GO	LENGTH (cm)	LENGTH CODE	WEIGHT (kg)	WEIGHT CODE	FATE CODE	SEX M - F - I		COMMENTS
1720	*1*	*BET*	*A1*	*A3*	*152*	*UF*	*85*	*WW*	*RGG*	*F*		*Gonad sample No.3*
*							*72*	*GG*				*example of 2 weights* *



Hooks come in, in order 1 - 5.

Accurate **Hook number** is not easy when there are more than 8 hooks in a basket or fishing is very busy. In these cases an estimate is satisfactory.

Weight codes describe the state of a fish when 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).

Sex: M = male, F = female
I = indeterminate - this means you have inspected the gonad but cannot decide what it is. (maybe because it is immature). If you have not inspected gonads enter a stroke (—) or cross (X).

Empty column is to be used for extra information such as "gonad stage" to be collected when especially asked for.

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 shark lines (on floats) are recorded as Hook No. 99

SHIP'S TIME	HOOK No.	SPECIES CODE	CONDITION CODE CAUGHT	CONDITION CODE LET GO	LENGTH (cm)	LENGTH CODE	WEIGHT (kg)	WEIGHT CODE	FATE CODE	SEX M - F - I		COMMENTS

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, or A3)
A1	Alive, healthy
A2	Alive - injured or distressed
A3	Alive but dying

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

(measure pectoral and 2nd dorsal fin at most forward point that they join body)

Fate codes descibe type of processing when fish are retained, or else why they were discarded.

Code
RGG - Retained - gilled and gutted (retained 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 (Marlin)
RSD - Retained - but shark damaged
RCC - Retained - for crew consumption (on board)
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 - protected species - alive
DPD - Discarded - protected species - dead
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 species codes.

Code	Common Name	Code	Common Name
YFT	Yellowfin	LMA	Long finned Mako shark
BET	Bigeye	SMA	Short finned Mako shark
ALB	Albacore	OCS	Oceanic white-tip shark
SKJ	Skipjack	PTH	Pelagic Thresher shark
MLS	Striped Marlin	BTH	Bigeye Thresher shark
BLZ	Blue Marlin	BSH	Blue shark
BLM	Black Marlin	FAL	Silky shark
SWO	Swordfish	DOL	Mahimahi
SFA	Sailfish	RRU	Rainbow runner
SSP	Short-billed Spearfish		
WAH	Wahoo		

Baskets observed. Count (tally) the baskets (floats) that come aboard as you monitor catch. If you stop for a meal, etc., note the time and reason on a line

Ideally you will have observed all the baskets that have come onboard
If for any reason you have to leave the deck the percentage of the catch you covered will be calculated using your' baskets observed'
tally. If your tally is not the same as the total amount of baskets you observered - i.e you missed some . **MAKE A NOTE.**

Baskets observed on this form:	Tally: 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 III	Total: *53*

SOUTH PACIFIC REGIONAL OBSERVER CONVERSION FACTORS

FORM LL- 5

REVISED SPC/FFA DEC. 2000.

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	
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	

NOTES ON FORM LL- 5

CONVERSION FACTORS

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	PAGE OF
This header should be filled in completly	*eg:SPC1.5 m Aluminium calipers*	*eg: JMA 97-03* This is page 7 →	*7 19*
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	Don't forget !	Total Form LL-5 used in the trip was
	eg: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 you are unable to get **whole** or **processed weight**, onboard attach a label inside the mouth or gut cavity of the fish so when it comes to shore you can record **landed weght.** Even when you can recored proccesed weight on board still use labels and record **landed weight** of fish as recorded at unloading

Ship's Time
is the time the fish lands on deck.
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 codes describe the actual measurements collected from a fish.

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:
aim for accuracy to 0.5 kg if less than 10 kg.
and
aim for accuracy to 1.0 kg if greater than 10kg.

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 when weighed.

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)

IMPORTANT

This form is to be used in addition to the Catch Monitoring Form LL-4. 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 the catch. 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 elect or have been asked to take time out from normal sampling procedures to put more effort into collecting conversion factor information. Consequently the Catch Monitoring Form may not be utilised. In these cases you should attempt to record sex of the fish in the comments section.

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.

SOUTH PACIFIC REGIONAL POLE AND LINE OBSERVER GENERAL INFORMATION

FORM PL - 1

REVISED BY SPC/FFA DEC., 2000

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.		NATIONALITY	How many ?
VESSEL OWNER	FLAG	INTERNATIONAL RADIO CALLSIGN	NATIONALITY	How many ?
VESSEL CAPTAIN	FISHING MASTER		NATIONALITY	How many ?
FISHING PERMIT OR LICENCE NUMBER(S)			TOTAL NUMBER OF CREW	

CREW

OBSERVATIONS / COMMENTS

ELECTRONICS

MARINE DEVICES		MAKE	MODEL	COMMENTS (equipment usage)
NAVIGATIONAL RADAR No. 1	Y / N			
NAVIGATIONAL RADAR No. 2	Y / N			
BIRD RADAR	Y / N			
GPS	Y / N			
TRACK PLOTTER	Y / N			
SONAR	Y / N			
DEPTH SOUNDER	Y / N			
DEPTH SOUNDER	Y / N			
RADIO DIRECTION FINDER	Y / N			
RADIO BUOYS - NON CALL-UP	Y / N			
RADIO BUOYS - CALL-UP	Y / N			
DOPPLER CURRENT METER	Y / N			
BATHYTHERMOGRAPH / XBT	Y / N			
WEATHER FACSIMILE	Y / N			
NOAA WEATHER SATELLITE MONITOR	Y / N			
SEA SURFACE TEMP. GAUGE	Y / N			
WIND SPEED / DIRECTION GAUGE	Y / N			
BINOCULARS	Y / N		Number / Power	
VMS (FFA TYPE APPROVED ALC)	Y / N			Seal Intact ? **Y N**
IMMARSAT SYSTEM	Y / N	Phone#	Fax #	Email:
FISHERY INFORMATION SERVICES	Y / N	# 1	# 2	# 3

OBSERVATIONS / COMMENTS

NOTES ON FORM PL - 1

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

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.
Crew : Report how many of each different nationality on board (this includes the Captain !).
Total number of crew : This is to include the Captain and Fishing master.
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

Marine devices : All of these (except the radio buoys) are found on the bridge or in the radio room.
Empty lines : These are to record equipment you think are important but are not listed in this section.
Y / N : Circle "(Y) / N" if yes, the vessel does have this device, or "Y / (N)" no, if it does not.
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 (FFA type-approved) : Is there a "vessel monitoring system" on board ? What type ?
N.B. a VMS can also be referred to as an ALC (automatic location communicator).
Seal intact ? Does the FFA seal that is fixed to the VMS unit look like it has been interfered with ?
Telephone / Facsimile / Email : If the vessel has a fax, phone or email address record it here
Fishery Information Services : Note down the names of any computer software the vessel uses to enhance its fishing. These may be updated internet services ie about the weather / fishing grounds, or stand alone packages ie sea bed mapping

SOUTH PACIFIC REGIONAL POLE AND LINE OBSERVER DAILY LOG

FORM PL - 2

REVISED BY SPC/FFA DEC., 2000

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SHIP'S TIME	LATITUDE (dd^{o} mm.mmm')	N S	LONGITUDE (ddd^{o} mm.mmm')	E W	ACTIVITY CODE	SCHOOL ASSOC.	SCHOOL DETECT	BAIT SPECIES 1	BAIT SPECIES 2	BAIT SPECIES 3	No. of BUCKETS	BEACON/ PAYAO #	

FLOATING OBJECT AND SCHOOL SIGHTINGS	E.g.:	Tally	Total	Floating objects (with no school)	Tally	Total	Schools under floating objects:	Tally	Total	Free schools	Tally	Total
		𝍸 III	9									

START OF DAY

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

ALL MUST BE RECORDED

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
10 Deployment- 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 Bait fishing

SCHOOL ASSOCIATION

1 Unassociated } Free schools
2 Feeding on baitfish }
3 Drifting log, debris or dead animal
4 Drifting raft, FAD or payao
5 Anchored raft, FAD or payao
6 Live whale
7 Live whale shark
8 Other (please specify)

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

DID YOU OBSERVE ANY EVENTS TODAY THAT REQUIRE FORM GEN-3 ? YES NO

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 GMT/UTC.
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.

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 first one that helped find these fish.
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.

Circle Y if any infringements as stated in form GEN -3 were observered. Record the details to your diary

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 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.

SOUTH PACIFIC REGIONAL POLE-AND-LINE OBSERVER FORM PL - 3
CATCH DETAILS

REVISED BY SPC/FFA DEC., 2000

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID NUMBER	PAGE OF

SHIP'S DATE D D Y Y M M	SPRAYING, CHUMMING and POLING time:	START h h m m	FINISH h h m m	No. OF CREW POLING	MEASURING INSTRUMENT

COMMENTS

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

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:							

NOTES ON FORM PL - 3

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 102 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.

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)

SOUTH PACIFIC REGIONAL PURSE SEINE OBSERVER FORM PS - 1
GENERAL INFORMATION (Page 1)

REVISED SPC/FFA DEC. 2000

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 CHARACTERISTICS

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

No. OF SPEED BOATS	No. OF TOW BOATS	No. OF LIGHT BOATS	NET SKIFF ENGINE MAKE / HORSEPOWER	VESSEL CRUISING SPEED (kts)

HELICOPTER MAKE AND MODEL	HELICOPTER REGISTRATION No.	EFFECTIVE RANGE (kms) OF HELICOPTER	COLOUR OF HELICOPTER

FISHING GEAR

POWER BLOCK: MAKE MODEL	PURSE WINCH: MAKE MODEL		DESCRIBE LENGTH / DIAMETER OF PURSE CABLE
MAX. NET DEPTH M Y F	MAX. NET LENGTH M Y F	NET - No. OF STRIPS	NET MESH SIZE OF MAIN SECTION CM IN

BRAILER TYPE	CAPACITY OF BRAIL mT

ELECTRONICS, etc.

MARINE DEVICES		MAKE	MODEL	COMMENTS (equipment usage)
NAVIGATIONAL RADAR No. 1	Y / N			
NAVIGATIONAL RADAR No. 2	Y / N			
BIRD RADAR	Y / N			
GPS	Y / N			
TRACK PLOTTER	Y / N			
SONAR	Y / N			
DEPTH SOUNDER	Y / N			
DEPTH SOUNDER	Y / N			
RADIO DIRECTION FINDER	Y / N			
RADIO BUOYS (NON CALL-UP)	Y / N			How many?
RADIO BUOYS (CALL-UP)	Y / N			How many?
GPS BEACON	Y / N			How many?
DOPPLER CURRENT METER	Y / N			
CURRENT METER	Y / N			
WEATHER FACSIMILE	Y / N			
WEATHER SATELLITE MONITOR	Y / N			
SEA SURFACE TEMP. GAUGE	Y / N			
WIND SPEED / DIRECTION GAUGE	Y / N			
BINOCULARS	Y / N		Number / Power	
VMS (FFA TYPE-APPROVED)	Y / N			Seal intact ? **Y N**
IMMARSAT SERVICES	Y / N	Phone #	Fax #	Email:
FISHERY INFORMATION SERVICES	Y / N	# 1	# 2	# 3

GENERAL INFORMATION

Trip Details

OBSERVER NAME	First name first. - Last name last. - Make sure to print.- Ie. *John Smith not Smith John*
DEPARTURE PORT	Port from which vessel left to start the present trip. I.e. Pago, Guam, Chuuk, etc.
SHIP'S DEPARTURE DATE AND TIME	Record the date and time from the ships clock, when the vessel throws of its mooring ropes or pulls up its anchor to start a trip. Record Ship's time. Do not record UTC time here.
OBSERVER TRIP ID NUMBER:	This number is issued before you leave port and should be used on all forms used for that trip. The number will not change for the entire trip. Place wherever required on all forms.
RETURN PORT	When you finish your trip, put the name of port that you disembarked from the vessel.
SHIP'S RETURN DATE AND TIME	The date and time when the vessel ties up or drops anchor in port. Do not record UTC time here.

Vessel Characteristics

VESSEL NAME	Vessels full name, no abbreviations, for example 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.
FLAG OF VESSEL	The country where the vessel is registered. For example: 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 they have 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. Record the major number on the Hull or side of the vessel this is usually the call sign.
NO OF SPEED BOATS	Number of speed boats. Don't count tow boat or speed boat used only as tow boat.
NO OF TOW BOATS	Count the tow boats. Don't count speed boats if they are already counted
NO OF LIGHT BOATS	These are boats that have powerful lights on them. They can be used to assist in hauling the net at night. They are also equipped with the extra strong lights to attract fish around Fads/logs at night.
NET SKIFF ENGINE / HORSEPOWER	The make of the engine used and strength of the engine (i.e horsepower) of the net skiff. Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp)
VESSEL CRUISING SPEED	Ask 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 **- MODEL**	Brand of main power block on the vessel. The model of the block. If you cant see this on the block ask the captain, engineer or winch driver.
PURSE WINCH - MAKE **- MODEL**	Brand of main purse winch on the vessel. The model of the winch. If you can't see this on the winch ask the winch driver or engineer.
DESCRIBE LENGTH & DIAMETER OF THE PURSE CABLE	The purses cable total length and the different lengths and diameters that make up the cable. Diameter is the thickness of the cable. A cable is made up of different lengths of different thicknesses. For example a cable with a total length of 2000 metres might be made up of two 300 metre end pieces of 22-millimetre cable and a middle section 1400 metres of 35-millimetre cable.
MAX. NET DEPTH	The 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. M = Metres; Y = Yards; F = Fathoms. Make sure you circle the correct unit used on the vessel for net measurements
NET - No OF STRIPS	Each net is made up of strips of netting sewn together to create the depth of the net. How many of these strips make up the net? *For example if depth of the net is 300 metres and strips are 10 metres wide, 30 strips of net are required to make the net depth.* Adding strips deepens the net, taking strips away makes the net shallower. Ask the deck boss or engineer for this information.
NET MESH SIZE OF MAIN SECTION	There are a number of mesh sizes used. All that is required is the mesh size of the main body of the net. Make sure the units are recorded in "CM" centimetre or "IN" Inches. Ask the Deck boss
CAPACITY OF BRAILER	The capacity in Metric Tonnes. Once known this figure will assist you to estimate the catch caught.
BRAILER TYPE	Describe the brailing operation - exactly. This includes; how the mouth of the net was held open - i.e. with the skiff or by a boom, the design of the actual brailer - long handle, short handle, no handle or x-shaped and whether the brailer was linked to a boom or the purse davit. A full description of the brailer type should be included in your written report.

Electronics

YES / NO	If the vessel has a device circle (Y) yes .If the vessel does not have the device circle (N) No You must circle Y or N for every device listed.
MAKE & MODEL	Name of company and model name or number of each device listed. Don't mix up make and model. *E.g.: A Furuno GP500 GPS: - Furuno is the brand (make), GP500 is the model, GPS is what it is*
WIND SPEED /DIRECTION GAUGE	Beware that many pieces of equipment are now inter-linked with each other. The wind vane is often linked into the GPS which in turn can be linked into the track plotter, sounder and perhaps the current meter. You may find the wind speed and direction reading on a different pieces of equipment, even if there is no actual wind speed direction gauge. Record here if the wind speed is available on other pieces of electronic
BINOCULARS	In comments write how many of each power of binocular *(e.g.: 2 x 8x50, 2 x 10x50 and 1 x 15x70)*
COMMENT (equipment usage)	Write any comments relative to the equipment or its use. Say whether each piece of equipment was used during your trip, whether it is never used - too old, broken etc or only sometimes used.

SOUTH PACIFIC REGIONAL PURSE SEINE OBSERVER **FORM PS - 1**
GENERAL INFORMATION **(Page 2)**

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER

WELL STORAGE PLAN

WELL No.	CAPACITY (mt) PORT	CAPACITY (mt) STARBOARD	BRINE	DRY	COMMENTS (especially note if a well is used for fuel or water)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
Total:	+	=	**mT**	⬅	TOTAL CAPACITY IN METRIC TONNES

(circle °F or °C)

TEMPERATURE OF BRINE WELLS: °F °C

TEMPERATURE OF DRY WELLS: °F °C

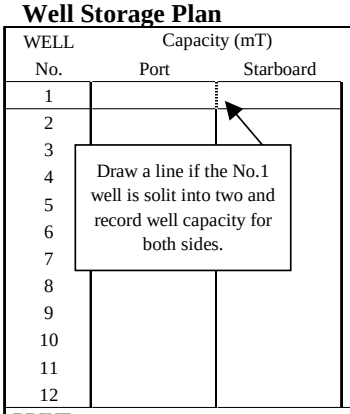
CREW

POSITION	NAME	YRS EXP.	NATIONALITY	COMMENTS
CAPTAIN				
NAVIGATOR / MASTER				
MATE				
CHIEF ENGINEER				
ASSISTANT ENGINEER				
DECK BOSS				
COOK				
HELICOPTER PILOT				
HELICOPTER MECHANIC				
SKIFF MAN				
WINCH MAN				

Position	Name	Yrs exp.	Nationality	Name	Yrs. exp	Nationality
CREW						
CREW						
CREW						
CREW						
CREW						
CREW						
CREW						
CREW						
CREW						
CREW						
Total:			⬅	TOTAL NUMBER OF CREW (include Captain and officers)		

GENERAL INFORMATION

Well Storage Plan

	• All vessels have well storage set out in a pattern that suits the design of the vessel. • Some vessels have one well up front of the boat (in the bow) and then the same number of wells on the port (left side) as they have on the starboard (right side). • The wells are always numbered from the front to the rear. • If there are two wells instead of one up front (bow), draw a line to split the No.1 well row into a port and starboard column, then show the (mT) capacity of the two wells. • Place the Metric Tonne capacity in the columns that represent the port or starboard wells. • The engineer or captain usually has a well layout and storage capacity plan which you can copy. • Make sure the figures you enter are in Metric Tonnes. • If there is an unusual arrangement of wells that makes it difficult to record on this table, then please draw the arrangement and attach it to your report. • United States vessels normally report in Short Tons (though instructed to report in metric tonnes). • Be sure you know what capacity units you are using. • You may have to use the conversion table supplied to work out Metric Tonne capacity of each well.
BRINE	Show if each well is to be used to cool fish in brine (in a seawater and salt mix) by writing Yes or No
DRY	Show if each well can be used for dry storage (with no water or brine) of fish by writing Yes or No
COMMENTS	Write comments about the wells. This may include wells that have had fuel or fresh water stored in them before they are used for fish storage.
TEMPERATURE - OF BRINE WELLS **" - OF DRY WELLS**	Note temperature that the engineer keeps brine wells and dry wells at when fish are stored in them. Temperature is different for brine and dry wells. Circle °F or °C for degrees Fahrenheit or centigrade.
TOTAL CAPACITY OF VESSELS WELLS IN METRIC TONNES (MT)	Add all the well capacities and put the total figure in this space. Make sure you get Metric Tonnes not Short Tons. Use conversion tables.

Crew Details

POSITION AND NAME	Select the position and enter the name of the crew relative to this position. If you can't get crew names ask for the crew list given to immigration when they go to Port. It will have all the names on it. Record first and last name last, also be certain of the spelling. If a person holds more than one position write "Same as the (other position they hold)" e.g.: helicopter pilot may be helicopter mechanic; the Captain may be the Navigator/Master.
YEARS EXPERIENCE	Try to get this information from the crew if it is difficult to obtain put a dash in the column
NATIONALITY	The nationality should be available on the crew list. Pay particular attention to the nationality of any Pacific Islanders amongst the crew.
COMMENTS	Put any information about the crew in this column. This could be a name of a vessel they previously worked on, or the name of Fishery Colleges they attended. Any relevant information may be useful.
TOTAL NUMBER OF CREW	Total the number of crew being careful to not count some of the crew twice
	The crew list has the most common positions on a purse seine vessel, if there are extra specialist positions that are not listed here, write them in one of the crew rows. If the vessel does not have anyone in the position indicated write “Vacant” in the name column.

COMMENTS OR DRAWING OF WELL PATTERN

SOUTH PACIFIC REGIONAL PURSE-SEINE OBSERVER
DAILY LOG

FORM PS - 2

REVISED SPC/FFA DEC. 2000

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	SCHOOL ASSOC.	SCHOOL DETECT	BEACON / PAYAO #	COMMENTS

FLOATING OBJECT AND SCHOOL SIGHTINGS	Example		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	
	Tally	Total	Tally	Total	Tally	Total	Tally	Total	Tally	Total	Tally	Total
	𝍸 ||||	9										

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
10 Deploy / 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
H1 Helicoptor takes off to search
H2 Helicopter returned from search

SCHOOL ASSOCIATION

1 Unassociated } Freeschool
2 Feeding on Baitfish } Freeschool
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)

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

DID YOU OBSERVE ANY EVENTS TODAY THAT REQUIRE FORM GEN - 3 ? Yes / No

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

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

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

EEZ Code: Place the code for the EEZ (on back of Form GEN-2) 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) (°): If reading from a wind meter adjust to make up for moving vessel.
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) or close enough.

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.

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)
Total: Add up the "tally" strokes at the end of the day to get the total.

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 ").

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.

Anchored FAD / payao: Use this code when vessel is fishing around previously set and anchored FADs and payaos that it finds because they are marked on a chart

Helicopter codes: Only use helicopter codes if the helicopter is used directly for searching or fishing - not when it is running messages between boats or to shore.
Unless there is an accident every "H1" code should have a matching "H2" code.

School assoc and *detect codes* should be used whenever activity code "1", "8" or "9" is used.

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

School Detect.: Use a "How Detected" code to best show how fish were found.
If more than one method was used then use the code that shows what first made the vessel change course to inspect the fish. (E.g.: If helicopter reports fish then vessel bird radar was used near to the reported position, use code "2" - seen from helicopter.

Did you Observe any Events that require Form Gen -3
Circle **Yes** if any infringements, as listed on Form GEN - 3, were observed.
Write notes on the incident in Form GEN-3 and you diary.
If there was no incident for the day circle **No**.

SOUTH PACIFIC REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS-3

REVISED SPC/FFA DEC. 2000

OBSERVER NAME	VESSEL NAME	PAGE OF

OBSERVER TRIP I.D. NUMBER	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 LANDINGS	TOTAL ON-BOARD BEFORE THIS SET (a)	mT	TOTAL TONNAGE THIS SET (b)	mT	NEW ON-BOARD TOTAL (a+b)	mT	Sum of all brails (*See PS-4*)

SKJ - YFT - BET **OTHER SPECIES**

SPECIES CODE	FATE CODE	CATCH (mT) OBSERV.	CATCH (mT) VESSEL	SPECIES CODE	FATE CODE	CATCH (mT)	NUMBER OF FISH	VESSEL LOG	COMMENTS

(Circle one)

Did any SKJ, YFT, or BET escape during the set ?	**YES NO**	If fish did escape ("YES") what is the approximate percentage ?	**%**
Were there any discards of SKJ, YFT or BET ?	**YES NO**	How many species other than SKJ, YFT or BET were caught ?	

Tick to indicate the school association for this set: F Free School ( ) Floating Object School ( )

How many tags recovered ?	TAG #	SPECIES	LENGTH	WEIGHT	SEX

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
		CXS	Bigeye trevally	MAK	Mako shark
BLZ	Blue marlin	DOL	Mahi mahi	SPN	Hammerhead sharks
BLM	Black marlin	RRU	Rainbow runners	THR	Thresher sharks
MLS	Striped marlin	FLF	File fish	RHN	Whale shark
SFA	Sailfish	TRI	Trigger fishes	MAN	Manta ray
SSP	Short billed spearfish	KYC	Drummer	MOX	Sunfish
SWO	Broadbill swordfish	MSD	Mackerel scad		
		PSC	Man - o - war fish	SQU	Squid
ALB	Albacore	LOB	Triple tail	FRZ	Frigate and bullet tuna
BAT	Batfishes	BRZ	Pomfrets and ocean bream	MAX	Mackerel (unidentified)
FRI	Frigate tuna			SHK	Sharks(unidentified)
BLT	Bullet tuna	MAM	Marine mammals	TUN	Tuna (unidentified)
KAW	Kawakawa	TTX	Marine turtle	TRE	Trevally (unidentified)
WAH	Wahoo	BRD	Bird (unidentified)	UNS	Fish (unidentified)

FATE CODES	
RWW	Retained - whole weight
RHG	Retained - headed and gutted (marlin 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)
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
DPA	Discarded - protected species - alive
DPD	Discarded - protected species - dead
DOR	Discarded - other reasons (specify)
DFR	Discarded trunk - fins retained (shark only)
ESC	Escaped

PURSE SEINE LOG - SET DETAILS **NOTES ON Form PS -3**

DETAILS

OBSERVER NAME	First name first. Last name last. Make sure to print. Ie John Smith not Smith John
VESSEL NAME	Vessels full name. No abbreviation, for example a vessel with the name "Captain Paul Smith should not be abbreviated to Capt P. J. Smith
PAGE OF	Number each PS-3 form in order of use, continue until trip is completed.
OBSERVER ID NUMBER	This number is issued before you leave port . It will be the same on all forms.
START OF DATE AND TIME (SEE PS-2	The exact date and time that you have recorded for this set on your PS-2
START OF SET DATE AND TIME	The exact date and time that the vessel has recorded for this set in their Regional Purse
(VESSEL LOG)	Seine Log Sheet

SET SEQUENCE

BEGIN SET (SKIFF OFF)	This will be the exact same time as recorded on your daily log and on the 'Details' section. (see above)
BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and then 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. This indicates the net has enclosed the fish they cannot escape. When all the rings appear - record the time.
BEGIN BRAILING	Record the time the vessel starts the brailing process. This can be got from your 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. Rem to change the activity on PS -2.

CUMULATIVE TOTALS

CUMULATIVE TOTALS	Keep a running total of the amount of fish on-board. State the total amount of tuna on-board before the set by filling in the first box (a). Next, fill in the total amount of tuna landed during this set into the second box (b). Now add both totals (a+b) to give you the total amount of tuna on-board the vessel after the set.

SUM OF ALL BRAILS

Sum of all brails (*See PS-4*)	After calculating the total number brails on PS-4 transfer you answer here.

SKJ - YFT - BET

Species codes	**Only** enter the three tuna species SKJ-YFT-BET in this column - when they are landed.
Fate Code	Enter the appropriate fate code for the landed target catch here. Remember their may be more than one fate code for each species ie SKJ could have the fate codes RWW, RCC, DTS and DGD during 1 set.
CATCH (mT) (OBS)	Calculate (worksheet provided) in mT the amount of each Tuna species retained. Estimate the discards.
CATCH (mT) (VESSEL)	Copy the figures recorded by the vessel from the Vessel logsheet for this set. Do not change your your figures or tell the vessel to change theirs figures if they are not the same as yours. Use mT only.

OTHER SPECIES

SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
FATE CODE	Use the fate codes provided to say what happened to each species that was landed. Rem some species will have more than one fate code.
CATCH (mT)	Give us your best estimate of each species caught, in each fate code category. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.300 mt of DOL and .04 mt WAH
Number of fish Vessel log	If only small amounts of a species are landed record the numbers. Large amts are recorded in CATCH mt Copy the figures recorded by the vessel from the Vessel logsheet for this set. Place a zero in the column if they have not recorded the species

QUESTIONS

Did any SKJ-YFT-BET escape during the set	Circle Y if you are sure a significant amount of the school escaped during the set or N if none escaped
If YES, Estimate the Percentage Escaped.	This is a difficult task. You will have to ask the Captain, or radio operator, how much fish he thinks is in in the school before or during the set. They will know by looking at the sounder. They will also know if some have escaped. Try to find out what percentage has escaped.
Were there any Discards of SKJ-YFT-BET ?	Circle Y if any Tuna were discard **after** landing on-board.
How many Species other than SKJ-YFT-BET were caught	Count the number of by-catch species landed. For example if wahoo, scad, trevally and rainbow runners were all landed during the set, put 4 in the box.
Tick to indicate school assocition for this set.	If the set was made on a free school ie a free school or school feeding on bait fish tick the 'free school' box. If there was any floating object with the school ie drifting log, dead animal, live whale, drifting or anchored FAD please tick the 'floating object school" box.

TAGS

HOW MANY TAGS RECOVERED ?	The number of tags recovered from the set. Keep an eye out for tags on Tuna and Billfish
TAG # - SPECIES-LENGTH-WEIGHT WEIGHT-SEX	When you recover a tag, record the tag Number and the Species name for the Fish. Then measure the appropriate length (with Tuna it is Upper Jaw to Fork Length), weigh the fish if possible and cut it open to find the Sex if possible. Note the colour of the tag and the name of the tagging organisation.

SOUTH PACIFIC REGIONAL PURSE-SEINE OBSERVER LENGTH FREQUENCY

FORM PS - 4

REVISED SPC/FFA DEC. 2000

OBSERVER NAME	OBSERVER TRIP ID NO.	VESSEL NAME	START OF SET DATE AND TIME (see PS-2) D D M M Y Y h h m m						PAGE OF

COMMENTS ON SAMPLING PROTOCOL	MEASUREMENTS FOR EACH SPECIES UF - UPPER JAW FORK INTAIL (TUNA, SHARK) LF - LOWER JAW FORK INTAIL (BILLFISH) TW - TOTAL WIDTH (TIPS OF WINGS - RAYS) TL - TIP OF SNOUT TO END OF TAIL (NO FORK TAIL) CL - CARAPACE LENGTH (TURTLES)

BEGIN BRAIL TIME	END BRAILING TIME	NO OF BRAILS SAMPLED	NO OF SAMPLES PER BRAILS		MEASURING INSTRUMENT
BRAILS BROUGHT ONBOARD	FULL	3/4 BRAILS	1/2 BRAILS	1/4 BRAILS	SUM OF ALL BRAILS

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	

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

NOTES ON FORM PS - 4

LENGTH FREQUENCY

OBSERVER NAME	Put you first name first, and your last name last,
OBSERVER TRIP ID	This is the same number you are using for all other forms in this book. Do not make up your own number or use the trip number reported by the vessel.
PAGE OF	Number each page you use for the one set
VESSEL NAME	Full name of vessel (no abbreviations)
START SET DATE & TIME	Record date and time that ship is using exactly as it is recorded on Forms PS-2 and PS-3. This is the date and time at the moment the net skiff is released.

DETAILS OF SAMPLING

COMMENTS ON SAMPLE PROTOCOL	Write your reasons for adopting the sampling protocol you have chosen and any other information that may have an effect on your sampling. I.e. the size of the brail.
TOTAL BRAILS BOUGHT ABOARD	The total numbers of times that the vessel brails fish aboard from the net to the wells. Knowing the size of the brail will help you estimate the total weight of fish caught.
NO OF BRAILS SAMPLED	How many of the total number of brails bought aboard have you sampled
NO OF FISH SAMPLED PER BRAIL	How many fish did you sample out of each brail sampled. Remember to measure at least 5 fish, randomly collected, from each brail. Do not pick a particular size or species, take them from the brail as you grab them.
BRAILS BROUGHT ONBOARD	Count the number of Full, ¾, ½, ¼ brails that you observe coming onboard. Remember: 3 full brails, and 3 x ¾ brails, and 3 x ½ brail, and 4 x ¼ brails = 3 +2 ¼ + 1 ½ + 1. Sum = 7 ¾ brails
BEGIN / END BRAIL TIME	Record the time the vessel starts and finishes the brailing procedure.
MEASURING INSTRUMENT	What sort of measuring instrument did you use? I.e.: Wooden / Plastic Callipers; Tape measure; Flat Ruler; etc.
SPECIES CODE 1- 150	Place the species code (refer to codes on form PS-3) of the fish you measured in order of the way they came out of the brail. The numbers are only there to assist you with keeping totals of fish measured.

A NUMBER SAMPLED	Write the total individual species sampled in the appropriate boxes
B SUM OF LENGTHS	Add all the lengths for each species and enter in the boxes under the headings
C AVERAGE LENGTH	Sum of lengths of each species divided by number of individual species sampled (Round to nearest centimetre) C = A / B

IMPORTANT POINTS

1. Spread your sampling throughout the entire brailing process
2. Always get a random sample from the brail, dont choose fish because they are the easiest size to handle.
3. Do not let crew select fish for you even though they are trying to assist.
4. Be sure to Identify and separate Yellowfin and Big-eye when sampling
5. If you are using a deck tape ensure that one end of the tape is placed against a flat surface or has a nose block. Make sure the end of the tape starts at 0 cm. If the tape has an extension before the zero when recording length make an adjustment with the final measurement.
6. If using a deck tape, Make sure the fish is on the tape straight when measuring
7. Do not use a flexible tape measure unless the fish is extremely large and the normal callipers or deck tape is to small. i.e. large Shark, Marlin etc.
8. Do not measure damaged fish.
9. Record length to the centimetre, down. E.g.: a 69.9 cm fish is recorded as 69 cm.
10. Do not forget to note the species in the columns provided especially when there is a change of species whilst measuring.
11. Record the measurements on the board or paper supplied and transfer them to form PS -4 as soon as you leave the working deck.
12. Ensure that you take thorough note of other species and discards while you are measuring fish.
13. Check length /weight conversion tables for estimated weight of tuna species.

INDIVIDUAL WEIGHT IN KGS. CONVERTED TO ESTIMATED MEASUREMENT IN CENTIMETRES (GUIDE ONLY)

Kgs	.5	1	1.5	2	2.5	3	3.5	4	5	6	7	8	9
SkipJack	<33	33-37	38-43	44-47	48 -50	51-53	54-55	56-59	60-63	64-66	67-69	70-72	73-74
Yellowfin	<33	33-38	39-43	44-46	47 -49	50-52	53-55	56-58	59- 63	64-66	67-69	70-75	76-78
Big-eye	<33	32-37	38-41	42-45	46 -48	49-51	52-54	55-58	59 62	63-64	65-67	68-73	74-76

Kgs	10	11	12	13	14	15	16	17	18	19	20	21	22
SkipJack	75-76	77-78	79 -80	81-82	83	84	85	86					
Yellowfin	79-80	81-82	83-84	85 87-	88	89-90	91-92	93-94	95	96-97	98-102	103-105	106-108
Big-eye	77-78	79-80	81-82	83-85	86- 87	88-89	90-91	92-93	94	95-96	97-98	99	100-101

Kgs	23	24	25	26	27	28	29	30	31	32	33	34	35
Yellowfin	109	110-111	112-113	114	115-116	117	118-119	120	121	121-123	124	125	126
Big-eye	102-103	104	105	106-107	108	109-110	111	112	113	114-115	116	117	118

Kgs	36	37	38	39	40	41	42	43	44	45	46	47	48
Yellowfin	127-128	129	130	131	132	133	134-135	136	137	138	139	140	141
Big-eye	119	120	121	122	123	124	125	126	127	128	129	130	131

Kgs	49	50	51	52	53	54	55	56	57	58	59	60	61
Yellowfin	142	143	144	145	146	147	148	149	150	151	152	153	154
Big-eye	132	133	134	135	136	137	138		139	140	141		142

SOUTH PACIFIC REGIONAL PURSE-SEINE OBSERVER — FORM PS - 5
VESSEL LOGSHEET and WELL LOADING RECONCILIATION (Optional)

REVISED SPCFFA DEC 2000

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE OF

OBSERVER (SEE NOTES ON BACK) DATE	OBSERVER TIME	LOGSHEET SET TIME DATE	LOGSHEET SET TIME TIME	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	OBSERVER'S 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)).

Notes on FORM PS - 5

VESSEL LOGSHEET and WELL LOADING RECONCILIATION

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 ON BACK) DATE	OBSERVER TIME	LOGSHEET SET TIME DATE	LOGSHEET SET TIME TIME	PORT WELLS 12	11	10	9	8	7	6	5	4	3	2	1	STARBOARD WELLS 2	3	4	5	6	7	8	9	10	11	12	OBSERVER'S TOTAL	OBSERVER'S CUMUL. TOTAL	COMMENTS
03/03	0530	03/02	0600		40							Example 1													30		70	70	
04/03	0545	No record							8			Example 2															8	78	
05/03	0840 }	04/03	} 1500						12			Example 3															12	90	Logsheet entry
05/03	1740 }								20	28										40					10		98	188	was 100 mT
09/03	0555	No record								12											40		4				56	244	
11/03	0740	No record					20																20				40	284	
15/03	1635	No record										Example 4											5				5	289	
—	—	15/03	1635	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
15/03	—	15/02	—			50						Example 5			80									32			82	371	(because it is full) 0930
17/03	—		—		(-40)							Example 6													(-40)		0	371	transfer approx. 2100
TOTALS					0	50	20		40	40					80					40	40		29	32	0		—	371	

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)).

Totals at bottom : When the page is finished add up catch in each well. Add all figures in a column. Don't forget to subtract the negative numbers for catch that was removed from a well. When the page is finished write each well total on the top line of a new page. Write "Totals carried over from page ?? in the comments column.

SOUTH PACIFIC REGIONAL OBSERVER
VESSEL AND AIRCRAFT SIGHTINGS AND FISH TRANSFER LOG

FORM GEN - 1

REVISED SPC/FFA DEC. 2000

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF

VESSEL OR AIRCRAFT SIGHTINGS

DATE	TIME	OBSERVER'S VESSEL POSITION				SIGHTED VESSEL OR AIRCRAFT				COMPASS BEARING (degrees)	DISTANCE (Nautical Miles)	ACTIVITY CODE	PHOTO FRAME #	COMMENT
		LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE					

FISH TRANSFERS

DATE	TIME	OBSERVER'S VESSEL POSITION				RECEIVING VESSEL			FISH TRANSFERRED				TRANSFER TYPE (T or S)	COMMENT
		LATITUDE (dd° mm.mmm')	N S	LONGITUDE (ddd° mm.mmm')	E W	NAME	INTERNATIONAL CALLSIGN	TYPE CODE	SKJ WGT.	YFT WGT.	BET WGT.	MIXED WGT.		

VESSEL & AIRCRAFT CODES

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

ACTIVITY CODES

- FISHING INCLUDES ANY RELATED ACTIVITY

FI	FISHING
PF	POSSIBLY FISHING
NF	NOT FISHING

FLAG COUNTRY CODES

- IF COUNTRY IS NOT IN LIST WRITE NAME OF COUNTRY

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

TRANSFER TYPE CODES

T	TRANSHIPPING
S	SET SHARING
B	BUNKERING

- **ALL DATES AND TIMES MUST BE UTC / GMT**
- **ALL WEIGHTS MUST BE METRIC TONNES**

VESSEL AND AIRCRAFT SIGHTINGS LOG and FISH TRANSFER LOG 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 or fax, immediately you see such activity. All information about the vessel and its activities should be in the Telex or Fax. 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.

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	Record the UTC/GMT Month Day and Time as given on the GPS.
LATITUDE DD MM.MMM LONGITUDE DDD MM.MMM	This will be available from the GPS and should be recorded as indicated on the monitor DD & DDD = degrees MM = minutes. MMM = decimal minutes.
N S & E W	The GPS will also indicate whether the latitude is North or South of the Equator. This is important. Do not forget to write "N "or "S" beside the position. The GPS also indicates whether you are East or West of longitude 180^0. Don't forget to write "E" or "W" after the longitude.
NAME	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 visibly painted on the vessel.
FLAG	Try to determine the flag country; This is often written on the stern of the vessel.
TYPE CODE	The "Vessel and aircraft" type codes" are on front of Form. E.g.: purse -seiner = 1; longliner = 2; etc.
COMPASS BEARING	Look at the compass and get a bearing from your vessel to the position of the other vessel.
DISTANCE (NAUTICAL MILES)	You may require the use of the radar to get an exact distance to the vessel. If this is not possible estimate the distance.
ACTIVITY CODE	This is in relation to what activity is happening when you sight the vessel. If you are not sure write what you see in the comment column. If the vessel is bunkering or transhipping indicate this also in the comment column.
PHOTO FRAME #	Record the number of the photo frame from your camera if you have taken a photo.
COMMENT	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.

OBSERVER NAME	Put first name first, and last name last, and print name. in full.
VESSEL NAME	Put vessels full name; Names should not be abbreviated.
OBSERVER TRIP ID	This is the same number you used on Form 1. It was issued to you before you left port. It will not change for the whole trip.
PAGE OF	If there is more than one page for the trip, number each page.

FISH TRANSFER LOG RECEIVING VESSEL

NAME	Name of the vessel that is receiving the fish
INTERNATIONAL CALL-SIGN	The call-sign that is visibly painted on the vessel
TYPE CODE	Use the "Vessel and aircraft codes" on front of Form GEN-1 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.
TRANSFER TYPE T OR S	Get type of transfer from "Transfer codes" on front of Form.
COMMENT	Comment about the transhipment (e.g.: method used; problems; destination of the fish; etc.)

CODE TABLES

VESSEL & AIRCRAFT CODES	To make recording easier, each type of vessel has a unique number code (see code table). Be careful using number codes.
ACTIVITY CODES	Describes the activity the vessel is carrying out when sighted.
FLAG COUNTRY CODES	Codes for different countries from which a vessel may come. This is usually found from the country's flag on the vessel or the name of the country on the stern.
TRANSFER TYPE CODES	T = Transhipping to a reefer or another vessel. S = Set sharing - when a vessel has too many fish from a set (usually the last set needed to fill all wells) and another vessel is invited to brail the remaining fish from the net. B = Bunkering - when a vessel is next a tanker to take on fuel

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 JUN 23 YOU SIGHTED A KOREAN LONGLINE VESSEL FISHING AT LATITUDE 05:12 345S LONGITUDE 156:12.233E. THE NAME OF THE VESSEL IS MOONSHADOW, ITS CALLSIGN IS Q2344. IT HAS A LARGE GREEN STRIPE ON THE HULL, YOU HAVE TAKEN A PHOTO.

SOUTH PACIFIC REGIONAL OBSERVER **FORM GEN - 3**
VESSEL TRIP MONITORING RECORD

REVISED FFA DEC. 2000.

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:

	Yes	No
• RECORD INACCURATE POSITIONS ON THE VESSEL LOGSHEET		
• FISH IN AREAS THAT WERE NOT COVERED BY ANY LICENCE OR ACCESS AGREEMENT		
• MIS-REPORT CATCHES IN THE VESSEL LOGS OR WEEKLY REPORTS.		
• NOT REPORT CATCHES OF COMMERCIAL SPECIES		
• NOT RECORD CATCHES OF BYCATCH AND DISCARDS		
• CATCH MARINE MAMMALS		
• BREACH MARPOL REGULATIONS		
• NOT REPORT TO NATIONAL AUTHORITIES WHEN BUNKERING		
• TRANSFER FISH FROM OR TO ANOTHER VESSEL AT SEA		
• REQUEST THAT AN EVENT NOT BE REPORTED		
• OFFICERS MISTREAT THE CREW		
• DID THE CAPTAIN OR CREW HINDER THE OBSERVER IN ANYWAY		

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.

	OBSERVER SIGNATURE

VESSEL TRIP COMPLIANCE RECORD Notes on FORM GEN - 3

This check form must be completed at the end of your trip. It is important to ensure that information you collect is kept confidential from the vessel and any other persons except the officers whom you report to when you get back to 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 not to report the illegal fishing which could land them in prison.

OBSERVER NAME	Print your first name first, and your last name last
VESSEL NAME	Print the vessels full name no abbreviations. For example, Captain Ivan Grimsby Korsakov should not be abbreviated to Capt. I. G Korsakov
OBSERVER ID NUMBER	This is the same number you used on Form 1 and were issued to you before you left port. It will not change for the whole trip on any of the forms.

DID THE VESSEL DO ANY OF THE FOLLOWING

RECORD INACCURATE POSITIONS ON THE LOG-SHEET	The vessel log sheet should be filled out daily or after each set by the captain or a designated officer on the vessel. You have the right to ask for a look at this log at anytime (inspect this log at least once a day). Check the times the vessel is recording the position and see if it is the same position, you have recorded for the same time on your daily observer logs. Discrepancies of anything more than 3 miles should be reported and the distance noted in your report.
FISH IN AN AREA THAT THE VESSEL IS UNLICENSED	You should make yourself aware of the areas in FFA countries where a vessel is not permitted to fish.. Generally Internal waters, Territorial seas (12 miles from a land base line) and Archipelagic waters are off limits to most purse seiners, (exceptions do occur). Some countries such as Papua New Guinea has areas where you are not permitted to fish unless you are a specific type of vessel. The local fishery divisions will help, or FFA has listed in the US Treaty manual for US vessels the closures. These also apply to most DWFN Purse-seiners.
INDICATE POSSIBLE CATCH MIS-REPORTING	Is the vessel under reporting, over reporting or not reporting any of the sets that you have observed. This can be done for various reasons, however check the vessel logs daily to ensure all sets are recorded and the catch has been logged correctly. If your estimate varies by a large amount, be suspicious and keep an eye on what is occurring, and report this when you return.
ATTEMPT TO NOT REPORT CATCHES	You are to report any attempt by the vessel to not report any fish, shark and mammal species, retained or discarded. Please report, if a vessel reports all its main commercial species correctly, but are not reporting any by-catch that is being retained or discarded. Please report any attempt to not report commercial species that have been rejected because they are damaged, to small or are considered to be undesirable for other reasons. The vessel may not think recording discards is important, however it is a requirement that all species (not only commercial species) caught must be recorded correctly, whether they are retained or discarded.
ATTEMPT TO RECORD A SPECIES AS DIFFERENT SPECIES.	There are a number of reasons a vessel may attempt to record a species as a different species. They may do this to report to a country that all the fish they have caught are not of high value. Whilst this is not a big problem with purse-seine catches as most species go for canning, some of the species can be used for sashimi and will bring higher prices. This in turn means there is a higher value on the catch than reported.. However, if it is not reported correctly, then the licence fee can only be determined on the lower value. Common occurrences of this are recording Big Eye as Yellowfin, recording both Big Eye and Yellowfin as Skipjack. Purse seiners often record small Big-eye as Yellowfin because they bring the same price at the cannery. Report this if it occurs, and give your estimates of each species in the catch.
CATCH OR ATTEMPT TO CATCH MARINE MAMMALS	This includes all species of Whales, Dolphins Turtles, Dugongs and Seals. If the vessel deliberately sets on any marine mammal, write a short report on the fate of this animal. For example, if the mammal escaped by own its means or was hauled aboard in a distressed or deceased state. Often the animal is released or escapes unharmed. You should report if the animal was released unharmed or released injured. Anything to report about the vessels' attitude to the animal is important. All deliberate catches and accidental catches of marine mammals should also be reported in the daily set logs Form 3.
ANY BREACH OF MARPOL	MARPOL is an international Convention for the prevention of pollution from ships. Rubbish thrown overboard into the sea represents a threat to all marine life and to other vessels. 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 unprocessed perishable garbage within 12 nautical miles of land or a reef. If a vessel is within 12 miles of land then no unprocessed rubbish is permitted to be discharged over the side. If the vessel is more than 12 miles then only food scraps, paper, glass, metals or crockery is permitted. If the vessel has a processor or grinder on board then only perishable processed rubbish (No plastics) may be dumped up to 3 miles from land. Report in the comments what the vessel does with its rubbish and whether the vessel has an incinerator on board.

SOUTH PACIFIC REGIONAL POLLUTION REPORT Form GEN–6

OBSERVER NAME		OBSERVERS VESSEL NAME		PAGE OF
OBSERVER TRIP ID NUMBER		DATE OF SIGHTING / OBSERVATION		TIME OF SIGHTING / OBSERVATION
LATITUDE (DD º MM. MMM')	N S	LONGITUDE (DDD º MM. MMM')	E W	EEZ / Harbour
COMMENTS ON LOCATION (E.G. BEARING AND DISTANCE TO NEAREST LAND OR REEF)				

WIND DIRECTION º	WIND SPEED (KTS)	SEA CONDITIONS C S M R	CURRENT DIRECTION º	Observers Vessel Activity

NAME OF OFFENDING VESSEL		INTERNATIONAL RADIO CALLSIGN		TYPE OF VESSEL	
PHOTOGRAPHS OR VIDEO		SAMPLES TAKEN		OTHER ACTION TAKEN	

OIL SPILLS NATURE AND SOURCE OF SPILL (CIRCLE APPROPRIATE)			
VESSEL AGROUND / COLLISION AND LEAKING OIL	YES NO	VESSEL UNDERWAY DISCHARGING OR LEAKING OIL	YES NO
VESSEL AT ANCHOR/BERTH AND DISCAHARGING OR LEAKING OIL	YES NO	OIL SLICK SIGHTED WITH NO DEFINITE SOURCE	YES NO
LAND BASED SOURCE - DESCRIBE SOURCE IF KNOWN IN COMMENTS	YES NO	OTHER OIL SLICK (DESCRIBE IN COMMENTS)	YES NO

VISUAL APPEARANCE AND EXTENT OF SPILL (ESTIMATE AREA AND QUANTITY IF POSSIBLE)

Type of Waste Dumped at Sea (Circle appropriate)			
ALL PLASTICS (BOTLES, STRAPPING, BAGS)	YES NO	METALS INCLUDING TIN AND ALUMINIUM	YES NO
WASTE OIL AND FUEL	YES NO	CHEMICALS OR DETERGENTS	YES NO
OLD OR USELESS FISHING GEAR, NETS, LINES FLOATS ETC (DESCRIBE)	YES NO		

COMMENTS (INCLUDE NAME AND POSITION OF VESSELS SIGHTED IN THE AREA)

Form GEN–6 South Pacific Regional Pollution Report

Observers Name - must be written with the first name first and your last name second. For example: and observer with the name John Smith would be written as John Smith not Smith John**.**

Vessel Name - Put the vessels full name, no abbreviations, for example, a vessel with the name Captain John Samuel Bull should not be abbreviated to Capt. J. S. Bull.

Observer Trip ID number- This number is issued to you before you leave port and should be used on all forms used during the Trip. (*Make sure you get this number before leaving*) The number will remain the same for the duration of the trip. When issued with the 'Trip ID Number" it is a good idea to mark all your forms straight away.

Page No. Keep all your from GEN – 6's together. Number the first GEN –6 "Page 1 of ___". Number the second GEN – 6 you use during the trip "Page 2 of __" then at the end of the trip add up all your pages. If you have 4 pages go back and mark in the blank with a 6, i.e. "Page 1 of 6". It may happen that you will have only one GEN-6 form. State page 1 of 1 for a single page.

Date of Sighting/Observation – Record the date that the incident was sighted. Use the ship's (or local) date. Make sure you are using the same ship's date as you used on your other observer forms. If you are reporting a harbour incident – use the local date.

Time of Sighting/Observation- Record the time that a pollution incident was sighted/observed from the ship's clock. Make sure you are using the same ship's time as you used on your other observer forms .If you are not at sea, state what time you are using i.e. 09.00 hrs Fijian local time.

Latitude & Longitude - This will be available from the GPS and should be recorded as indicated on the monitor dd & ddd.= degrees; mm= minutes; mmm = decimal minutes; For degrees or minutes less than 10, always precede number with zero (for example 5^0 will be entered as 05)

N, S - E, W - The GPS will indicate whether the latitude (Lat.) is North or South of the Equator. It will also indicate whether the longitude (Long.) reading is East or West of 180^0. It is extremely important that you do not mix these up when the vessel is near the equator or the International date line 180^0. The recording of a Lat. and Long. is useless with out these indications after the Lat. and Long. figures.

EEZ Codes - Place the code for the EEZ you are in when the position is recorded. The vessel's chart should give you an indication. If you are not sure put the code in for EEZ where you think you are. EEZ Country Codes are on back of Form

Comments on Location – Note any distinguishing feature of the location – near a reef, shallow water, land feature, proximity to other vessels etc.

Wind (^{0}) KTS. - Record the wind direction in degrees using the ships compass or read direction from the wind gauge. Do not record North, Southeast. Etc. The wind speed can be read from the wind meter or estimated if there is no wind gauge. Remember if the vessel is moving the wind speed on the wind meter may need to be adjusted to compensate for the vessel movement. If the wind meter has only readings in Metres Per Second, convert this to Knots by multiplying metres per second x 2.

Sea – This describes the sea conditions, **C**= Calm - **S**= Slight - **M** = moderate - R = Rough. You will have to judge the conditions yourself.

Current Direction –Record the prevailing current direction. If you are not certain ask the Captain.

Vessel Activity - Record what the vessel was doing at the time of the incident. Vessel activity codes (1-14) are available on the right hand side of PS-2. You may, if you are on a longliner or in harbour give a written description of what the vessel was doing at the time i.e. searching, transiting, fishing, drifting, transshipping etc.

Name of Offending Vessel Put the offending vessels full name, no abbreviations, for example, a vessel with the name Captain John Samuel Bull should not be abbreviated to Capt. J. S. Bull. State unknown if this is the case.

Call Sign – Note if applicable/available

Type of Vessel – Describe in general terms – fishing vessel, inter island vessel, tanker, container vessel etc. Estimate size and any distinguishing features eg. Flag etc

Photographs/video taken – Yes or no as appropriate

Samples Taken – Yes or no as appropriate. To sample use a clean glass bottle/jar label with date, time, location. Seal.

Other Action Taken Tick, describe as appropriate in comments.

Oil Spill Nature and Source of Spill –Tick the appropriate box. If there are additional observations please note them in the comments section

Visual Appearance and Extent of Spill – Please use the "Pocket Guide for Surveillance of Marine Pollution" to assist you in filling this section.

Type of Waste Dumped or Floating at Sea – Tick the appropriate box and estimate the quantity as best as possible.

Comments – Write any information you think is important to better describe the pollution incident. If not enough room in the column, write the information in you diary and then write the page number of the diary in the comments column

Country Codes

AS: American Samoa
AU: Australia
CK: Cook Islands
FM: Fed. States of Micronesia
FJ: Fiji
FR: France
PF: French Polynesia
GU: Guam
ID: Indonesia
IW : International Waters
JP: Japan
TO: Kingdom of Tonga
KI: Kiribati
KR: Korea
CN: Mainland China
MY: Malaysia
MH: Marshall Islands
NR: Nauru
NC: New Caledonia
NZ: New Zealand
NU: Niue
MR: Northern Mariana Islands
PW: Palau
PG: Papua New Guinea
PH: Philippine
RU: Russia
SG: Singapore
SB: Solomon Islands
TW: Taiwan
TK: Tokelau
TV: Tuvalu
VU :Vanuatu
WS: Western Samoa

APPENDIX 7. SOUTH PACIFIC REGIONAL UNLOADING AND PORT SAMPLING FORMS

1. **Longline Port Unloading Form**

2. **Longline Sampling Form**

3. **Purse-Seine and Pole-and-Line Unloading Form**

4. **Pole-and-Line Sampling Form**

5. **Purse-Seine Sampling Form**

6. **Purse-Seine Well Loading Form**

7. **Troll Sampling Form**

SOUTH PACIFIC REGIONAL LONGLINE UNLOADING FORM

REVISED SPC/FFA, DEC., 2000

PORT	COMPLETED BY	MONTH	YEAR	PAGE OF

UNLOADING DATES	INFORMATION ON THE VESSEL			NUMBERS AND WEIGHT OF EACH SPECIES IN CATCH							OTHER 1	OTHER 2	OTHER 3	OTHER 4
				YFT	BET	ALB	BLZ	MLS	BLM	SWO				
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			Wt.											
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			Wt.											
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			Wt.											
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			Wt.											
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			Wt.											
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			Wt.											
FIRST DAY	NAME	FLAG	**EXPORT** No.											
			Wt.											
	REG. No	AGENT	**LOCAL** No.											
LAST DAY			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 DATES

START The day date on which the longliner began unloading

END The day date on which the longliner finished unloading

INFORMATION ON THE VESSEL

NAME Full name of the longliner, including number if it has one (e.g., *Catchit No. III*)

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

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

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*
BLZ 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)
SHK 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 start and end dates of unloading, the vessel name, registration, flag and agent* **should still be recorded.**

SOUTH PACIFIC REGIONAL LONGLINE PORT SAMPLING FORM

REVISED AT REGIONAL FORMS COMMITTEE DEC 2000.

PORT:	SAMPLER:	ASSISTANT:	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		N / S	TO LATITUDE		N / S	FROM LONGITUDE		E / W	TO LONGITUDE		E / W

	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							

N.B.: CIRCLE "Y" OR "N" TO ANSWER	
WERE ALL THE YFT, BET AND ALB UNLOADED AND ALL SAMPLED ?	Y N
WERE ALL SWO, MLS, BLZ, BLM AND SFA UNLOADED AND ALL SAMPLED ?	Y N

Eg: FSH ||||/ = 6

RECORD COUNTS OF FISH NOT SAMPLED and other COMMENTS

ALL SPECIES EXCEPT BILLFISH			
LENGTH CODES		WEIGHT CODES	
UF	UPPER JAW TO CAUDAL FORK	WW	WHOLE WEIGHT
US	UPPER JAW TO SECOND DORSAL	GG	GILLED & GUTTED
PS	PECTORAL TO SECOND DORSAL	GT	GILLED, GUTTED, TAILED
NM	NOT MEASURED	GX	GUTTED, HEADED, TAILED
		NM	NOT MEASURED

BILLFISH			
LENGTH CODES		WEIGHT CODES	
LF	LOWER JAW TO CAUDAL FORK	GH	GUTTED, HEADED
PF	PECTORAL TO CAUDAL FORK	GX	GUTTED, HEADED, TAILED
PS	PECTORAL TO SECOND DORSAL	GO	GUTTED ONLY, NOT GILLED
NM	NOT MEASURED	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:	ASSISTANT:	PAGE OF
VESSEL NAME:	COUNTRY OF REGISTRATION:		
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 N S	TO LATITUDE N S	FROM LONGITUDE	

PAGE OF Number pages out of the total 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",

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) and assistant (person writing measurements on form), if there is one.

Date at Start of Trip } all dates must have two digits for days,
Date at End of Trip } two digits for month and 2 digits for year.
Date of Sample } So 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.

Country of Registration (flag) and **Registration Number**
The country in which the vessel is registered and the registration number that country has issued to the vessel. Usually this is found on

SPECIES	LENGTH CM	CODE	WEIGHT KG	CODE	EXPORT CODE	OTHER *Specify here*

Length: (cm) must be rounded down to whole centimetres (e.g. 69.9cm is recorded as 69cm)

(See "Length Codes" on front of form.)

Export code: "LO" for local only if fish is **not** to be exported. Else use one of the country codes below to show destination of

Species

Code	Common Name
YFT	Yellow fin
BET	Bigeye
ALB	Albacore
SKJ	Skipjack
MLS	Striped marlin
BLZ	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
SHK	Sharks

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

Weight: (kg) must be recorded to nearest kilogram (e.g. 58.7kg is written as 59kg)

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 sample 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 *)

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 an entry for yellowfin landed for export to Japan

25	*YFT*	*125*	*UF*	*56*	*GG*	*JP*	

N.B.: CIRCLE "Y" OR "N" TO ANSWER	
WERE ALL THE YFT, BET AND ALB UNLOADED AND ALL SAMPLED ?	(Y) N
WERE ALL SWO, MLS, BLZ, BLM AND SFA UNLOADED AND ALL SAMPLED ?	Y (N)

RECORD COUNTS OF FISH NOT SAMPLED and other COMMENTS

Eg: *FSH* 𝍸 I = 6
DOL III = 3 *TST* 𝍸 II = 7
FAL IIII = 4
MAK 𝍸 I = 6

* example

Comment e.g.: *When asked why no marlin unloaded the Captain said it was unloaded to Grabit Co., Fishtown on 2nd of March*

Circle "Y" (for yes)
or "N" (for no) for each of the above questions.

If only a few fish are kept back for the crew then still answer "Y".

Only circle "N" in the situation where several fish are being kept on board to be off-loaded at another place or time for another market.

	YFT	BET	
NUMBER			
SUM LENGTHS			
SUM WEIGHTS			

Number (Port sampler should always add these)

Sum of Lengths and **Sum of Weights**
(Adding these is optional for port samplers. Results are used by staff who enter data into computers, to check that they have made no mistakes)

Only add up for each species recorded on **this** form Don't include counts that you have in "Record Counts of Fish Not Sampled and Comments" box

SOUTH PACIFIC REGIONAL UNLOADING FORM FOR PURSE SEINE and POLE-AND-LINE VESSELS

REVISED SPC/FFA DEC. 2000

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	CAPTAIN	PERMIT No.	DESTINATION

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	BET	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 NAME	FLAG	REGISTRATION No.	TRIP DATES START	TRIP DATES END	WEIGHT OF EACH SPECIES (mT) SKJ	YFT	BET	YFT / BET	SKJ / YFT BET	OTHER Sp.	TOTAL	FULL OR PART UNLOADING

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 county that the vessel is registered in (also called Vessel Nationality)
REGISTRATION No.	The registration number of the fishing vessel given by the FLAG country
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.

SOUTH PACIFIC REGIONAL POLE-AND-LINE PORT SAMPLING FORM

REVISED SPC/FFA DEC. 2000.

PORT:	SAMPLER:	ASSISTANT:	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

			WEIGHT OF CATCH (KG) from unloadings records after sampling					OTHER SPECIES	SIZE SORTED FISH SIZE CLASSES
			SKJ	YFT	BET	YFT & BET	MIXED TUNA		
	Not sorted before sample	⇨							Eg: *3 to 6 kg.*
	Sorted by species only	⇨							
	Sorted by size and species	⇨							1
Record weight of each species landed.		⇨							2
Record size class of sorted fish at right.		⇨							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
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

~~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.

Σ LENGTHS (= sum of lengths): - Add up lengths in the column directly above. This is used for data entry checking.

SOUTH PACIFIC REGIONAL PURSE SEINE PORT SAMPLING FORM

REVISED BY SPC/FFA DEC. 2000

PORT:	SAMPLER:	ASSISTANT:	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				
$\sum$ 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

Use the Purse Seine Sampling Form to record lengths of fish that are unloaded from purse seiners at the end of a trip. Only sample fish from the vessel wells for which good information about the sets put into them can be obtained. This includes position, time, and school association type. The wells to sample must have fish in them that come only from sets of the same association type, that are caught in the same general area at about the same time. Normally try to sample fish caught in a 5-degree by 5-degree square and landed during the same month.

If the sample from a single sampling session has more than 150 fish, use additional Purse Seine 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 achieve this place 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
ASSISTANT	First and last name of person writing measurements, if different from the sampler
CARRIER OR CANNERY	Name of the carrier vessel or cannery to which fish are being off-loaded directly
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 No.	A number issued to the vessel by the country of registration (flag country)
DATE OF DEPARTURE	The date the vessel left port at the beginning of the trip
DATE OF ARRIVAL	The date the vessel returned to port at the end of the trip
DATE OF SAMPLE	The day the sample was taken

Some boats (especially Taiwanese) can be hard to identify so be very careful to get the correct vessel registration.

SET DETAIL INFORMATION - get this information from vessel logsheets !

Fill in one line for each set that was stored in the sampled well. Get this information from vessel logsheets. The Well Loading Worksheet can also be used to help. See the Notes for Well Loading Worksheet.

It is very important to find out and record the set type (school association code) that sampled fish come from. Also make sure to record the Set Start Time exactly as it is recorded on the vessel log.

SAMPLING STRATEGY

Be sure to tick the correct box. This is very important.

Normal strategy is to take a "Random Species" sample. A port sampler collects specimens entirely at random from a mixed school (or a pure school) to get a sample to be used for species composition and length frequency analyses. Tick the upper box in this case.

If the port sampler collects fish of a particular species to measure, then it is not a species composition sample. Tick the lower box - "Non-Random Species - length frequency sample only" in this case.

Any other comments can also be included at the bottom of the "SET DETAILS" box.

SAMPLED WELL - Record the "WELL NUMBER" that was sampled and the "WEIGHT OF FISH IN that WELL". Record all weights in metric tonnes.

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.

DATA ENTRY VERIFICATION (do this now to help check that your data has been entered properly, later)

NUMBER OF EACH SPECIES	Add up total number of each species recorded on this form
Σ LENGTHS FOR EACH SPECIES	(Σ = sum of) Add up the lengths of each species separately. Don't mix them.

SOUTH PACIFIC REGIONAL PURSE SEINE WELL LOADING WORKSHEET

REVISED SPC/FFA DEC. 2000

PORT:	SAMPLER:	ASSISTANT:	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

SET DATE	SET POSITION		SCHOOL ASSOC	SET START TIME	SKJ	YFT	SKJ + YFT	OTHER SPECIES	WELL No.
	LATITUDE	LONGITUDE							

Notes for PURSE SEINE WELL LOADING WORKSHEET

The Well Loading Worksheet can be used to record information about purse seine sets and the wells in which the catch was stored in order to help find good wells for species composition and length frequency sampling. This is useful if there are going to be many wells sampled. It may also be useful when it is very difficult to find suitable wells for sampling and a port sampler needs to go carefully through the logsheet set by set. Normally, however, the sampler can collect enough information about the wells that they will sample directly onto the Purse Seine Port Sampling Form.

*All dates are to be recorded using 2-digit number for each of day "*D D*", month "*M M*" and year "*Y Y*" in that order. To achieve this place a "0" in front of single digit numbers. E.g.: write the 3rd of January, 1996 as 03 01 96.*

GENERAL INFORMATION

PORT	The port of unloading
COMPLETED BY	The first and last name of the person who completed the form
DATE	The date the form was completed
VESSEL NAME	The name of the fishing vessel
VESSEL NATIONALITY	The county of registration
PERMIT	The permit issued to the purse seiner by the port country
PREVIOUS PORT OF ENTRY	The port from which the vessel the began trip
DATE OF DEPARTURE	The date the vessel left the previous port at the beginning of the trip
DATE OF ARRIVAL	The date the vessel returned to port at the end of the trip
FISHING AREA	The northern, southern, western and eastern boundaries of the fishing area, recorded to the nearest degree of latitude and longitude

WELL LOADING DATA

Use this area to collect information about all successful sets (i.e., <u>not</u> for sets from which no fish were caught).
The information needed is found in the Vessel Logsheets which should be made available by the captain / fishing master.

If the catch from a set is stored in more than one well and the amounts stored in each well are available, then the amounts stored in each well should be recorded on separate lines, one line for each well in which the catch was stored. For example, if the catch from a set is stored in three wells, and the amounts stored in each well are available, then the catch from the set should be recorded on three lines, one line for each well. If the catch is stored in more than one well, but the amounts stored in each well are <u>not</u> available, then use a single line and, in the well column, list all the wells used.

DATE	The date the set was made
LATITUDE	The latitude at which the set was made, to the nearest minute, e.g. *2°23'S*
LONGITUDE	The longitude at which the set was made, to the nearest minute, e.g. *149°46'E*
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
SKJ	The amount (metric tonnes) of skipjack caught
YFT	The amount (metric tonnes) of yellowfin caught
SKJ + YFT	The amount (metric tonnes) of mixed skipjack and yellowfin caught, if they are not estimated separately
OTHER SPECIES	The amount (metric tonnes) of other species caught
WELL No.	The number of the well in which the catch was stored, e.g. *P2* (for well number 2, port side). If the catch from the set was stored in more than one well, and the amounts stored in each well are <u>not</u> available, then list all the wells in which the catch was stored; e.g. *P2, S2* (for port well number 2 and starboard well number 2).

SOUTH PACIFIC REGIONAL TROLL VESSEL PORT SAMPLING FORM

REVISED SPC/FFA DEC 2000

PORT:	SAMPLER:	ASSISTANT:	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

SOUTH PACIFIC 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

PORTThe port of unloading

SAMPLER	First and last name of person measuring the fish
ASSISTANT	First and last name of person recording measurements, if different from the sampler
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 DATE AT END OF TRIP DATE AT END OF TRIP DATE OF SAMPLE	Record dates using two digits for each of day, month and year, in that order (DD MM YY). Do this by placing a "0" in front of single digit numbers. E.g.: write the 3rd of January, 1996 as "03 01 96".
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*	BLZ	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 69 cm). **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". **Note:** 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 8. GAMEFISH TOURNAMENT AND CHARTER VESSEL DATA FORMS

1. Gamefish Tournament Data Sheet

2. Gamefishing Individual Vessel Logsheet

Gamefish tournament data sheet

Competition name	Date/s of fishing competition	General location of fishing ground (include Lat & Long if possible)	Person completing form - name and contact details

Catch by day of competition

Ret = retained fish, Rel= released fish

Weather (e.g. SE 15 kts, choppy seas)				
Day 1	Day 2	Day 3	Day 4	Day 5

Effort			Total catch by species (numbers of fish) - record weights on back of form																									
Day and date	Number of boats fishing	Hours of fishing (tournament hours)	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	
			Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel
_____ ../../..																														
_____ ../../..																														
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_____ ../../..																														
_____ ../../..																														

Please post results to:
Oceanic Fisheries Programme,
Secretariat of the Pacific Community,
PO Box D5 98848, Noumea Cedex, New Caledonia
Fax to: 687 263818

Please attach copy of grid map used
Please ensure all tag release data are sent to the tag organisation (indicate which tagging programme)

Number & species tagged

species	Tag No	species	Tag No	species	Tag No

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

APPENDIX 9. REGIONAL REGISTER APPLICATION AND RENEWAL FORMS

1. Regional Register of Foreign Fishing Vessels Application for Registration

2. Regional Register of Foreign Fishing Vessels Application for Renewal

REGIONAL REGISTER OF FOREIGN FISHING VESSELS

APPLICATION FOR REGISTRATION

Forum Fisheries Agency
PO BOX 629
Honiara
Solomon Islands

Phone: (677) 21124
Fax: (677) 23995
Telex: HQ 66336
E-mail: mcs@ffa.int

INSTRUCTIONS:
* "Address" means complete mailing address
* Clearly mark the boxes [X] where appropriate
* All units metric - please specify if other units used
* Affix a recent (date-stamped) 6x8 inch colour, side-view, photo of the vessel
* Affix a copy of the vessel's flag State Registration Certificate
* Affix company ownership details and proof of corporate registration

Name of Vessel _____ **International Radio Call Sign** _____

Country of Registration (Flag) _____ **Flag State Registration Number** _____

Vessel contacts Fax _____ Phone _____ Telex _____ E-mail _____

If this vessel was registered before or ANY of these details have changed, please specify:

Last Vessel Name _____ Year changed _____ Last Radio Call Sign _____

Last Country of Registration _____ Last Flag State Registration Number _____

Vessel Owner
Name .....
Address .....
.....
Phone/Fax .....
E-mail .....

Vessel Charterer / Operator
Name .....
Address .....
.....
Phone/Fax .....
E-mail .....

Vessel Master/Captain
Name .....
Address .....
.....
Phone/Fax .....
E-mail .....

Fishing Master
Name .....
Address .....
.....
Phone/Fax .....
E-mail .....

Vessel Type:
- [ ] Single Purse Seiner
- [ ] Longliner
- [ ] Fish Carrier / Reefer
- *Group Purse Seiner:*
  - [ ] Mothership
  - [ ] Net Boat
  - [ ] Search Boat
- [ ] Pole and Line
- [ ] Troller
- [ ] Bunker
- [ ] Other _____ (Please specify)

Hull Material:
- [ ] Steel
- [ ] Fibreglass
- [ ] Other _____ (Please specify)
- [ ] Wood
- [ ] Aluminium

Gross Tonnage _____ (gross tons) **Length Overall** _____ (metres)

Country Built _____ **Rated Speed** _____ (knots)

Year Built _____ (Affix copy of vessel's plan) **Number of Crew** _____

Total Engine Power _____ _____ (specify units)

Total Fuel Carrying Capacity _____ (kilolitres)

Does the vessel have installed an FFA VMS type-approved ALC? **Yes/No** (Please circle your response)

If your response to the above question is '**Yes**', please provide the Inmarsat Number. _____

Storage Method:
(You may choose more than one)

- ☐ Ice
- ☐ Refrigerated Sea Water
- ☐ Brine (NaCl)
- ☐ Air (Coils)

Total Daily Capacity _____ tonnes/day

Total Storage Capacity _____ cubic meters

Complete either A, B or C as appropriate

A. PURSE SEINE VESSELS

Helicopter Reg No _____ Net Length _____ metres

Helicopter Model _____ Net Depth _____ metres

Number of FADs carried on board _____ No of Auxiliary Boats _____

Number of Radio Beacons carried on board _____

Frequencies of Radio Beacons _____

Bird Radar Present **Yes / No** (Please circle your response)

B. POLE AND LINE VESSELS

No of Automatic Poling Devices _____ Bait Storage Capacity _____ cubic metres

Bird Radar Present **Yes / No** (Please circle your response)

C. LONG LINE VESSELS

Main line material _____ Max No Baskets _____

Main line length _____ kilometres Max No Hooks _____

Line Shooter Present **Yes / No** (Please circle your response)

I hereby apply for registration of the above vessel on the Regional Register of Foreign Fishing Vessels maintained by the Forum Fisheries Agency.

I declare that, to the best of my knowledge, the vessel does not have any outstanding matters pending.

I declare that the above information is true and complete. I understand I am required to report any changes to the above information within 60 days, and further understand that failure to do so may affect the good standing of the vessel on the Regional Register.

Application Period _____ *(eg 00/01)*

Applicant

State whether owner, charterer or duly authorised agent .....

Name of Applicant .....

Address .....

.....

.....

Phone No. _____

Fax No. _____

E-mail _____

Signature _____ Date _____

REGIONAL REGISTER OF FOREIGN FISHING VESSELS

APPLICATION FOR RENEWAL

Forum Fisheries Agency
PO BOX 629
Honiara
Solomon Islands

Phone (677) 21124
Fax (677) 23995
Telex HQ 66336
E-mail: mcs@ffa.int

INSTRUCTIONS: * Address means complete mailing address
* Clearly mark the boxes [X] where appropriate

Name of Vessel _____ **International Radio Call Sign** _____

Country of Registration (Flag) _____ **Flag State Registration Number** _____

Vessel Contacts Fax _____ Phone _____ Telex _____ E-mail _____

Vessel Type:

- [ ] Single Purse Seiner
  - *Group Purse Seiner:*
  - [ ] Mothership
  - [ ] Net Boat
  - [ ] Search Boat
- [ ] Longliner
- [ ] Pole and Line
- [ ] Troller
- [ ] Fish Carrier / Reefer
- [ ] Bunker
- [ ] Other _____ (Please specify)

I hereby apply to renew registration of the above vessel on the Regional Register of Foreign Fishing Vessels maintained by the Forum Fisheries Agency.

I declare that there has been no change in the information provided in the original application for the first registration made in respect of the said vessel, and that the information contained therein remains true, complete and correct.

Application Period _____ *(eg 00/01)*

Applicant
State whether owner, charterer or duly authorised agent .....

Name of Applicant .....
Address .....
.....
.....

Phone No _____
Fax No _____
Telex No _____
E-mail _____

Signature _____ Date _____