Pelagic Fisheries of the Western Pacific Region

1997 Annual Report

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for the

Western Pacific Fishery Management Council
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Introduction

Background

The Fishery Management Plan (FMP) for Pelagic Fisheries of the Western Pacific Region was implemented by the National Oceanic and Atmospheric Administration=s National Marine Fisheries Service (NMFS) on 23 March 1987. The Western Pacific Regional Fishery Management Council (WPRFMC or Council) developed the FMP to manage the pelagic resources covered by the Magnuson Fishery Conservation and Management Act of 1976 and occurring in the US Exclusive Economic Zone (EEZ) around American Samoa, Guam, Hawaii, the Northern Mariana Islands, and other US possessions in the Western Pacific Region (Johnston Atoll, Kingman Reef & Palmyra island, Jarvis Island, Howland and Baker Islands, and wake Island).

The objectives of the Pelagics FMP were revised in 1991. The abridged objectives are to:

- Manage fisheries for management unit species to achieve optimum yield.
- Promote domestic harvest of, and domestic fishery values associated with, Pacific pelagic management unit species, or PPMUS[1] (e.g., by enhancing the opportunities for satisfying recreational fishing experience, continuation of traditional fishing practices, and domestic commercial fishermen to engage in profitable operations).
- Diminish gear conflicts in the EEZ, particularly in areas of concentrated domestic fishing.
- Improve the statistical base for conducting better stock assessments and fishery evaluations.
- Promote the formation of regional/international arrangements for assessing and conserving PPMUS throughout their range.
- Preclude waste of PPMUS associated with longline, purse seine, pole-and-line or other fishing operations.

[1] The Magnuson Act was amended to allow the inclusion of tunas in US fishery management authority as of January 1992. In the Pacific, tuna management is the responsibility of the regional fishery management councils. Pacific pelagic management unit species (PPMUS) includes former pelagic management unit species (PMUS) and tunas.

- To promote domestic marketing of PPMUS in American Samoa, Guam, Hawaii and Northern Mariana Islands.

The Pacific pelagic management unit species (PPMUS) are[2]:

English Common Name	Scientific Name
Mahimahi (dolphinfishes)	*Coryphaena* spp.
Wahoo	*Acanthocybium solandri*
Blue and black marlins	*Makaira* spp.
Striped marlin and shortbill spearfish	*Tetrapturus* spp
Swordfish	*Xiphias gladius*
Sailfish	*Istiophorus platypterus*
Requiem sharks (oceanic species)	family Carcharinidae
Thresher sharks	family Alopiidae
Mackerel sharks	family Lamnidae
Hammerhead sharks	family Sphyrnidae
Yellowfin, bigeye, albacore, and bluefin tunas	*Thunnus* spp
Skipjack tuna	*Katsuwonus pelamis*
Kawakawa	*Euthynnus affinis*
Frigate and bullet tunas	*Auxis* spp
Slender tuna	*Allothunus fallai*
Dogtooth tuna	*Gymnosarda unicolor*
Mackerel	*Scomber* spp
Moonfish[3]	*Lampris* spp
Oilfish family	Gempylidae
Pomfret (oceanic species)	family Bramidae

Non-tuna PPMUS are sometimes referred to as Aother PPMUS@ in this report. This term is equivalent to PMUS (Pelagic Management Unit Species) used in annual reports previous to 1992, before tunas were included in the management unit.

The PPMUS are caught in the troll, longline, handline and pole-and-line (baitboat) fisheries. they are caught in oceanic as well as insular pelagic waters. Most of these species are considered to be epipelagic because they occupy the uppermost layers of the pelagic zone. All are high-level predators in the trophic sense. pelagic fisheries for PPMUS are among the most important, if not the dominant Pacific Island fisheries.

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[2] Classifications in this table follow Amendment 6 to the FMP, effective 27 November 1992.

[3] Moonfish, oilfish and pomfret were added to the FMP by Amendment 7, effective 24 June 1994

The FMP requires the Council=s Pelagic Plan Team (Team) to prepare an annual report on the status of the pelagic fisheries taking place in each of the island areas served by the Council (American Samoa, Guam, Hawaii and Northern Mariana Islands), to evaluate the effectiveness of the FMP in meeting its goals and objectives, and make recommendations for future management and administrative action.

Report Content

This report contains fishery performance data from each of the four island groups through 1997, interpretations of trends or important events occurring in the fisheries, and recommendations. This report was prepared using reports submitted by the following agencies . The Hawaii report is an integration of State of Hawaii Division of Aquatic Resources and NMFS summaries.

- Territory of American Samoa, Department of Marine and Wildlife Resources
- Territory of Guam, Division of Aquatic and Wildlife Resources
- Territory of Guam, Department of Commerce
- State of Hawaii, Division of Aquatic Resources
- Commonwealth of the Northern Marianas, Division of Fish and Wildlife
- National Marine Fisheries Service, Southwest Region (including Southwest Fisheries Science Center Honolulu Laboratory, Pacific Area Office and Office of Enforcement)
- US Coast Guard, District 14
- Pacific Fisheries Research Program, University of Hawaii

Report Appraisal

Report Content has not changed significantly from previous years.

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Table 1. Names of Pacific pelagic management unit species

English Common Name	Scientific Name	Samoan or AS local	Hawaiian or HI local	Chamorro or Guam local	S. Carolinian or NMI local	N. Carolinian or NMI local
Mahimahi (dolphinfishes)	*Coryphaena* spp.	Masimasi	Mahimahi	Botague	Sopor	Habwur
Wahoo	*Acanthocybium solandri*	Paala	Ono	Toson	Ngaal	Ngaal
Indo-Pacific blue marlin Black marlin	*Makaira mazara:* *M. indica*	Sa=ula	A=u, Kajiki	Batto=	Taghalaar	Taghalaar
Striped marlin	*Tetrapturus audax*		Nairagi			
Shortbill spearfish	*T. angustirostris*	Sa=ula	Hebi	Spearfish		
Swordfish	*Xiphias gladius*	Sa=ula malie	A=u kã, Broadbill, Shutome	Swordfish	Taghalaar	Taghalaar
Sailfish	*Istiophorus platypterus*	Sa=ula	A=u lepe	Guihan layak	Taghalaar	Taghalaar
Oceanic sharks	Alopiidae, Carcharinidae, Lamnidae, Sphynidae	Malie	Mano	Halu=u	Paaw	Paaw
Albacore	*Thunnus alalunga*	Apakoa	›Ahi palaha, Tombo	Albacore	Angaraap	Hangaraap
Bigeye tuna	*T. obesus*	Asiasi, To=uo	›Ahi po=onui, Mabachi	Bigeye tuna	Toghu, Sangir	Toghu, Sangir
Yellowfin tuna	*T. albacares*	Asiasi, To=uo	›Ahi shibi	›Ahi, Shibi	Yellowfin tuna	Toghu
Northern bluefin tuna	*T. thynnus*		Maguro			
Skipjack tuna	*Katsuwonus pelamis*	Atu, Faolua, Ga=oga	Aku	Bunita	Angaraap	Hangaraap
Kawakawa	*Euthynnus affinis*	Atualo, Kavalau	Kawakawa	Kawakawa	Asilay	Hailuway
Dogtooth tuna	*Gymnosarda unicolor*	Tagi	Hagatsuo	Dogtooth or white tuna	Ayul	Owel
Moonfish	*Lampris* spp	Koko	Opah		Ligehrigher	Ligehrigher
Oilfish family	Gempylidae	Palu talatala	Walu,		Tekiniipek	Tekiniipek

Pomfret	family Bramidae	Manifi moana	Escolar Monchong			
Other tuna relatives	*Auxis* spp, *Scomber* spp; *Allothunus* spp	(various)	Ke꞉o ke꞉o, saba (various)	(various)	(various)	(various)

Table 2. Total 1997 pelagic landings[4] (in lbs) in the Western Pacific Region

Species	American Samoa	% change	Guam	% change	Hawaii	% change	Northern Marianas	% change	Total	% change
Albacore	627,613	169.7			3,900,000	30.0			4,527,613	40.06
Barracuda	9,157	102.1	2,802	-96.3			177	-24.4	12,136	18.23
Bigeye tuna	5,547	-44.6			5,500,000	5.8			5,505,547	5.67
Black marlin*	1,852								1,852	100.00
Blue marlin	41,250	9.5	87,382	30.8	1,800,000	-5.3	5,655	-17.7	1,934,287	-3.53
Bluefin tuna					100,000				100,000	0.00
Dogtooth Tuna	393	-93.4	1,858	-11.0			7,616	-27.6	9,867	-46.71
Kawakawa	369	64.0	3,256	-24.2					3,625	-15.07
Mahimahi	37,217	187.3	242,666	-25.3	1,100,000	57.1	25,021	-12.3	1,404,904	34.38
Misc billfish					400,000	0.0			400,000	0.00
Misc pelagics		-100.0	16,644	93.9	200,000	100.0	5,784	59.2	222,428	110.48
Misc tunas	388					-100.0		-100.0	388	-96.91
Moonfish	2,848				800,000	14.3			802,848	14.69
Pomfret*										
Rainbow runner*	521	-57.2	4,582	-421.6			740	-16.4	5,843	-77.53
Sailfish*	7,300	31.9					100	-81.7	7,400	21.71
Sharks	11,229	-11.9	5,238	36.1	5,000,000	11.1			5,016,467	11.08
Skipjack tuna	36,779	-51.6	206,570	-4.5	2,500,000	8.7	106,637	-19.3	2,849,986	4.62
Spearfish*										-100.00
Striped marlin					900,000	-10.0			900,000	-10.00
Swordfish	403				6,400,000	8.5			6,400,403	8.46
Wahoo	16,910	41.1	87,469	-62.4	800,000	60.0	6,064	-29.7	910,443	37.39
Yellowfin tuna	84,147	-9.8	92,571	-10.9	4,200,000	10.5	17,121	-43.7	4,393,839	9.13
TOTAL	883,923	74.3	751,038	-15.3	33,600,000	11.6	174,915	-22.2	35,409,876	11.67

* NMFS Hawaii longline logbook summaries aggregate several billfish and tuna species (noted with *) into miscellaneous billfish, tuna, and pelagics categories. All Hawaii totals shown here are NMFS estimates and rounded to the nearest 100,000 lb, except for bluefin tuna and misc. tunas.

[4] Landings are reported in island reports (Appendices 1-4), which include recreational and commercial domestic landings data, where available (e.g., for Hawaii, only commercial landings). In some cases, totals may not add precisely due to rounding. These do not include foreign transshipment or domestic cannery landings, which may be reported separately in island modules.

Summary

1) No FMP or regulatory amendments governing Western Pacific pelagic fisheries were proposed by the Council in 1997. See Administrative Activities for details. No permits were requested by any foreign nations to fish in the US EEZ of the Western Pacific Region.

Island summaries

2) In **American Samoa** pelagic fishing effort and landings of PPMUS of in American Samoa continued the upward trend which commenced in 1994. This reflects the continued interest in small scale longline fishing in the territory, targeting mainly albacore. An estimated 883,923 lb (+ 123%)[5] of pelagic fish were landed in 1997, of which 874.763 (+137%) were commercial landings valued at $ 874,763 (+137%). The average price for all pelagics was $1.11/lb (-15%).

The number of boats in the pelagic fishery during 1997 increased 20% from 1996. A total of 54 vessels made an estimated 2990 trips (+45%), comprising 817 trolling trips and 2173 longline trips. The average duration of all fishing trips was 6.8 hr/trip, similar to the 6.6 hr/trip in 1996. However longline trips were on average three hours longer than trolling trips (7.6hrs/longline trip vs 4.6 hrs/trolling trip). In contrast to 1996, where twice as many fishing trips used trolling gear, the ratio of longline to troll trips was almost 3:1 (2173 longline trips vs 817 trolling trips). Data on catch per unit of effort (CPUE) from the troll fishery suggested that the 1997 CPUE was slightly lower than in 1996, due to decreased CPUEs for most species The overall average CPUE for longline fishing in 1997 was 39.4 fish/1000 hooks, of which 31.2 fish/1000 hooks, or 79%, were albacore. Overall longline catch rates and catch rates for albacore between 1996 and 1997 showed little change.

Cannery landings at Pago Pago during 1997 comprised 88,400 t of skipjack, 22,700 t of yellowfin and 50,900 t of albacore. Most of the skipjack and yellowfin are caught in distant water fisheries, predominantly in the Western Tropical Pacific, while albacore landings are made by vessels operating in cooler waters to the south of American Samoa. Landings have remained relatively stable during the 1990s although there is a increasing trend in the volume of landed albacore, which partially reflects the increased longline fishing activity in both American and Western Samoa.

3) In **Guam** landings of all pelagics amounted to 751,038 lb (-13%), although total revenues increased to $515,007 (+39%). Other PPMUS landings declined markedly to 302,397 lb (-41%) but adjusted revenues increased to $351,229 (+31%). Tuna landings increased to 424,650 lb (+19%), with a matching increase revenues (+22%) to $154,819. The overall decrease in landings was attributed to the increase in bad-weather days, due to an extended typhoon season. Additionally, the Asian economic crisis resulted in a decrease in tourism, which impacted the charter boat sector, resulting in

[5] Percentages in parentheses indicate percent change from previous year

fewer trips and subsequently a decrease in landings. Landings in 1997 saw a reversal in a trend in Guam=s pelagic fisheries towards targeting other PPMUS, principally mahimahi, rather than tuna. Tunas comprised about 57% of the 1997 pelagic landings, in contrast to 1996 where they formed only 37% of pelagic landings.
Mahimahi comprised 32% of the total pelagic landings, followed by skipjack (28%), wahoo (9%), yellowfin tuna (12%) and blue marlin (12%).

Guam=s adjusted prices for pelagic fish have shown a general decline since 1980, although the adjusted price ($/lb) of tuna remained static between 1996 and 1997, and non-tuna PPMUS has continued to increase since 1995 and rose by 14% between 1996 and 1997.

Virtually all the landings of pelagic fish are made by trolling vessels and the fleet size operating in the fishery in 1997 was 464 vessels (-4%). This marks a reversal of a previously markedly increasing trend in fleet size since 1980. The number of trips (14,104) and hours fished (58,881) both declined (-11%) significantly in 1997, however there was a marked increase in hours per trip (4.2, 17%) in the fishery during 1997.

Transhipment activity in Guam was markedly reduced in 1997 as a consequence of the strong El-Nino Southern Oscillation (ENSO) event.

4) The **Hawaii** fisheries for PPMUS produced total pelagic landings of 33.6 million lb in 1997, or an increase of about 16%. Swordfish landings (6.4 million lb) in 1997 were higher than in 1996 (5.5 million lb), an increase of 16%. Swordfish continued to be the dominant species (19%) in the pelagic fishery. Other major components of the pelagic fishery include bigeye (16%), yellowfin (13%) and albacore (12%), other tunas (8%), and sharks (15%). Blue marlin catches declined only slightly (-5%) from 1996 while striped marlin catches declined (-10%) in 1997, but less severely than between 1995 and 1996 (-23%). Mahimahi landings were markedly higher (+22%) in 1997, as were tuna landings which increased by about 18% The numbers of sharks retained for finning increased in 1997 and this is reflected in the estimated landed whole weight of sharks which rose by 16%.

Total pelagics revenue increased by about 10% to $ 59.4 million, although the average price per pound for pelagic fish in 1997 declined slightly (-5%). The inflation adjusted ex-vessel revenue for the longline fishery increased significantly in 1997 (+17%), while the adjusted ex-vessel revenue for the handline fishery was markedly decreased (-43%) and down by about 10% for the troll fishery. The adjusted ex-revenue for aku baitboats in 1997 remained unchanged from the previous year.

Changes in catch rate by trollers and handliners varied by species in 1997. Troll catch rates for ono (+41%) mahimahi (+18%) and yellowfin (+13%) showed marked increases in catch per trip, while catch rates between years for blue marlin (-10%) and skipjack (-14%) were somewhat reduced, but above the long term average. For handline fishing, swordfish (+50%), blue marlin (40%) and wahoo (+10%) catch rates were significantly higher in 1997, while mahimahi catch rates were similar to the previous year (+2%). All handline tuna catch rates were down in 1997,

yellowfin by -6%, albacore by -22% and -48% for bigeye tuna, and for yellowfin and particularly bigeye were below the long term averages for these species.

The Hawaii longline fleet landed 27.1 million pounds of fish, an 8% increase on the 1996 landings. Of the billfish landed in Hawaii, longlining accounted for almost all the swordfish (99.8%) and striped marlin (100%), and 61% of the blue marlin. About 30% of the longline landings (8.3 million lb) were billfish and 77% of billfish landings were swordfish. The longline fleet also accounted for most of the bluefin tuna (100%), bigeye tuna (98%), albacore (93%), moonfish (. 100%), sharks (. 100%) landed in Hawaii. Estimated shark catches continued to increase (16%) due to a greater finning activity onboard longline vessels in 1997. The bluefin landings remained unchanged between 1996 and 1997.

Fishing effort for the combined pelagic fisheries in Hawaii remained at a high level in 1995. The number of longline vessels participating in this fishery increased slightly from 103 vessels making 1,100 trips in 1996 to 105 vessels making 1,122 trips in 1997. The size of the longline fleet declined steadily between 1991 and 1996 from 141 to 103 vessels, although there are a maximum of 164 licenses available in the limited entry system. The number of trips by the troll fishery increased by 7% to 23,129, higher than the 1979-1997 average of 18,096, but relatively static over the past ten years. The number of trips taken by aku baitboats (404) declined by 8%, and probably reflects the loss in early 1998 of one of the aku boat fleet. The present level of aku boat activity, in terms of trip, is about half the long term average. The number of handline trips in 1997 (5,697) was an 11% decrease on fishing activity compared with 1996.

5) Landings of all pelagics in the **Northern Mariana Islands** (NMI) decreased significantly (-22%) between 1996 and 1997 to 174,914 lb. The principal reason for the decline is believed to be the particularly bad weather experienced in the Marianas in the last portion of 1997. A number of typhoons and super typhoons passed through the Marianas during 1997 causing severe damage on some islands and keeping fishermen off the water more than in a typical year. Skipjack landings were -19% lower (132,155) than 1996, and lower than the long term average between 1983 and 1997. Yellowfin tuna landings were markedly reduced (-44%) and only slightly above the long term average. Landings of mahimahi were down 12 % from 1996 but were still significantly higher than the long term average. Wahoo landings declined by nearly 30% but were nearly equal to the long term average. Blue marlin landings also declined markedly (-30%), but were still almost twice the long term average.

The large decreases in landings during 1997 were not reflected in total adjusted revenues which increased by about 10% ($379,145) over those in 1996. Tuna adjusted revenues rose 13%, and other PPMUS were up by a more modest 3%.

The number of fishermen making commercial pelagic landings declined slightly in 1997 to 106 (-7%), but remained well above the long term average. Similarly, the number of trips landing PPMUS declined (-9%), was still much higher than the long term average.

The inflation adjusted prices of other PPMUS and tunas have remained fairly stable since 1993, but showed marked increases in 1997, perhaps in response to the reduced landings of fish. The average

adjusted price of tunas rose to $2.2/lb (+46%) and of other PPMUS to $2.07/lb (+28%), both well above the long term average.

Species summaries

6) The **swordfish** longline fishery in Hawaii began in 1989 with landings of 0.6 million lb, increasing to 3.4 million lb in 1990, and peaking at 13.1 million lb in 1993. Swordfish landings declined in 1994 and 1995 but may be leveling out and stabilizing at about 6 million lb. Landings in 1997 amounted to 6.4 million lb, slightly larger than the long term average for the fishery. The estimated average size of longline-caught swordfish was 163 lb in 1997, slightly above the 1987-1997 average (+7%). Swordfish comprised the largest proportion of the total non-tuna landings by all fisheries in Hawaii for the seventh consecutive year (37% in 1997, 38% in 1996, 38% in 1995, 60% in 1994, 72% in 1993, 73% in 1992, 62% in 1991, and 38% in 1990). The longline catch rate of swordfish in 1997 continued to increase for the third successive year, from the all-time low in 1994, and was 5% higher than the long term average between 1991 and 1997. Swordfish landings from non-longline gear were negligible in comparison (0.2%). Other areas did not report landings of swordfish, apart from a few captures in the American Samoa longline fishery.

7) **Blue marlin** catches in American Samoa continued to increase (+43%) as a result of the expansion of the longline fishery, which took 85% of the total blue marlin catch. Guam landings of blue marlin (87,382 lb) were 31% higher than 1996, ranking joint third with wahoo behind mahimahi and skipjack tuna. Blue marlin landings (1.8 million lb) in Hawaii were slightly lower than in 1996 (-6 %) at 1.8 million lb. Longliners accounted for 61 % of the total Hawaii blue marlin landings. Blue marlin landings in the Northern Marianas (5,655 lb) were significantly down on the previous year (-21.6), in common with most species, but were still nearly double the long term average between 1983-1997.

The catch rate of blue marlin in the American Samoa troll fishery was markedly lower (-25%) than in 1996, but still notably higher than the long term average. In Guam, blue marlin troll catch rate increased markedly from 1996 (+67%) and was equivalent to the long term average. In the Hawaii longline fishery blue marlin tends to be caught incidentally at a higher rates on tuna trips than swordfish trips. The catch rate of blue marlin on tuna trips remained unchanged between 1996 and 1997, and the same as the long term average. The catch rate of blue marlin in the Hawaii troll fishery increased (+29%) and was higher than the long term average. In the Northern Marianas, the 1997 marlin was lower than in 1997 (-10%) but still above the long term average.

8) **Striped marlin** landings ranked third among the billfish in Hawaii (after swordfish and blue marlin), and in 1997 it accounted for 5% of the commercial landings of non-tuna PPMUS. The 1997 landings of 0.9 million lb were (-10%) lower than 1996 landings and lower than the long-term average. Striped marlin is regarded as a secondary target species (after bigeye tuna) in the winter longline fishery, and was the third in terms of volume of total longline landings of billfish after swordfish and blue marlin. Landings in the Hawaii troll and handline fisheries during 1997 (84,000 lb, -29%) were markedly reduced from the previous year and about 10% below the long-term average. The species rarely appears in the domestic landings from other areas.

9) **Shortbill spearfish** made up less than 1% of the PPMUS landings in Hawaii, and rarely appeared in the landings reported for other areas.

10) **Sailfish** landings were insignificant in most areas. American Samoa reported landings of 7,300 lb of sailfish in 1997, a 32% increase on 1996 landings and four times greater than the long term average.

11) **Mahimahi** landings (37217 lb) in American Samoa during 1997 rose markedly from 1996 (+187%) and were significantly higher than any time in the past. Guam=s 1997 mahimahi landings (242,666 lb) were markedly reduced (-25%) on the 1996 total but still considerably higher than the long term average. Mahimahi landings in Guam have continued to display wide, unexplained annual fluctuations since 1987. The trolling catch rate for mahimahi has, however, remained relatively stable over the past three years. Mahimahi landings (1,100,000 lb) made up 6% of the 1997 non-tuna PPMUS landings in Hawaii, an increase of 57.1%. The longline fishery accounted for 45% of the 1997 landings, with the bulk of mahimahi landings coming from the combined troll and handline fisheries. The troll catch rate in Hawaii was 15% higher than the 1996 rate and above the long term average. Northern Marianas mahimahi landings declined in common with most other species and amounted to 25,021 lb (+12%). Mahimahi accounted for 56% of the total non-tuna PPMUS landings. The trolling catch rate in 1997 remained more or less unchanged from 1996 and was still slightly higher than the long-term average.

12) **Wahoo** landings in American Samoa increased to 16,910 lb (+41.1%), to the highest level yet. This increase in landings was generated mainly from the longline fishery as catch rates from trolling dropped by 38% to 0.62 lb/hr, but still higher than the long term average (0.43 lb/hr). Guam's wahoo landings (87,469lb) declined markedly by over 60 % from 1997 with catch rates dropping by 50% from 1996. Wahoo landings in Hawaii increased from 0.7 million lb to 0.8 million lb between 1996 and 1997. The 1997 trolling catch rate for wahoo in Hawaii increased by 41% from 1996, and was well above long-term average. Northern Marianas wahoo landings (6,064 lb) and catch rate (2.96 lb/trip) in lb/trip both decreased by 29% and 23% respectively. The catch was about the same as the long term average but the catch rate was significantly lower than the long term average CPUE.

13) Estimated Hawaii **shark** volume increased by 11% between 1996 and 1997. The landings reported here are only domestic landings. The increase is due to increased landings of shark fins, about 95% of which are from blue sharks. The price for blue shark fins has increased from about $15/lb in 1992 to $26/lb in 1997 while the price for other miscellaneous shark fin has increased from $20/lb in 1991 up to $50/lb in 1997[6]. Shark landings from other areas were relatively minor. Virtually the entire shark landings come from longline vessels. However, the Bottomfish Plan Team has also noted that Northwestern Hawaiian Islands bottom-fishermen also land fins of coastal and reef sharks taken incidentally [7], although the quantity has not been estimated.

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[6] Dr. Samuel Pooley, NMFS Honolulu Laboratory, pers. comm.

[7]. WPRFMC Bottomfish Plan Team meeting, March 27-28 , 1996, Executive Centre Hotel, Honolulu,

14) **Yellowfin tuna** landings in American Samoa (84,147) decreased by about 10%, and catch rates were 23% lower in the troll fishery than in 1996, and slightly below the long term average. Guam yellowfin landings (92,571 lb) decreased 11% but the catch rates were the same as in 1996 and the long term average. The total Hawaii landings of yellowfin (4.2 million lb) were 11% higher than 1996 and about equivalent to the long-term average. Landings of yellowfin by trollers and handliners in 1997 were reduced by 29%, while landings by longliners increased by 79%. Trolling catch rate of yellowfin increased by 13% during 1997 and the catch rate from handline fishing declined by 6%. Longline catch rates of yellowfin by directed tuna trips were remained unchanged between 1996 and 1997, and similar to the long term average. Northern Marianas Islands yellowfin landings of 17,121 lb were much lower (-43.7%) than 1996, and the catch rates were about 38% lower than in 1996, and below the long-term average.

15) **Skipjack tuna** landings in American Samoa in 1997 (36,779 lb) represented a nearly 52% drop compared with 1996 landings, while the troll catch rate declined by 25% and was significantly below the long term average. The decline in skipjack landings is due mainly to a reduction in troll fishing, while longline fishing (which does not target skipjack) has increased. Guam skipjack landings in 1997 (206,570 lb) represented a decrease of 4.5% and catch rates were 6 higher than in 1996 Hawaii skipjack landings (2.5 million lb) rose 9 % in 1997 and were close to the long term average. The skipjack were caught principally by baitboats, which landed 1.7 million lb of skipjack in 1997, similar to the volume landed in 1996. Both troll skipjack catch rate (14%) and baitboat catch rate (+8%) rose in 1997, and were above the long-term average. Northern Marianas Islands 1997 skipjack landings were 19% lower (106,637 lb) than 1996, while the catch rate fell slightly by 11% from 1996 and was still far below the long-term average.

16) Hawaii landings of **bigeye tuna** (5.5 million lb) were 6% higher than 1996, almost all (98%) caught by longline. No other areas reported bigeye landings apart from American Samoa, where the emergent albacore fishery caught a modest 5,547 lb of bigeye tuna.

17) American Samoa reported landing 627,613 lb of **albacore** during 1997, the highest yet recorded by the American Samoa fleet and a three fold increase on 1996 landings. Hawaii total landings of albacore (3.9 million lb) was a 30% increase from 1996, and is due mainly to the increased targeting of albacore in Hawaii by longline vessels. Landings of albacore by longline vessels increased by 62% in 1997. Other areas did not report landings of albacore.

18)**Troll fisheries** continue dominated the domestic fisheries in Guam and the Northern Marianas, in contrast to American Samoa, where the emergent longline fishery now accounts for 90% of PMUS landings. Growing charter fishing businesses in Guam and Northern Marianas contributed heavily to troll

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fishing effort. In Hawaii, longline landings continue to dominate pelagic fisheries production and in 1997 accounted for over 80% of the landed volume of PMUS.

Issues

In Hawaii the issue of bycatch in the longline fishery continues to drive most of the management initiatives of the Western Pacific Fishery Council and associated agencies. The Council is concerned with longline catches of protected species such as turtles and albatross, and by the marked increase of retention and finning of blue shark by longline fishermen. Measures to improve information on the levels of turtle and seabird interactions, and to mitigate seabird mortalities were implemented in 1997. Concern over the level of blue marlin catches in the commercial fisheries in Hawaii led the Council to focus more effort on the management of this species. The emergent longline fishery in American Samoa based mainly on albacore is also major concern for the Council, which is in the process of implementing a closed area around the islands of the Territory to protect the small vessel pelagic fishing. Pelagic fisheries in both Guam and the Marianas were severely impacted by typhoons in 1997 leading to a drop in production of most species. The economic recession in Asia and subsequent decline in tourism may lead to a contraction of commercial fisheries in both locations

Recommendations to the Council

1. **The Council should request the Hawaii Division of Aquatic Resources (HDAR) to develop and implement a fish dealer permitting system, and should computerize and enforce its dealer reporting system. This will further document the total volume of fish sold in the state, and will provide a crossBreference validation capability for fishermen's reports.**

   Status: The Dealer Permitting Law now passed and administrative rule to establish the regulations currently being drafted. HDAR has accepted the recommendation of computerizing the dealer reporting system and HDAR staff have begun working with WPacFIN staff to initiate and fund this project. HDAR conducted a preliminary survey of many of the States known dealers to begin estimating the magnitude of the job and begin planning the best method to proceed.

2. **The Council and/or other appropriate agency should seek funding to conduct a survey of Hawaii smallBscale fisheries. This survey is needed to evaluate the significance of nonBcommercial and partBtime components of these fisheries.**

   Status: Request has been made to NMFS to include Hawaii and the insular territories in the Marine Recreational Fisheries Statistical Survey (MRFSS) in 1999.

3. **The HDAR should continue to improve the collection of Hawaii fisheries data so that the data provide useful information on fishing effort.**

Status: This recommendation will now appear only in the Hawaii module recommendations

4. **The three fishery management councils with Pacific jurisdiction, along with member states and NMFS, should collaborate to ensure the collection of landing and logbook data from all domestic longline and driftnet vessels harvesting swordfish and other Pacific Pelagic Management Unit Species (PPMUS)**

Status: Reporting of pelagic catches from all Pacific Councils: This recommendation is retained with further recommendations to standardize data reporting consistency between Councils and more sharing and exchange of data. Paul Dalzell showed data obtained from the Pacific States Marine Fisheries Commission, which will be added to the annual report in the form of an additional module.

5. **The Council should support an analysis of trends in mahimahi and ono landings and catch rates, and other incidental catches, throughout the western Pacific region, including data from EEZ and distantBwater fisheries.**

Status: This recommendation is retained.

6. **The Council should attempt to obtain data on discards from U.S. and other purse seine fisheries within the U.S. EEZ and on the high seas.**

Status: Most of the purse seine catch analysis is covered in the Annual Report=s International Module, but the information on discards, received from the PIAO by the Council, needs to be added.

Plan Administration

Administrative Activities

There were no FMP or regulatory amendments developed by the Western Pacific Fishery Management Council for pelagic fisheries during 1997. Therefore, no regulatory action related to the pelagics FMP was required by the NMFS Southwest Region, Pacific Islands Area Office (PIAO).

As requested by the Council at its 94th meeting, the PIAO prepared and submitted for publication in the Federal Register a control date of November 13, 1997 governing the pelagic longline fishery in American Samoa. The control date was published in January 1998 (3532 FR 63, January 23, 1998).

Longline Permits

During 1997, 164 permits, the maximum allowed under the FMP, were maintained in the Hawaii longline limited entry fishery. Administrative activities at PIAO primarily involved the transfer of 25 Hawaii longline limited permits. PIAO also processed and issued Western Pacific general longline permits for the pelagic fisheries in American Samoa (33 permits), Guam (2 permits), and the Commonwealth of the Northern Mariana Islands (1 permit). The number of longline permits issued in American Samoa was double the number issued (16) in 1996.

The names of vessels registered with Hawaii limited entry and Western Pacific longline permits and permit holders are listed in Table 3.

Foreign Fishing Permits

No administrative actions relating to foreign fishing in the western Pacific EEZ were required because no foreign fishing permits were requested for any vessels with which the US has a Governing International Fishing Agreement.

Table 3. 1997 Hawaii longline limited entry permit holders

Hawaii limited entry longline fishery

VESSEL	PERMIT HOLDER
F/V ALEUTIAN SPRAY	Kristofer Knutsen
F/V ANNA	MTA Corp.
F/V ARROW	David Kelly
F/V AUKAI VI	Ralph Takafuji Sr.
F/V B-52	B-52 Inc.
F/V BARBARA H	Arthur/Barbara Haworth
F/V BIG AL	R & R Fisheries Inc.
F/V BIG DEAL	Roy-Al Boat Mgmt.
F/V BLUE DRAGON	B Dragon Corp.
F/V BLUE FIN	Liet An Lu/Mai Thi Do
F/V BLUE SKY	Blue Sky Fishing Prod
F/V BRANDI	Success Inc.
F/V CAPT. DAVIS	Ho Son Nguyen
F/V CAPT. DIAMOND	Capt. Diamond Inc.
F/V CAPT. GREG	Aquanut Co. Inc.
F/V CAPT. LE	L & T Fishery Corp.
F/V CAPT. MILLIONS I	Nga Van Le
F/V CAPT. MILLIONS III	Capt.Millions III Inc.
F/V CAPT. MILLIONS IV	H and M Fishery Inc.
F/V CAPT. WASHINGTON I	Capt.Washington I Inc.
F/V CHRIS	Kan-Do Pesca Inc.
F/V COMMANDER	Sang Van Tran
F/V CORI DAWN	Cori Dawn Corp.
F/V CRYSTA	F/V Crystal Inc.
F/V DAE IN HO	KYL Inc.
F/V DAEINHO III	Chunha Inc.
F/V DASHER II	DukSung Fishing Inc.
F/V DAWNING STAR	Larry B. & Dawn Powers
F/V DEBORAH ANN	Amko Fishing Co. Inc.
F/V DOUBLE D	Joseph Dettling
F/V E.T.	Vessel Mgmt.Assoc.Inc.
F/V EDWARD G	Edward G. Co. Inc.
F/V ESTHER I	Yong Sang Kim
F/V FINBACK	Finback Inc.
F/V FIREBIRD	Firebird Fishing Corp.
F/V GAIL ANN	Gail Ann Co. Inc.
F/V GARDEN SUN	Muoi Peter Ngo
F/V GLORY	Roy Yi
F/V GOLDSTAR\	Sapphire USA Inc.
F/V GRACE	Sang Yeol Kim
F/V HAVANA	Thomas Webster
F/V HAWAII POWER	Hawaii Power Inc.
F/V HEOLA	H & M Marine Inc.
F/V HOKUAO	White Inc.
F/V INDEPENDENCE	Independence Inc.
F/V IOLANI	All Star Fishery Inc.
F/V JAGUAR T-L	Jaguar Inc.
F/V JANTHINA	Trans World Marine Inc
F/V JENNIFER	Kil Cho Moon
F/V JI YONG	Hyon Su Oh
F/V JOHN KENNEDY	Kinh Nguyen
F/V KAIMI	James Cook
F/V KASATKA	Artemon Basargin
F/V KATHERINE II	K.A. Fishing Co. Inc.
F/V KATHERINE III	Song Fishing Corp.
F/V KATY MARY	Vessel Mgmt. Assoc Inc
F/V KAY	K.Y. Fishing Inc.
F/V KELLY ANN	Kelly Ann Corp.
F/V KEMA SUE	Kema Sue Inc.
F/V KILAUEA	Aukai Fishing Co.Ltd.
F/V SOUTH PACIFIC	South Pacific Fishing
F/V SPACER K	Hwa Deog Kim
F/V SUN FLOWER #1	TX, Inc.
F/V SUN STAR	Sun Fishing Co. Inc.
F/V KIM THANH I	Kim Thanh I Inc.
F/V KIMMY I	Kim Tran
F/V KING DIAMOND II	Scotty Nguyen
F/V KINGFISHER	Quan Do
F/V KINUE KAI	Awahnee Oceanics Inc.
F/V KOLEA	Paik Fishing Inc.
F/V LADY ALICE	Lady Alice Co. Inc.
F/V LADY CHRISTINE	Christine Tran
F/V LADY CHRISTINE II	Christine Tran Inc.
F/V LADY CHUL	Jong Ik Fishing Co Inc
F/V LADY LYN III	Lady Lyn Inc.
F/V LEA LEA	M.S. Honolulu Inc.
F/V LIBERTY	Yu & AAS Corp.
F/V LIHAU	White Inc.
F/V LILA	Samuel Lee
F/V MAN SEOK	KMC & PCC Inc.
F/V MANA LOA	Hawaii Protect Assc Lt
F/V MARIE M	Viking V Inc.
F/V MARINE STAR	Viking V Inc.
F/V MIDNIGHT II	Albert K. Duarte
F/V MISS AGGIE N	Miles Gould
F/V MISS JESSICO	Pacific Seafoods Inc
F/V MISS JULIE	Quan Do
F/V MISS LISA	Miss Lisa Inc.
F/V MISS VIVIANA	Nguyen Hai Thanh/Reagan/Duoc
F/V MOKULELE	Robert Cabos
F/V NEW HORIZON	John D. Gibbs
F/V NORPAC	George Rains Jr.
F/V NORTHERN VENTURE	Roy-Al Boat Mgmt.
F/V OCEAN DIAMOND	Ocean Diamond Inc.
F/V OPAL IMAGE	Pacific Fishing Supply
F/V PACIFIC DREAM	Pacific Seafoods Inc.
F/V PACIFIC FIN	Fishrite Inc.
F/V PACIFIC HORIZON	John Gibbs
F/V PACIFIC PRIDE	Pacific Seafoods Inc.
F/V PACIFIC STAR	N. Pac Fishery Inc.
F/V PAN AM II	Pan Am K Marine Corp.
F/V PARADISE QUEEN II	Katrianna Pacific Corp
F/V PEARL HARBOR II	Gilbert DeCosta
F/V PETITE ONE	Ka'upu Ltd.
F/V PHI NAM	Pilgrim Truong
F/V PIKY	M/V Piky Inc.
F/V PRINCESS K	Princess K Fish Corp
F/V QUEEN DIAMOND	Santa Maria III Inc.
F/V RED DIAMOND	Xuan Nguyen
F/V RED OCTOBER	Pacific Fishing Supply
F/V ROBIN	Fat City Fishing
F/V ROBIN II	Robin Fishing Inc.
F/V SANDY DORY	Highliner Inc.
F/V SAPPHIRE	Hanh Thi Nguyen
F/V SEA BIRD	Ly Hoa Van
F/V SEA DIAMOND	Nancy Nguyen
F/V SEA DIAMOND II	Sea Diamond II Inc.
F/V SEA DRAGON	Long Thanh Nguyen
F/V SEA HAWK	Hawaii Fishing Co.
F/V SEA MOON	Sea Flower Inc.
F/V SEA SPIDER	Paul Seaton, Trustee
F/V SEA SPRAY	Parker Seafoods, Inc.
F/V SEASPRAY	Hanson/Hanson Fish Co
F/V SEEKER II	Seeker Fisheries Inc.
F/V SEVEN STARS	Kwang Myong Co. Inc.
F/V SUNFLOWER III	Le's Brothers Fish Inc
F/V TUCANA	Pacific Boat Corp. Inc
F/V ULHEELANI	Ulheelani Corp.
F/V VAN LOI	Van Loi Corp.

F/V VICTORIA	Victoria Inc.
F/V VIRGINIA CREEPER	Sylvan Seafoods Inc.
F/V VOSTOK	Evgeny Basargin
F/V VUI VUI II	Vui Vui,A Limited Part
F/V VUI-VUI	Santa Maria III Inc.
F/V WHITE NIGHT	Natalia/Kiril Basargin
F/V WONIYA	Sierra Fisheries Inc.

Hawaii longline permit holders without vessels

PERMIT HOLDER
CKM Inc.
Che Kun Kim
Ocean Associates Corp.
Theodore Benjestorf
Hanh Thi Nguyen
Henry Niemi Jr.
James Chan Song Kim
John Romero
Vedoy Enterprises Inc.
David B.H. Ho
William Sullivan
Hanh Thi Nguyen
Allen Merritt
Finback Inc.
H&M Marine Inc.
Minh Hoang Dang
M&T Fishing Co. Inc.
Vessel Management Assoc.
Master Vincent Inc.
Shaman Partnership
Hana Like Inc.
L & B Fisheries Inc.
Richard Enslow
Lindgren-Pitman Inc.
Richard Enslow
Pacific Fishing Supply
John Romero

1997 Western Pacific General Longline Permit

American Samoa Pelagic Fishery

VESSEL	PERMIT HOLDER
F/V 38 SPECIAL	Peter Reid
F/V AAONE	Asaua Fuimaono
F/V ALIA O SINA	Afoa Moega Lutu
F/V AMIGO	Jay Vaoalii
F/V DOS GRIS	George Poysky III
F/V EAGLE II	Steve Haleck
F/V FAISUA	Sui Aveina
F/V FAIVAIMOANA I	Faivaimoana Fishing Co Lt
F/V FOTOLUPE	Lautogia Taula
F/V FUATINO	Nana Aveina
F/V GREEN PEACE I	Maselino Ioane
F/V GREEN PEACE II	Maselino Ioane
F/V GREEN PEACE III	Maselino Ioane
F/V ISABELLA	Jose Lugo
F/V LADY HERMINA	Jadran Satalic
F/V LADY LU	Lu's Fish Grotto
F/V LADY POLATAI	Tagaimamao Masaniai
F/V LADY VICTORIA	Violina Lin
F/V LADYSMITH	Coastal&OffshorePac Corp
F/V MALIA	Uili Talimao
F/V MARY EMMILY	Malua/Henry Nickel
F/V MISS MIHI	Timothy Jones
F/V MONA OF THE OCEAN	Terry Chang
F/V NORTH STAR	Richard Mathisen
F/V NORTHWEST	Frank McCoy Sr.
F/V OFIRA	Asaua Fuimaono
F/V REEL CAT	Dave Haleck
F/V SEA MASTER	Violina Lin
F/V SILVER BULLET	David Pedro
F/V SOUTH WIND I	Elvin Mokoma
F/V SOUTH WIND II	Elvin Mokoma
F/V SOUTH WIND III	Elvin Mokoma
F/V SOUTH WIND IV	Elvin Mokoma

Guam Pelagic Fishery

VESSEL	PERMIT HOLDER
F/V ATALOA	Jim/Nathan Elliott
F/V KARIYUSHI	Guam Y.T.K. Corp.

Commonwealth of the Northern Mariana Islands Pelagic Fishery

VESSEL	PERMIT HOLDER
F/V CHARITO	Renato Azucenas

Protected Species Conservation

In 1997 the Southwest Region=s (SWR) Observer Program placed observers on Hawaii-based longline vessels covering 40 fishing trips from January 1, 1997 through December 31, 1997, for a coverage rate of about 3.6%. Thirty-eight trips were completed during the calendar year with 18 trips recording sea turtle interactions and 20 trips without interactions.

Total observed fishing effort was approximately 585,763 hooks, and 507 sets; 40 sea turtle and 5 marine mammal interactions were observed.

Loggerhead turtles were the species most often involved in observed interactions (Table 4) with longline gear, followed by leatherbacks and then olive ridleys. Of the 40 turtles observed taken, 38 were released alive. Two turtles (a leatherback and an unidentified hard shell) were released with their disposition/condition unconfirmed (Table 4).

Table 4. Observed longline gear/turtle interactions, 1997

Turtle species	Condition	
	Released alive	Released, disposition unknown
Loggerhead	24	0
Olive Ridley	3	0
Leatherback	11	1
Unidentified hardshell	0	1
Green	0	0
Hawksbill	0	0
TOTAL	38	2

Estimates of total incidental turtle take and mortality for the longline fleet has continued to be a problem for the NMFS Honolulu Laboratory. This is due in part to the low observer coverage (<5%), the rarity of longline-turtle interactions and the different targeting strategies of the elements that comprise the longline fleet. During 1998, the NMFS Honolulu Laboratory produced a report[8] which included the

[8]. Kleiber, P. 1998. Estimating annual takes and kills of sea turtles by the Hawaiian longline fishery, 1991-97, from observer program and logbook data. Honolulu Laboratory, Southwest Science Center, National Marine Fisheries Service, NOAA, Administrative Report H-98-08, 15 pp.

most statistically reliable estimated takes and kills of turtles in the longline fishery based on a classification and regression tree model. These estimates and the allowable take and kill levels, determined from the 1994 biological opinion under Section 7 of the Endangered Species Act, are given in Table 5.

Table 5. Estimated fleet-wide turtle takes and kills in the Hawaii longline fishery, 1991-1997

Species	Allowable take	Estimated takes						
		1991	1992	1993	1994	1995	1996	1997
Loggerhead	305	355	514	581	476	376	426	284
95% CL		215-462	295-624	360-770	237-558	191-461	207-502	150-435
Olive Ridley	152	118	108	115	101	110	109	111
95% CL		49-184	46-169	47-178	41-157	45-170	45-170	48-175
Leatherback	271	190	173	185	162	176	175	178
95% CL		119-268	108-245	115-261	101-229	110-249	109-247	111-251
Green	119	31	28	30	27	29	29	29
95% CL		7-58	5-52	6-56	5-49	6-53	5-52	6-54
Species	**Allowable kills**	**Estimated kills**						
		1991	1992	1993	1994	1995	1996	1997
Loggerhead	46	62	90	102	83	66	75	50
95% CL		33-85	46-117	58-145	38-103	31-83	32-92	23-74
Olive Ridley	41	30	27	29	26	28	28	28
95% CL		11-50	9-46	10-48	9-43	10-47	10-46	10-47
Leatherback	23	8	7	8	7	7	7	7
95% CL		0.1-21	0.1-19	0.1-20	0.1-18	0.1-19	0.1-19	0.1-20
Green	18	0.5	0.5	0.5	0.4	0.5	0.5	0.5
95% CL		0.04-1.01	0.04-0.92	0.04-0.98	0.03-0.86	0.04-0.94	0.03-0.92	0.03-0.94

SWR observers also obtained turtle tissue samples for genetic analyses, tagged and photographed turtles for future identification, and collected turtle life history data when possible.

Under the Honolulu Laboratory=s Marine Turtle Research Program (MTRP), satellite transmitters were placed on 9 loggerhead and 3 olive ridley turtles to investigate their post-release movements and survival in 1997. Preliminary reports from the MTRP indicate transmission durations ranging from approximately 7 days to 6.5 months. The cessation of signals may be due to a number of different factors (battery life/failure, transmitter/antenna failure, predation, post-release mortality, etc.) which are currently under investigation.

Marine mammal and seabird interactions were also recorded by the observers and are summarized below in Tables 6 and 7.

Table 6. Observed longline gear/marine mammal interactions, 1997

Marine mammal species	Condition	
	Released alive	Released dead
False killer whale	1	0
Risso=s dolphin	2	0
Spinner dolphin	1	0
Short-finned pilot whale	0	1
TOTAL	4	1

Table 7. Observed longline gear/seabird interactions, 1997

Seabird species	Condition	
	Released alive	Released dead
Laysan albatross	19	43
Black-footed albatross	24	86
TOTAL	43	129

Initial expansions of the seabird takes suggest that between 1000-2000 of each species of albatross are killed by the Hawaii longline fishery each year. The NMFS Honolulu Laboratory is currently investigating the most appropriate statistical method to expand the observed albatross mortalities to the entire fleet, in the same manner as was accomplished for turtles.

Habitat Protection

A major El-Nino-Southern Oscillation (ENSO) event commenced in the tropical Pacific towards the end of 1996 and continued through much of 1997. As expected during a strong ENSO year, the focus of pelagic fishing in the tropical Pacific shifted eastwards from the waters between New Guinea and Micronesia, to the central Pacific between 170EE and 160EW. This had important consequences for Guam, where port calls by purse seine and longline vessels were markedly reduced. Conversely, purse seine vessels were able to operate in waters immediately to the north of American Samoa and hence reduce transit times too and from the Pago Pago canneries.

USCG and NMFS Enforcement Activities

NMFS Enforcement Activities

The USCG conducted 1498. hours of fisheries patrols with C-130 aircraft in the Central and Western Pacific during 1997. The C-130 surveillance of the eight non-contiguous EEZ s was broken down as follows: 76.4 hours in the Main Hawaiian Islands; 77.3 hours in the Northwest Hawaiian islands; 345 hours in Guam and the Northern Mariana Islands; 11 .4 hours in Johnston Atoll; 71.5 hours in American Samoa; 167.2 hours in Palmyra Atoll/Kingman Reef 243.9 hours in Jarvis Island; 2842 in Howland/Baker Islands; and six hours in Wake Island. There were also 215.2 hours flown in direct support of High Seas Driftnet (HSDN) enforcement. The USCG flew 331.6 hours with HH-65 helicopters in support of fisheries operations; this effort was concentrated in the Main Hawaiian Islands and while deployed on high endurance cutters. During 1 997, a drastic reduction in assigned high endurance cutter days resulted in only 60 days used patrolling the U.S. EEZ in this region.

In 1997. there were 327 total fishing vessel boardings within the Fourteenth USCG District. A breakdown of vessels boarded is as follows: 195 were U.S. 42 were Japanese, 53 were Taiwanese, 15 were South Korean, and 22 were of other nationalities.

There were five significant (non-VMS) fisheries enforcement cases involving foreign fishing vessels in 1997. The following information applies:

> On 6 June, the PU YU No. 6026 was detected illegally fishing with large-scale HSDN nearly 1000 miles northeast of Midway Island. Since no USCG vessel was in a position to respond to the illegal activity, C-130 aircraft maintained surveillance of the vessel until a Fisheries Agency of Japan patrol vessel was able to respond. Due to uncertain nationality of the vessel, the FAJ was unable to conduct a boarding. The vessel entered the PRC territorial sea after 17 June. A case package documenting the incident was forwarded, via the State Department, to the PRC. PRC fisheries officials have reportedly acted on the case package and seized the vessel.
>
> On 26 June, a Canadian P-3 aircraft detected the HSDN vessel CAO YU No. 6025 illegally fishing with large-scale HSDN nearly 1500 miles northeast of Midway Island. The cutters BASSWOOD and CHASE intercepted the vessel. The vessel aggressively attempted to avoid an at-sea enforcement boarding. but was eventually boarded on 9 July. The vessel was seized and taken to Guam. The vessel and its catch were forfeited and the master was prosecuted for hindering a Coast Guard boarding.
>
> On 29 June. CGC SASSAFRAS boarded FFV SHIN CHANG No. 502 while in port at Pago Pago, American Samoa. SASSAFRAS uncovered five separate EEZ incursions in the U.S. EEZ of Palmyra Atoll in May and June 1997. The vessel was seized on 5 August. The

vessel=s owner paid a 100,000 dollar fine, forfeited 18,000 dollars worth of catch and agreed to install and maintain a Vessel Monitoring System (VMS) for a period of five years.

On 23 July, CGC GALVESTON ISLAND boarded the FFV CHIN HSIN LONG No. 20 and uncovered a Lacey Act violation. The vessel=s logs showed that they had fished in the EEZ of Papua New Guinea without a permit. NMFS investigated the crime and assessed a 10,000 dollar fine.

On 31 July, a USCG-130 detected the FFV SOUTH STAR fishing illegally in the U.S. EEZ of Howland/Baker Islands. The vessel abandoned their longline gear and departed the EEZ. Since no USCG cutter was able to respond. the C-130 documented the violation and a case package has been sent through the State Department to the flag state (Belize) for action.

Meetings and Conferences

Throughout 1997 the Fourteenth District Law Enforcement Branch actively participated in meetings and conferences in support of living marine resources. These events ranged from informal gatherings to multi-lateral high level conferences. Significant attendance were: The Forum Fisheries Agency s (FFA) Monitoring, Control, and Surveillance Working Group meeting and the Maritime Surveillance Seminar in April; the Second Multi-Lateral High Level Conference on the Management of Highly Migratory Species in the Western and Central Pacific Ocean in June; the Pacific Insular Area Fisheries Agreement discussions in July; the Workshop on the Legal Aspect of VMS in September; and the MLHLC Technical Consultation on Fisheries Management Issues in November.

Partnerships

In 1997 the USCO worked to strengthen its international partnerships. Specifically, Fourteenth District Law Enforcement continued to share USCG cutter and aircraft patrol information within Australia and New Zealand. Sighting data was shared with the Pacific island countries, via the FFA.

D14 conceived and executed Operation PACIFIC COMPASS, a recurring Cooperative Maritime Patrol and Self-Support Operation. involving Coast Guard cutters and aircraft, Pacific island country=s patrol boats, and Australian/New Zealand Maritime surveillance aircraft. The purpose of Operation PACIFIC COMPASS is to expand District Fourteen=s partnership with regional fisheries enforcement counterparts, in support of USCG program goals, and in stride with the CINC=s Theater Engagement Plan.

Vessel Monitoring System

The Hawaii VMS, monitored by NMFS and USCO, continues to be an effective surveillance and enforcement tool. In 1997 there were five significant enforcement cases cued by the VMS information. Using "signature analysis." USCG and NMFS identify possible incursions into the Main Hawaiian Island (MHI) longline closure area and the Northwest Hawaiian Island (NWI-II) Protected Species Zone (PSZ). This information is passed to patrolling cutters for investigation during an at-sea enforcement boarding. The following information applies:

On 28 February the F/V LEA LEA was observed on VMS fishing in the MHI longline closure area. CGC ASSATEAGUE conducted an at-sea enforcement boarding of the vessel and substantiated the violation.

On 28 April the F/V SUN STAR was observed on VMS, on two occasions, fishing in the MI-Il longline closure area. CGC KISKA conducted an at-sea enforcement boarding of the vessel and substantiated the violations.

On 3 July, the F/V SEA DIAMOND was observed on VMS fishing in the MHI longline closure area. CGC WASHINGTON conducted an at-sea enforcement boarding of the vessel. The boarding found that the vessel=s VMS unit was operating correctly.. However, the SEA DIAMOND s log books had several discrepancies, up to 150 miles, when compared to VMS data. The vessel had logged fishing activity at times when the VMS "signature analysis" showed them to be fishing. The WASHINGTON issued violation reports for the incursion as well as falsifying log books.

On 4 July, the F/V MISS VIVIANA was observed on VMS fishing in the MHI longline closure area. CGC WASHINGTON conducted an at-sea enforcement boarding of this vessel. The boarding found that like the previous case, the vessel=s VMS unit was operating correctly. Again, the log books had several discrepancies when compared to VMS data. The vessel had also logged fishing activity at times when the VMS "signature analysis" showed them to be fishing. The WASHINGTON issued violation reports for the incursion as well as falsifying log books.

On 23 September the F/V CORI DAWN was observed on VMS fishing in the MHI longline closure area. CGC WASHINGTON conducted an at-sea enforcement boarding of this vessel. The boarding found discrepancies like the previous two cases, and WASHINGTON issued violation reports for the incursion as well as falsifying logbooks.

NMFS ENFORCEMENT ACTTVITIES

Special Agents of the National Marine Fisheries Service, Office for Enforcement (OLE), conduct investigations of alleged violations of NOAA statutes and regulations, including the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA), the Lacey Act, the Marine Mammal Protection Act and the Endangered Species Act. During 1997, Agents were assigned to Honolulu,

Hawaii and Agana, Guam. The Agents in Honolulu provided coverage for all the Hawaiian Islands while the Agents in Agana covered Guam and responded to alleged violations in the Northern Mariana Islands. A Special Agent was also assigned on a temporary duty basis to Honiara, in the Solomon Islands, for much of 1997, to assist nations that are members of the Forum Fisheries Agency. An Agent also was assigned to American Samoa in 1997 on an as-needed basis.

MSFCMA

A. Western Pacific Pelagic Fisheries

During 1997, 114 longline vessels fished in the Western Pacific Pelagic Fisheries, primarily for tunas and swordfish. In order to participate in these fisheries, vessels were required, among other things, to have a limited entry permit and to carry on board a Vessel Monitoring System (VMS). Vessels were also subject to a requirement to carry an observer. The regulations imposed reporting requirements on participants and closed approximately 160,000 square nautical miles around the northwest and main Hawaiian islands to longlining to help protect fishery stocks, and also to protect endangered species that occur in the region, particularly the Hawaiian monk seal. During the year OLE documented 23 apparent violations of the Western Pacific Pelagic Fisheries regulations.

Vessel Monitoring System

The NMFS OLE currently operates a satellite-based fishing vessel monitoring system to help determine the location and activity of vessels fishing around the Hawaiian Islands. VMS can also be used to receive catch and effort data from the fleet, transmit and receive messages, and accurately accurately locate vessels during an emergency. While VMS is currently used only for fisheries around the Hawaiian Islands, the system has potential uses in other fisheries throughout the Western Pacific, where the United States exercises jurisdiction over about 1.5 million square miles of ocean.

Statistics for 1997

C	Complaints received		134
C	Dockside boardings conducted in Honolulu		56
C	Dockside boardings conducted in American Samoa	167	
C	Fisheries investigations opened	42	