No. 348

Marquesas Area Fishery and Environmental Data, January—March 1959

SPECIAL SCIENTIFIC REPORT—FISHERIES No. 348

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Explanatory Note

The series embodies results of investigations, usually of restricted scope, intended to aid or direct management or utilization practices and as guides for administrative or legislative action. It is issued in limited quantities for the official use of Federal, State or cooperating Agencies and in processed form for economy and to avoid delay in publication.

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MARQUESAS AREA FISHERY AND ENVIRONMENTAL DATA
JANUARY - MARCH 1959

By

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Special Scientific Report--Fisheries No. 348
Washington, D. C.
June 1960

ABSTRACT

This report presents meteorological, oceanographic and fishery data collected aboard the Honolulu Biological Laboratory research vessel, Charles H. Gilbert, and a chartered West Coast tuna clipper, Cape Falcon, on expeditions to the southeastern Pacific Ocean centered in the Marquesas Islands during January-March 1959.

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This is the fourth report in a series presenting data obtained on cruises to the portion of the southeastern Pacific Ocean that is centered in the Marquesas Islands. The first report (Austin 1957) includes results of cruises made in August and September 1956. The second (Wilson and Rinkel 1957) includes data obtained from cruises made during January - March 1957, and the third (Wilson, et al. 1958) contains results from cruises made during October 1957 - June 1958.

The two expeditions made during January - March 1959 were the final in a program undertaken by the Honolulu Biological Laboratory (HBL), Bureau of Commercial Fisheries, to study the tuna resources of the southeastern Pacific Ocean. One of the expeditions was made on a chartered West Coast tuna clipper, the Cape Falcon, out of San Diego, to test the feasibility of fishing commercially for surface tuna schools in the Marquesas area. The other expedition was made on the Bureau's research vessel Charles H. Gilbert to continue the investigation of surface tuna schools. As in the earlier reports, the data are presented without analysis so that they may be made available to other agencies studying the Pacific. Descriptive and analytical reports will follow.

The Cape Falcon departed San Diego January 26, 1959, for Almejas Bay, Baja California, where baiting operations were conducted from January 30 to February 5. Actual scouting and fishing for surface tuna schools in the Marquesas area (5°-20° S., 130°-150° W.) occupied the period from February 15 to March 15. The track of the Cape Falcon is shown in figures 1 and 1a.

The Gilbert departed Honolulu January 7, 1959 and returned on March 26, 1959. During the course of the cruise the following were accomplished: bait surveys in the Marquesas and Society Islands, a surface tuna school survey in the Tuamotu Archipelago, a standard inshore surface tuna school survey, and the north and south legs of a standard offshore surface tuna school survey in the Marquesas (fig. 2). The track of the Gilbert is shown in figure 3.

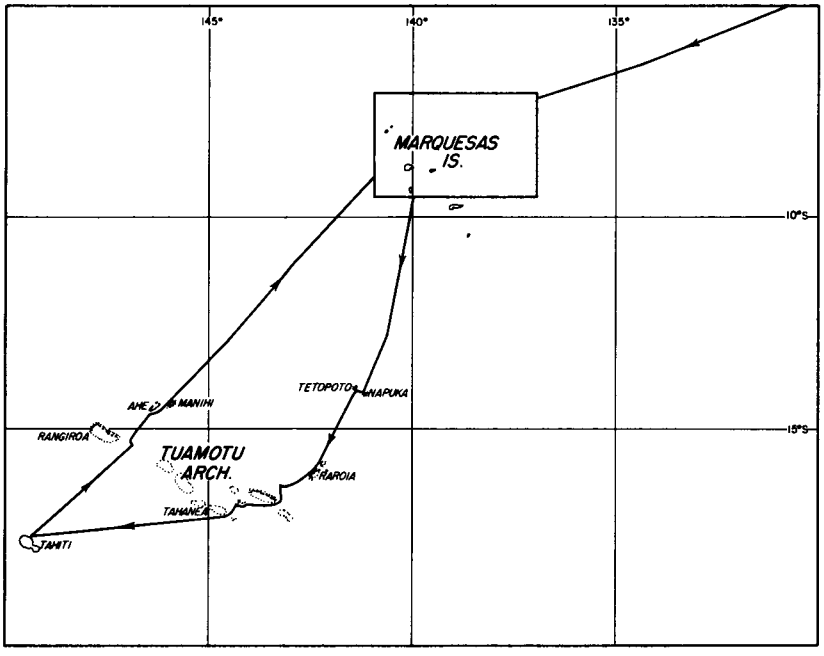

Figure 1.--Track of the Cape Falcon.

FIELD PROCEDURES

Bathythermograph and meteorological observations.

Bathythermograph (BT) lowerings during Charles H. Gilbert cruise 43 were made every 3 hours between Honolulu and 10° N. latitude, every 6 hours between 10° N. and 5° N. latitude, every 3 hours between 5° N. latitude and the Marquesas, at local noon daily during the inshore survey, every 3 hours during the southbound legs of the offshore survey, at each tuna fishing station, and at 0900 and 1400 daily between the Marquesas and Tahiti. BT lowerings totaled 224 during Gilbert cruise 43.

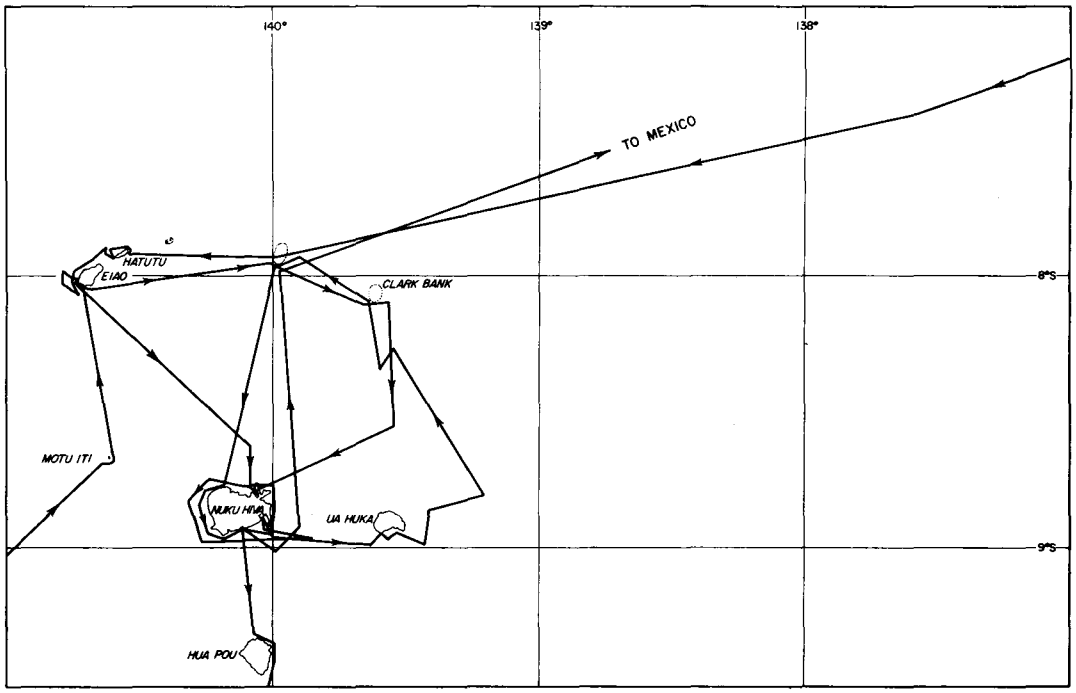

Figure 1a.--Track of the Cape Falcon in the Marquesas Islands.

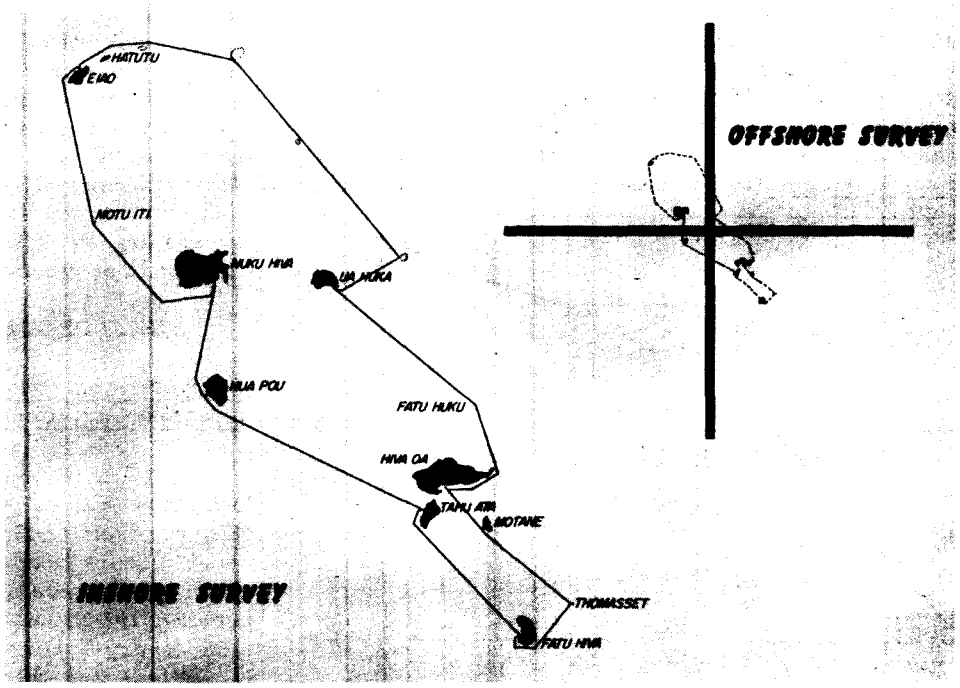

Figure 2.--Standardized inshore and offshore survey tracks, Marquesas area.

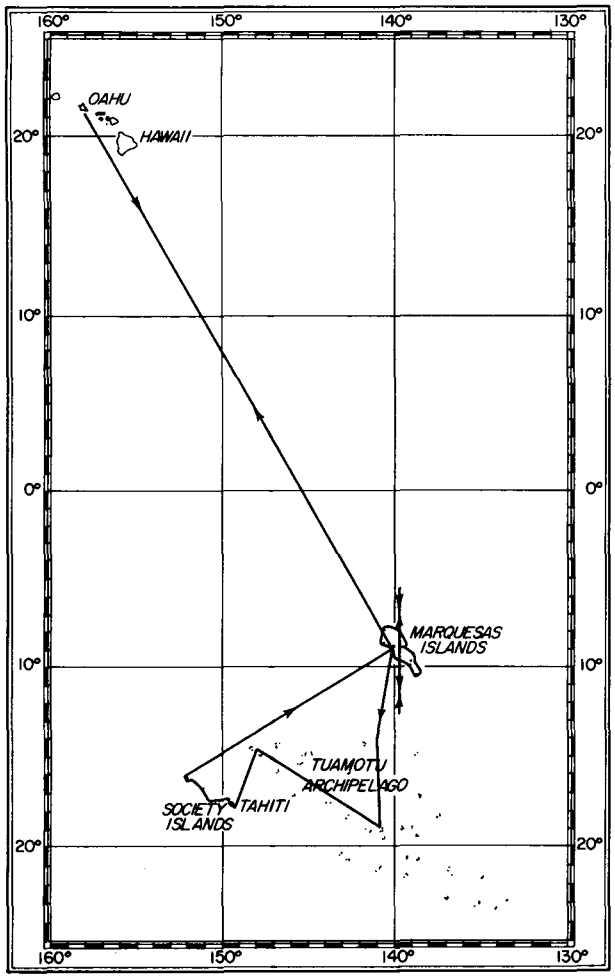

Figure 3. --Track of the Charles H. Gilbert.

Entries were made on Oceanographic Log Sheet "B" in conjunction with BT lowerings. These entries were coded according to Hydrographic Office Publication 606-c and are reproduced in table 1. Included in this table are salinity determinations of surface water samples taken at BT lowerings.

Standard weather observations were made up to 4 times daily during Gilbert 43. The observations were coded according to U. S. Weather Bureau Form 1210-F and are presented in table 3.

Although no bathythermograph lowerings or standard weather observations were made on board the Cape Falcon, the Government observer made routine observations on the environment which were coded and recorded on Oceanographic Log Sheet "B". These observations are presented in table 2, which also includes salinity determinations of surface water samples taken in conjunction with some of the environmental observations.

Productivity observations

Water transparency observations using a 30 cm. Secchi disc and water color observations by comparison with the Forel standard were made at local noon daily during Gilbert 43 while in the Marquesas area (table 5).

A study of the rate of carbon dioxide uptake by the C^{14} method was made in various localities between Hawaii, the Marquesas, and the Society Islands in collaboration with the Commonwealth Scientific and Industrial Research Organization (C.S.I.R.O.), Australia and the University of Hawaii. The results of this study will be published elsewhere.

Surface trolling

Varying numbers of lines were trolled from the Gilbert while running to and from the survey areas and while scouting for surface schools. The catches and related data are given in table 6.

Varying numbers of lines were trolled from the Cape Falcon, while scouting for surface schools in the survey areas. The troll catches are presented in table 7.

Live-bait fishing

The live-bait pole-and-line fishing techniques used on Gilbert 43 were similar to those of the Hawaiian skipjack fishery (June 1951). Marquesan sardines were used as bait. The results of fishing and other related data are presented in table 8. The length-frequency distribution of samples of skipjack, yellowfin, and bigeye caught are given in table 10.

The fishing techniques of California baitboat fishermen were used aboard the Cape Falcon. A description of the techniques is given by Godsil (1938). Anchovetas obtained at Almejas Bay, Baja California, were used as bait. The results of fishing and other pertinent data are presented in table 9. The length-frequency distribution of samples of yellowfin and skipjack caught are given in table 11.

Baitfish surveys

Descriptions of procedures used in conducting baitfish surveys in the Marquesas have appeared in earlier publications (Wilson and Rinkel 1957, and Wilson, et al. 1958). The

results of bait surveys and bait fishing operations during Gilbert cruise 43 are presented in table 12. The length-frequency distributions of bait samples are presented in table 14, and observations of surface water temperature and salinity at baiting localities are presented in table 4.

As noted earlier, bait for pole-and-line fishing from the Cape Falcon was obtained in Almejas Bay, Baja California. The gear and methods of baiting employed on the Cape Falcon are similar to those used by California baitboat fishermen. A description of the gear and methods is given by Alverson and Shimada (1957) and will not be repeated here. The results of baiting in Almejas Bay appear in table 13, which also includes results of two days of baiting in the bays of the Marquesas.

Birds, tuna schools, and aquatic mammals

A watch was maintained during daylight hours for birds, tuna schools, and aquatic mammals aboard both the Cape Falcon and the Gilbert. Summaries of these observations are presented in tables 15 through 18, inclusive.

Field party personnel

Charles H. Gilbert

William T. Tanaka, Master
Robert C. Wilson, Field Party Chief
Richard J. Hansen, Fishery Aid
Harry R. Jitts, Collaborator,
C.S.I.R.O., Australia

Cape Falcon

Sverre Jangaard, Master
Thomas S. Hida, Observer

LABORATORY PROCEDURES

Salinity determinations

A modification of the Knudsen method (Van Landingham 1957) was used in analyzing the surface water samples.

Personnel processing samples and data
(In addition to the author)

Arthur Oishi, Fishery Aid
Betty Ann L. Keala, Statistical Clerk

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Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
1	0000	1/10	18°17.0'N	155°27.5'W	76.5	11	06	76.8	73.2	1012	60	0	8	7	2	12	1	34.59
2	0300	1/10	17°55.0'N	155°15.0'W	77.5	11	07	78.0	75.0	1011	01	6	5	9	1	12	1	34.36
3	0600	1/10	17°31.5'N	155°00.0'W	77.0	07	09	77.1	74.5	1014	00	6,8	2	8	1	12	1	34.47
4	0900	1/10	17°10.0'N	154°47.0'W	76.0	02	05	77.6	74.5	1015	00	6	2	8	1	12	1	34.41
5	1200	1/10	16°47.0'N	154°34.5'W	77.6	09	08	77.5	74.5	1012	00	X	9	8	1	12	1	34.25
6	1500	1/10	16°25.0'N	154°21.5'W	76.2	03	06	78.3	74.6	1014	00	6	3	8	1	12	1	34.29
7	1800	1/10	16°03.0'N	154°07.5'W	77.5	09	11	78.0	74.5	1013	03	6,1	7	8	2	09	2	34.23
8	2100	1/10	15°41.0'N	153°54.0'W	78.1	10	10	79.4	74.9	1014	01	1,6,8	3	8	2	12	2	34.32
9	0000	1/11	15°18.0'N	153°43.5'W	78.6	02	05	78.6	74.4	1012	02	1,6	2	9	2	12	2	34.38
10	0300	1/11	14°54.0'N	153°34.0'W	77.8	06	12	78.5	74.5	1012	02	1,6	2	9	2	11	2	34.52
11	0600	1/11	14°32.0'N	153°22.5'W	77.8	08	13	78.1	74.8	1013	00	X	9	9	2	09	2	34.48
12	0900	1/11	14°12.0'N	153°08.0'W	77.7	09	13	78.0	74.6	1013	00	1	3	8	2	11	2	34.39
13	1200	1/11	13°50.5'N	152°52.5'W	77.6	07	14	78.6	74.1	1010	00	1,8	2	8	2	11	2	34.33
14	1500	1/11	13°30.0'N	152°37.5'W	77.3	08	14	77.8	74.0	1011	25	8	3	7	2	11	2	34.18
15	1800	1/11	13°07.5'N	152°25.0'W	77.5	06	14	80.5	75.0	1012	01	8,1	2	8	2	10	2	34.15
16	2100	1/11	12°45.0'N	152°15.0'W	78.0	06	16	80.5	75.3	1011	03	1,8	3	8	3	08	2	34.18
17	0000	1/12	12°24.0'N	152°04.5'W	77.9	06	16	79.5	75.0	1008	00	1,8	2	8	3	12	2	34.13
18	0300	1/12	12°02.0'N	151°54.0'W	78.1	07	17	80.0	75.5	1009	02	8	3	8	3	11	2	33.93
19	0600	1/12	11°40.5'N	151°44.0'W	78.5	07	17	78.7	75.5	1010	02	8	3	8	3	11	2	34.03
20	0900	1/12	11°19.5'N	151°32.5'W	77.9	06	22	78.9	75.1	1010	02	8	3	7	3	11	2	34.03
21	1200	1/12	10°58.0'N	151°21.0'W	78.1	07	17	78.9	75.6	1008	02	8	3	8	4	11	2	33.92
22	1500	1/12	10°36.5'N	151°10.0'W	77.7	06	21	78.8	75.6	1008	02	8	4	7	3	11	2	33.96
23	1800	1/12	10°15.5'N	150°58.5'W	78.1	08	17	80.5	77.0	1010	03	8,6	6	7	4	09	2	33.92
24	0000	1/13	09°35.0'N	150°33.0'W	79.3	08	18	80.3	77.0	1005	03	8	8	7	4	09	2	33.97
25	0600	1/13	08°54.5'N	150°01.0'W	80.5	10	19	81.0	77.6	1008	00	X	9	7	4	09	2	34.06
26	1200	1/13	08°15.0'N	149°29.0'W	81.4	13	14	81.0	77.8	1007	00	X	X	7	4	09	2	-
27	1800	1/13	07°34.0'N	148°57.0'W	82.2	09	22	78.2	77.5	1009	21	8	8	5	4	10	2	-
28	0000	1/14	06°51.5'N	148°25.0'W	80.3	14	16	82.0	77.0	1006	25	8	8	6	4	10	2	-
29	0600	1/14	06°15.0'N	147°58.5'W	81.4	14	16	81.1	77.0	1008	01	1,8	2	7	4	15	2	-
30	1200	1/14	05°36.0'N	147°30.0'W	80.8	14	16	80.5	75.8	1008	03	8	3	7	4	15	2	-
31	1800	1/14	04°57.5'N	147°02.0'W	79.6	13	17	83.8	76.8	1010	02	8	3	7	4	13	2	-
32	2100	1/14	04°38.0'N	146°48.0'W	79.8	12	16	81.3	76.9	1009	03	1,8	6	7	4	13	2	-
33	0000	1/15	04°16.0'N	146°35.5'W	80.0	11	16	81.0	75.2	1008	03	1,8	4	7	4	12	2	-
34	0300	1/15	03°53.0'N	146°25.0'W	80.4	12	15	81.0	75.2	1008	01	1	2	8	3	12	2	-
35	0600	1/15	03°38.0'N	146°16.0'W	79.5	10	13	80.9	75.1	1011	01	1,8	2	8	3	12	2	-

Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43 - continued

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
36	0900	1/15	03°18.0'N	146°02.5'W	79.6	10	10	79.9	75.3	1011	02	1	2	8	3	12	2	-
37	1200	1/15	02°58.5'N	145°49.0'W	79.5	11	10	81.2	75.0	1010	03	1, 6	8	8	3	12	2	-
38	1500	1/15	02°40.0'N	145°36.0'W	79.5	13	08	78.5	74.5	1010	02	1	2	8	3	12	2	-
39	1800	1/15	02°20.5'N	145°22.5'W	78.9	12	08	81.8	76.0	1012	02	8	2	9	3	12	2	-
40	2100	1/15	02°01.5'N	145°09.5'W	79.5	15	12	80.9	74.9	1011	03	1, 6, 8	4	9	3	12	2	-
41	0000	1/16	01°40.0'N	144°58.5'W	80.1	18	04	80.0	73.8	1008	02	1, 8	2	8	1	12	2	-
42	0300	1/16	01°18.0'N	144°50.0'W	81.0	14	03	80.5	73.5	1008	02	1, 8	2	9	1	12	2	-
43	0600	1/16	00°57.0'N	144°40.0'W	79.7	18	03	79.7	73.1	1011	01	1	1	9	1	12	2	-
44	0900	1/16	00°36.0'N	144°30.5'W	79.0	18	02	79.2	74.0	1010	02	1	2	8	1	12	2	-
45	1200	1/16	00°15.0'N	144°21.0'W	78.6	19	03	79.1	73.3	1009	01	1	2	8	1	12	2	-
46	1800	1/16	00°20.5'S	144°12.0'W	77.2	19	08	78.4	74.0	1010	01	X	0	9	1	12	1	-
47	2100	1/16	00°36.0'S	144°08.0'W	79.2	20	08	79.0	74.0	1008	02	X	0	9	1	12	1	-
48	0000	1/17	01°00.0'S	143°56.0'W	78.9	19	08	80.5	74.0	1006	02	X	0	9	1	12	1	-
49	0300	1/17	01°24.5'S	143°43.0'W	80.4	20	05	81.3	73.5	1007	02	8	1	9	1	12	1	-
50	0600	1/17	01°47.0'S	143°30.0'W	81.0	11	05	80.5	73.1	1009	01	X	0	9	1	12	1	-
51	0900	1/17	02°12.5'S	143°16.5'W	79.5	08	02	79.5	73.3	1008	02	X	0	9	1	12	1	-
52	1200	1/17	02°38.0'S	143°03.0'W	79.4	07	06	78.8	73.0	1007	03	8	1	9	1	12	1	-
53	1500	1/17	03°06.5'S	142°47.0'W	79.9	07	05	79.4	73.5	1008	02	8	1	9	1	12	1	-
54	1800	1/17	03°28.0'S	142°35.0'W	80.2	07	05	82.0	74.7	1010	03	8	3	9	1	12	1	-
55	2100	1/17	03°52.0'S	142°21.0'W	80.8	06	07	80.8	74.9	1009	02	8	3	9	1	12	1	-
56	0000	1/18	04°17.0'S	142°08.0'W	81.1	06	09	80.6	75.0	1008	02	8	3	9	1	12	1	-
57	0300	1/18	04°42.0'S	141°53.0'W	79.8	05	15	80.8	74.5	1008	02	8	3	9	2	12	1	-
58	0600	1/18	05°06.0'S	141°42.0'W	80.0	04	15	81.9	75.8	1010	01	8	2	9	2	12	1	-
59	0900	1/18	05°34.0'S	141°35.0'W	80.0	04	13	80.2	74.5	1010	02	8	4	8	2	12	1	-
60	1200	1/18	06°01.5'S	141°28.5'W	80.3	05	15	81.0	75.0	1010	01	8	2	8	2	12	1	-
61	1500	1/18	06°30.0'S	141°22.0'W	78.7	06	14	80.2	74.5	1010	02	8, 1	2	9	2	12	1	-
62	1800	1/18	06°55.0'S	141°12.0'W	80.3	06	13	82.7	75.5	1012	03	8, 1	5	9	3	12	1	-
63	2100	1/18	07°19.0'S	141°01.5'W	81.8	07	12	82.1	75.1	1012	01	8, 1	3	9	3	12	1	-
64	0000	1/19	07°44.0'S	140°51.0'W	81.1	08	12	81.2	75.0	1010	02	8, 1	3	9	2	12	1	-
65	0300	1/19	08°09.5'S	140°39.5'W	81.2	01	14	80.3	74.7	1010	02	1, 8	4	9	3	09	1	-
66	0600	1/19	08°38.0'S	140°26.0'W	81.8	07	16	82.1	74.9	1012	03	4	7	9	3	09	1	-
67	1900	1/26	10°28.5'S	140°38.0'W	82.5	02	22	83.0	77.2	1011	21	6, 8	8	7	4	02	1	-
68	0000	1/27	11°10.0'S	140°51.5'W	81.9	01	20	82.5	77.0	1008	02	6, 8	8	7	4	02	2	35.68
69	1900	1/27	13°45.5'S	141°39.0'W	82.0	08	13	82.0	76.2	1011	01	6, 8	7	7	4	02	2	-
70	0000	1/28	14°30.0'S	141°23.0'W	82.5	07	09	82.4	77.9	1010	02	6, 8	7	7	2	04	2	35.77

Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43 - continued

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
71	1900	1/28	15°52.0'S	141°36.0'W	82.3	08	16	83.6	76.3	1013	03	5,8	6	8	2	02	2	-
72	0000	1/29	15°52.0'S	142°24.0'W	82.3	10	09	83.0	78.0	1010	02	4,8	6	8	2	28	2	35.81
73	1900	1/29	16°15.0'S	142°53.5'W	82.2	08	14	84.5	77.5	1013	02	4,8	6	8	2	30	2	-
74	2130	1/29	16°27.0'S	143°03.0'W	82.3	08	14	83.0	76.8	1012	01	1,8	5	8	2	11	2	-
75	0000	1/30	16°34.0'S	143°28.0'W	82.0	05	14	81.5	77.0	1010	15	1,4,8	6	8	2	05	2	35.93
76	1900	1/30	16°15.5'S	144°03.5'W	81.8	07	09	82.7	75.0	1012	02	4,8	6	9	2	03	1	-
77	0000	1/31	16°01.0'S	144°50.0'W	83.5	09	11	84.5	76.1	1010	02	4,8	6	9	2	10	1	35.93
78	1845	1/31	15°43.5'S	145°12.0'W	83.4	11	05	83.5	76.5	1012	02	1,8	2	9	2	02	1	-
79	2248	1/31	15°53.0'S	145°36.0'W	85.4	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
80	2253	1/31	15°53.0'S	145°36.0'W	85.4	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
81	2258	1/31	15°53.0'S	145°36.0'W	86.5	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
82	2303	1/31	15°53.0'S	145°36.0'W	86.2	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
83	2308	1/31	15°53.0'S	145°36.0'W	86.5	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
84	2313	1/31	15°53.0'S	145°36.0'W	86.2	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
85	2318	1/31	15°53.0'S	145°36.0'W	86.4	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
86	2323	1/31	15°53.0'S	145°36.0'W	84.9	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	-
87	2328	1/31	15°54.5'S	145°39.0'W	85.3	07	03	83.5	75.6	1010	02	8,9	2	9	1	01	2	35.90
88	1900	2/1	15°44.5'S	145°54.0'W	83.5	15	02	83.2	75.3	1011	02	8,5	3	9	0	03	2	-
89	2135	2/1	15°29.0'S	146°05.0'W	87.2	29	06	83.4	74.8	1010	02	8,5	2	9	0	03	2	-
90	0000	2/2	15°34.0'S	146°25.0'W	85.6	29	06	83.3	72.6	1008	02	8	2	9	0	04	1	35.89
91	1720	2/2	15°30.0'S	146°36.0'W	83.5	XX	00	83.0	76.2	1009	15	8,1	3	9	0	32	2	-
92	1900	2/2	15°24.5'S	146°50.5'W	84.0	XX	00	84.2	76.5	1009	03	8	3	9	0	32	2	-
93	0000	2/3	15°05.0'S	147°21.5'W	84.1	04	08	83.0	75.0	1008	16	6,8	3	9	1	34	2	35.82
94	1900	2/3	15°03.0'S	147°59.5'W	83.1	11	09	83.1	76.5	1009	16	9,6	4	9	1	32	2	-
95	0000	2/16	16°01.5'S	150°55.0'W	83.4	25	13	83.7	78.3	1010	14	8,0	6	8	1	35	2	35.50
96	0300	2/16	15°45.0'S	150°33.0'W	83.3	30	11	84.0	79.0	1010	02	8,0	6	8	1	32	2	-
97	0600	2/16	15°28.5'S	150°11.5'W	83.2	32	08	83.0	77.7	1012	01	8	3	8	1	32	2	-
98	0900	2/16	15°12.0'S	149°49.5'W	82.8	33	07	82.9	77.5	1012	01	8	2	7	1	32	2	-
99	1200	2/16	14°55.5'S	149°27.0'W	83.4	32	08	82.4	76.1	1011	01	8	1	8	1	32	2	-
100	1500	2/16	14°39.0'S	149°05.0'W	83.1	30	06	83.2	77.7	1011	02	8	1	8	1	32	2	-
101	1800	2/16	14°24.0'S	148°42.0'W	82.9	31	09	83.0	76.7	1013	01	1,8	2	8	1	32	2	-
102	2100	2/16	14°09.0'S	148°20.0'W	84.0	31	10	83.4	77.0	1012	03	1,6,8	6	8	1	09	2	-
103	0000	2/17	13°54.0'S	147°58.0'W	84.0	32	10	84.0	78.0	1010	03	1,8	6	8	1	09	2	35.57
104	0300	2/17	13°38.0'S	147°39.0'W	84.2	31	10	85.5	79.0	1010	XX	8,0	4	8	2	30	2	-
105	0600	2/17	13°24.0'S	147°13.0'W	83.5	33	13	83.0	78.4	1012	01	8	3	8	2	30	2	-

Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43 - continued

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
106	0900	2/17	13°09.0'S	146°48.0'W	83.3	32	15	82.8	78.2	1012	02	8	2	8	2	30	2	-
107	1200	2/17	12°53.5'S	146°24.0'W	83.0	32	17	82.1	78.8	1010	03	8	5	8	2	30	2	-
108	1500	2/17	12°38.0'S	145°59.0'W	83.2	33	21	83.5	77.7	1010	02	6	4	8	3	30	2	-
109	1800	2/17	12°24.0'S	145°38.0'W	81.9	32	22	82.8	78.4	1012	03	8,0	6	8	3	30	2	-
110	2100	2/17	12°10.5'S	145°17.5'W	82.2	33	21	86.0	78.9	1012	02	8,6	6	8	3	36	2	-
111	0000	2/18	11°56.5'S	144°57.0'W	82.2	33	25	83.0	77.5	1010	03	8,6	8	8	3	36	3	-
112	0300	2/18	11°42.5'S	144°36.0'W	81.5	34	19	80.2	77.0	1010	02	8,6	8	8	4	36	3	35.42
113	0600	2/18	11°28.5'S	144°15.5'W	80.0	32	18	82.1	77.9	1012	50	6,8	8	7	3	36	3	-
114	0900	2/18	11°15.0'S	143°55.0'W	81.5	34	19	82.7	77.5	1012	50	X	8	6	3	36	3	-
115	1200	2/18	11°00.5'S	143°34.0'W	81.8	34	21	82.0	77.0	1010	02	8	8	6	3	36	3	-
116	1500	2/18	10°46.5'S	143°13.5'W	82.4	34	20	82.0	76.8	1011	15	8,6	8	6	5	36	3	-
117	1800	2/18	10°32.0'S	142°52.5'W	81.0	34	23	82.5	76.2	1013	15	8,6	8	7	4	36	3	-
118	2100	2/18	10°18.0'S	142°31.5'W	82.1	34	19	82.8	77.1	1012	15	8,6	8	7	4	36	3	-
119	0000	2/19	10°03.0'S	142°10.0'W	82.1	36	15	83.2	76.8	1011	01	8,6	6	8	3	36	3	35.80
120	0300	2/19	09°49.0'S	141°50.0'W	82.3	35	14	83.0	77.2	1011	02	5,6	8	6	3	00	1	-
121	0600	2/19	09°35.5'S	141°30.0'W	82.2	01	13	82.5	77.1	1013	03	5,6	8	7	3	00	1	-
122	0900	2/19	09°21.5'S	141°09.0'W	81.5	04	17	82.2	76.8	1012	01	8,5	5	7	2	00	1	-
123	1200	2/19	09°07.5'S	140°48.0'W	82.1	03	13	79.6	77.0	1012	02	8,5	5	7	2	00	1	-
124	2200	2/22	08°38.0'S	140°25.0'W	82.5	04	10	81.8	76.5	1010	00	6,8	6	7	1	05	1	-
125	2242	2/22	08°35.0'S	140°28.0'W	82.0	06	09	83.1	76.2	1010	02	6,8	6	7	1	05	1	-
126	2200	2/23	07°53.0'S	139°59.0'W	82.7	07	11	81.0	73.8	1011	01	1,6,8	2	8	1	08	1	-
127	0000	2/24	08°01.5'S	139°45.0'W	82.5	06	11	83.7	75.0	1009	03	1,8	4	8	1	08	1	-
128	0120	2/24	08°05.0'S	139°39.5'W	83.0	06	11	83.5	74.8	1009	02	1,8	4	8	1	08	1	-
129	2010	2/24	08°34.0'S	139°14.0'W	82.2	07	14	83.0	73.7	1012	02	8	2	9	2	12	1	-
130	2200	2/24	08°43.0'S	139°13.0'W	82.5	08	13	82.5	73.0	1011	01	6,8	2	9	1	12	1	-
131	2200	2/25	09°35.0'S	138°50.0'W	82.1	09	12	82.5	76.5	1011	03	6,8	6	8	1	09	1	-
132	2010	2/26	10°13.0'S	138°33.0'W	83.2	06	12	83.7	75.0	1012	00	8	1	9	1	05	1	-
133	2200	2/26	10°21.5'S	138°26.0'W	83.0	08	13	83.3	73.2	1011	02	8	1	9	1	06	1	-
134	2200	2/27	09°49.0'S	139°09.0'W	83.5	34	03	85.3	75.0	XX	01	8	3	9	1	01	1	-
135	2345	2/27	09°50.0'S	139°17.5'W	83.0	04	13	83.5	74.5	1010	02	8	2	9	1	01	1	-
136	2245	2/28	09°31.0'S	140°05.5'W	83.2	08	15	83.2	74.0	1010	02	8	1	9	1	02	1	-
137	1900	3/3	08°50.0'S	139°40.0'W	82.5	11	14	82.8	76.0	1013	02	8	2	9	2	07	1	-
138	0600	3/5	05°23.5'S	139°42.5'W	79.8	12	17	80.5	74.9	1010	00	8	1	9	2	08	1	35.25
139	0900	3/5	05°43.5'S	139°46.0'W	79.5	11	14	80.5	74.0	1010	00	X	1	8	2	07	1	35.32
140	1200	3/5	06°04.0'S	139°49.0'W	80.0	10	18	80.0	74.7	1009	00	8	1	8	2	07	1	35.33

Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43 - continued

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
141	1500	3/5	06°24.5'S	139°52.0'W	79.8	10	13	80.3	75.0	1010	02	8	1	9	2	07	1	35.39
142	1800	3/5	06°47.5'S	139°49.0'W	80.2	10	11	80.1	76.0	1012	03	8,0	5	9	2	07	1	-
143	2030	3/5	07°06.5'S	139°48.0'W	81.5	13	07	82.0	75.6	1011	02	6	6	9	2	07	1	35.35
144	2330	3/5	07°21.5'S	139°47.0'W	82.3	06	07	82.3	77.1	1009	-	8	2	9	2	07	1	-
145	0300	3/6	07°48.5'S	139°44.0'W	82.0	10	12	82.4	76.3	1008	02	8,1	3	9	2	10	1	35.63
146	0600	3/6	08°11.0'S	139°46.0'W	81.7	10	16	82.1	75.0	1010	00	8	2	8	2	10	1	35.81
147	0900	3/6	08°30.0'S	139°56.0'W	81.8	12	14	82.0	75.4	1010	00	X	1	8	1	10	1	35.88
148	1800	3/8	09°25.0'S	139°36.0'W	82.0	07	15	82.8	76.3	1011	00	8	2	9	2	09	1	-
149	2030	3/8	09°40.0'S	139°35.5'W	83.3	07	16	83.0	75.8	1013	03	8,6	4	8	3	09	1	35.95
150	2255	3/8	09°58.5'S	139°39.0'W	83.6	06	14	83.3	75.3	1009	01	8	3	8	3	09	1	-
151	0000	3/9	10°05.0'S	139°39.0'W	82.5	10	15	83.2	75.0	1008	01	8	1	8	3	09	1	35.99
152	0300	3/9	10°26.5'S	139°40.0'W	82.4	08	11	82.9	75.3	1009	00	8	1	9	2	14	1	35.99
153	0600	3/9	10°49.0'S	139°41.0'W	82.8	10	15	82.9	75.2	1011	00	8	2	8	1	14	1	36.03
154	0900	3/9	11°10.0'S	139°41.0'W	82.1	10	13	82.4	76.0	1011	00	X	2	8	1	14	1	36.04
155	1200	3/9	11°30.0'S	139°41.5'W	82.6	11	14	81.0	76.2	1010	00	8	4	8	1	14	1	36.04
156	1500	3/9	11°51.0'S	139°42.0'W	82.4	09	16	81.5	77.4	1010	00	8	2	8	2	12	1	36.04
157	1800	3/9	12°09.0'S	139°44.0'W	83.0	08	15	82.8	76.3	1012	50	8,6	6	8	2	14	1	36.04
158	2100	3/9	12°27.0'S	139°45.0'W	83.4	09	14	83.1	76.8	1011	15	1,6,8,9	4	8	2	14	1	36.07
159	0000	3/10	12°44.0'S	139°48.0'W	82.9	09	10	83.8	77.0	1009	02	8	3	8	2	09	1	36.03
160	0300	3/10	13°01.5'S	139°50.5'W	83.5	11	13	83.4	77.0	1010	14	8,1	5	8	1	12	1	36.03
161	0045	3/11	10°37.0'S	139°38.5'W	83.7	10	11	83.1	75.9	1009	01	8	4	8	1	11	1	-
162	0000	3/17	08°34.5'S	140°27.0'W	83.6	08	12	83.5	77.5	1011	01	6,8	3	8	2	06	1	35.91
163	0300	3/17	08°09.0'S	140°43.5'W	82.8	08	14	83.7	77.3	1012	02	8	2	8	3	14	1	-
164	0600	3/17	07°45.0'S	140°59.0'W	82.3	10	12	82.8	76.6	1013	02	8	2	8	2	06	1	-
165	0900	3/17	07°20.5'S	141°14.5'W	82.2	10	16	82.2	76.5	1013	02	8	2	8	2	09	1	-
166	1200	3/17	06°55.4'S	141°30.0'W	82.0	07	14	81.4	76.5	1012	01	8	1	8	2	09	1	-
167	1500	3/17	06°31.0'S	141°45.5'W	81.1	07	14	79.3	74.7	1013	20	8	6	8	3	09	1	-
168	1800	3/17	06°07.0'S	142°00.0'W	81.3	09	17	81.9	76.2	1015	01	8	2	8	2	05	1	-
169	2100	3/17	05°42.0'S	142°14.0'W	82.2	07	13	82.0	75.5	1014	02	8	2	8	2	09	1	-
170	0000	3/18	05°18.0'S	142°29.0'W	82.0	06	11	81.6	75.2	1012	03	4,8	5	8	2	03	1	35.34
171	0300	3/18	04°54.0'S	142°45.0'W	82.1	07	12	83.4	75.5	1012	01	8	2	8	2	04	1	-
172	0600	3/18	04°20.0'S	143°01.0'W	81.1	09	13	81.1	75.0	1014	02	8	2	8	2	05	1	-
173	0900	3/18	04°06.0'S	143°16.5'W	80.8	06	07	81.8	74.8	1014	02	8	2	8	2	05	1	-
174	1200	3/18	03°42.0'S	143°32.5'W	81.0	08	07	79.5	73.9	1012	03	8	3	8	1	05	1	-
175	1500	3/18	03°17.0'S	143°49.0'W	80.8	10	11	79.7	74.6	1013	01	8	2	8	1	05	1	-

Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43 - continued

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
176	1800	3/18	02°52.5'S	144°05.0'W	80.6	11	11	80.4	74.8	1014	02	8	2	8	1	04	1	-
177	2100	3/18	02°28.0'S	144°20.0'W	82.1	12	10	82.5	76.1	1012	02	8,6	2	8	1	09	2	-
178	0600	3/19	02°06.0'S	144°36.0'W	81.1	12	11	81.0	76.0	1013	02	8	2	8	1	05	1	-
179	0900	3/19	01°41.0'S	144°49.0'W	81.0	11	10	81.0	76.3	1013	02	8	2	8	1	07	1	-
180	1200	3/19	01°16.0'S	145°03.0'W	80.6	11	09	80.5	75.9	1012	01	8	2	8	1	07	1	-
181	1500	3/19	00°51.0'S	145°16.0'W	80.3	13	11	79.3	75.6	1013	02	8	2	8	2	05	1	-
182	1800	3/19	00°24.5'S	145°30.0'W	80.5	18	11	83.2	76.8	1015	02	8	2	9	1	10	1	-
183	2100	3/19	00°02.0'S	145°44.0'W	81.3	15	12	82.0	76.5	1013	02	8	2	8	2	07	1	-
184	0000	3/20	00°13.5'N	145°54.5'W	81.3	17	12	85.0	78.1	1010	03	4,8	3	8	2	16	1	35.00
185	0300	3/20	00°40.0'N	146°11.0'W	81.1	13	10	82.2	76.3	1011	03	4,8	5	8	2	12	1	-
186	0600	3/20	01°07.5'N	146°26.0'W	80.7	11	08	81.5	76.7	1013	03	8,4,2	6	7	1	12	1	-
187	0900	3/20	01°35.0'N	146°39.0'W	80.7	11	13	80.7	76.0	1013	03	8,4,2	8	8	2	12	1	-
188	1200	3/20	02°02.0'N	146°52.0'W	81.0	11	12	80.2	76.4	1010	00	8,4,2	7	8	2	12	1	-
189	1500	3/20	02°31.0'N	147°06.0'W	81.0	10	10	80.5	76.4	1011	01	8	6	7	2	12	1	-
190	1800	3/20	02°59.0'N	147°19.5'W	81.1	10	09	82.1	77.0	1013	01	8,4,1	3	9	1	12	1	-
191	2100	3/20	03°28.0'N	147°33.0'W	81.1	10	13	81.7	77.3	1012	03	6,4	6	9	2	04	1	-
192	0000	3/21	03°53.0'N	147°44.5'W	82.5	08	09	81.8	76.4	1010	01	4,6,8	4	8	2	04	1	34.86
193	0300	3/21	04°18.0'N	147°55.0'W	82.7	08	13	82.2	77.0	1010	03	1,8,6	5	8	2	04	1	-
194	0600	3/21	04°43.5'N	148°05.0'W	82.2	08	12	82.0	77.1	1012	02	8,4	3	8	2	04	1	-
195	1200	3/21	05°38.5'N	148°25.0'W	82.0	07	18	80.1	77.0	1010	16	8,4	4	8	2	04	1	-
196	1800	3/21	06°32.5'N	148°44.0'W	81.5	05	15	80.9	77.3	1013	21	6	8	6	3	04	1	-
197	0000	3/22	07°07.0'N	149°00.5'W	82.0	07	20	81.3	76.9	1010	20	8,4	8	6	3	04	1	34.33
198	0600	3/22	07°59.0'N	149°22.0'W	80.9	07	20	81.8	76.6	1012	01	4	6	5	3	04	1	-
199	1200	3/22	08°51.0'N	149°43.0'W	81.0	06	19	80.7	75.7	1010	00	8,4	6	6	3	04	1	-
200	1800	3/22	09°42.5'N	150°05.5'W	79.2	06	20	80.0	76.3	1013	18	6	7	7	4	04	1	-
201	0000	3/23	10°33.5'N	150°30.0'W	80.0	07	21	80.0	74.7	1011	00	4,6,8	7	8	3	04	2	-
202	0300	3/23	10°59.0'N	150°43.0'W	79.5	07	22	79.8	74.0	1011	02	6,8	7	7	3	06	2	-
203	0600	3/23	11°24.0'N	150°56.0'W	78.5	06	23	78.2	74.5	1013	00	6,8	7	6	3	06	3	34.25
204	0900	3/23	11°50.0'N	151°10.0'W	78.0	07	21	78.2	73.8	1014	02	6,8	8	7	4	06	3	34.06
205	1200	3/23	12°16.0'N	151°23.0'W	77.6	07	20	77.3	73.1	1013	00	6,8	6	6	3	06	3	34.13
206	1500	3/23	12°41.0'N	151°37.0'W	77.6	07	24	76.7	72.8	1013	14	8,6	7	6	4	06	2	34.17
207	1800	3/23	13°06.0'N	151°50.0'W	77.4	06	24	77.0	72.0	1015	14	8,6	7	6	4	07	4	34.18
208	2100	3/23	13°31.0'N	152°03.5'W	77.0	06	25	78.2	72.0	1016	01	8,6	3	6	4	06	3	34.24
209	0000	3/24	13°56.0'N	152°16.5'W	77.4	07	20	78.0	72.0	1014	03	8	4	7	4	06	3	34.25
210	0300	3/24	14°20.0'N	152°29.5'W	76.9	07	23	78.2	71.9	1014	02	8,6,4	6	6	4	06	2	34.30

Table 1.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 43 - continued

Ser. No.	Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
211	0600	3/24	14°44.0'N	152°42.0'W	75.5	07	24	76.5	71.6	1017	02	8,6	7	6	4	06	3	34.33
212	0900	3/24	15°09.0'N	152°55.0'W	76.0	06	20	76.3	70.8	1019	01	8,6	3	7	4	07	3	34.38
213	1200	3/24	15°34.0'N	153°05.5'W	76.0	07	15	75.3	69.5	1018	03	8,6	7	7	4	06	3	34.37
214	1500	3/24	15°59.0'N	153°15.0'W	76.4	07	23	75.4	71.0	1017	01	4,8	5	6	4	06	1	34.31
215	1800	3/24	16°24.5'N	153°25.0'W	75.6	07	22	75.8	70.5	1019	01	8,6	2	8	3	06	1	34.30
216	2100	3/24	16°50.0'N	153°35.0'W	75.4	07	20	77.0	68.2	1020	03	8,6	6	8	3	07	1	34.42
217	0600	3/25	17°05.5'N	154°00.0'W	76.2	08	20	76.3	70.1	1020	02	8,6	7	6	3	06	2	34.35
218	0900	3/25	17°22.0'N	154°23.0'W	75.2	07	23	74.3	69.7	1024	25	6	8	5	3	07	2	34.41
219	1200	3/25	17°38.0'N	154°45.5'W	75.1	08	23	74.8	69.9	1020	01	6,8	2	7	3	06	2	34.44
220	1500	3/25	17°54.0'N	155°07.0'W	75.0	08	20	74.7	70.0	1019	01	8	1	7	3	08	1	34.54
221	1800	3/25	18°11.0'N	155°27.5'W	73.9	06	24	74.8	70.5	1021	02	8	2	8	3	07	1	34.62
222	2100	3/25	18°29.0'N	155°45.0'W	74.2	06	22	73.5	70.8	1021	02	8	3	6	4	07	3	34.67
223	0000	3/26	18°48.0'N	156°00.0'W	76.1	08	20	75.1	71.0	1019	01	8	2	7	3	07	3	34.48
224	0300	3/26	19°09.0'N	156°13.0'W	77.5	06	08	76.9	70.8	1018	03	8	6	7	2	14	1	34.47

Table 2.--Environmental observations, Cape Falcon

Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
					Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
1600	2/6	22°08'N	114°12'W	73.4	02	10	69.1	61.5	1016	03	4,1	5	8	2	02	1	-
2300	2/6	21°06'N	115°10'W	74.4	36	10	71.6	64.4	1015	02	4,1	4	8	2	36	1	34.19
0400	2/7	20°37'N	115°39'W	73.6	02	08	69.8	61.5	1016	02	X	4	8	2	XX	X	-
1600	2/7	19°14'N	116°43'W	73.9	06	08	73.2	66.3	1017	03	4,1	6	8	1	31	1	-
2300	2/7	18°28'N	117°14'W	75.7	06	11	74.8	69.0	1014	02	4,8	7	8	2	34	1	33.96
0400	2/8	17°51'N	117°36'W	76.5	06	12	74.5	70.0	1015	02	X	5	8	2	XX	X	-
1600	2/8	16°22'N	118°28'W	77.9	09	16	77.3	72.0	1012	03	8,5	7	8	3	31	1	-
2300	2/8	15°29'N	119°05'W	78.7	09	12	79.7	74.0	1011	14	8,5	7	8	3	32	1	33.27
0400	2/9	14°46'N	119°24'W	78.7	09	12	79.2	74.3	1012	02	X	7	7	3	XX	X	-
1600	2/9	13°10'N	120°20'W	78.5	05	20	79.9	75.0	1012	01	8,4	3	8	3	05	1	-
2300	2/9	12°34'N	120°48'W	78.5	07	20	79.2	75.7	1010	15	8,4	6	7	3	07	1	33.38
0400	2/10	11°55'N	121°08'W	78.5	07	22	79.0	75.4	1011	02	8	6	7	3	XX	X	-
1600	2/10	10°25'N	121°55'W	79.5	07	22	79.8	76.0	1010	02	8,4	6	7	3	07	1	-
2300	2/10	09°41'N	122°41'W	79.8	07	22	81.0	77.0	1007	02	8	6	7	3	07	1	34.24
0400	2/11	09°03'N	122°56'W	80.0	07	22	79.0	76.4	1009	20	8	6	6	3	XX	X	-
1600	2/11	07°28'N	123°41'W	80.4	07	18	76.0	75.4	1009	51	8	9	6	3	07	1	-
2300	2/11	06°45'N	124°27'W	80.6	16	12	77.0	75.4	1007	50	8	8	7	3	07	1	34.41
0400	2/12	06°09'N	124°43'W	80.0	16	18	80.5	76.0	1009	15	8	7	7	3	XX	X	-
1600	2/12	04°34'N	125°26'W	80.0	14	20	80.8	76.1	1010	01	8,4	6	8	3	14	1	-
2300	2/12	03°47'N	125°18'W	80.0	14	20	80.2	75.7	1007	02	8,4	5	8	3	14	1	34.53
0400	2/13	03°13'N	125°38'W	79.9	14	22	79.7	75.3	1008	02	8	5	8	3	XX	X	-
1600	2/13	01°45'N	126°25'W	79.0	13	18	77.3	74.8	1010	50	8	7	7	3	13	1	-
2300	2/13	01°00'N	127°06'W	78.4	15	16	78.7	75.1	1007	01	8	1	8	3	15	1	34.77
0400	2/14	00°41'N	127°16'W	77.5	15	14	78.2	75.7	1008	02	8	1	7	3	XX	X	-
1600	2/14	01°10'S	128°10'W	77.8	15	18	79.0	75.3	1010	03	6	7	8	3	15	1	-
2300	2/14	01°56'S	129°02'W	79.0	13	16	81.0	76.0	1008	02	8	6	8	3	13	1	35.26
0500	2/15	02°50'S	129°20'W	78.8	13	18	79.5	75.0	1010	01	X	1	7	3	XX	X	-
1700	2/15	04°53'S	130°18'W	79.0	14	16	79.7	75.2	1012	03	8	6	8	3	14	1	-
0000	2/16	05°13'S	131°16'W	80.2	13	14	81.1	75.7	1010	02	8	7	8	3	13	1	35.42
0500	2/16	05°29'S	131°59'W	79.7	13	12	79.7	75.0	1012	01	8	2	8	2	13	1	-
1700	2/16	06°07'S	133°38'W	80.0	13	12	82.0	77.0	1014	02	8,1	2	8	2	13	1	-
0000	2/17	06°24'S	134°35'W	81.2	09	08	85.0	77.2	1012	02	8,1	2	8	2	09	1	35.34
0500	2/17	06°45'S	135°18'W	80.8	09	10	81.7	76.2	1013	01	X	1	8	2	09	1	-
1700	2/17	07°25'S	137°07'W	80.6	36	12	80.0	75.0	1014	02	8	1	8	2	09	1	-
0000	2/18	07°28'S	138°02'W	82.4	36	10	83.9	76.8	1012	02	8	1	8	2	09	1	35.74

Table 2.--Environmental observations, Cape Falcon - continued

Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
					Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
0500	2/18	07°40'S	138°23'W	81.9	36	10	81.1	76.3	1014	03	8	5	8	2	09	1	-
0330	2/19	07°54'S	139°58'W	82.8	03	12	81.5	77.0	1012	02	8	6	8	3	03	1	35.97
1830	2/19	07°55'S	140°05'W	82.4	03	18	83.0	77.7	1014	02	8,1	4	8	3	03	1	-
1525	2/20	07°56'S	140°36'W	82.0	04	12	81.0	74.5	1012	14	8,1	6	8	2	04	1	35.86
1700	2/21	08°31'S	140°12'W	82.3	08	12	81.0	75.0	1012	01	8,4	2	8	2	08	1	-
0000	2/22	08°48'S	140°00'W	82.4	14	14	74.0	73.5	1009	61	0	9	5	3	09	1	35.72
0100	2/23	09°50'S	140°08'W	82.8	05	04	81.5	75.8	1009	01	8,1	6	8	1	05	1	35.94
0700	2/23	10°35'S	140°18'W	82.8	05	08	81.1	75.7	1012	02	8,1	6	8	1	05	1	-
1800	2/23	12°11'S	140°34'W	81.9	31	12	76.5	74.2	1012	21	8,5	7	6	2	06	1	-
0100	2/24	13°12'S	140°48'W	83.0	05	12	81.9	76.0	1010	01	8	5	8	2	06	1	35.66
1800	2/24	14°10'S	141°17'W	82.7	09	12	82.8	76.3	1014	02	1,8	5	8	2	09	1	-
0130	2/25	14°03'S	141°31'W	83.0	09	12	82.1	77.0	1010	01	8,1	2	8	2	09	1	35.67
0600	2/25	14°39'S	141°43'W	82.9	09	08	82.0	76.5	1013	02	8,1	2	8	2	09	1	-
1800	2/25	15°53'S	142°23'W	83.3	09	10	83.0	77.3	1015	02	8	3	8	2	09	1	-
0130	2/26	16°18'S	143°14'W	83.5	15	05	83.8	76.7	1012	01	8	2	8	1	00	0	35.83
0715	2/26	16°30'S	143°17'W	82.9	12	12	82.2	76.8	1013	02	X	2	8	2	XX	X	-
1800	2/26	16°46'S	143°25'W	82.7	10	09	85.4	76.8	1014	02	8	2	8	2	10	1	-
0230	2/27	16°58'S	144°35'W	83.2	09	10	83.0	76.0	1012	02	8	2	8	2	09	1	35.98
0600	2/27	17°03'S	145°07'W	82.9	09	12	82.5	76.6	1012	02	8	2	8	2	09	1	-
1800	2/27	17°12'S	146°55'W	83.3	12	10	82.9	77.3	1014	02	8	2	8	2	12	1	-
0100	2/28	17°17'S	147°52'W	83.0	09	12	86.4	77.9	1012	02	8	2	8	2	12	1	35.84
0600	2/28	17°22'S	148°34'W	83.0	09	10	83.2	77.0	1014	02	8	2	8	2	13	1	-
0030	3/2	16°54'S	148°51'W	84.0	09	12	83.6	77.8	1012	02	8,1	3	8	2	10	1	35.83
1800	3/2	15°22'S	146°55'W	83.6	09	12	84.4	77.6	1014	01	8	2	8	2	09	1	-
0100	3/3	14°53'S	146°28'W	84.5	08	14	84.0	77.8	1010	03	8	3	8	3	04	1	35.95
0600	3/3	14°14'S	145°55'W	83.7	08	16	83.9	77.7	1012	01	8	2	8	3	XX	X	-
1800	3/3	13°10'S	144°49'W	83.3	08	22	83.9	76.7	1014	02	8	2	8	3	06	1	-
0100	3/4	12°31'S	144°10'W	84.0	08	18	83.4	76.9	1010	02	8	2	8	3	06	1	35.52
0600	3/4	12°02'S	143°41'W	83.3	08	18	83.3	76.9	1012	02	8	2	8	3	XX	X	-
1800	3/4	10°45'S	142°39'W	83.0	09	18	83.9	77.9	1012	02	8	2	8	3	09	1	-
0100	3/5	10°10'S	142°05'W	83.4	09	20	83.3	77.4	1008	14	8	2	8	3	09	1	35.86
0600	3/5	09°42'S	141°37'W	83.1	09	18	83.1	77.6	1010	02	8	2	8	3	XX	X	-
1900	3/5	08°38'S	140°36'W	82.5	09	14	84.0	76.1	1012	02	8	2	8	3	09	1	-
0100	3/6	08°17'S	140°36'W	83.1	09	12	86.1	78.5	1009	03	8	3	8	3	09	1	35.86
1800	3/6	08°01'S	140°33'W	82.1	09	20	82.9	75.8	1012	01	8	1	8	3	09	1	-

Table 2.--Environmental observations, Cape Falcon - continued

Time, GCT	Date, 1959	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰
					Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.	
0100	3/7	07°57'S	139°57'W	82.8	09	14	82.1	75.3	1009	03	8	2	8	3	09	1	35.83
0530	3/7	07°54'S	139°58'W	82.5	09	10	81.8	75.9	1010	03	6,8	5	8	2	09	1	-
1830	3/7	07°57'S	139°52'W	82.4	09	14	83.1	76.9	1012	01	8	3	8	3	09	1	-
0630	3/8	08°22'S	139°40'W	82.3	09	14	82.9	76.3	1010	02	8	1	8	3	XX	X	-
1800	3/8	08°31'S	139°53'W	82.6	09	16	83.3	76.0	1011	03	8	4	8	3	09	1	-
1800	3/10	08°49'S	140°15'W	83.0	09	06	81.1	75.0	1012	20	8	5	8	1	09	1	-
0100	3/12	08°58'S	139°47'W	83.4	09	12	83.2	75.0	1009	14	8	2	8	3	09	1	36.03
1900	3/12	08°58'S	139°24'W	82.9	09	12	83.7	77.0	1013	03	8	4	8	3	09	1	-
0100	3/13	08°38'S	139°21'W	83.7	07	10	83.3	75.6	1010	01	8	2	8	2	07	1	35.96
0630	3/13	08°16'S	139°33'W	83.2	09	10	80.0	77.4	1012	51	8	3	6	2	09	1	-
1810	3/13	08°11'S	139°38'W	82.5	09	10	83.3	76.9	1013	14	8	3	8	2	09	1	-
0115	3/14	07°55'S	140°00'W	83.1	07	12	83.2	77.1	1010	02	8	3	8	2	07	1	35.74
0800	3/14	07°56'S	139°57'W	82.2	07	14	82.2	76.7	1013	02	8	3	8	3	07	1	-
1800	3/14	08°05'S	140°00'W	83.0	09	14	83.1	77.6	1014	02	8	3	8	3	09	1	-
0300	3/15	08°59'S	140°10'W	83.2	09	18	83.9	76.9	1011	01	8	2	8	3	09	1	36.0[illegible]

Table 3.--Weather observations, Charles H. Gilbert cruise 43[1/]

Date, 1959	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
1/10	18.2°N	155.4°W	0000	98	11	06	60	5	1011.5	X	XX	76.8	73.2	76.5	8	8	7	5	X	X	12	2	2
1/10	17.5°N	155.0°W	0600	98	07	09	00	6	1013.5	2	2.0	77.1	74.5	77.0	2	2	4	5	0	0	12	2	2
1/10	16.7°N	154.5°W	1200	98	09	08	00	0	1011.5	7	1.5	77.5	74.5	77.6	X	X	X	X	X	X	12	2	2
1/10	16.0°N	154.0°W	1800	98	09	11	03	1	1012.9	2	2.0	78.0	74.5	77.5	7	5	4	5	0	5	09	6	3
1/11	15.2°N	153.6°W	0000	99	02	05	02	1	1011.5	7	3.0	78.6	74.4	78.6	2	2	4	5	0	5	09	6	3
1/11	14.3°N	153.2°W	0600	98	08	13	00	0	1012.9	2	2.0	78.1	74.8	77.8	X	X	X	X	X	X	09	3	3
1/11	13.8°N	152.9°W	1200	98	07	14	00	0	1010.5	7	3.0	78.6	74.1	77.6	2	1	1	4	0	1	11	3	3
1/11	13.0°N	152.2°W	1800	98	06	14	02	0	1012.2	2	3.0	80.5	75.0	77.5	2	1	3	5	0	1	09	2	3
1/12	12.3°N	152.0°W	0000	98	06	16	02	0	1008.5	7	3.0	79.5	75.0	77.9	2	1	4	5	0	1	12	2	4
1/12	11.5°N	151.5°W	0600	98	07	17	02	0	1010.2	2	2.0	78.7	75.5	78.5	2	1	4	5	0	1	11	2	4
1/12	10.9°N	151.1°W	1200	98	07	17	02	0	1008.5	7	2.0	78.9	75.6	78.1	2	2	4	5	0	0	11	2	4
1/12	10.3°N	150.7°W	1800	97	08	17	03	1	1009.8	2	2.0	80.5	77.0	78.1	6	6	1	5	0	0	09	2	4
1/13	09.5°N	150.6°W	0000	98	08	18	03	2	1005.1	7	3.0	80.3	77.0	79.3	8	8	1	4	X	X	09	2	4
1/13	08.9°N	150.2°W	0600	98	10	19	00	1	1008.1	2	3.0	81.0	77.6	80.5	X	X	X	X	X	X	09	2	4
1/13	07.9°N	149.7°W	1200	98	13	14	00	1	1006.8	7	1.0	81.0	77.8	81.4	X	X	X	X	X	X	09	2	4
1/13	07.5°N	149.5°W	1800	96	09	22	21	6	1009.1	2	3.0	78.2	77.5	82.2	8	8	7	3	X	X	10	2	4
1/14	06.5°N	149.0°W	0000	97	14	16	21	6	1005.8	7	2.0	82.0	77.0	80.3	8	8	7	3	X	X	10	2	4
1/14	06.0°N	147.8°W	0600	97	14	16	01	6	1007.8	2	2.0	81.1	77.0	81.4	3	2	1	3	0	1	15	2	4
1/14	05.5°N	147.4°W	1200	97	14	16	03	0	1007.5	7	1.0	80.5	75.8	80.8	3	3	1	3	0	0	15	2	4
1/14	04.8°N	147.1°W	1800	97	13	17	02	0	1009.8	2	2.0	83.8	76.8	79.6	3	3	1	4	0	0	13	2	4
1/15	04.2°N	146.5°W	0000	98	11	16	02	0	1007.8	7	3.0	81.0	75.2	80.0	4	3	1	4	0	8	12	2	4
1/15	03.6°N	146.1°W	0600	98	10	13	01	0	1010.8	2	3.0	80.9	75.1	79.5	2	1	1	3	0	8	12	2	3
1/15	02.8°N	145.8°W	1200	98	11	10	03	1	1009.5	7	2.0	81.2	75.0	79.5	8	8	4	3	X	X	12	2	3
1/15	02.2°N	145.5°W	1800	98	12	08	01	0	1012.2	2	2.0	81.8	76.0	78.9	2	2	2	4	0	0	12	2	3
1/16	01.6°N	144.9°W	0000	98	18	04	02	0	1008.1	6	2.5	80.0	73.8	80.1	2	2	2	4	0	1	12	2	2
1/16	00.2°N	143.3°W	0600	98	18	03	01	0	1010.8	2	2.0	79.7	73.1	79.7	1	1	2	4	0	0	12	2	2
1/16	00.1°N	144.1°W	1200	98	19	03	01	0	1008.8	7	1.5	79.1	73.3	78.6	1	1	2	4	0	0	12	2	2
1/16	00.7°S	144.1°W	1800	99	19	08	01	0	1010.2	1	1.0	78.4	74.0	77.2	0	0	0	9	0	0	12	2	1
1/17	01.9°S	144.0°W	0000	99	19	08	02	0	1006.1	7	2.0	80.5	74.0	78.9	0	0	0	9	0	0	12	2	1
1/17	02.0°S	143.6°W	0600	99	11	05	02	0	1009.1	2	2.0	80.5	73.1	81.0	0	0	0	9	0	0	12	2	1

[1/] All columns in USWB 1210-F are not included here. Those deleted are:

Column	2	Day of week	Column	23	Course of ship
"	3	Octant	"	24	Speed of ship
"	13	Barometer as read	"	31	Diff. sea-air, °F.
"	14	Barometer as corrected	"	32	Dew point, °F.
"	17	Air temperature, °F.			

Table 3.--Weather observations, Charles H. Gilbert cruise 43 - continued

Date, 1959	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
1/17	03.4°S	143.0°W	1200	99	07	06	03	0	1007.1	7	1.5	78.8	73.0	79.4	1	1	2	4	0	0	12	2	1
1/17	03.5°S	142.5°W	1800	99	07	05	03	0	1010.2	1	3.0	82.0	74.7	80.2	3	3	2	4	0	0	12	2	1
1/18	05.7°S	142.0°W	0000	98	06	09	02	0	1007.5	7	2.0	80.6	75.0	81.1	3	3	2	4	0	0	12	2	2
1/18	05.1°S	141.6°W	0600	98	04	15	01	0	1010.5	2	2.0	81.9	75.8	80.0	2	2	2	4	0	0	12	2	2
1/18	06.0°S	141.4°W	1200	98	05	15	01	0	1009.5	6	1.0	81.0	75.0	80.3	2	2	2	4	0	0	12	2	2
1/18	06.8°S	141.2°W	1800	98	06	13	03	1	1012.5	1	2.0	82.7	75.5	80.3	5	1	2	4	0	4	12	2	2
1/19	08.4°S	140.8°W	0000	98	08	12	02	0	1009.5	7	2.0	81.2	75.0	81.1	4	2	2	5	0	1	12	2	2
1/19	08.6°S	140.4°W	0600	98	07	16	03	1	1012.2	2	2.0	82.1	74.9	81.8	7	0	0	0	3	0	12	2	2
1/26	10.6°S	140.2°W	1800	98	02	22	20	6	1011.2	1	2.0	82.8	77.2	82.5	8	8	4	3	X	X	02	2	4
1/27	11.7°S	140.8°W	0000	97	01	20	02	5	1008.5	7	1.5	82.5	77.0	81.9	8	3	4	3	6	0	02	2	4
1/27	12.4°S	140.9°W	0600	96	02	21	21	6	1010.8	2	2.5	82.2	78.3	82.1	9	9	X	X	X	X	02	2	4
1/27	13.3°S	141.0°W	1200	96	02	21	00	6	1008.8	7	1.5	81.9	76.9	82.0	8	8	4	3	X	X	01	2	3
1/27	13.7°S	141.7°W	1800	97	07	15	02	6	1011.2	2	1.5	79.8	76.0	82.0	8	8	4	3	X	X	02	2	3
1/28	14.5°S	141.3°W	0000	97	07	09	01	2	1009.5	6	1.0	82.4	77.9	82.5	7	7	4	3	0	0	04	2	2
1/28	15.6°S	141.1°W	0600	97	08	12	02	2	1012.5	2	2.5	81.9	77.3	82.1	8	8	X	X	X	X	04	2	2
1/28	15.6°S	141.2°W	1200	97	07	14	01	2	1011.2	7	2.0	80.6	76.5	82.0	6	6	0	X	6	0	06	2	2
1/28	15.6°S	141.2°W	1800	98	07	18	03	1	1013.2	2	1.4	84.5	78.2	82.3	6	2	1	4	1	0	02	2	2
1/29	15.9°S	141.5°W	0000	98	10	09	02	2	1009.8	7	2.0	83.0	78.0	82.3	6	2	1	4	6	0	28	2	2
1/29	16.4°S	143.0°W	1800	99	08	14	02	2	1011.5	1	1.0	84.5	77.5	82.2	6	2	2	4	2	0	30	2	2
1/30	15.9°S	142.4°W	0000	99	05	14	15	1	1010.2	7	1.5	81.5	77.0	82.0	6	2	2	4	6	1	05	2	2
1/30	16.3°S	144.2°W	1800	99	07	09	02	2	1011.9	1	1.2	82.7	75.0	81.8	6	2	2	4	1	0	03	2	1
1/31	16.0°S	144.9°W	0000	99	09	11	02	2	1010.5	7	1.0	84.5	76.1	83.5	6	2	2	4	1	0	10	2	1
1/31	15.7°S	145.2°W	1800	99	07	04	01	1	1011.5	2	2.0	83.2	76.2	83.0	4	4	2	4	0	0	00	2	0
2/1	15.8°S	145.6°W	0000	99	07	03	03	0	1009.8	7	2.0	83.5	75.6	85.3	3	3	2	4	0	0	01	1	1
2/1	15.8°S	145.9°W	1800	99	00	00	01	0	1010.8	3	0.7	82.0	75.0	83.5	2	2	2	4	0	0	03	1	1
2/2	15.6°S	146.4°W	0000	99	29	06	02	0	1008.5	7	2.0	83.3	72.6	85.6	2	2	2	4	0	0	04	1	1
2/2	15.5°S	146.6°W	1800	99	00	00	02	0	1009.5	1	1.8	82.7	76.3	83.9	3	2	2	4	3	0	04	1	1
2/3	15.2°S	147.3°W	0000	99	04	08	16	0	1007.5	7	1.5	83.0	75.0	84.1	3	3	2	4	7	0	34	1	1
2/3	15.0°S	147.9°W	1800	98	03	13	03	2	1009.5	1	1.7	83.2	75.3	84.3	6	6	2	3	0	0	00	1	1
2/16	15.7°S	150.3°W	0000	99	25	13	14	2	1010.2	7	2.0	83.7	78.3	83.4	6	6	9	5	0	0	35	1	1
2/16	15.5°S	150.1°W	0600	98	32	08	01	1	1011.9	2	2.0	83.0	77.7	83.2	3	3	1	4	0	0	32	1	1
2/16	15.1°S	149.6°W	1200	98	32	08	01	0	1010.8	7	1.5	82.4	76.1	83.4	1	1	1	4	0	0	32	1	1
2/17	14.0°S	148.0°W	0000	98	32	10	03	1	1009.8	7	2.0	84.0	78.0	84.0	7	4	2	4	5	0	32	1	1
2/17	13.2°S	147.2°W	0600	98	33	13	01	1	1011.9	2	1.5	83.0	78.4	83.5	3	3	1	4	0	0	30	1	1
2/17	13.1°S	145.6°W	1200	98	32	17	03	1	1009.8	7	1.5	82.1	78.8	83.0	5	5	1	4	0	0	30	1	2
2/17	12.3°S	145.4°W	1800	98	32	22	03	1	1012.2	2	2.0	82.8	78.4	81.9	6	6	2	4	0	0	30	1	2
2/18	12.1°S	145.1°W	0000	98	32	25	03	2	1009.8	5	1.0	83.0	77.5	82.2	8	8	8	4	X	X	36	1	5
2/18	11.5°S	142.1°W	0600	97	32	18	50	2	1012.5	1	2.0	82.1	77.9	80.0	8	8	8	4	X	X	36	1	4
2/18	11.1°S	143.5°W	1200	97	34	21	02	5	1010.2	7	2.0	82.0	77.0	81.8	8	8	8	4	X	X	36	1	4
2/18	10.8°S	142.8°W	1800	98	34	23	15	8	1013.2	1	2.5	82.5	76.2	81.0	8	8	8	4	X	X	36	1	5

Table 3.--Weather observations, Charles H. Gilbert cruise 43 - continued

Date, 1959	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
2/19	10.3°S	142.0°W	0000	98	36	15	01	2	1010.8	7	1.5	83.2	76.8	82.1	7	7	8	4	0	0	36	1	3
2/19	09.7°S	141.2°W	0600	98	01	13	03	2	1012.9	2	2.5	82.5	77.1	82.2	8	8	8	4	X	X	00	1	3
2/19	09.2°S	140.8°W	1200	98	03	13	02	2	1011.5	6	2.0	79.6	77.0	82.1	5	3	1	4	1	0	00	1	2
2/23	08.6°S	140.6°W	0000	98	07	14	01	1	1009.1	6	2.0	81.9	75.4	82.3	5	5	8	4	0	0	03	1	2
2/23	08.0°S	139.8°W	1800	99	06	13	02	0	1012.9	2	2.0	82.0	74.6	81.6	2	1	2	6	5	0	03	1	2
2/24	08.4°S	139.4°W	1800	99	08	14	02	0	1013.2	2	2.5	81.8	73.2	82.4	1	1	2	6	0	0	10	1	2
2/25	08.7°S	139.3°W	0000	99	07	09	02	0	1010.2	6	1.5	85.0	74.5	83.0	1	1	2	6	0	0	09	1	2
2/25	09.2°S	139.2°W	1800	97	13	10	14	2	1012.5	2	2.0	78.9	75.5	82.1	7	5	7	4	0	2	15	1	2
2/26	09.8°S	138.8°W	0000	98	07	10	14	2	1009.1	7	2.5	82.6	76.4	82.6	4	3	2	5	0	2	10	1	2
2/26	10.1°S	138.8°W	1800	99	06	12	01	0	1012.9	2	1.5	83.6	73.8	82.0	1	1	2	6	0	0	10	1	2
2/27	10.6°S	138.7°W	0000	99	06	10	03	0	1009.8	7	2.0	83.4	75.5	82.9	2	2	2	6	0	0	10	1	2
2/27	10.2°S	139.0°W	1800	99	08	13	03	0	1013.2	1	2.0	82.2	75.3	82.7	3	3	2	5	0	0	08	1	2
2/28	09.8°S	139.2°W	0000	99	04	13	02	0	1010.2	6	2.0	83.5	74.5	83.0	2	2	2	5	0	0	06	1	2
2/28	09.8°S	139.4°W	1800	99	07	14	02	0	1013.9	2	2.0	82.5	74.2	82.5	1	1	2	6	0	0	02	1	2
3/1	09.5°S	140.2°W	0000	99	06	03	02	0	1009.1	7	3.0	84.2	74.0	83.3	1	1	2	6	0	0	02	1	2
3/3	08.9°S	139.7°W	1800	99	11	14	01	0	1013.5	1	1.0	83.4	73.4	82.5	2	2	2	4	0	0	06	2	1
3/4	08.9°S	139.7°W	0000	99	11	16	15	0	1009.5	6	2.5	82.0	76.4	82.3	3	2	2	4	7	0	05	2	1
3/4	06.8°S	139.7°W	1200	98	09	16	00	0	1009.5	6	1.5	80.6	75.4	80.6	2	2	2	4	0	0	08	2	1
3/4	06.2°S	139.7°W	1800	99	09	16	01	0	1011.5	X	XX	81.0	75.3	80.5	3	3	4	4	0	0	08	2	2
3/5	05.4°S	139.7°W	0000	99	11	12	01	0	1007.5	7	2.5	81.0	74.7	80.6	1	0	0	9	1	0	08	2	2
3/5	05.5°S	139.7°W	0600	99	12	17	00	0	1010.5	2	2.5	80.5	74.9	79.8	1	1	1	4	0	0	08	2	2
3/5	06.0°S	139.7°W	1200	98	10	18	00	0	1009.1	6	1.5	80.0	74.7	80.0	1	1	1	4	0	0	07	2	2
3/5	06.8°S	139.8°W	1800	98	10	11	03	1	1011.9	1	1.5	80.1	76.0	80.2	5	4	8	4	4	0	07	2	2
3/6	07.5°S	139.7°W	0000	99	09	11	01	1	1008.1	7	3.0	83.0	77.0	82.5	3	3	2	4	0	0	07	2	2
3/6	08.2°S	139.8°W	0600	98	10	16	00	0	1010.5	1	2.0	82.1	75.0	81.7	2	2	1	4	0	0	10	2	1
3/8	09.7°S	139.7°W	1800	99	07	15	00	0	1010.8	2	1.5	82.8	76.3	82.0	2	2	2	4	0	0	10	2	1
3/9	10.1°S	139.6°W	0000	99	10	15	01	0	1008.1	7	2.0	83.2	75.0	82.5	1	1	2	4	0	0	09	2	1
3/9	10.8°S	139.6°W	0600	98	10	15	00	0	1010.8	2	2.0	82.9	75.2	82.8	2	2	1	4	0	0	14	1	1
3/9	11.3°S	139.7°W	1200	98	11	14	00	0	1009.5	6	1.5	81.0	76.2	82.6	4	4	1	4	0	0	14	1	1
3/9	12.2°S	139.7°W	1800	98	08	15	50	1	1011.5	1	2.0	82.8	76.3	83.0	6	5	2	4	4	0	14	1	1
3/10	12.8°S	139.7°W	0000	99	09	10	02	5	1009.1	7	2.0	83.8	77.0	82.9	3	3	2	4	0	0	09	2	2
3/10	12.8°S	139.8°W	0600	98	08	11	01	0	1011.5	2	2.0	83.1	76.4	83.0	2	2	2	4	0	0	09	2	1
3/10	12.1°S	139.7°W	1200	98	08	11	02	0	1009.8	7	2.0	82.0	74.3	82.5	2	2	2	4	0	0	07	2	1
3/10	10.3°S	139.7°W	1800	99	10	07	02	0	1012.2	2	2.0	82.6	74.9	82.8	1	1	3	5	0	0	06	3	1
3/11	10.0°S	139.4°W	0600	99	09	16	00	0	1010.8	2	2.0	82.9	76.0	83.3	1	1	2	4	0	0	07	2	1
3/17	08.6°S	140.6°W	0000	98	08	12	01	1	1011.2	7	2.0	83.5	77.5	83.6	4	4	4	4	0	0	06	2	1
3/17	07.6°S	141.0°W	0600	98	10	12	02	0	1013.2	2	2.0	82.8	76.6	82.3	2	2	2	4	0	0	06	2	1
3/17	06.8°S	141.4°W	1200	98	07	14	01	0	1012.2	6	1.5	81.4	76.5	82.0	1	2	2	4	0	0	09	2	1
3/17	06.1°S	142.0°W	1800	98	09	17	01	0	1015.2	2	2.0	81.9	76.2	81.3	1	1	2	4	0	0	05	2	1
3/18	05.2°S	142.4°W	0000	98	06	11	03	0	1011.9	7	3.0	81.6	75.2	82.0	4	3	2	4	1	0	03	2	1

Table 3.--Weather observations, Charles H. Gilbert cruise 43 - continued

Date, 1959	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
3/18	04.2°S	143.3°W	0600	98	09	13	02	0	1013.5	2	2.5	81.1	75.0	81.1	2	2	2	4	0	0	05	2	1
3/18	03.7°S	143.7°W	1200	98	08	07	03	0	1012.5	7	1.5	79.5	73.9	81.0	3	3	2	4	0	0	05	1	1
3/18	03.0°S	144.0°W	1800	98	11	11	02	0	1014.2	1	1.5	80.4	74.8	80.6	2	2	2	4	0	0	04	1	1
3/19	02.4°S	144.5°W	0000	98	16	11	03	0	1010.2	7	2.5	81.2	75.2	81.9	4	4	2	4	0	0	16	2	1
3/19	02.1°S	144.6°W	0600	98	12	11	02	0	1013.2	2	3.0	81.0	76.0	81.1	2	2	2	4	0	0	05	1	1
3/19	01.5°S	144.7°W	1200	98	11	09	01	0	1011.9	7	2.0	80.5	75.9	80.6	2	2	2	4	0	0	05	1	1
3/19	00.5°S	145.5°W	1800	99	18	11	02	0	1014.6	1	2.0	83.2	76.8	80.5	2	2	2	4	0	0	10	1	1
3/20	00.3°N	145.9°W	0000	98	17	12	03	0	1010.5	7	2.5	85.0	78.1	81.3	3	2	2	4	5	0	16	2	1
3/20	01.2°N	146.4°W	0600	97	11	08	03	1	1013.2	2	2.5	81.5	76.7	80.7	7	3	2	4	5	1	12	1	1
3/20	02.2°N	146.8°W	1200	97	11	12	00	2	1010.5	7	2.0	80.2	76.4	81.0	7	2	2	4	5	0	12	2	1
3/20	03.0°N	147.3°W	1800	99	10	09	01	1	1012.9	2	2.0	82.1	77.0	81.1	3	2	2	4	4	1	12	1	1
3/21	03.8°N	147.8°W	0000	98	08	09	01	1	1010.2	7	2.0	81.8	76.4	82.5	4	2	4	4	5	0	04	1	1
3/21	04.9°N	148.1°W	0600	98	08	12	02	1	1012.5	2	2.0	82.0	77.1	82.2	3	2	2	5	3	0	04	1	1
3/21	05.6°N	148.5°W	1200	98	07	18	16	1	1010.2	2	2.0	80.1	77.0	82.0	4	2	2	4	5	0	04	2	2
3/21	06.6°N	148.9°W	1800	97	05	15	63	6	1013.2	2	2.5	80.9	77.3	81.5	8	8	4	3	X	X	04	2	2
3/22	07.3°N	149.3°W	0000	97	08	23	14	6	1009.5	8	3.5	81.3	76.9	82.0	8	8	4	3	X	X	04	2	3
3/22	08.1°N	149.2°W	0600	96	07	20	01	6	1011.9	2	1.0	81.8	76.6	80.9	7	X	X	X	3	X	04	2	3
3/22	08.9°N	149.6°W	1200	96	06	19	00	2	1010.5	7	2.0	80.7	75.7	81.0	6	5	2	4	3	0	04	2	3
3/22	09.7°N	150.1°W	1800	98	06	20	21	2	1013.2	2	2.0	80.0	76.3	79.2	6	6	4	4	0	0	04	2	3
3/23	10.6°N	150.5°W	0000	98	07	21	00	2	1010.8	7	2.5	80.0	74.7	80.0	7	4	4	4	5	0	04	2	3
3/23	12.5°N	150.8°W	0600	96	06	23	00	2	1013.2	2	2.0	78.2	74.5	78.5	7	6	4	4	0	0	06	2	3
3/23	12.3°N	151.1°W	1200	96	07	20	00	2	1012.9	7	2.0	77.3	73.1	77.6	6	6	4	4	0	0	06	2	3
3/23	13.1°N	151.8°W	1800	97	06	24	14	5	1015.2	2	3.0	77.0	72.0	77.4	7	7	7	4	0	0	06	2	3
3/24	14.0°N	152.3°W	0000	98	07	20	03	1	1013.9	7	2.0	78.0	72.0	77.4	4	4	1	4	0	0	06	2	3
3/24	14.7°N	152.6°W	0600	96	07	24	02	2	1016.9	2	3.0	76.5	71.6	75.5	7	7	2	4	0	0	06	2	3
3/24	15.5°N	153.1°W	1200	97	07	15	03	1	1017.6	7	1.5	75.3	69.5	76.0	7	7	2	4	0	0	06	2	3
3/24	16.5°N	153.4°W	1800	98	07	22	01	0	1019.3	2	2.0	75.8	70.5	75.6	2	2	2	4	0	0	06	2	3
3/25	17.0°N	153.7°W	0000	98	07	22	02	2	1018.6	7	1.5	74.8	69.9	76.2	6	6	4	4	0	0	07	2	3
3/25	17.2°N	153.9°W	0600	97	08	20	02	2	1019.6	3	2.0	76.3	70.1	76.2	7	7	2	4	0	0	06	2	3
3/25	17.7°N	154.5°W	1200	98	08	23	01	1	1019.6	7	1.5	74.8	69.9	75.1	2	2	2	4	0	0	06	2	3
3/25	18.2°N	155.4°W	1800	98	06	24	02	0	1020.7	2	2.0	74.8	70.5	73.9	2	2	2	4	0	0	07	2	3
3/26	18.8°N	156.0°W	0000	98	08	20	01	0	1019.0	7	2.5	75.1	71.0	76.1	2	2	2	4	0	0	07	2	3

Table 4.--Temperature and salinity of surface water in baiting areas, Charles H. Gilbert cruise 43

Date, 1959	Time, LT	Locality	Salinity ‰	Temp., °F.
1/22	1020	Tai Oa, Nuku Hiva	35.44	84.9
1/22	1420	Taipi Vai, Nuku Hiva	12.70	79.4
1/24	0817	Taipi Vai, Nuku Hiva	34.79	81.1
1/25	0625	Taiohae, Nuku Hiva	35.97	81.5
2/10	0625	Tautira, Tahiti	17.05	78.0
2/19	1242	Taipi Vai, Nuku Hiva	28.05	83.1
2/20	0655	Tai Oa, Nuku Hiva	35.77	81.4
2/20	0915	Tai Oa, Nuku Hiva	31.48	76.9
2/20	1345	Taiohae, Nuku Hiva	35.96	84.2
3/1	1231	Taipi Vai, Nuku Hiva	25.35	82.0
3/2	0516	Taiohae, Nuku Hiva	35.92	81.5
3/2	0953	Taiohae, Nuku Hiva	35.91	84.6
3/6	1000	Taipi Vai, Nuku Hiva	33.15	85.0
3/14	1340	Taiohae, Nuku Hiva	36.04	87.8

Table 5.--Transparency, water color and related observations, Charles H. Gilbert cruise 43

Date, 1959	Noon position 1/		Secchi disc, meters	Water color (Forel)	Sea 2/	Wind 3/	Percent sky cover
	Latitude	Longitude					
1/27	14°10'S	141°27'W	33.0	1	3	- 18	80
1/28	15°53'S	142°05'W	40.2	2	2	- 16	70
1/29	16°32'S	143°08'W	39.4	2	2	08 - 14	50
1/30	16°08'S	144°28'W	36.6	2	1	- 07	80
1/31	15°54'S	145°40'W	47.6	1	1	- 08	30
2/1	15°31'S	146°08'W	40.2	1	1	- 06	20
2/2	15°16'S	147°09'W	38.4	1	0	29 - 08	30
2/22	08°38'S	140°26'W	20.6	2	1	04 - 10	70
2/23	07°53'S	139°59'W	27.0	1	1	07 - 11	20
2/24	08°43'S	139°13'W	28.4	1	1	08 - 13	20
2/25	09°35'S	138°50'W	22.8	1	1	09 - 12	70
2/26	10°22'S	138°26'W	38.9	1	1	08 - 13	10
2/27	09°49'S	139°09'W	22.0	1	1	34 - 03	30
2/28	09°33'S	140°02'W	34.8	1	1	08 - 15	10

1/ All observations taken at 1200 LT, except on 2/28 when the observation was taken at 1300 LT.

2/ Sea state coded according to H.O. Pub. No. 606-c, second edition, 1956.

3/ Wind direction and speed coded according to U.S. Weather Bureau, Circular M.

Table 6.--Surface troll catch and related data, Charles H. Gilbert cruise 43

Date 1959	Time, LT	Position		Species	Number[1/]	Average length, cm.
		Latitude	Longitude			
1/9	1635	17°58'N	155°16'W	Yellowfin	3	77.0
1/9	1700	17°56'N	155°14'W	Dolphin	4	67.0
1/9	1715	17°54'N	155°13'W	Bigeye	2	45.5
1/10	0850	15°57'N	154°04'W	Dolphin	1	88.0
1/10	1000	15°49'N	153°58'W	Dolphin	3	78.7
1/11	1000	15°49'N	153°58'W	Dolphin	1	78.7
1/21	1600	09°23'S	140°08'W	Dolphin	1	103.0
2/18	1145	10°14'S	142°26'W	Rainbow Runner	1	72.2
2/23	0610	07°55'S	140°38'W	Little Tuna	1	61.3
2/23	0620	07°54'S	140°36'W	Yellowfin	2	85.8
2/23	0710	07°50'S	140°32'W	Wahoo	1	85.8
2/23	1215	07°54'S	139°57'W	Yellowfin	2	83.4
2/25	0525	08°59'S	139°30'W	Yellowfin	1	91.9
2/25	0530	09°00'S	139°30'W	Little Tuna	3	52.3
2/26	0830	10°08'S	138°46'W	Wahoo	1	115.5
2/26	1220	10°24'S	138°27'W	Wahoo	1	148.9
3/5	1730	07°53'S	139°43'W	Barracuda	1	138.1
3/8	0555	09°10'S	139°38'W	Dolphin	1	116.1
3/13	1300	08°48'S	139°46'W	Little Tuna	1	49.1
3/14	0630	08°46'S	140°04'W	Yellowfin	3	75.3
3/14	0700	08°36'S	139°59'W	Little Tuna	1	47.5
3/14	0700	08°36'S	139°59'W	Wahoo	1	136.9
3/16	1115	08°56'S	140°14'W	Wahoo	2	130.3

1/ Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 7. --Surface troll catch, Cape Falcon

Date, 1959	Yellowfin	Skipjack	Little tuna	Rainbow runner	Wahoo	Barracuda	Dogtooth tuna	Jack	Green Snapper
2/17	1	-	-	-	-	-	-	-	-
2/18	13	8	8	1	-	1	-	-	-
2/19	11	1	3	2	-	-	-	1	-
2/20	12	-	-	-	-	-	1	-	-
2/21	4	2	-	-	-	-	-	-	-
2/22	2	4	-	1	1	-	-	-	-
2/23	2	-	-	-	-	-	-	-	-
2/24	2	-	-	-	-	-	-	-	-
2/25	-	1	-	-	-	-	-	-	-
2/26	1	1	-	-	-	-	-	-	-
2/27	-	1	-	-	-	-	-	-	-
3/2	-	2	-	-	-	-	-	-	-
3/3	-	1	-	-	-	-	-	-	-
3/4	2	-	-	-	-	-	-	-	-
3/5	15	-	1	-	3	-	1	-	3
3/6	11	1	1	-	-	-	-	-	-
3/7	11	1	5	1	1	-	-	4	-
3/10	13	-	-	-	1	-	-	-	-
3/11	2	2	-	1	-	-	-	-	-
3/12	6	-	-	-	1	-	-	-	-
3/13	26	-	3	-	-	-	-	-	-
3/14	2	2	2	-	-	-	-	-	-
Total	136	27	23	6	7	1	2	5	3

Table 8.--Summary of pole-and-line fishing, Charles H. Gilbert cruise 43

Date, 1959	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species[1/]	Amount of bait (buckets)
		Latitude	Longitude				
1/15	1112	02°02'N	145°10'W	1	3	0 SJ	1.0[2/]
1/29	0953	16°25'S	142°59'W	1	5	0 SJ	.5
1/29	1016	16°28'S	143°02'W	3	8	1 SJ	4.0
1/29	1350	16°35'S	143°28'W	2	16	166 SJ	7.0
1/30	1410	16°01'S	144°49'W	1	2	0 SJ	1.0
1/31	0745	15°45'S	145°06'W	1	6	40 SJ	2.0
1/31	1345	15°54'S	145°40'W	2	5	0 SJ	.5
2/1	1105	15°29'S	146°06'W	1	11	217 SJ	5.0
2/2	0643	15°30'S	146°36'W	2	8	17 SJ, 4 YF	4.0
2/2	0855	15°25'S	146°49'W	1	3	0 SJ	.5
2/2	0955	15°21'S	146°57'W	1	2	0 SJ	.5
2/4	1520	14°58'S	147°31'W	2	6	0 SJ	1.0
2/22	1217	08°36'S	140°28'W	2	6	102 SJ	2.0
2/23	0831	07°45'S	140°20'W	4	10	0 SJ	2.0
2/23	0925	07°44'S	140°16'W	5	6	0 YF	2.0
2/23	1337	08°01'S	139°45'W	1	3	41 SJ	2.0
2/23	1445	08°05'S	139°39'W	2	7	16 SJ, 48 YF	2.0
2/24	0925	08°33'S	139°15'W	4	9	13 SJ	2.0
2/24	1012	08°36'S	139°13'W	2	4	0 SJ	1.0
2/24	1110	08°42'S	139°11'W	2	5	0 SJ	1.0
2/24	1245	08°47'S	139°16'W	1	4	0 SJ	1.0
2/25	0824	09°15'S	139°12'W	2	4	0 SJ	1.0
2/25	1310	09°44'S	138°46'W	2	7	0 SJ	1.0
2/25	1550	09°50'S	138°59'W	2	3	0 UN	1.0
2/26	0940	10°13'S	138°33'W	2	5	85 SJ	2.0
2/26	1215	10°24'S	138°28'W	2	4	0 SJ	1.0
2/27	1204	09°49'S	139°13'W	9	15	82 SJ	6.0
2/27	1333	09°51'S	139°15'W	3	12	0 SJ	2.0
2/28	1145	09°32'S	140°02'W	6	14	92 SJ	6.0
3/3	0815	08°50'S	139°40'W	3	9	17 SJ, 2 YF	5.0
3/5	1003	07°07'S	139°46'W	1	6	42 SJ	3.0
3/5	1253	07°21'S	139°44'W	2	11	231 SJ	4.0
3/8	1003	09°40'S	139°36'W	1	8	195 SJ	3.0
3/8	1058	10°47'S	139°35'W	3	13	23 SJ, 26 YF, 2 BE	3.0
3/8	1216	09°56'S	139°36'W	1	5	25 SJ	2.0
3/10	1306	10°44'S	139°37'W	2	8	0 SJ	2.0
3/10	1415	10°40'S	139°38'W	2	5	25 SJ	2.0

[1/] SJ = skipjack, YF = yellowfin, BE = bigeye, UN = unidentified

[2/] Tilapia; Marquesan sardines were used at all other occasions.

Table 9. --Summary of pole-and-line fishing, Cape Falcon

Date, 1959	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species [1]	Amount of bait, (scoops) [2]
		Latitude	Longitude				
2/16	0728	06°10'S	133°34'W	1	1.0	0 SJ	.50
2/17	1034	07°24'S	137°28'W	1	2.0	0 YF	.25
2/17	1151	07°24'S	137°34'W	2	6.0	81 SJ	10.00
2/17	1519	07°28'S	138°05'W	5	8.0	0 SJ	2.00
2/18	0617	07°55'S	139°58'W	4	30.0	56 YF	20.00
2/18	0821	07°55'S	139°58'W	1	19.0	210 YF	20.00
2/18	0850	07°55'S	139°58'W	1	.5	0 YF	handful
2/18	0854	07°55'S	139°58'W	3	4.0	0 SJ	2.50
2/18	0945	07°55'S	139°58'W	1	1.0	0 UN	.50
2/18	0956	07°55'S	139°58'W	1	9.0	42 YF	8.00
2/18	1027	07°55'S	139°58'W	1	4.0	5 YF	2.00
2/18	1044	07°55'S	139°58'W	1	1.0	0 UN	.50
2/18	1124	07°55'S	139°58'W	2	2.0	0 SJ	1.00
2/18	1306	07°55'S	139°58'W	3	29.0	69 YF	19.00
2/18	1410	07°55'S	139°58'W	7	26.5	148 YF	21.00
2/18	1520	07°55'S	139°58'W	4	7.5	86 YF, 0 SJ	7.25
2/18	1600	07°55'S	139°58'W	1	4.0	50 YF	5.00
2/18	1628	07°55'S	139°58'W	2	2.0	0 UN	.75
2/18	1639	07°55'S	139°58'W	1	1.0	0 SJ	1.00
2/18	1750	07°55'S	139°58'W	4	7.0	7 YF, 0 SJ	6.00
2/19	0659	07°55'S	139°58'W	4	18.0	37 YF	7.00
2/19	0817	07°55'S	139°58'W	2	8.0	6 YF, 0 SJ	9.00
2/19	0952	07°54'S	140°12'W	2	6.0	4 YF	3.00
2/19	1025	07°54'S	140°13'W	2	9.0	18 YF	4.50
2/19	1215	07°54'S	140°21'W	1	1.0	0 UN	.50
2/19	1412	07°54'S	140°32'W	3	9.0	25 YF	7.25
2/19	1500	07°54'S	140°31'W	2	8.5	45 YF, 2 RR	7.00
2/19	1522	07°53'S	140°31'W	1	1.0	0 SJ	.50
2/19	1545	07°54'S	140°32'W	4	17.0	88 YF, 0 SJ	12.50
2/19	1642	07°52'S	140°34'W	1	2.0	0 YF	1.00
2/19	1647	07°53'S	140°34'W	1	2.0	0 UN	1.00
2/19	1700	07°54'S	140°34'W	4	6.0	1 YF, 0 SJ	3.50
2/19	1736	07°54'S	140°34'W	2	5.0	7 YF, 0 LT	4.00
2/20	0707	07°56'S	140°36'W	1	2.0	0 YF	.50
2/20	0721	07°56'S	140°37'W	1	4.0	5 YF	4.00
2/20	0754	07°54'S	140°38'W	2	6.0	5 YF	5.50
2/20	0920	07°53'S	140°37'W	2	5.0	0 YF, 0 LT	1.50
2/20	0937	07°53'S	140°37'W	1	1.0	0 SJ	.50
2/20	0954	07°53'S	140°37'W	3	3.0	0 YF, 0 UN	1.50
2/20	1037	07°57'S	140°39'W	2	2.0	0 SJ	1.00
2/20	1153	08°04'S	140°46'W	1	17.0	67 YF	20.00
2/20	1236	08°02'S	140°45'W	2	6.0	25 YF	12.00
2/20	1325	08°04'S	140°43'W	1	1.0	0 SJ	.50
2/20	1345	08°04'S	140°45'W	1	.5	0 SJ	.50
2/20	1405	08°05'S	140°46'W	3	5.0	4 YF, 0 SJ	4.00
2/20	1435	08°04'S	140°45'W	1	1.0	0 SJ	1.00

[1] SJ = skipjack, YF = yellowfin, LT = little tuna, UN = unidentified, RR = rainbow runner

[2] In converting "scoops" to weight, Alverson and Shimada (1957) used a factor of 8 pounds per scoop.

Table 9. --Summary of pole-and-line fishing, Cape Falcon - continued

Date, 1959	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, (scoops) 2/
		Latitude	Longitude				
2/20	1455	08°03'S	140°44'W	3	3.0	0 YF	1.50
2/21	1029	08°30'S	140°03'W	1	2.0	0 SJ	1.00
2/21	1140	08°27'S	140°03'W	2	3.0	0 SJ	2.00
2/21	1223	08°39'S	140°02'W	3	4.0	0 YF	2.00
2/22	1010	09°15'S	140°02'W	1	1.0	0 SJ	2.00
2/22	1134	09°21'S	139°59'W	1	2.0	14 YF	5.00
2/22	1156	09°23'S	139°59'W	1	3.0	0 YF	1.00
2/22	1210	09°25'S	140°00'W	1	1.0	0 UN	1.00
2/22	1334	09°34'S	140°04'W	1	2.0	0 SJ	1.00
2/22	1403	09°40'S	140°05'W	2	2.0	0 SJ	2.00
2/22	1500	09°50'S	140°08'W	1	1.0	0 SJ	1.00
2/24	1553	14°08'S	140°27'W	2	5.0	0 YF	2.00
2/24	1614	14°09'S	140°28'W	1	2.0	0 UN	1.00
2/25	0917	16°04'S	142°30'W	2	2.0	0 UN	3.00
2/26	1443	16°57'S	144°33'W	1	2.0	0 SJ	2.00
2/27	1158	17°13'S	147°34'W	1	1.0	0 SJ	7.00
2/27	1338	17°17'S	147°52'W	3	4.5	0 SJ	1.00
3/2	0925	15°13'S	146°49'W	1	1.0	0 UN	1.00
3/2	1358	14°43'S	146°27'W	2	3.0	0 SJ	6.00
3/2	1702	14°30'S	146°15'W	1	3.0	0 SJ	3.00
3/4	1109	10°32'S	142°24'W	1	1.0	0 YF	2.00
3/5	0638	08°42'S	140°37'W	1	2.0	0 YF	2.00
3/5	0645	08°42'S	140°37'W	1	3.0	1 YF	3.00
3/5	0657	08°41'S	140°37'W	1	1.0	0 YF, 0 DT	1.00
3/5	0749	08°40'S	140°36'W	1	4.0	2 YF	3.00
3/5	0807	08°37'S	140°37'W	2	3.0	0 YF, 0 SJ	4.00
3/5	0929	08°40'S	140°39'W	1	1.0	0 SJ	1.00
3/5	0958	08°41'S	140°38'W	1	1.0	0 YF, 0 RR	2.00
3/5	1518	08°12'S	140°36'W	1	1.0	0 YF	2.00
3/6	0611	08°02'S	140°43'W	1	3.0	0 YF	2.00
3/6	0618	08°02'S	140°43'W	1	3.0	0 YF	2.00
3/6	1117	07°58'S	140°07'W	1	1.0	0 YF	2.00
3/6	1209	07°56'S	140°02'W	2	2.0	0 SJ	2.50
3/6	1422	07°55'S	139°58'W	1	-	0 UN	1.00
3/6	1544	07°52'S	139°56'W	1	1.0	0 YF	2.00
3/6	1626	07°55'S	139°58'W	2	3.0	0 YF	3.00
3/7	0628	07°55'S	139°58'W	1	1.0	0 YF, 0 UN	3.00
3/7	0652	07°55'S	139°58'W	1	3.0	0 YF, 0 LT, 0 RR	2.00
3/7	0718	07°55'S	139°58'W	2	2.0	0 SJ	5.00
3/7	0802	07°57'S	139°56'W	1	2.0	0 YF	2.00
3/7	0930	07°59'S	139°42'W	1	2.0	0 YF	4.00
3/7	1220	08°05'S	139°38'W	1	3.0	15 YF, 0 UN	10.00
3/7	1247	08°05'S	139°38'W	1	1.0	0 LT, 0 RR	3.00
3/7	1404	08°08'S	139°31'W	5	11.0	11 YF	18.00
3/7	1607	08°16'S	139°26'W	1	1.0	0 SJ	3.00

1/ SJ = skipjack, YF = yellowfin, LT = little tuna, UN = unidentified, DT = dogtooth tuna, RR = rainbow runner

2/ In converting "scoops" to weight, Alverson and Shimada (1957) used a factor of 8 pounds per scoop.

Table 9. --Summary of pole-and-line fishing, Cape Falcon - continued

Date, 1959	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, (scoops) 2/
		Latitude	Longitude				
3/7	1639	08°18'S	139°24'W	1	4.0	0 SJ	5.00
3/10	0555	08°48'S	140°07'W	2	3.0	0 YF	4.00
3/10	0712	08°48'S	140°15'W	3	3.0	0 YF	5.00
3/10	0732	08°48'S	140°16'W	1	1.0	0 YF	1.00
3/10	1132	08°56'S	139°59'W	1	1.0	0 UN	3.00
3/11	1515	09°00'S	139°38'W	2	2.0	0 SJ, 0 RR	3.00
3/11	1600	09°00'S	139°38'W	1	2.0	0 SJ	3.00
3/11	1715	08°58'S	139°39'W	1	1.0	0 YF	2.00
3/12	0740	08°01'S	139°28'W	1	1.0	0 SJ	.50
3/12	1247	08°41'S	139°17'W	1	2.0	0 UN	1.00
3/12	1620	08°15'S	139°32'W	2	3.0	13 YF, 0 SJ	5.50
3/12	1655	08°15'S	139°32'W	1	1.0	0 SJ	1.00
3/13	0555	08°20'S	139°37'W	2	3.0	5 YF	5.00
3/13	0909	08°02'S	139°45'W	2	3.0	0 YF	3.00
3/13	0950	08°01'S	139°43'W	1	2.0	0 YF	1.00
3/13	1152	07°52'S	139°59'W	1	1.0	0 YF, 0 RR	1.00
3/13	1214	07°52'S	139°59'W	1	4.0	2 YF	2.00
3/13	1303	07°52'S	139°59'W	3	3.0	0 YF	2.00
3/13	1422	07°56'S	140°00'W	1	5.0	2 YF, 0 LT	4.00
3/13	1445	07°53'S	139°59'W	1	2.0	0 YF	1.00
3/13	1525	07°56'S	140°00'W	1	3.0	2 YF	2.00
3/13	1534	07°56'S	139°58'W	1	2.0	0 YF	1.00
3/13	1610	07°56'S	139°58'W	1	1.0	0 YF	1.00
3/13	1655	07°56'S	140°00'W	1	1.0	0 YF	.50
3/14	0634	07°56'S	139°57'W	4	4.0	0 YF, 0 SJ	2.50

1/ SJ = skipjack, YF = yellowfin, LT = little tuna, UN = unidentified, RR = rainbow runner.

2/ In converting "scoops" to weight, Alverson and Shimada (1957) used a factor of 8 pounds per scoop.

Table 10. --Pole-and-line caught skipjack, yellowfin, and bigeye length frequency distribution, Charles H. Gilbert cruise 43

Date, 1959	Latitude and Longitude	Sex	Species[1/]	Fork length range in millimeters																																					Total
				415-424	425-434	435-444	445-454	455-464	465-474	475-484	485-494	495-504	505-514	515-524	525-534	535-544	545-554	555-564	565-574	575-584	585-594	595-604	605-614	615-624	625-634	635-644	645-654	655-664	665-674	675-684	685-694	695-704	705-714	715-724	725-734	735-744	745-754	755-764	765-774	775-784	
1/29	16°28'S	M	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	143°02'W	F	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
1/29	16°35'S	M	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	2	1	3	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
	143°28'W	F	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
1/31	15°45'S	M	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	2	1	1	-	-	-	-	-	-	12
	145°06'W	F	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	6	2	-	1	-	-	-	-	-	13
2/1	15°29'S	M	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	4	1	3	2	-	-	-	-	-	-	-	-	-	-	13
	146°06'W	F	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	2	4	2	-	-	-	-	1	-	-	-	-	-	12
2/2	15°30'S	M	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	146°36'W	F	SJ	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
		?	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	4
2/22	08°36'S	M	SJ	-	-	-	-	-	-	-	-	1	1	1	2	4	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	140°28'W	F	SJ	-	-	-	-	-	-	3	2	-	4	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
2/23	08°01'S	M	SJ	-	-	-	-	-	1	2	1	3	3	2	1	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
	139°45'W	F	SJ	-	-	-	-	-	-	-	3	1	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
2/23	08°05'S	M	SJ	-	-	-	-	-	-	-	-	-	2	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
	139°39'W	F	SJ	-	-	-	-	-	-	-	1	2	-	1	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
		?	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-	1	2	1	2	3	3	3	4	1	1	-	1	25
2/24	08°33'S	M	SJ	-	-	-	-	-	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	139°15'W	F	SJ	-	-	-	1	-	-	3	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
2/26	10°13'S	M	SJ	1	3	3	4	2	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
	138°33'W	F	SJ	-	2	-	3	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
2/27	09°49'S	M	SJ	-	-	-	-	-	-	-	-	2	-	3	8	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
	139°13'W	F	SJ	-	-	-	-	-	-	-	-	1	2	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
2/28	09°32'S	M	SJ	-	-	-	-	1	2	4	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
	140°02'W	F	SJ	-	-	-	-	1	2	5	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
3/3	08°50'S	M	SJ	1	1	5	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
	139°40'W	F	SJ	-	1	1	-	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		?	YF	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

1/ SJ = Skipjack, YF = Yellowfin, BE = Bigeye

Table 10. --Pole-and-line caught skipjack, yellowfin, and bigeye length frequency distribution, Charles H. Gilbert cruise 43 - continued

Date, 1959	Latitude and Longitude	Sex	Species[1/]	415-424	425-434	435-444	445-454	455-464	465-474	475-484	485-494	495-504	505-514	515-524	525-534	535-544	545-554	555-564	565-574	575-584	585-594	595-604	605-614	615-624	625-634	635-644	645-654	655-664	665-674	675-684	685-694	695-704	705-714	715-724	725-734	735-744	745-754	755-764	765-774	775-784	Total
				Fork length range in millimeters																																					
3/5	07°07'S	M	SJ	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	3	2	1	1	-	1	-	-	-	-	-	-	13
	139°46'W	F	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	4	3	1	-	-	-	-	1	-	-	-	-	12
3/5	07°21'S	M	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	1	3	1	2	1	1	-	-	-	-	-	-	-	1	-	-	15
	139°44'W	F	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2	3	2	1	3	1	-	-	-	-	-	-	-	-	-	-	-	14
3/8	09°40'S	M	SJ	-	-	6	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
	139°36'W	F	SJ	-	-	2	2	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
3/8	10°47'S	M	SJ	-	1	-	-	-	2	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
	139°35'W	F	SJ	-	-	1	-	-	4	4	3	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
		?	YF	-	-	-	-	-	-	-	2	3	12	6	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
		?	BE	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
3/8	09°56'S	M	SJ	-	-	-	-	1	-	-	-	-	1	1	4	4	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
	139°36'W	F	SJ	-	-	-	-	-	-	-	1	2	1	2	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
3/10	10°40'S	M	SJ	-	-	-	2	1	-	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
	139°38'W	F	SJ	-	-	-	-	3	3	1	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	Total		SJ	2	8	18	13	26	21	34	28	21	19	16	27	22	15	12	5	8	6	7	6	4	6	13	11	10	17	15	9	9	3	2	2	1	-	1	-	-	417
			YF	-	-	-	-	-	-	-	2	3	12	6	2	3	1	-	-	-	-	2	-	-	2	-	3	-	1	2	1	2	3	3	3	4	1	1	-	1	58
			BE	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

1/ SJ = Skipjack, YF = Yellowfin, BE = Bigeye

Table 11. --Pole-and-line caught skipjack and yellowfin length frequency distribution, Cape Falcon

Date, 1959	Latitude and Longitude	Species 1/	Fork Length range in millimeters																																																																					Total
			525-534	535-544	545-554	555-564	565-574	575-584	585-594	595-604	605-614	615-624	625-634	635-644	645-654	655-664	665-674	675-684	685-694	695-704	705-714	715-724	725-734	735-744	745-754	755-764	765-774	775-784	785-794	795-804	805-814	815-824	825-834	835-844	845-854	855-864	865-874	875-884	885-894	895-904	905-914	915-924	925-934	935-944	945-954	955-964	965-974	975-984	985-994	995-1004	1005-1014	1015-1024	1025-1034	1035-1044	1045-1054	1055-1064	1065-1074	1075-1084	1085-1094	1095-1104	1105-1114	1115-1124	1125-1134	1135-1144	1145-1154	1155-1164	1165-1174	1175-1184	1185-1194	1195-1204	1205-1214	1275-1284	1405-1414	
2/17	07°24'S 137°34'W	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
2/18	07°55'S 139°58'W	YF	1	-	-	-	-	1	-	-	-	-	-	-	-	1	2	1	-	1	2	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	21
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	1	1	-	-	1	-	2	1	-	2	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	2	-	1	-	-	-	-	-	-	6
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	-	-	-	1	1	-	-	-	1	-	-	-	-	-	7
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	-	1	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
2/18	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
2/19	07°55'S 139°58'W	YF	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
2/19	07°55'S 139°58'W	YF	-	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
2/19	1/2 mi. E of Hatutu	YF	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1	-	3	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
2/19	3/4 mi. NE of Hatutu	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	2	1	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
2/19	1/2 mi. NNW of Hatutu	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	2	-	1	2	1	2	-	-	1	2	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
2/19	1 mi. NW of Hatutu	YF	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
2/20	1-1/2 mi. WNW of S. tip of Hatutu	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
2/20	3 mi. NW of S. tip of Hatutu	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2/20	3 mi. SW of Eiao	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	-	-	-	-	-	-	-	-	-	4
2/20	1-1/2 mi. W of Eiao	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	1	-	-	-	-	-	-	1	-	5
2/20	4 mi. SW of Eiao	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
3/7	Clark Bank	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
3/13	Slightly NW 20-25 fa. Bank	YF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Total	SJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
		YF	1	1	-	-	-	1	-	1	1	1	-	1	5	2	6	8	8	10	12	11	10	3	8	1	3	1	3	2	-	-	1	-	-	1	1	-	1	-	1	1	1	4	-	2	1	2	1	1	-	1	1	-	2	-	1	3	2	2	2	3	2	2	3	-	1	1	-	-	-	1	2	147

1/ SJ = Skipjack, YF = Yellowfin

Table 12. --Summary of bait fishing, Charles H. Gilbert cruise 43

Date, 1959	Locality	Amount seen (buckets)			No. of sets		Catch (buckets)		
		Marquesan sardine	Tahitian sardine	Tahitian nehu	Day	Night	Marquesan sardine	Tahitian sardine	Tahitian nehu
1/20	Taa Huku, Hiva Oa	-	-	-	-	-	-	-	-
1/20	Oe Hau, Tahu Ata	-	-	-	-	-	-	-	-
1/20	Motopu, Tahu Ata	-	-	-	-	-	-	-	-
1/20	Hana Hevane, Tahu Ata	1	-	-	-	-	-	-	-
1/20	Hana Tetou, Tahu Ata	38	-	-	-	-	-	-	-
1/20	Vai Tahu, Tahu Ata	20	-	-	-	-	-	-	-
1/21	Hana Menu, Hiva Oa	-	-	-	-	-	-	-	-
1/22	Tai Oa, Nuku Hiva	13 1/4	-	-	4	-	13 1/4	-	-
1/22	Taipi Vai, Nuku Hiva	3	-	-	3	-	3	-	-
1/23	Tai Oa, Nuku Hiva	9	-	-	3	-	9	-	-
1/23	Anaho, Nuku Hiva	-	-	-	-	-	-	-	-
1/23	Hatiheu, Nuku Hiva	-	-	-	-	-	-	-	-
1/24	Taipi Vai, Nuku Hiva	28	-	-	8	-	28	-	-
1/25	Taiohae, Nuku Hiva	47	-	-	4	-	47	-	-
2/8	Port Phaeton, Tahiti	-	14	20	-	2	-	14	20
2/9	Port Phaeton, Tahiti	-	-	-	1	-	-	-	-
2/10	Tautira, Tahiti	-	28	-	4	-	-	28	-
2/10	Matavai, Tahiti	-	-	-	-	-	-	-	-
2/11	Matavai, Tahiti	-	70	-	-	-	-	-	-
2/11	Papetoai, Moorea	-	10	-	-	-	-	-	-
2/11	Pao Pao, Moorea	-	27	-	-	-	-	-	-
2/12	Faaroa, Raiatea	-	3	-	-	-	-	-	-
2/12	Uturoa, Raiatea	-	-	-	-	-	-	-	-
2/13	Vaitape, Bora Bora	-	-	-	-	-	-	-	-
2/14	Fanui, Bora Bora	-	-	-	-	-	-	-	-
2/19	Taipi Vai, Nuku Hiva	21	-	-	3	-	21	-	-
2/20	Tai Oa, Nuku Hiva	32	-	-	4	-	31	-	-
2/20	Marquesienne, Nuku Hiva	-	-	-	-	-	-	-	-
2/20	Taiohae, Nuku Hiva	57	-	-	3	-	57	-	-
3/1	Tai Oa, Nuku Hiva	-	-	-	1	-	-	-	-
3/1	Taipi Vai, Nuku Hiva	-	-	-	1	-	-	-	-
3/2	Taiohae, Nuku Hiva	82	-	-	9	-	82	-	-
3/6	Hatiheu, Nuku Hiva	trace	-	-	1	-	-	-	-
3/6	Anaho, Nuku Hiva	-	-	-	-	-	-	-	-
3/6	Taipi Vai, Nuku Hiva	30	-	-	3	-	30	-	-

Table 12. --Summary of bait fishing, Charles H. Gilbert cruise 43 - continued

Date, 1959	Locality	Amount seen (buckets)			No. of sets		Catch (buckets)		
		Marquesan sardine	Tahitian sardine	Tahitian nehu	Day	Night	Marquesan sardine	Tahitian sardine	Tahitian nehu
3/11	Hana Menu, Hiva Oa	-	-	-	-	-	-	-	-
3/11	Hana Iapa, Hiva Oa	-	-	-	-	-	-	-	-
3/11	Pua Mau, Hiva Oa	5	-	-	-	-	-	-	-
3/11	Taa Huku, Hiva Oa	15	-	-	-	-	-	-	-
3/12	Hana Tetou, Tahu Ata	6	-	-	-	-	-	-	-
3/12	Hana Hevane, Tahu Ata	10	-	-	-	-	-	-	-
3/13	Haka Hetau, Hua Pou	-	-	-	-	-	-	-	-
3/13	Aneo, Hua Pou	1/4	-	-	-	-	-	-	-
3/13	Hakaehu, Nuku Hiva	50	-	-	-	-	-	-	-
3/13	Hatiheu, Nuku Hiva	25	-	-	-	-	-	-	-
3/14	Anaho, Nuku Hiva	5	-	-	-	-	-	-	-
3/14	Taipi Vai, Nuku Hiva	20	-	-	-	-	-	-	-
3/14	Tai Oa, Nuku Hiva	15	-	-	-	-	-	-	-
3/14	Taiohae, Nuku Hiva	380	-	-	1	-	28	-	-

Table 13.--Summary of bait fishing, Cape Falcon

Date 1959	Locality	Number of sets		Catch (scoops)	
		Day	Night	Anchoveta	Marquesan Sardine
1/30	Almejas Bay	-	1	174	-
1/31	Baja, California	-	8	817	-
2/1	Baja, California	-	4	1,157	-
2/2	Baja, California	-	7	166	-
2/3	Baja, California	-	5	164	-
2/4	Baja, California	-	7	266	-
2/5	Baja, California	-	4	257	-
3/10	Taipi Vai, Nuku Hiva	2	-	-	3/4
3/15	Taiohae, Nuku Hiva	4	-	-	50
	Total	6	36	3,001	50-3/4

Table 14.--Length frequency distribution of Marquesan sardines, Tahitian sardines, and Tahitian nehu, Charles H. Gilbert cruise 43

Date, 1959	Position		Fork length range in millimeters										Total
	Latitude	Longitude	35-44	45-54	55-64	65-74	75-84	85-94	95-104	105-114	115-124	125-134	
							Marquesan sardine						
1/22	08°56'S	140°10'W	-	-	8	6	2	3	-	-	-	-	19
1/22	08°56'S	140°10'W	-	-	-	-	-	-	1	7	7	1	16
1/22	08°55'S	140°04'W	-	-	-	-	1	-	3	10	3	-	17
1/23	08°56'S	140°10'W	-	1	3	7	6	4	-	-	-	-	21
1/25	08°56'S	140°07'W	-	-	3	8	5	4	2	-	-	-	22
3/2	08°56'S	140°07'W	-	-	-	-	4	18	3	-	-	-	25
3/14	08°56'S	140°07'W	-	-	-	-	7	13	4	-	-	-	24
Total				1	14	21	25	42	13	17	10	1	144
							Tahitian nehu						
2/8	17°44'S	149°20'W	-	-	4	15	9	-	1	-	-	-	29
							Tahitian sardine						
2/8, 9	17°44'S	149°20'W	1	-	-	2	2	4	6	3	2	1	21
2/10	17°44'S	149°10'W	-	-	1	2	2	8	1	4	1	1	20
2/10	17°44'S	149°10'W	8	1	11	11	-	-	-	1	1	-	33
Total			9	1	12	15	4	12	7	8	4	2	74

Table 15. --Record of daily sightings of bird flocks, scattered birds, and tuna schools, Charles H. Gilbert cruise 43

Date, 1959	Noon Position		Total number	Bird flocks										Scattered birds								Tuna schools				
				Size			Composition																				
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Tropical birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Tropical birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Yellowfin-Skipjack	
1/9	18°31'N	155°36'W	1	-	1	-	1	-	-	-	1	-	-	10	1	3	-	-	2	-	-	-	1	-	
1/10	15°34'N	153°50'W	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	1	-	-	-	-	-	
1/11	12°38'N	152°12'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
1/12	09°48'N	150°44'W	-	-	-	-	-	-	-	-	-	-	-	7	-	10	-	1	1	-	-	-	-	-	
1/13	07°06'N	148°36'W	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	4	-	-	-	-	-	
1/14	04°31'N	146°42'W	-	-	-	-	-	-	-	-	-	-	-	14	-	1	1	1	1	-	-	-	-	-	
1/15	01°55'N	145°06'W	1	-	1	-	1	-	-	-	-	-	-	1	-	19	-	-	5	-	-	1	-	-	
1/16	00°44'S	144°05'W	2	1	1	-	2	1	-	-	1	-	-	-	-	21	-	-	2	-	-	-	-	-	
1/17	04°00'S	142°18'W	1	-	-	1	1	-	-	1	-	-	-	2	-	26	3	2	7	-	-	-	1	-	
1/18	07°27'S	140°58'W	14	1	1	12	14	5	-	2	1	-	-	2	7	37	-	-	-	-	-	3	11	-	
1/20	09°54'S	139°05'W	1	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
1/21	09°34'S	139°40'W	6	1	4	1	6	-	-	-	2	-	-	-	6	29	-	-	3	-	-	-	4	-	
1/22	08°58'S	140°09'W	5	-	1	4	5	1	-	-	4	-	-	-	-	10	-	-	-	-	-	1	4	-	
1/26	10°54'S	140°46'W	-	-	-	-	-	-	-	-	-	-	-	5	-	5	-	-	-	-	-	-	-	-	
1/27	14°10'S	141°27'W	-	-	-	-	-	-	-	-	-	-	-	4	5	6	1	1	-	-	-	-	-	-	
1/28	15°53'S	142°05'W	2	1	-	1	2	1	-	-	-	-	-	23	-	39	-	-	-	-	-	-	2	-	
1/29	16°32'S	143°08'W	4	-	-	4	4	1	-	3	1	-	-	7	-	19	-	-	-	-	-	2	2	-	
1/30	16°08'S	144°28'W	5	1	3	1	5	1	-	1	1	-	-	55	7	15	1	-	-	-	-	-	4	-	
1/31	15°54'S	145°40'W	5	-	2	3	5	5	-	-	-	-	-	-	4	24	1	-	-	-	-	4	1	-	
2/1	15°31'S	146°08'W	3	-	-	3	3	2	-	-	-	-	-	-	7	71	-	-	-	-	-	2	1	-	
2/2	15°16'S	167°09'W	6	-	-	6	6	6	-	3	-	-	-	-	6	48	-	-	-	-	-	2	3	1	
2/3	15°31'S	148°11'W	3	-	3	-	3	2	-	-	-	-	-	2	14	57	-	-	-	-	-	-	-	-	
2/11	Pao Pao Bay, Moorea		1	-	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
2/12	16°44'S	151°26'W	-	-	-	-	-	-	-	-	-	-	-	-	4	5	-	-	-	-	-	-	-	-	
2/13	16°30'S	151°46'W	2	-	1	1	2	2	-	-	1	-	-	5	11	9	-	-	-	-	-	-	1	-	
2/15	16°12'S	151°10'W	-	-	-	-	-	-	-	-	-	-	-	-	4	8	-	-	-	-	-	-	-	-	
2/16	14°03'S	148°12'W	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	
2/17	12°06'S	145°10'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
2/18	10°12'S	142°24'W	2	-	-	2	2	2	-	1	1	-	-	4	-	4	-	-	2	-	-	1	1	-	

Table 15. --Record of daily sightings of bird flocks, scattered birds, and tuna schools, Charles H. Gilbert cruise 43 - continued

Date, 1959	Noon Position		Total number	Bird flocks									Scattered birds								Tuna schools			
				Size			Composition																		
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Tropical birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Tropical birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Yellowfin-Skipjack
2/22	08°38'S	140°26'W	2	-	-	2	2	2	-	-	-	-	-	-	9	93	1	-	-	-	-	1	1	-
2/23	07°53'S	139°59'W	9	-	4	5	9	5	-	5	-	-	-	3	4	36	2	-	-	-	3	2	4	-
2/24	08°43'S	139°13'W	4	-	-	4	4	3	-	-	-	-	-	-	5	64	-	1	1	-	-	4	-	-
2/25	09°35'S	138°50'W	4	-	1	3	4	2	-	-	-	-	-	-	1	65	7	-	-	-	-	2	2	-
2/26	10°22'S	138°26'W	3	-	1	2	3	2	-	2	-	-	-	-	7	40	3	-	2	-	-	2	1	-
2/27	09°49'S	139°09'W	2	-	-	2	1	1	-	1	-	-	-	14	6	49	1	-	-	-	-	2	-	-
2/28	09°33'S	140°02'W	2	-	1	1	2	1	-	-	-	-	-	12	2	48	2	-	-	-	-	1	1	-
3/1	08°55'S	140°02'W	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	2	2	-	-	-	-	-
3/3	08°24'S	139°40'W	1	-	-	1	1	1	-	-	-	-	-	-	16	68	3	-	5	-	-	-	-	1
3/4	05°38'S	139°42'W	3	-	3	-	3	-	-	-	-	-	-	1	-	14	1	-	-	-	-	-	-	-
3/5	07°15'S	139°46'W	6	-	1	5	6	6	-	1	-	-	-	2	2	13	1	-	2	-	-	4	2	-
3/8	09°52'S	139°36'W	3	-	1	2	3	3	-	1	-	-	-	5	5	25	1	-	2	-	1	2	-	1
3/9	12°32'S	139°47'W	-	-	-	-	-	-	-	-	-	-	-	1	-	9	-	-	-	-	-	-	-	-
3/10	10°54'S	139°38'W	4	-	1	3	4	3	-	2	1	-	-	4	1	22	-	3	-	-	-	1	-	1
3/12	09°38'S	139°48'W	3	-	-	3	3	3	-	2	-	-	-	2	2	46	-	-	1	-	-	2	1	-
3/13	08°56'S	139°15'W	2	-	1	1	2	-	-	-	-	-	-	-	-	98	-	-	-	-	-	-	1	-
3/14	08°58'S	140°09'W	1	-	1	-	1	1	-	-	-	-	-	-	3	23	-	-	-	-	-	-	1	-
3/16	08°52'S	140°16'W	4	-	-	4	4	4	-	-	-	-	-	-	5	31	-	-	-	-	-	1	3	-
3/17	05°34'S	142°18'W	-	-	-	-	-	-	-	-	-	-	-	-	2	12	-	-	-	-	-	-	-	-
3/18	02°25'S	144°21'W	-	-	-	-	-	-	-	-	-	-	-	1	-	6	-	-	1	-	-	-	-	-
3/19	00°01'S	145°46'W	-	-	-	-	-	-	-	-	-	-	-	2	-	4	-	-	1	-	-	-	-	-
3/20	03°36'N	147°38'W	-	-	-	-	-	-	-	-	-	-	-	-	3	6	-	-	5	-	-	-	-	-
3/21	06°48'N	148°53'W	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	1	-	-	-	-	-
3/22	10°16'N	150°20'W	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-
3/23	13°39'N	152°08'W	1	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-
3/24	16°58'N	153°38'W	-	-	-	-	-	-	-	-	-	-	1	21	-	-	-	-	7	-	-	-	-	-
3/25	18°36'N	155°51'W	-	-	-	-	-	-	-	-	-	-	1	15	-	13	-	2	-	-	-	-	-	-
3/26	Honolulu		-	-	-	-	-	-	-	-	-	-	5	12	8	-	-	-	-	-	-	-	-	-

Table 16.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Cape Falcon

Date, 1959	Noon Position		Total number	Bird flocks										Scattered birds								Tuna schools			
				Size			Composition																			
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Tropical birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Tropical birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Mixed
2/6	21°23'N	114°48'W	-	-	-	-	-	-	-	-	-	-	-	2	-	-	4	-	2	-	-	-	-	-
2/7	18°48'N	117°01'W	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	7	-	-	-	-	-
2/8	15°50'N	118°54'W	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-	9	-	-	-	-	-
2/9	12°57'N	120°37'W	1	-	-	1	1	-	-	-	1	-	-	4	-	-	-	1	5	-	-	1	-	-
2/10	10°04'N	122°30'W	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	2	-	-	-	-	-
2/11	07°06'N	124°15'W	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	6	-	-	-	-	-
2/12	04°10'N	125°03'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-
2/13	01°19'N	126°57'W	3	2	1	-	3	-	-	-	-	-	-	1	-	-	-	-	3	-	-	-	1	-
2/14	01°39'S	128°55'W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
2/15	05°04'S	130°55'W	4	1	2	1	4	-	-	1	-	-	-	4	-	-	-	-	-	-	-	-	1	-
2/16	06°12'S	134°09'W	12	4	7	1	12	-	-	2	-	-	-	1	-	11	-	1	17	-	-	1	3	-
2/17	07°21'S	137°37'W	12	5	5	2	12	3	-	-	3	-	-	2	-	20	4	-	1	-	1	3	1	-
2/18	07°54'S	139°58'W	22	4	10	8	22	6	-	5	8	-	-	2	3	21	-	-	1	-	7	3	7	3 [1/]
2/19	07°52'S	140°20'W	19	1	9	9	19	6	-	4	4	-	-	9	14	92	6	-	1	-	6	1	5	4 [2/]
2/20	08°02'S	140°46'W	24	-	8	16	24	12	-	13	1	-	-	-	-	20	-	-	-	-	9	7	2	3 [3/]
2/21	08°36'S	140°06'W	11	1	6	4	11	1	1	4	-	-	-	2	9	131	5	1	-	-	1	2	3	
2/22	09°23'S	139°59'W	14	-	10	4	14	3	-	4	-	-	-	20	6	226	1	-	2	-	2	4	3	1 [3/]
2/23	12°42'S	140°40'W	3	-	3	-	3	-	-	2	-	-	-	1	-	6	-	-	-	-	-	-	1	-
2/24	14°04'S	141°29'W	7	2	5	-	7	-	-	4	-	-	-	-	-	68	5	-	-	-	1	1	1	-
2/25	16°13'S	142°46'W	8	2	4	2	8	4	-	3	-	-	-	2	3	140	3	-	-	-	2	-	1	-
2/26	16°47'S	144°10'W	11	3	5	3	10	8	-	-	-	-	-	4	51	98	11	-	-	-	-	1	2	-
2/27	17°13'S	147°34'W	5	-	4	1	5	2	-	-	2	-	-	-	1	21	-	-	-	-	-	2	2	-
3/1	17°10'S	149°09'W	2	1	-	1	2	1	-	-	-	-	-	1	3	32	-	-	-	-	-	-	1	-
3/2	14°57'S	146°38'W	11	4	4	3	11	3	-	4	1	-	-	-	4	62	2	-	-	-	-	2	2	-
3/3	12°51'S	144°27'W	2	1	1	-	2	-	-	2	1	-	-	1	-	3	-	-	-	-	-	1	-	-
3/4	10°25'S	142°19'W	2	-	1	1	2	1	-	1	-	-	-	-	-	2	-	-	1	-	1	-	-	-

1/ 2 yellowfin-skipjack, 1 yellowfin-skipjack-little tuna

2/ 3 yellowfin-skipjack, 1 yellowfin-little tuna

3/ Yellowfin-skipjack

Table 16. --Record of daily sightings of bird flocks, scattered birds, and tuna schools, Cape Falcon - continued

Date, 1959	Noon Position		Total number	Bird flocks									Scattered birds								Tuna schools			
				Size			Composition																		
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Tropical birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Tropical birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Mixed
3/5	08°40'S	140°37'W	20	3	8	9	20	10	-	2	1	-	-	3	29	90	11	-	-	-	4	2	5	4 4/
3/6	07°58'S	140°07'W	18	5	7	6	18	9	-	4	1	-	-	6	24	331	1	-	3	-	5	1	5	-
3/7	08°07'S	139°37'W	20	-	14	6	20	9	-	5	1	-	-	4	-	55	-	-	4	-	3	3	6	4 5/
3/8	08°49'S	140°03'W	2	1	1	-	2	-	-	-	-	-	-	1	8	168	-	1	6	-	-	-	-	-
3/9	08°49'S	139°55'W	1	-	1	-	1	-	-	-	-	-	-	-	-	20	-	-	-	-	-	1	-	-
3/10	08°57'S	139°59'W	8	2	2	4	8	3	-	1	-	-	-	-	7	102	6	2	-	-	1	1	-	2 3/
3/11	08°53'S	140°02'W	6	-	4	2	6	2	-	1	-	-	-	-	-	12	-	-	-	-	1	3	1	-
3/12	08°48'S	139°12'W	16	5	5	6	16	8	1	1	-	-	-	2	13	88	-	-	3	-	1	4	4	1 3/
3/13	07°54'S	139°57'W	13	3	8	2	13	3	-	1	-	-	-	5	7	159	-	1	4	-	10	-	2	2 6/
3/14	08°37'S	140°10'W	8	2	4	2	6	2	1	-	2	-	-	7	14	130	-	-	2	-	-	1	1	1 3/

3/ Yellowfin-skipjack

4/ 1 yellowfin-skipjack 1 yellowfin-dogtooth tuna, 1 yellowfin-dolphin, 1 yellowfin-rainbow runner

5/ 2 yellowfin-unidentified, 1 yellowfin-little tuna-rainbow runner, 1 little tuna-rainbow runner

6/ 1 yellowfin-little tuna, 1 yellowfin-rainbow runner

Table 17.--Record of aquatic mammals sighted, Charles H. Gilbert cruise 43

Date, 1959	Position		Time LT	Observation	Number
	Latitude	Longitude			
1/16	01°06'S	143°52'W	1455	Whale	1
1/16	01°18'S	143°45'W	1615	"	1
2/1	16°03'S	145°43'W	0625	Porpoise	20
2/22	08°59'S	140°11'W	0915	"	6
2/22	08°14'S	140°40'W	1550	"	2
2/23	07°56'S	139°53'W	1240	"	4
2/24	08°48'S	139°17'W	1045	"	1
2/24	08°56'S	139°27'W	1500	"	12
2/25	09°24'S	139°02'W	0950	"	8
3/1	08°56'S	140°04'W	1007	"	15
3/5	06°37'S	139°51'W	0640	Whale	1
3/8	09°54'S	139°35'W	1215	Blackfish	4
3/13	09°21'S	140°07'W	0550	Porpoise	20
3/13	09°02'S	140°12'W	1105	"	9
3/13	08°52'S	140°15'W	1224	"	4
3/13	08°46'S	140°09'W	1430	"	2
3/17	04°47'S	142°50'W	1800	"	very large school

Table 18.--Record of aquatic mammals sighted, Cape Falcon

Date, 1959	Position		Time LT	Observation	Number
	Latitude	Longitude			
2/12	03°48'N	125°12'W	1300	Blackfish	2
2/16	06°22'S	134°31'W	1425	"	2
2/18	07°54'S	139°58'W	1248	Porpoise	large school
2/21	08°31'S	140°12'W	0800-0830	"	-
2/22	09°10'S	140°03'W	0930	"	large school
2/22	09°34'S	140°06'W	1415	"	10
2/25	16°14'S	142°56'W	1443	"	few
3/4	10°36'S	142°28'W	1020	Whale	2
3/5	08°48'S	140°46'W	1025	Porpoise	few
3/8	08°45'S	140°02'W	1010	"	large school
3/9	08°45'S	140°03'W	0615	"	50
3/10	08°45'S	140°14'W	0625	"	few
3/10	08°48'S	140°15'W	0750	"	large school
3/12	08°50'S	139°15'W	1130	"	approx. 30
3/13	08°02'S	139°44'W	0900-0910	Blackfish	2
3/13	08°02'S	139°44'W	0936	Whale	1
3/14	08°32'S	140°08'W	1123	Blackfish	12

Table 19.--Common and scientific names of fish caught

Anchoveta	Cetengraulis mysticetus (Günther)
Barracuda	Sphyraena nigripinnis Temminck and Schlegel
Bigeye tuna	Parathunnus sibi (Temminck and Schlegel)
Dogtooth tuna	Gymnosarda nuda (Günther)
Dolphin	Coryphaena hippurus Linnaeus
Green snapper	Aprion virescens Cuvier and Valenciennes
Jack	Caranx ignobilis (Forskål)
Jack	Caranx lugubris Poey
Jack	Caranx melampygus Cuvier and Valenciennes
Little tuna	Euthynnus yaito Kishinouye
Marquesan sardine	Harengula vittata (Cuvier and Valenciennes)
Rainbow runner	Elagatis bipinnulatus (Quoy and Gaimard)
Skipjack	Katsuwonus pelamis (Linnaeus)
Tahitian nehu	Stolephorus sp.
Tahitian sardine	Sardinella melanosticta (Schlegel)
Wahoo	Acanthocybium solandri (Cuvier and Valenciennes)
Yellowfin tuna	Neothunnus macropterus (Temminck and Schlegel)