

# Marquesas Area Fishery and Environmental Data, January—March 1959



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MARQUESAS AREA FISHERY AND ENVIRONMENTAL DATA  
JANUARY - MARCH 1959

By

Howard O. Yoshida  
Fishery Research Biologist  
United States Fish and Wildlife Service

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## 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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Howard O. Yoshida  
Fishery Research Biologist  
Honolulu Biological Laboratory  
U. S. Bureau of Commercial Fisheries  
Honolulu, Hawaii

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 in-

vestigation 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.

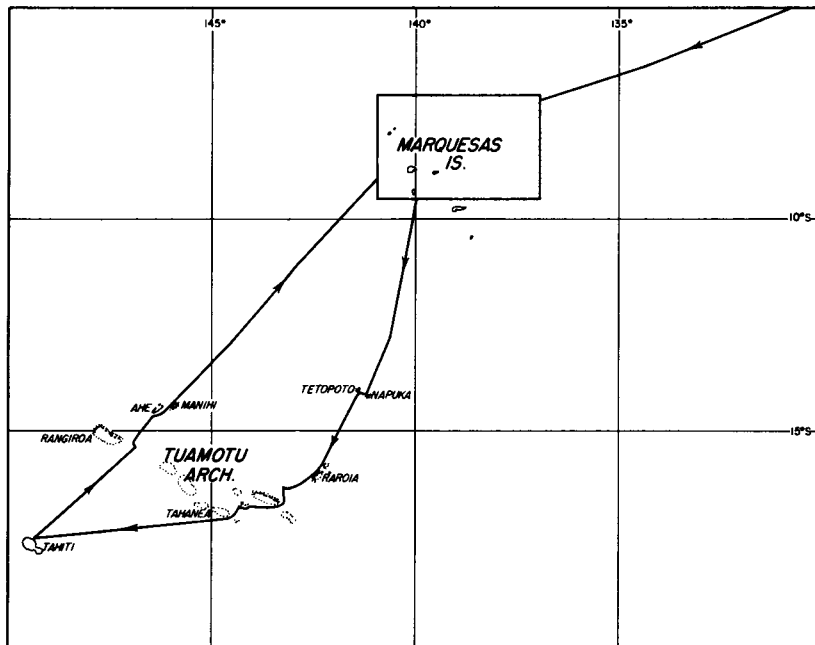


Figure 1. --Track of the Cape Falcon.

#### 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.

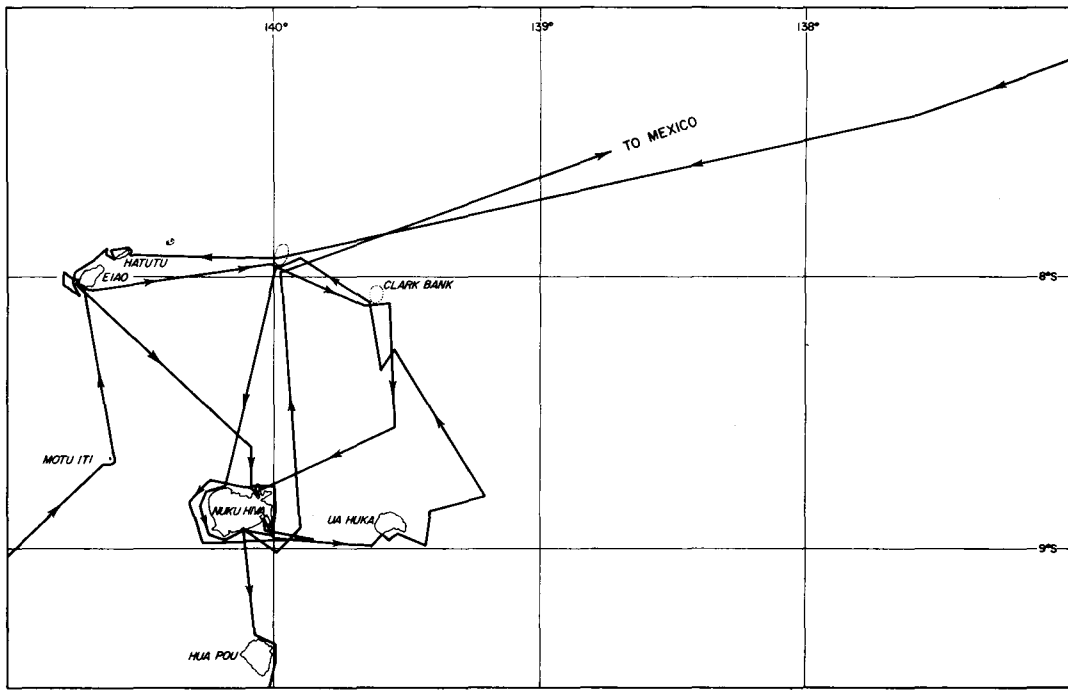


Figure 1a. --Track of the Cape Falcon in the Marquesas Islands.

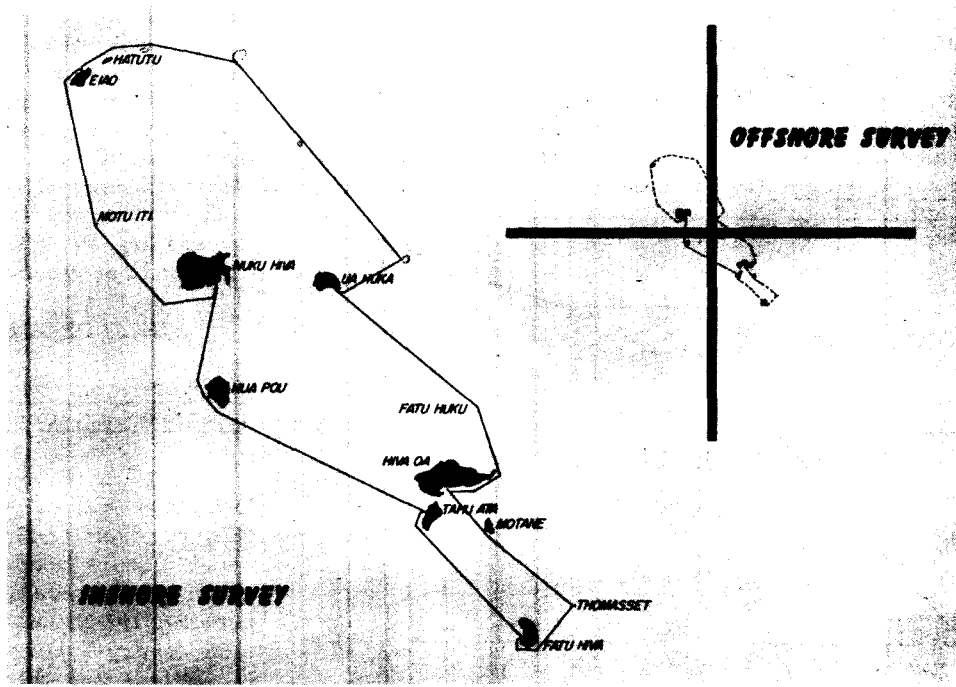


Figure 2. --Standardized inshore and offshore survey tracks, Marquesas area.



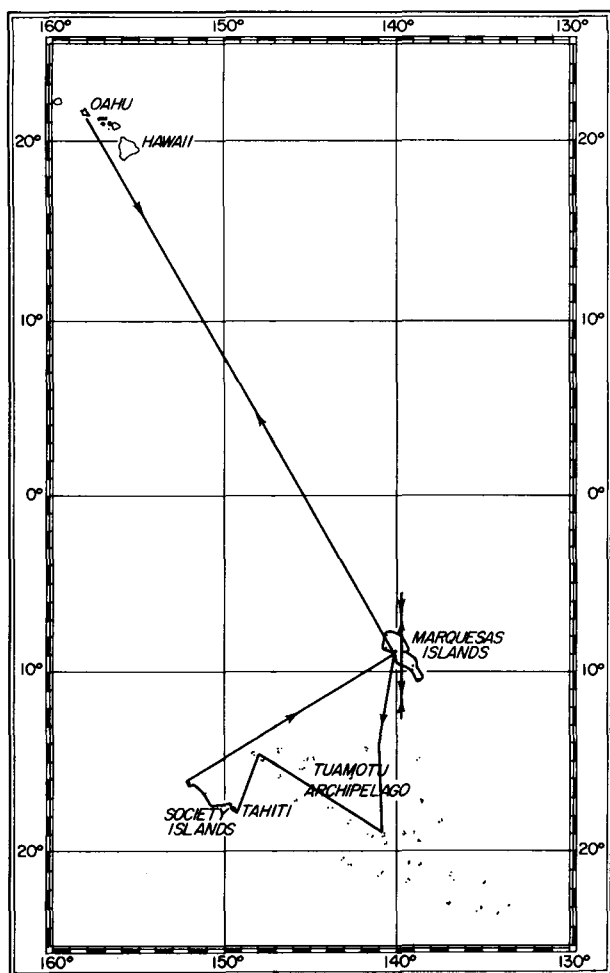


Figure 3. --Track of the Charles H. Gilbert.

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, Date, GCT 1959 | Latitude  | Longitude  | Bkt. temp., °F. | Wind      |            | Air temp.     |               | Baro-meter, mb. | Wear, ther | Clouds  |       | Visibility | Swell     |       | Surf. sal., ‰ |       |
|----------|----------------------|-----------|------------|-----------------|-----------|------------|---------------|---------------|-----------------|------------|---------|-------|------------|-----------|-------|---------------|-------|
|          |                      |           |            |                 | Dir., °T. | Force, kt. | Dry bulb, °F. | Wet bulb, °F. |                 |            | Type    | Cover |            | Dir., °T. | Ampt. |               |       |
| 1        | 0000                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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, Date, GCT 1959 | Latitude | Longitude | Bkt. temp., °F. | Wind      |            | Air temp.     |               | Baro- meter, mb. | Wear- ther | Clouds |         | Visibility | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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         | 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, Date, GCT 1959 | Latitude  | Longitude  | Bkt. temp., °F. | Wind      |            | Air temp.     |               | Baro-meter, mb. | Wear, ther | Clouds |       | Visibility | Swell     |      | Surf. sal., ‰ |       |
|----------|----------------------|-----------|------------|-----------------|-----------|------------|---------------|---------------|-----------------|------------|--------|-------|------------|-----------|------|---------------|-------|
|          |                      |           |            |                 | Dir., °T. | Force, kt. | Dry bulb, °F. | Wet bulb, °F. |                 |            | Type   | Cover |            | Dir., °T. | Amt. |               |       |
| 71       | 1900                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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                 | 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  | 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  | 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  | 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  | 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  | 84.0            | XX        | 00         | 84.2          | 76.5          | 1009            | 03         | 8      | 3     | 9          | 0         | 32   | 2             | -     |
| 93       | 0000                 | 2/3       | 15°05.0'S  | 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  | 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  | 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  | 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  | 83.2            | 32        | 08         | 83.0          | 77.7          | 1012            | 01         | 8      | 3     | 8          | 1         | 32   | 2             | -     |
| 98       | 0900                 | 2/16      | 15°12.0'S  | 82.8            | 33        | 07         | 82.9          | 77.5          | 1012            | 01         | 8      | 2     | 7          | 1         | 32   | 2             | -     |
| 99       | 1200                 | 2/16      | 14°55.5'S  | 83.4            | 32        | 08         | 82.4          | 76.1          | 1011            | 01         | 8      | 1     | 8          | 1         | 32   | 2             | -     |
| 100      | 1500                 | 2/16      | 14°39.0'S  | 83.1            | 30        | 06         | 83.2          | 77.7          | 1011            | 02         | 8      | 1     | 8          | 1         | 32   | 2             | -     |
| 101      | 1800                 | 2/16      | 14°24.0'S  | 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  | 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  | 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  | 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  | 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, Date, GCT 1959 | Latitude | Longitude | Bkt. temp., °F. | Wind      |            | Air temp.     |               | Baro- meter, mb. | Wear- ther | Clouds |       | Vis- ibility | Swell     |        | Surf. sal., ‰ |       |
|----------|----------------------|----------|-----------|-----------------|-----------|------------|---------------|---------------|------------------|------------|--------|-------|--------------|-----------|--------|---------------|-------|
|          |                      |          |           |                 | Dir., °T. | Force, kt. | Dry bulb, °F. | Wet bulb, °F. |                  |            | Type   | Cover |              | Dir., °T. | Am- t. |               |       |
| 106      | 0900                 | 2/17     | 13°09.0'S | 146°48.0'W      | 83.3      | 32         | 15            | 82.8          | 78.2             | 1012       | 02     | 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            | 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            | 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     | 6            | 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            | 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     | 8            | 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     | 8            | 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      | -             |       |
| 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      | -             |       |
| 115      | 1200                 | 2/18     | 11°00.5'S | 143°34.0'W      | 81.8      | 34         | 21            | 82.0          | 77.0             | 1010       | 02     | 8     | 8            | 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            | 5         | 36     | -             |       |
| 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            | -     |
| 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            | -     |
| 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            | 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | -     |
| 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            | 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            | 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            | 35.33 |

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

| Ser. No. | Time, Date, GCT 1959 | Latitude  | Longitude  | Bkt. temp., °F. | Wind      |            | Air temp.     |               | Baro-meter, mb. | Wear-ther | Clouds  |       | Visi-bility | Swell     |       | Surf. sal., ‰ |       |
|----------|----------------------|-----------|------------|-----------------|-----------|------------|---------------|---------------|-----------------|-----------|---------|-------|-------------|-----------|-------|---------------|-------|
|          |                      |           |            |                 | Dir., °T. | Force, kt. | Dry bulb, °F. | Wet bulb, °F. |                 |           | Type    | Cover |             | Dir., °T. | Armt. |               |       |
| 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.     |               |      | Baro-meter, mb. | Wear-ther | Clouds |           | Visibility | 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      | 7         | 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, Date, GCT 1959 | Latitude | Longitude | Bkt. temp., °F. | Wind      |            | Air temp.     |               | Baro-meter, mb. | Wear-ther | Clouds |       | 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   | 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   | 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         | 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    | 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    | 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    | 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    | 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.     |               |      | Baro- meter, mb. | Wea- ther | Clouds |           | Visi- bility | Swell |   | Surf. sal., ‰ |
|-----------|------------|----------|-----------|-----------------|-----------|------------|---------------|---------------|------|------------------|-----------|--------|-----------|--------------|-------|---|---------------|
|           |            |          |           |                 | Dir., °T. | Force, kt. | Dry bulb, °F. | Wet bulb, °F. | Type |                  |           | Cover  | Dir., °T. |              | Am't. |   |               |
| 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, Date, GCT | Latitude | Longitude | Bkt. temp., °F. | Wind      |            | Air temp.     |               |      | Baro-meter, mb. | Wear-ther | Clouds |          | Visibility | 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.     |               | Baro-meter, mb. | Wear-ther | Clouds |       | Visibility | Swell     |       | Surf. sal., ‰ |
|-----------|------------|----------|-----------|-----------------|-----------|------------|---------------|---------------|-----------------|-----------|--------|-------|------------|-----------|-------|---------------|
|           |            |          |           |                 | Dir., °T. | Force, kt. | Dry bulb, °F. | Wet bulb, °F. |                 |           | Type   | Cover |            | Dir., °T. | Ampt. |               |
| 0100      | 3/7        | 07°57'S  | 139°57'W  | 82.8            | 09        | 14         | 82.1          | 75.3          | 1009            | 03        | 8      | 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             |
| 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             |
| 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             |
| 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             |

Table 3. --Weather observations, Charles H. Gilbert cruise 43<sup>1/</sup>

| 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           | 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      |

<sup>1/</sup> 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.,<br>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          | 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 <sup>1/</sup> |           | Secchi disc, meters | Water color (Forel) | Sea <sup>2/</sup> | Wind <sup>3/</sup> | 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                |

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

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

<sup>3/</sup> 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<br>1959 | Time,<br>LT | Position |           | Species        | Num-<br>ber <sup>1/</sup> | Average<br>length,<br>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                     |

<sup>1/</sup> 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,<br>1959 | Yellowfin  | Skipjack  | Little tuna | Rainbow<br>runner | Wahoo    | Barracuda | Dogtooth<br>tuna | Jack     | Green<br>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           | -                 | -        | -         | -                | -        | -                |
| <b>Total</b>  | <b>136</b> | <b>27</b> | <b>23</b>   | <b>6</b>          | <b>7</b> | <b>1</b>  | <b>2</b>         | <b>5</b> | <b>3</b>         |

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

| Date,<br>1959 | Time,<br>LT | Position |           | Number<br>of<br>passes | Number<br>of<br>minutes<br>chummed | Number caught<br>and species <sup>1/</sup> | Amount<br>of bait<br>(buckets) |
|---------------|-------------|----------|-----------|------------------------|------------------------------------|--|--------------------------------|
|               |             | Latitude | Longitude |                        |                                    |  |                                |
| 1/15          | 1112        | 02°02'N  | 145°10'W  | 1                      | 3                                  | 0 SJ                                       | 1.0 <sup>2/</sup>              |
| 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                            |

<sup>1/</sup> SJ = skipjack, YF = yellowfin, BE = bigeye, UN = unidentified

<sup>2/</sup> Tilapia; Marquesan sardines were used at all other occasions.

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

| Date,<br>1959 | Time,<br>LT | Position |           | Number<br>of<br>passes | Number<br>of<br>minutes<br>chummed | Number caught<br>and species <sup>1/</sup> | Amount<br>of bait,<br>(scoops) <sub>2/</sub> |
|---------------|-------------|----------|-----------|------------------------|------------------------------------|--|--|
|               |             | 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   |

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

<sup>2/</sup> 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,<br>1959 | Time,<br>LT | Position |           | Number<br>of<br>passes | Number<br>of<br>minutes<br>chummed | Number caught<br>and species <u>1/</u> | Amount<br>of bait,<br>(scoops) <u>2/</u> |
|---------------|-------------|----------|-----------|------------------------|------------------------------------|--|--|
|               |             | 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,<br>1959 | Time,<br>LT | Position |           | Number<br>of<br>passes | Number<br>of<br>minutes<br>chummed | Number caught<br>and species <sup>1/</sup> | Amount<br>of bait,<br>(scoops) <sup>2/</sup> |
|---------------|-------------|----------|-----------|------------------------|------------------------------------|--|--|
|               |             | 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   |

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

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









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

| Date,<br>1959 | Locality                | Amount seen<br>(buckets) |                     |                  | No. of<br>sets |       | Catch<br>(buckets)   |                     |                  |
|---------------|-------------------------|--------------------------|---------------------|------------------|----------------|-------|----------------------|---------------------|------------------|
|               |                         | Marquesan<br>sardine     | Tahitian<br>sardine | Tahitian<br>nehu | Day            | Night | Marquesan<br>sardine | Tahitian<br>sardine | Tahitian<br>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          | Taipei 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          | Taipei 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          | Taipei 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           | Taipei 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           | Taipei Vai, Nuku Hiva   | 30                       | -                   | -                | 3              | -     | 30                   | -                   | -                |

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

| Date,<br>1959 | Locality              | Amount seen<br>(buckets) |                     |                  | No. of<br>sets |       | Catch<br>(buckets)   |                     |                  |
|---------------|-----------------------|--------------------------|---------------------|------------------|----------------|-------|----------------------|---------------------|------------------|
|               |                       | Marquesan<br>sardine     | Tahitian<br>sardine | Tahitian<br>nehu | Day            | Night | Marquesan<br>sardine | Tahitian<br>sardine | Tahitian<br>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<br>1959 | Locality              | Number<br>of sets |       | Catch (scoops) |                      |
|--------------|-----------------------|-------------------|-------|----------------|----------------------|
|              |                       | Day               | Night | Anchoveta      | Marquesan<br>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         | Taipei 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,<br>1959     | Position |           | Fork length range in millimeters |       |       |       |       |       |        |         |         | Total |         |
|-------------------|----------|-----------|----------------------------------|-------|-------|-------|-------|-------|--------|---------|---------|-------|---------|
|                   |          |           | 35-44                            | 45-54 | 55-64 | 65-74 | 75-84 | 85-94 | 95-104 | 105-114 | 115-124 |       | 125-134 |
|                   | Latitude | Longitude |                                  |       |       |       |       |       |        |         |         |       |         |
| 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       | 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       |           | Bird flocks |         |              |             | Scattered birds |         |                |               |           |                        |       |               |       |           | Tuna schools |              |                    |                        |
|------------|---------------------|-----------|-------------|---------|--------------|-------------|-----------------|---------|----------------|---------------|-----------|------------------------|-------|---------------|-------|-----------|--------------|--------------|--------------------|------------------------|
|            | Latitude            | Longitude | Size        |         | Total number | Composition |                 |         |                |               | Albatross | Petrels or shearwaters | Other | Storm petrels | Other | Yellowfin | Skipjack     | Unidentified | Yellowfin-Skipjack |                        |
|            |                     |           | < 10        | 10 - 50 |              | > 50        | Terns           | Boobies | Tropical birds | Frigate birds |           |                        |       |               |       |           |              |              |                    | Petrels or shearwaters |
| 1/9        | 18°31'N             | 155°36'W  | 1           | 1       | 1            | 1           | 1               | 1       | 1              | 10            | 1         | 3                      | -     | -             | -     | -         | -            | 1            | -                  |                        |
| 1/10       | 15°34'N             | 153°50'W  | -           | -       | -            | -           | -               | -       | -              | -             | -         | 1                      | 1     | 1             | 2     | -         | -            | -            | -                  |                        |
| 1/11       | 12°38'N             | 152°12'W  | -           | -       | -            | -           | -               | -       | -              | -             | 1         | -                      | -     | -             | -     | -         | -            | -            | -                  |                        |
| 1/12       | 09°48'N             | 150°44'W  | -           | -       | -            | -           | -               | -       | -              | 7             | -         | 10                     | -     | 1             | -     | -         | -            | -            | -                  |                        |
| 1/13       | 07°06'N             | 148°36'W  | -           | -       | -            | -           | -               | -       | -              | 16            | -         | -                      | -     | 4             | -     | -         | -            | -            | -                  |                        |
| 1/14       | 04°31'N             | 146°42'W  | -           | -       | -            | -           | -               | -       | -              | 14            | -         | 1                      | 1     | 1             | -     | -         | -            | -            | -                  |                        |
| 1/15       | 01°55'N             | 145°06'W  | 1           | 1       | 1            | 1           | 1               | 1       | 1              | 1             | -         | 19                     | -     | 5             | -     | -         | -            | -            | -                  |                        |
| 1/16       | 00°44'S             | 144°05'W  | 2           | 1       | 1            | 2           | 1               | 1       | 1              | -             | -         | 21                     | -     | 2             | -     | -         | -            | -            | -                  |                        |
| 1/17       | 04°00'S             | 142°18'W  | 1           | 1       | 1            | 1           | 1               | 1       | 1              | 2             | -         | 26                     | 3     | 2             | 7     | -         | -            | 1            | -                  |                        |
| 1/18       | 07°27'S             | 140°58'W  | 14          | 1       | 12           | 14          | 5               | -       | 2              | 1             | -         | 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               | -       | -              | -             | -         | 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             | -         | 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               | 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               | 2       | 1              | 1             | -         | 4                      | -     | -             | -     | -         | 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 |           | Bird flocks |         |             |       |         |                |               |                        |              |           | Scattered birds        |         |       |               |                |               |       | Tuna schools |          |              |                    |       |   |
|------------|---------------|-----------|-------------|---------|-------------|-------|---------|----------------|---------------|------------------------|--------------|-----------|------------------------|---------|-------|---------------|----------------|---------------|-------|--------------|----------|--------------|--------------------|-------|---|
|            | Latitude      | Longitude | Size        |         | Composition |       |         |                |               |                        | Total number | Albatross | Petrels or shearwaters | Boobies | Terns | Frigate birds | Tropical birds | Storm petrels | Other | Yellowfin    | Skipjack | Unidentified | Yellowfin-Skipjack |       |   |
|            |               |           | < 10        | 10 - 50 | > 50        | Terns | Boobies | Tropical birds | Frigate birds | Petrels or shearwaters |              |           |                        |         |       |               |                |               |       |              |          |              |                    | Other |   |
| 2/22       | 08°38'S       | 140°26'W  | -           | -       | 2           | 2     | 2       | -              | -             | -                      | -            | -         | -                      | 9       | 93    | 1             | -              | -             | -     | -            | -        | -            | 1                  | 1     | - |
| 2/23       | 07°53'S       | 139°59'W  | -           | 4       | 5           | 9     | 5       | -              | -             | -                      | -            | -         | 3                      | 4       | 36    | 2             | -              | -             | -     | -            | -        | -            | 3                  | 2     | 4 |
| 2/24       | 08°43'S       | 139°13'W  | -           | -       | 4           | 4     | 3       | -              | -             | -                      | -            | -         | -                      | 5       | 64    | -             | 1              | 1             | -     | -            | -        | -            | 4                  | -     | - |
| 2/25       | 09°35'S       | 138°50'W  | -           | 1       | 3           | 4     | 2       | -              | -             | -                      | -            | -         | -                      | 1       | 65    | 7             | -              | -             | -     | -            | -        | -            | 2                  | 2     | - |
| 2/26       | 10°22'S       | 138°26'W  | -           | 1       | 2           | 3     | 2       | -              | -             | -                      | -            | -         | -                      | 2       | 40    | 3             | -              | -             | -     | -            | -        | -            | 2                  | 1     | - |
| 2/27       | 09°49'S       | 139°09'W  | -           | -       | 2           | 1     | 1       | -              | -             | -                      | -            | -         | -                      | 1       | 6     | 1             | -              | -             | -     | -            | -        | -            | 2                  | -     | - |
| 2/28       | 09°33'S       | 140°02'W  | -           | 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       | -              | -             | -                      | -            | -         | -                      | -       | 16    | 68            | 3              | -             | 5     | -            | -        | -            | -                  | -     | 1 |
| 3/4        | 05°38'S       | 139°42'W  | -           | 3       | -           | 3     | -       | -              | -             | -                      | -            | -         | -                      | -       | 1     | 14            | 1              | -             | -     | -            | -        | -            | -                  | -     | - |
| 3/5        | 07°15'S       | 139°46'W  | -           | 1       | 5           | 6     | 6       | -              | -             | -                      | -            | -         | -                      | 1       | 2     | 13            | 1              | -             | 2     | -            | -        | -            | 4                  | 2     | - |
| 3/8        | 09°52'S       | 139°36'W  | -           | 1       | 2           | 3     | 3       | -              | -             | -                      | -            | -         | -                      | 1       | 5     | 25            | 1              | -             | 2     | -            | -        | -            | 1                  | 2     | - |
| 3/9        | 12°32'S       | 139°47'W  | -           | -       | -           | -     | -       | -              | -             | -                      | -            | -         | -                      | -       | 1     | 9             | -              | -             | -     | -            | -        | -            | -                  | -     | - |
| 3/10       | 10°54'S       | 139°38'W  | -           | 1       | 3           | 4     | 3       | -              | -             | -                      | -            | -         | -                      | 2       | 1     | 22            | -              | 3             | -     | -            | -        | -            | 1                  | 1     | - |
| 3/12       | 09°38'S       | 139°48'W  | -           | -       | 3           | 3     | 3       | -              | -             | -                      | -            | -         | -                      | 2       | 2     | 46            | -              | -             | 1     | -            | -        | -            | 2                  | 1     | - |
| 3/13       | 08°56'S       | 139°15'W  | -           | 1       | 1           | 2     | -       | -              | -             | -                      | -            | -         | -                      | -       | -     | 98            | -              | -             | -     | -            | -        | -            | -                  | 1     | - |
| 3/14       | 08°58'S       | 140°09'W  | -           | 1       | 1           | 1     | 1       | -              | -             | -                      | -            | -         | -                      | -       | -     | 23            | -              | -             | -     | -            | -        | -            | -                  | 1     | - |
| 3/16       | 08°52'S       | 140°16'W  | -           | -       | 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     | -            | -        | -            | -                  | -     | - |
| 3/23       | 13°39'N       | 152°08'W  | -           | 1       | -           | -     | -       | -              | -             | -                      | -            | -         | -                      | -       | -     | -             | 1              | -             | -     | -            | -        | -            | -                  | 1     | - |
| 3/24       | 16°58'N       | 153°38'W  | -           | -       | -           | -     | -       | -              | -             | -                      | -            | -         | -                      | -       | 21    | -             | -              | -             | 7     | -            | -        | -            | -                  | -     | - |
| 3/25       | 18°36'N       | 155°51'W  | -           | -       | -           | -     | -       | -              | -             | -                      | -            | -         | -                      | -       | 15    | -             | 13             | -             | -     | -            | -        | -            | -                  | -     | - |
| 3/26       | Honolulu      |           | -           | -       | -           | -     | -       | -              | -             | -                      | -            | -         | -                      | -       | 8     | -             | 5              | 12            | -     | -            | -        | -            | -                  | -     | - |





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

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

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,<br>1959 | Position |           | Time<br>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,<br>1959 | Position |           | Time<br>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

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

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