

DRIFT BOTTLE RECORDS FOR THE GULF OF MAINE, GEORGES BANK AND BAY OF FUNDY, 1956-58



SPECIAL SCIENTIFIC REPORT-FISHERIES No. 378

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

United States Department of the Interior, Stewart L. Udall, Secretary
Fish and Wildlife Service, Clarence F. Pautzke, Commissioner
Bureau of Commercial Fisheries, Donald L. McKernan, Director

DRIFT BOTTLE RECORDS FOR THE GULF OF MAINE, GEORGES BANK AND BAY OF FUNDY, 1956-58

by

Dean F. Bumpus

Contribution No. 1146 from the Woods Hole Oceanographic Institution



United States Fish and Wildlife Service
Special Scientific Report--Fisheries No. 378

Washington, D. C.
May 1961

This work was financed by the Bureau of Commercial Fisheries under Contract No. 14-17-008-62, with funds made available under the Act of July 1, 1954 (68 Stat. 376), commonly known as the Saltonstall-Kennedy Act.

DRIFT BOTTLE RECORDS FOR THE GULF OF MAINE, GEORGES BANK AND BAY OF FUNDY, 1956-58

by

Dean F. Bumpus

The drift-bottle data tabulated here are the result of extended studies by the United States Fish and Wildlife Service, the Fisheries Research Board of Canada, and the Woods Hole Oceanographic Institution in the Gulf of Maine area.

Since the previous data report, Bumpus and Day (1957), drift bottles have not only been released during voyages of research vessels in the area but also from Lightships and the U.S. Air Force Texas Towers. One set of data, *Crawford* 18, represents bottles released in Raleigh Bay off North Carolina. A number of bottles launched prior to the autumn of 1959 have been reported since the above-mentioned report went to press. These are included as an appendix as is one return from *T. N. Gill* Cruise 8, supplementary to those reported by Anderson and Gehringer (1959).

Some of the results of these and previous data are reported by Bumpus (1960). The several thousand drift bottles released during 1957 and 1958, as part of the Passamaquoddy Fisheries Investigations, are not included here. The results of that study are found in Chevrier and Trites (1960).

The drift bottle paths, drawn on the accompanying figures, were deduced in a manner similar to that described by

Day (1958). Briefly, the final paths drawn on each chart resulted from constructing a consistent field of motion for any given set of data, commencing with the shortest drifts in both time and distance and continuing until all paths had been drawn.

Bottle Type and Distribution

The bottles used were those commonly employed for carbonated drinks. They were of clear glass and measured approximately 8 1/2 inches high and 2 1/4 inches in diameter with a capacity of 8 fluid ounces. Dry sand ballast was added to the majority of the bottles with the intention that they should float vertically at or near the surface and thus be less influenced by the action of winds and breaking waves. Where bottles were not ballasted, it is so indicated.

The Data

The original data are on file at the Woods Hole Oceanographic Institution, where a punch card system is maintained and supplemented as new returns are received and further studies initiated.

The listings below include all recoveries on record as of August 31, 1960, from the following cruises and static locations. Diagrams of the surface circulation as deduced from the recoveries of the drift bottles launched on these cruises accompany the data.

Note.--Dean F. Bumpus, Oceanographer, Woods Hole Oceanographic Institution, Woods Hole, Mass.

1956	<i>Harengus</i>	Cruise AH5	Sept. 19-Oct. 4	Figure 1
	<i>Silver Bay</i>	" 1	Sept. 21-Oct. 5	
	<i>Silver Bay</i>	" 2	Oct. 15-Oct. 25	Figure 2
	<i>Harengus</i>	" AH6	Oct. 16-Oct. 28	
	<i>Silver Bay</i>	" 4	Nov. 14-Nov. 30	Figure 3
	<i>Harengus</i>	" AH7	Nov. 14-Dec. 1	
1947	<i>Delaware</i>	" 57-1	Jan. 26-Feb. 4	Figure 4
	<i>Albatross III</i>	" 88	Feb. 19-Feb. 28	
	<i>Albatross III</i>	" 90	Apr. 11-Apr. 17	Figure 5
	<i>Albatross III</i>	" 92	Apr. 25-May 1	Figure 6
	<i>Albatross III</i>	" 93	May 8-May 16	Figure 7
	<i>Albatross III</i>	" 94	May 22-May 28	Figure 8
	<i>Albatross III</i>	" 95	June 5-June 9	Figure 9
	<i>Harengus</i>	" 17	Sept. 9-Sept. 15	Figure 10
	<i>Harengus</i>	" 18	Oct. 7-Oct. 25	Figure 11
	<i>Albatross III</i>	" 104	Oct. 9-Oct. 17	
	<i>Albatross III</i>	" 105	Oct. 29-Nov. 8	Figure 12
	<i>Harengus</i>	" 19	Nov. 5-Nov. 21	
	<i>Albatross III</i>	" 106	Dec. 3-Dec. 19	Figure 13
	<i>Delaware</i>	" 57-9	Dec. 17-Dec. 19	
1958	<i>Albatross III</i>	" 107	Jan. 18-Jan. 20	Figure 14
	<i>Delaware</i>	" 57-9(111)	Jan. 28-Jan. 29	
	<i>Sackville</i>	" 37	Feb. 6-Feb. 27	Figure 15
	<i>Sackville</i>	" 38	Apr. 4-Apr. 5	Figure 16
	<i>Metacomet</i>	" 58-1	Apr. 8-Apr. 26	
	<i>Albatross III</i>	" 110	May 6-May 7	Figure 17
	<i>Metacomet</i>	" 58-2	May 8-May 11	
	<i>Crawford</i>	" 18	May 17-June 3	Figure 18
	<i>Albatross III</i>	" 111	May 20-May 24	Figure 19
	<i>Sackville</i>	" 39	May 22-May 27	

1958	<i>Albatross III</i>	Cruise 117	Sept. 9-Sept. 15	Figure 20
	<i>Dartmouth</i>	" 1	Sept. 9-Sept. 15	
	<i>Albatross III</i>	" 118	Sept. 23-Oct. 1	
	<i>Delaware</i>	" 58-5	Oct. 6-Oct. 14	
	<i>Albatross III</i>	" 119	Oct. 8-Oct. 16	Figure 21
	<i>Harengus</i>	" 25	Oct. 15-Oct. 30	
	<i>Albatross III</i>	" 120	Oct. 21-Oct. 28	
	<i>Harengus</i>	" 27	Nov. 10-Nov. 24	Figure 22
	<i>Delaware</i>	" 58-7	Dec. 12, 18 and 19	
	<i>Sambro</i> Lightship		Oct. 9, 1958-Dec. 30, 1958	
	<i>Lurcher</i> Lightship		Oct. 28, 1956-Dec. 31, 1958	
	<i>Princess Helene</i>		Dec. 18, 1958-Dec. 31, 1958	
	<i>Portland</i> Lightship		July 23, 1958-Dec. 31, 1958	
	Texas Tower #2		Jan. 31, 1958-Dec. 31, 1958	
	<i>Nantucket</i> Lightship		July 28, 1958-Dec. 27, 1958	
	Texas Tower #4		Oct. 7, 1958-Dec. 31, 1958	

LITERATURE CITED

- ANDERSON, W. W., AND J. W. GEHRINGER.
1959. Physical, oceanographic, biological and chemical data, South Atlantic coast of the United States. M/V Theodore N. Gill Cruise 8. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 303, 227 p.
- BUMPUS, D. F., AND C. G. DAY.
1957. Drift bottle records for the Gulf of Maine and Georges Bank, 1931-56. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 242, 64 p.
- BUMPUS, D. F.
1960. Sources of water contributed to the Bay of Fundy by surface circulation. J. Fish. Res. Bd. Canada, 17 (2): 181-197.
- CHEVRIER, J. R., AND R. W. TRITES.
1960. Drift bottle experiments in the Quoddy region, Bay of Fundy. J. Fish. Res. Bd. Canada, 17 (6): 743-762.
- DAY, C. G.
1958. Surface circulation in the Gulf of Maine as deduced from drift bottles. U. S. Fish and Wildlife Service, Fishery Bulletin, vol. 58, no. 141, p. 443-472.

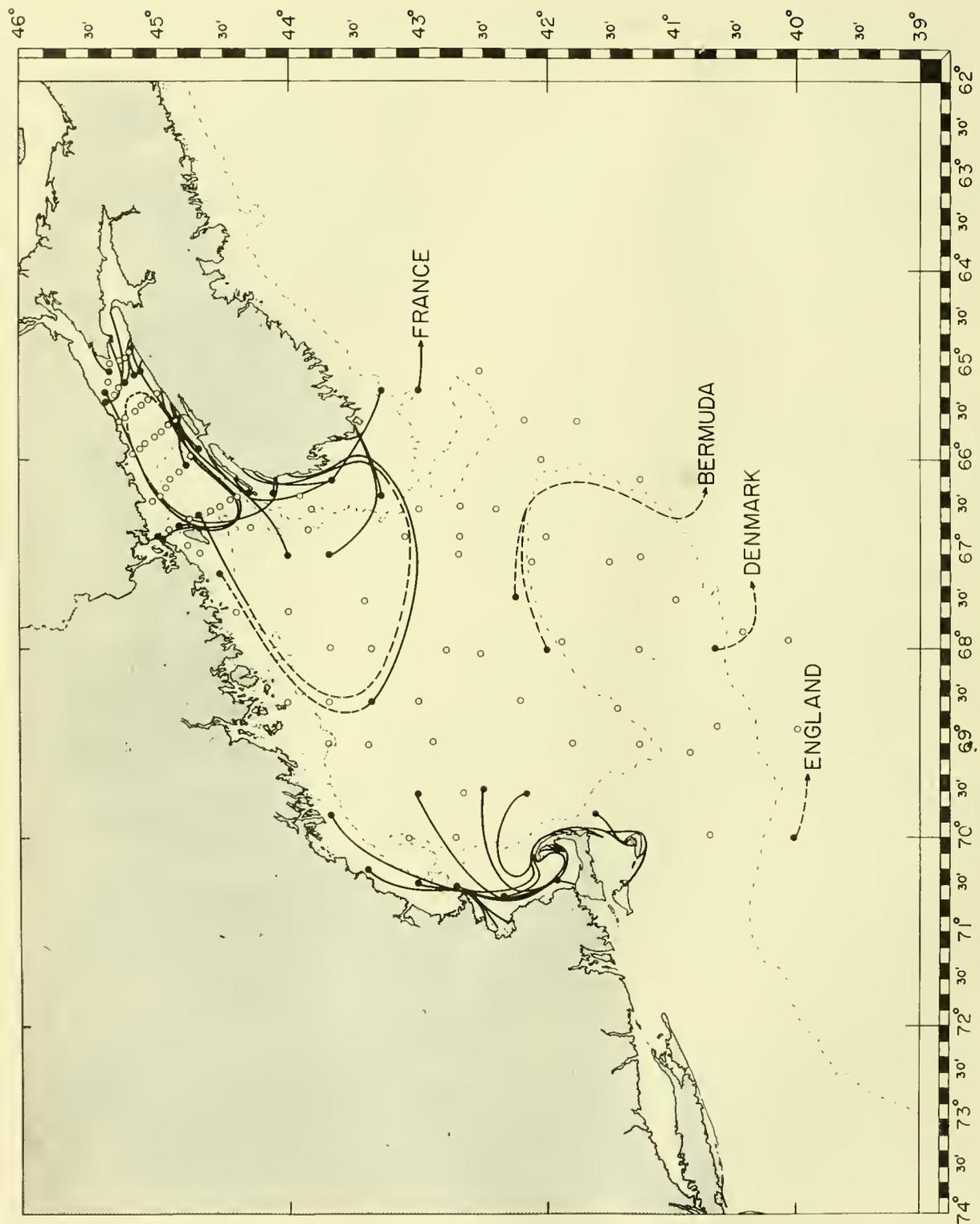


FIGURE 1. --Surface circulation deduced from recoveries of drift bottles launched on *Harengus* Cruise AH5 and *Silver Bay* Cruise 1. September 19-October 5, 1956.

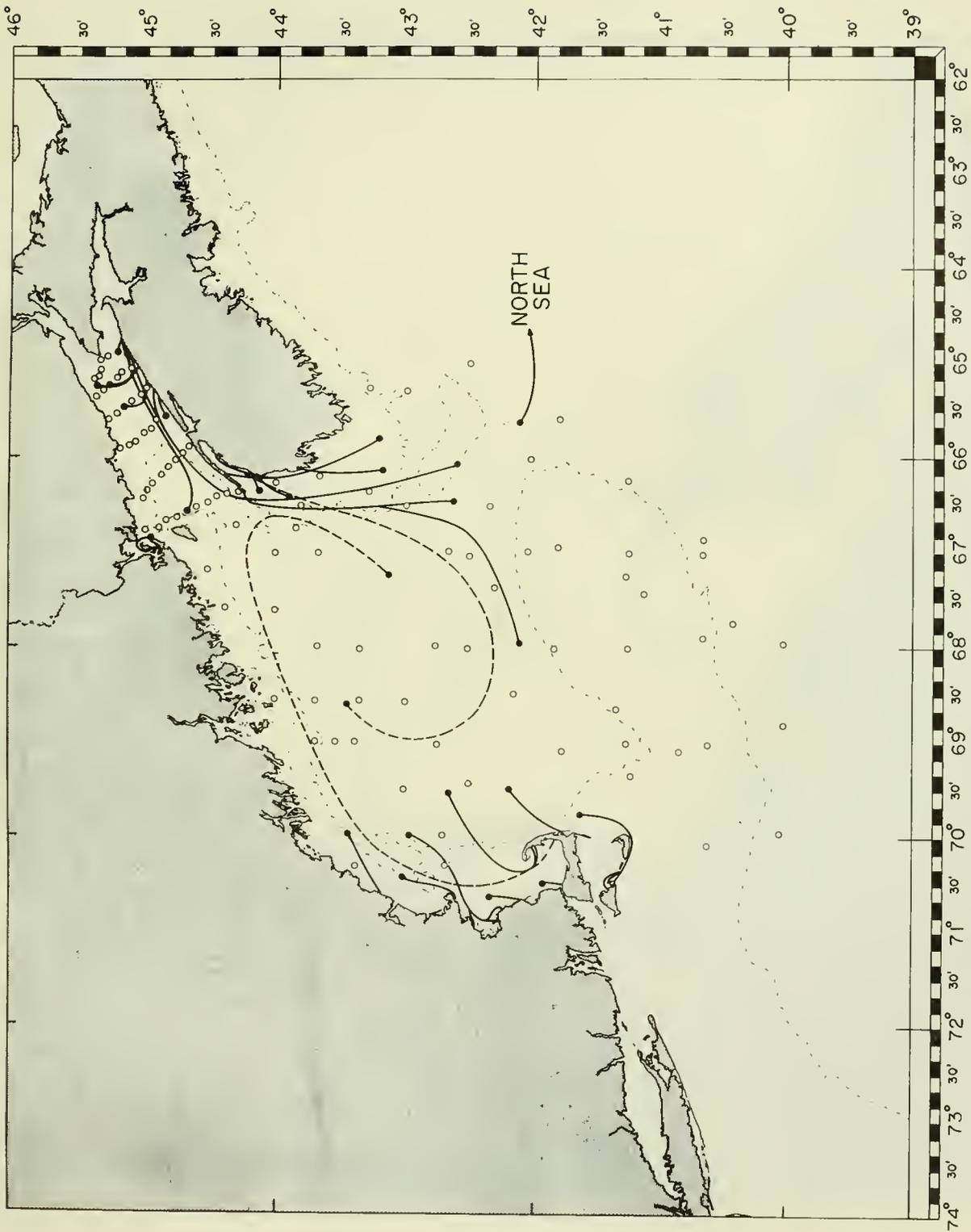


FIGURE 2. --Surface circulation deduced from recoveries of drift bottles launched on Silver Bay Cruise 2 and *Harengus* Cruise AH6, October 15-28, 1956.



FIGURE 3. --Surface circulation deduced from recoveries of drift bottles launched on Silver Bay Cruise 4 and Harengus Cruise AH7. November 14-December 1, 1956.

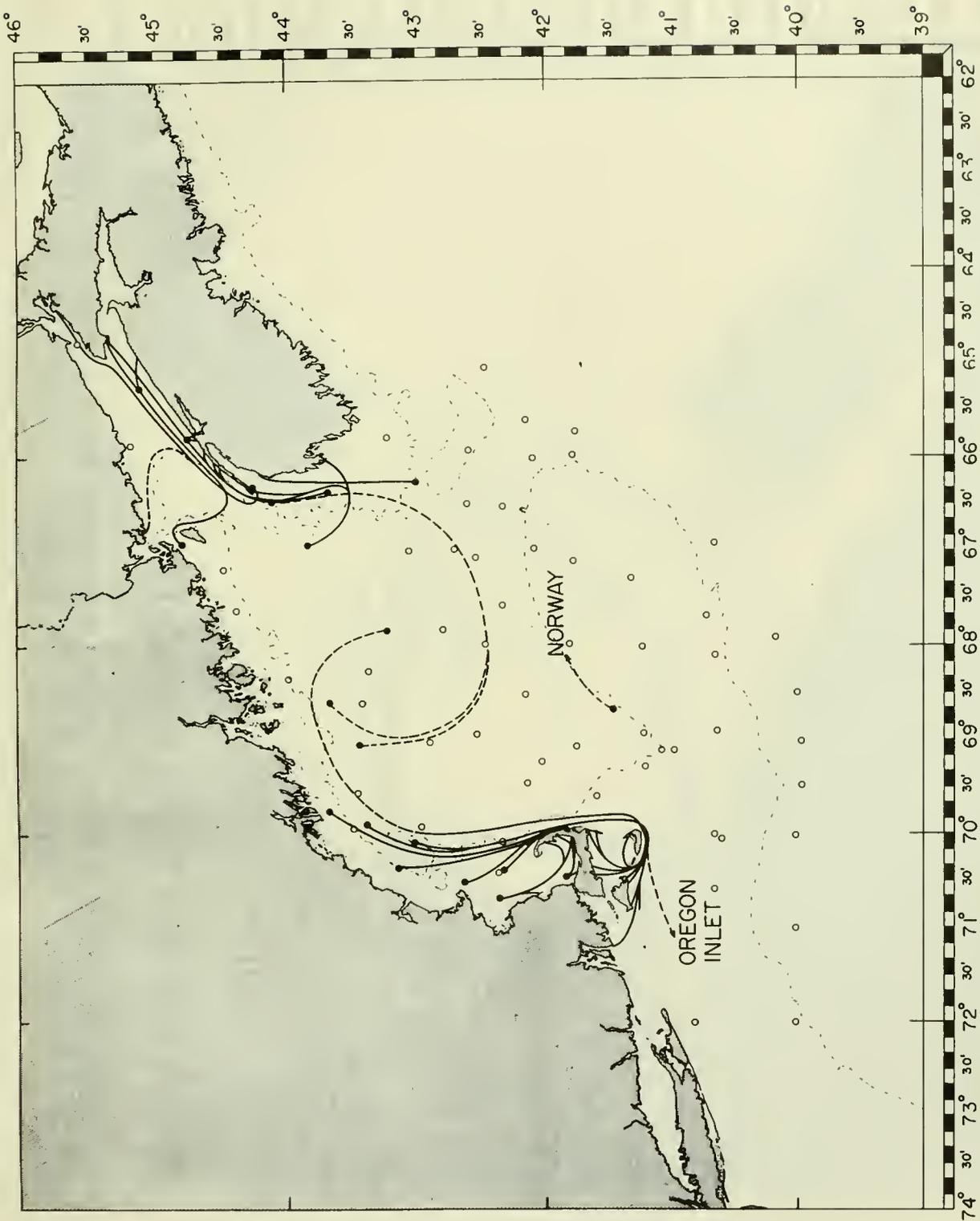


FIGURE 4. --Surface circulation deduced from recoveries of drift bottles launched on *Delaware* Cruise 57-1 and *Albatross III* Cruise 88. January 26-February 28, 1957.



FIGURE 5. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 90, April 11-17, 1957.

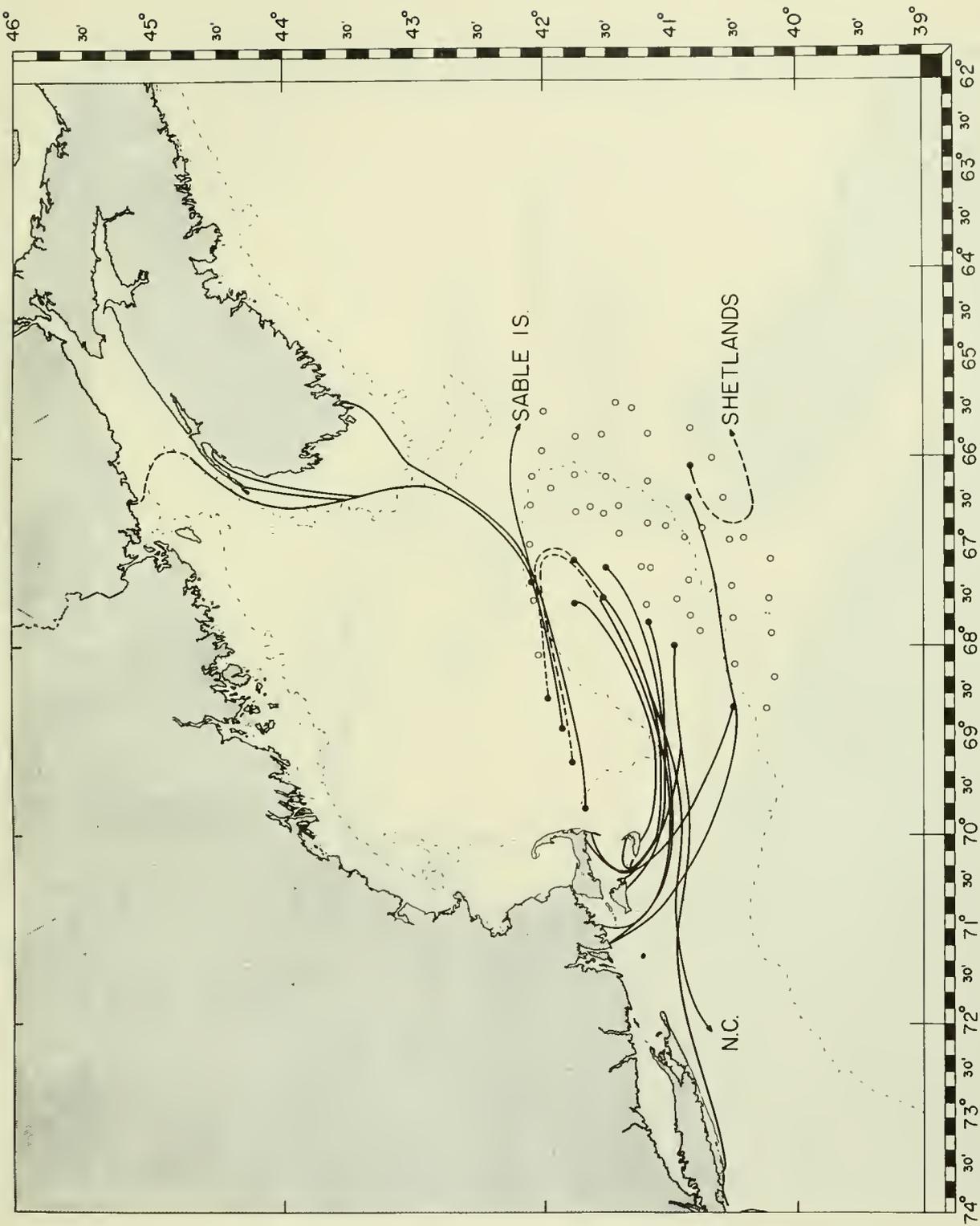


FIGURE 6. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 92. April 25-May 1, 1957.

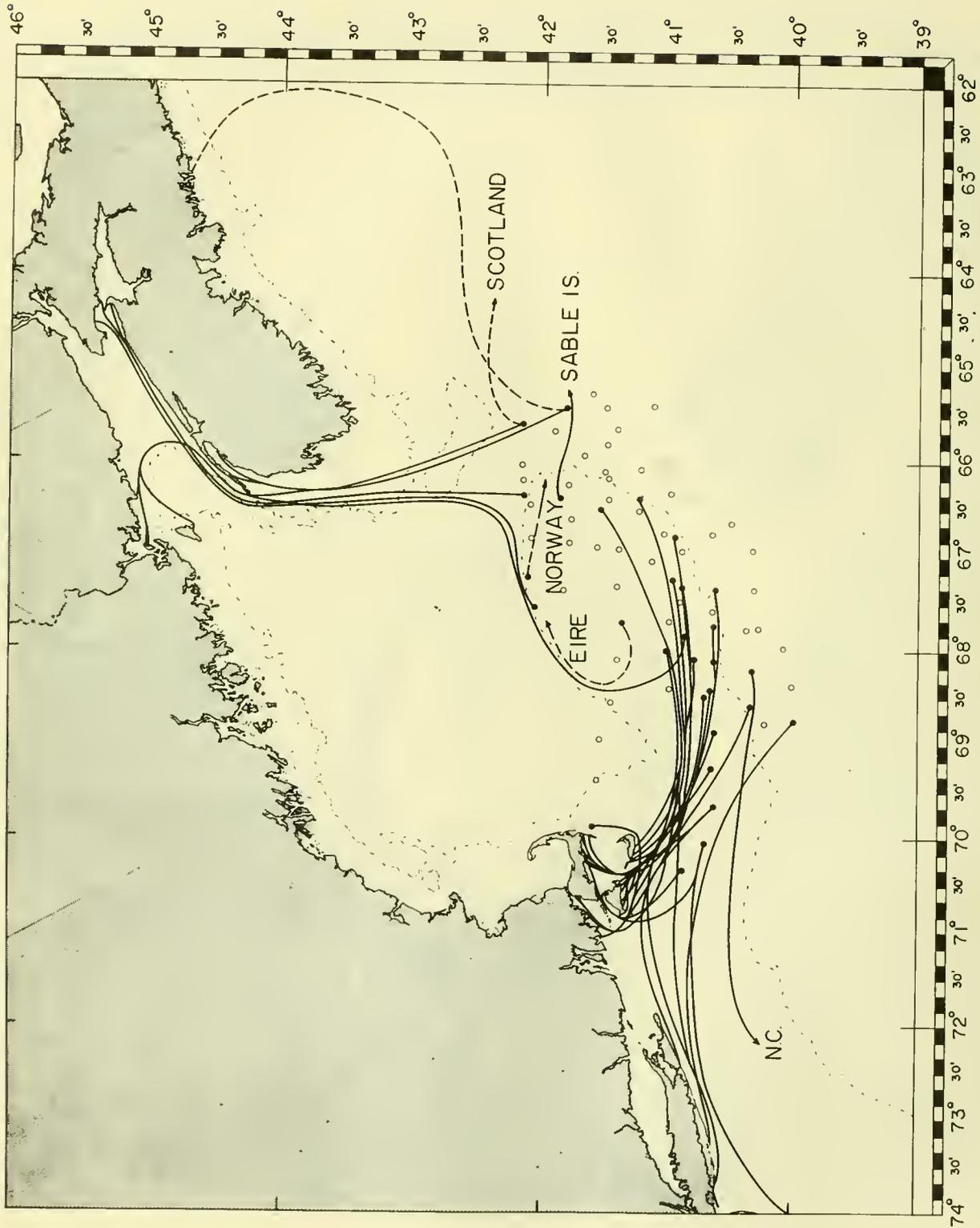


FIGURE 7. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 93, May 8-16, 1957.

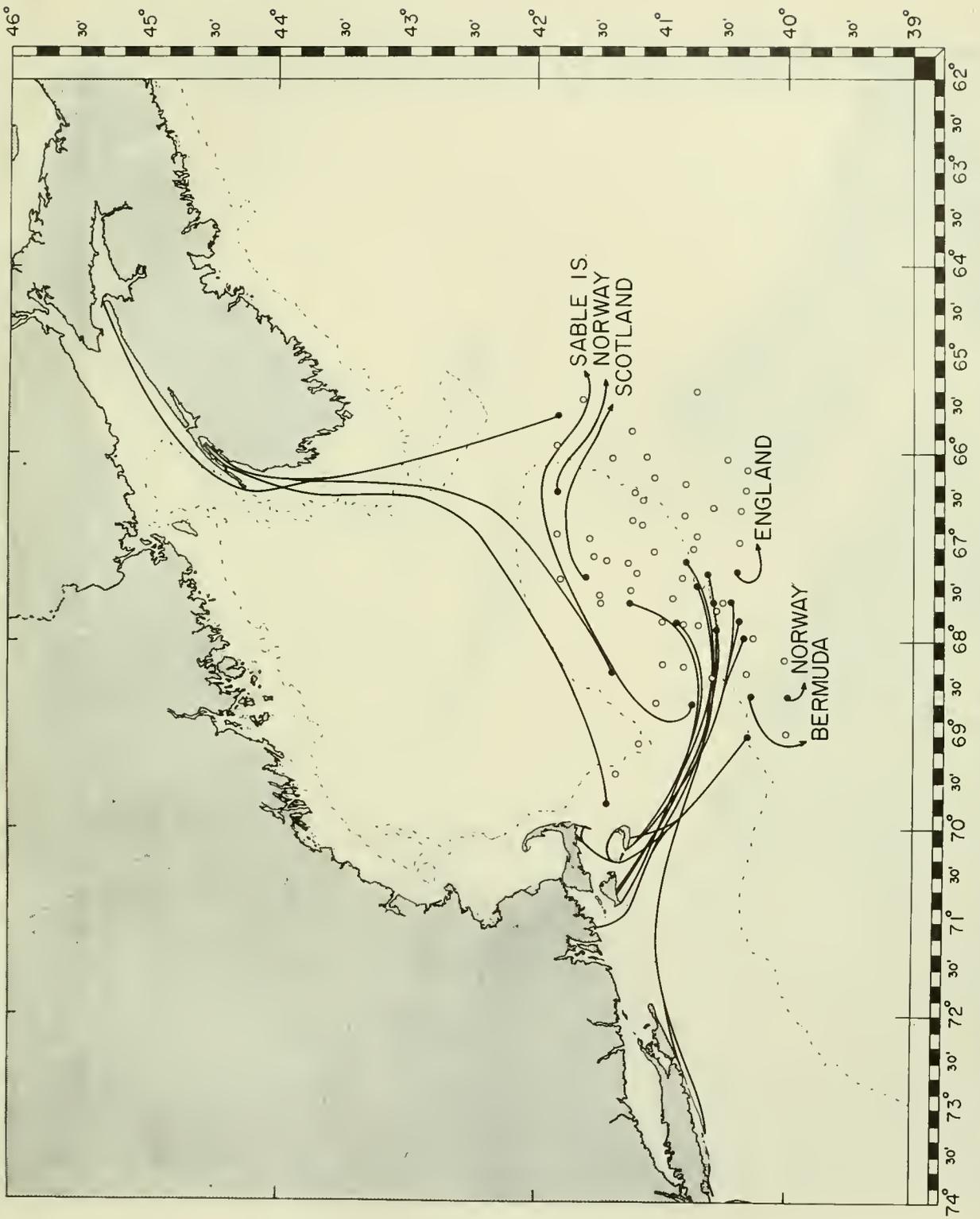


FIGURE 8. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 94, May 22-28, 1957.

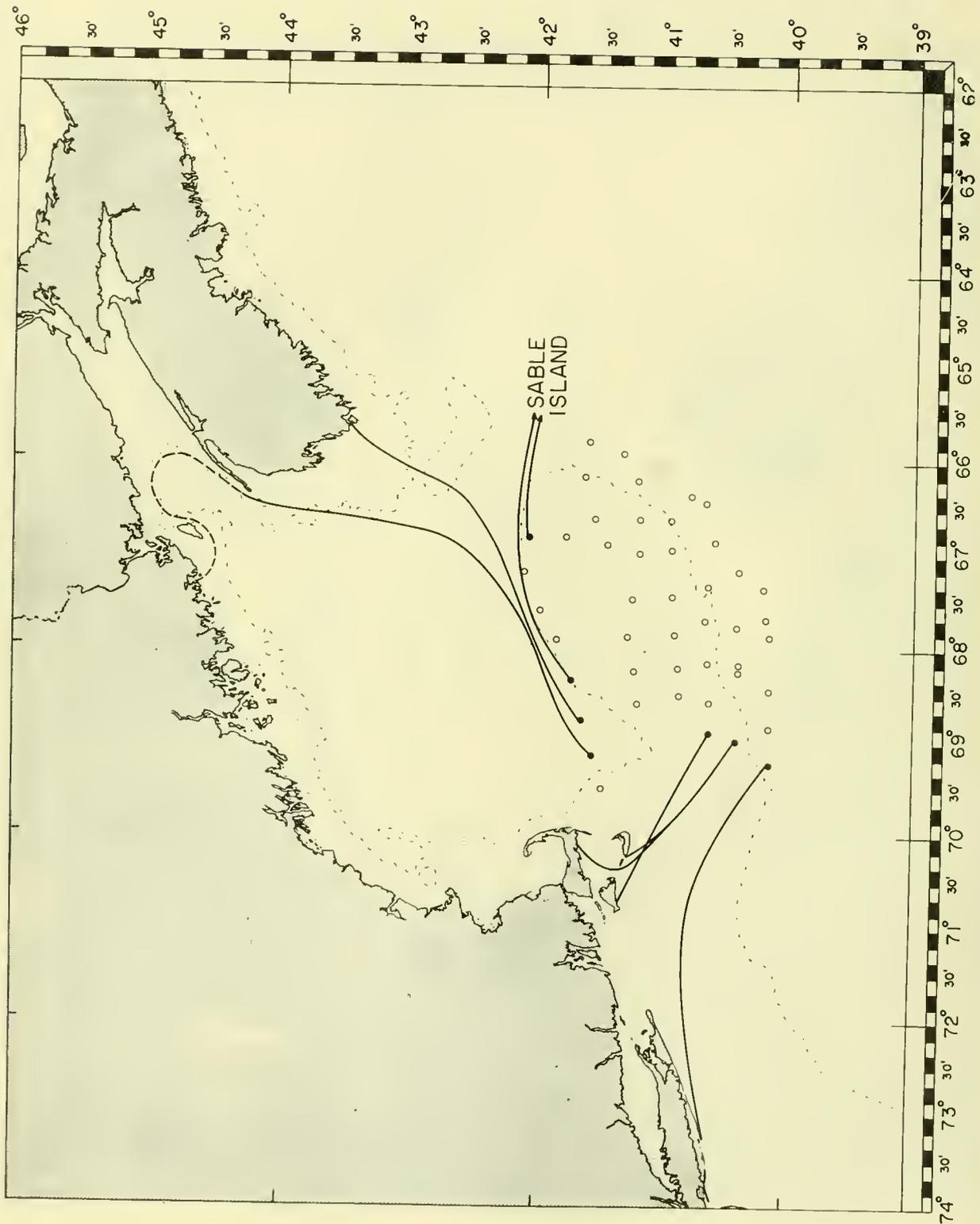


FIGURE 9. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 95. June 5-9, 1957.

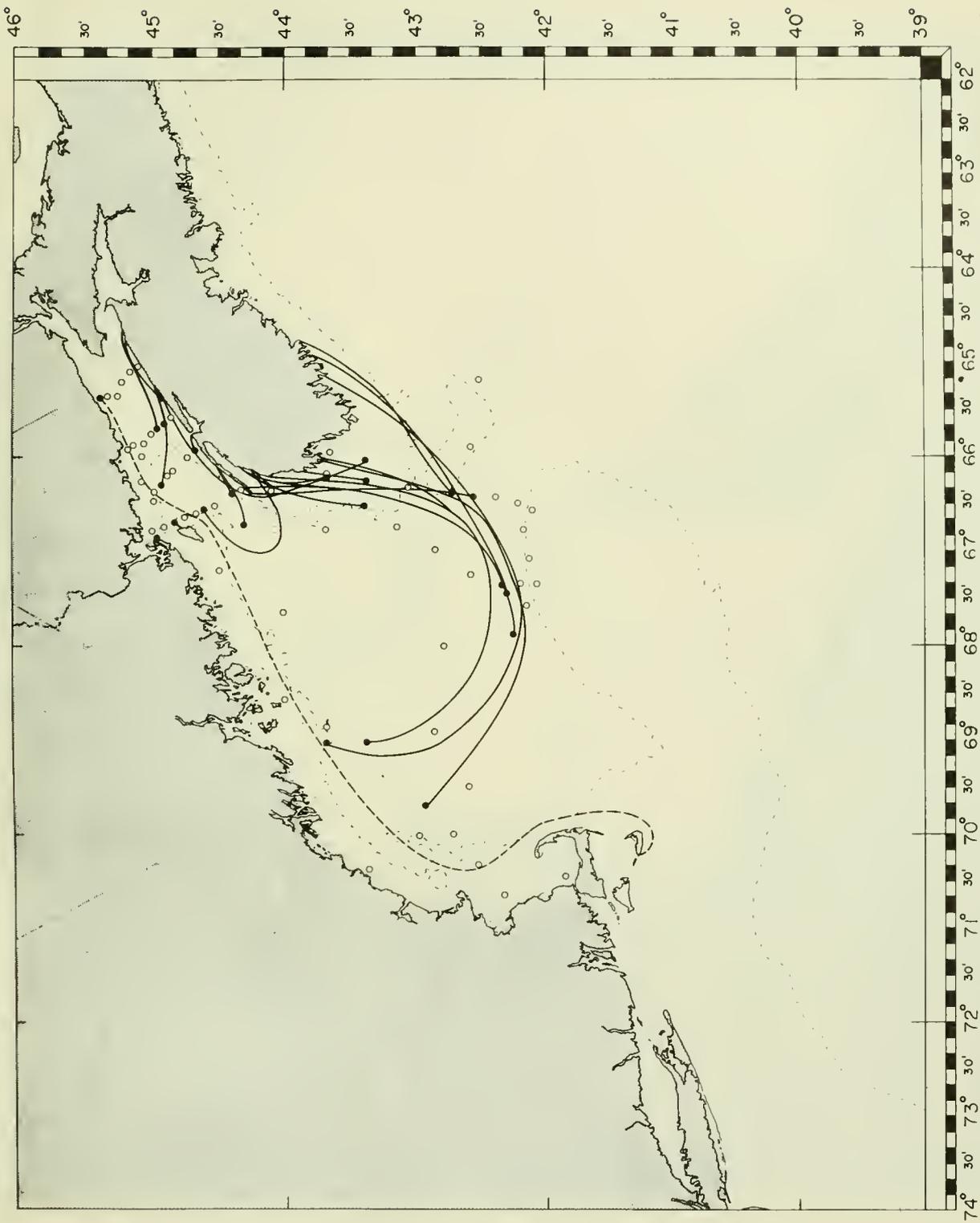


FIGURE 10. --Surface circulation deduced from recoveries of drift bottles launched on *Harengus* Cruise 17, September 9-15, 1957.

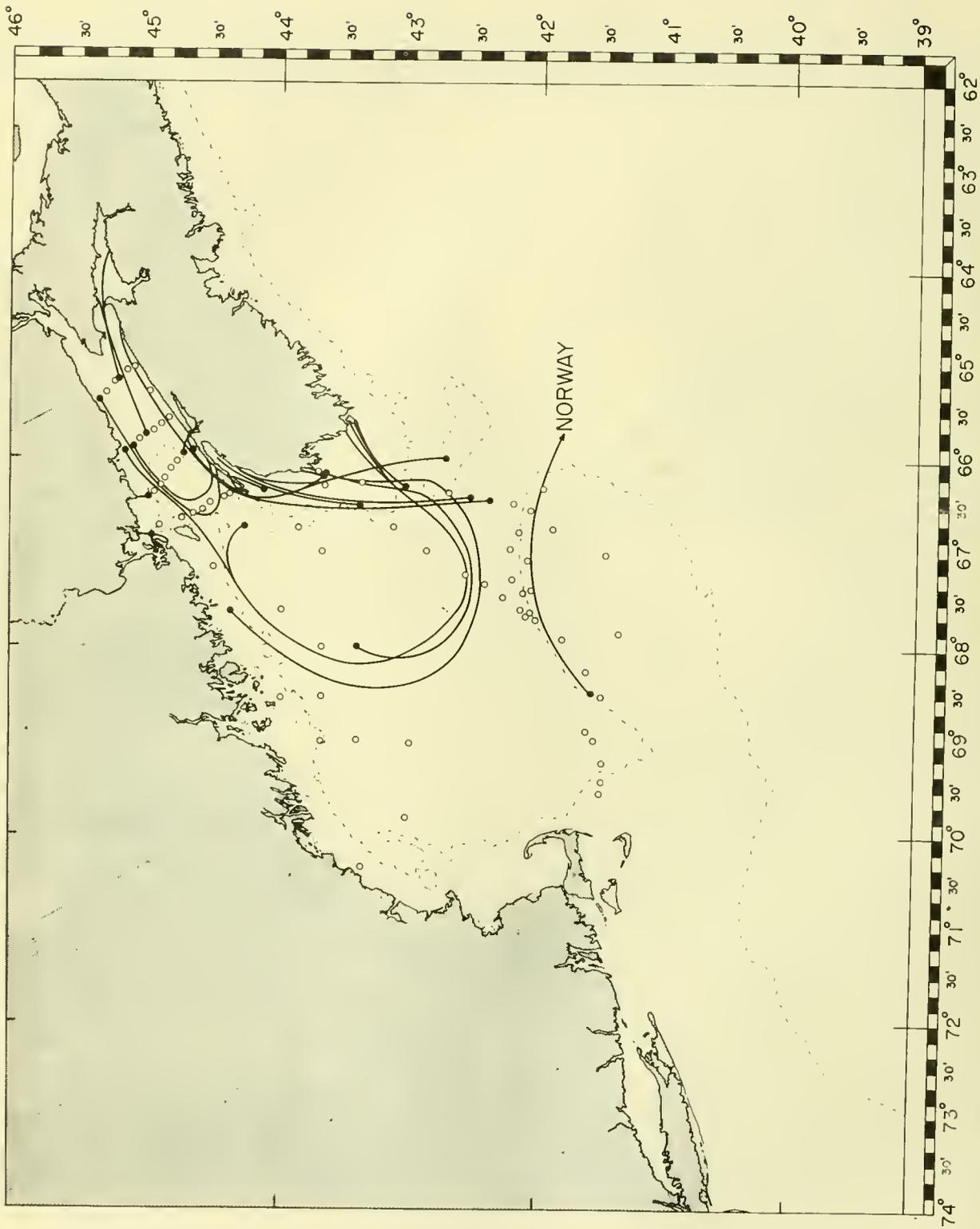


FIGURE 11. --Surface circulation deduced from recoveries of drift bottles launched on *Harengus* Cruise 18 and *Albatross III* Cruise 104, October 7-25, 1957.

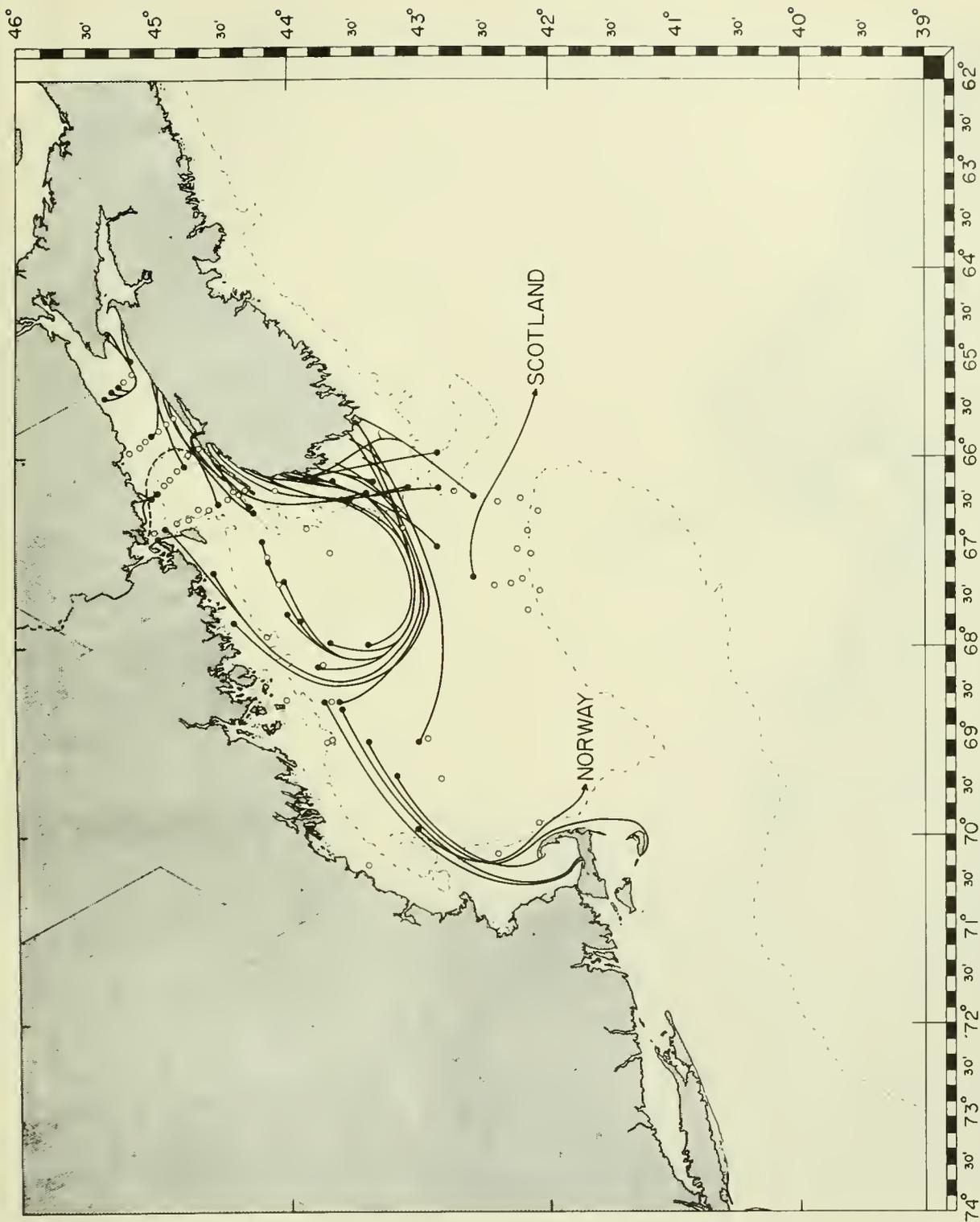


FIGURE 12. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 105 and *Harengus* Cruise 19. October 29-November 21, 1957.

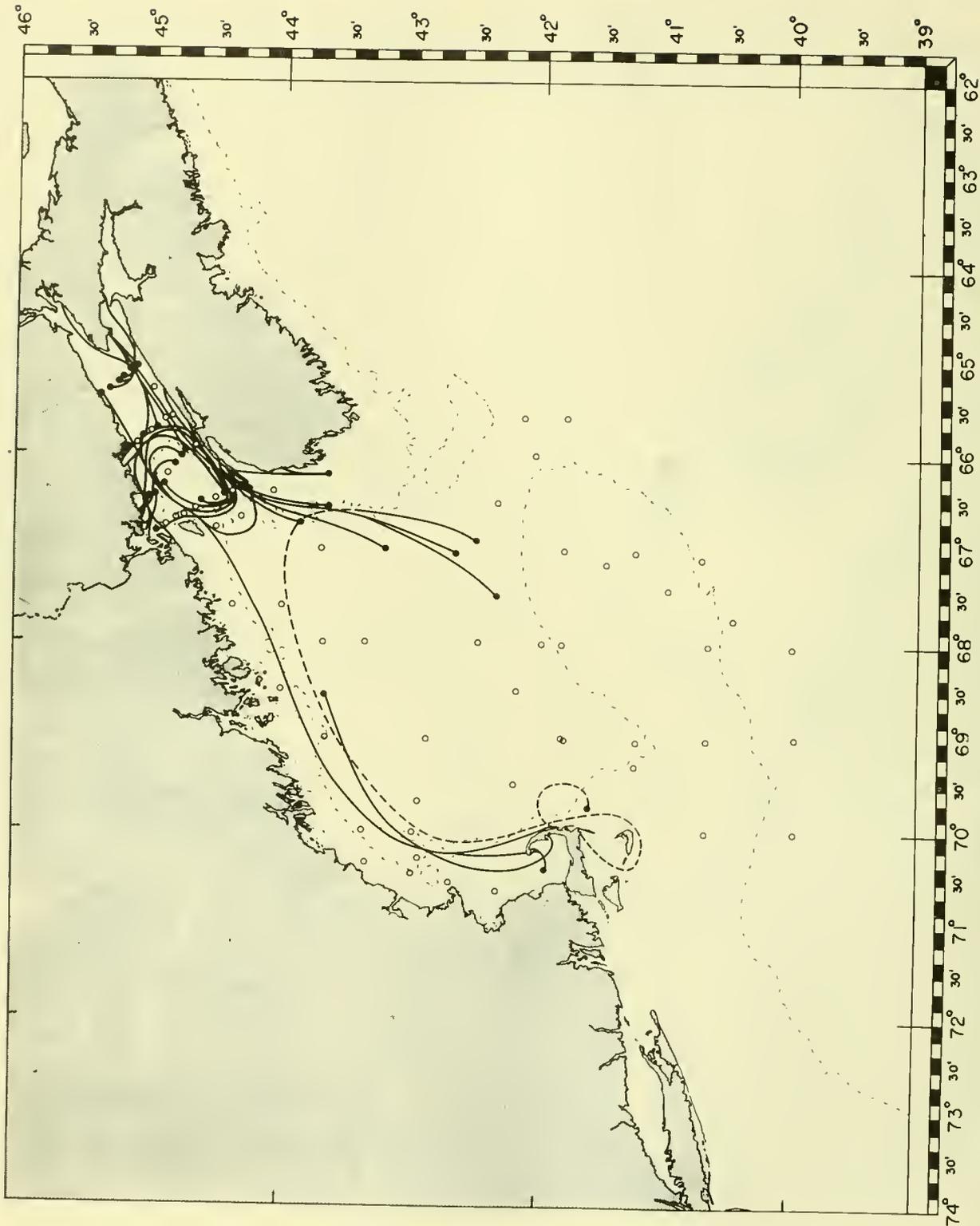


FIGURE 13. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 106 and *Delaware* Cruise 57-9, December 3-19, 1957.

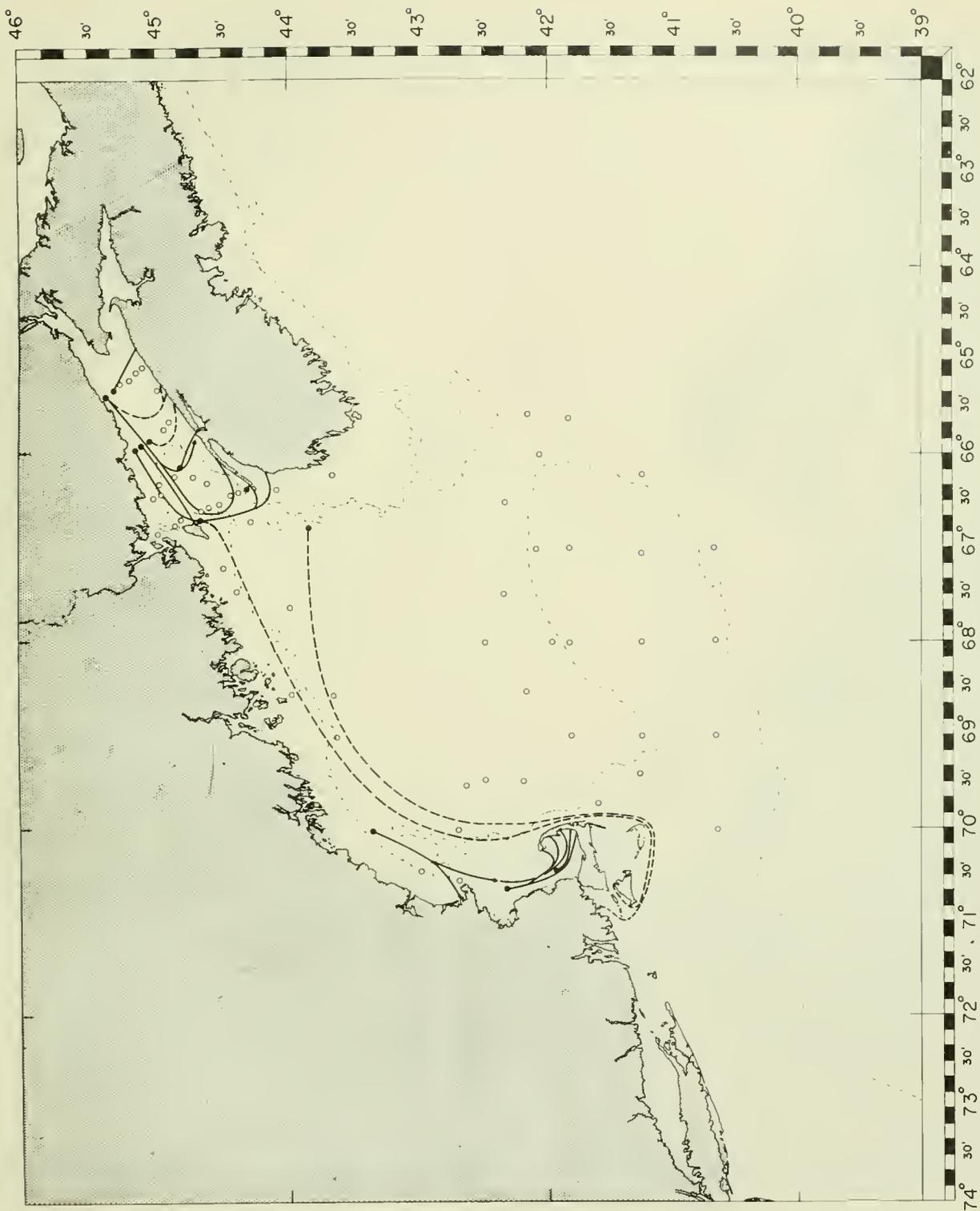


FIGURE 14. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 107 and *Delaware* Cruise 57-9 (111). January 18-29, 1958.

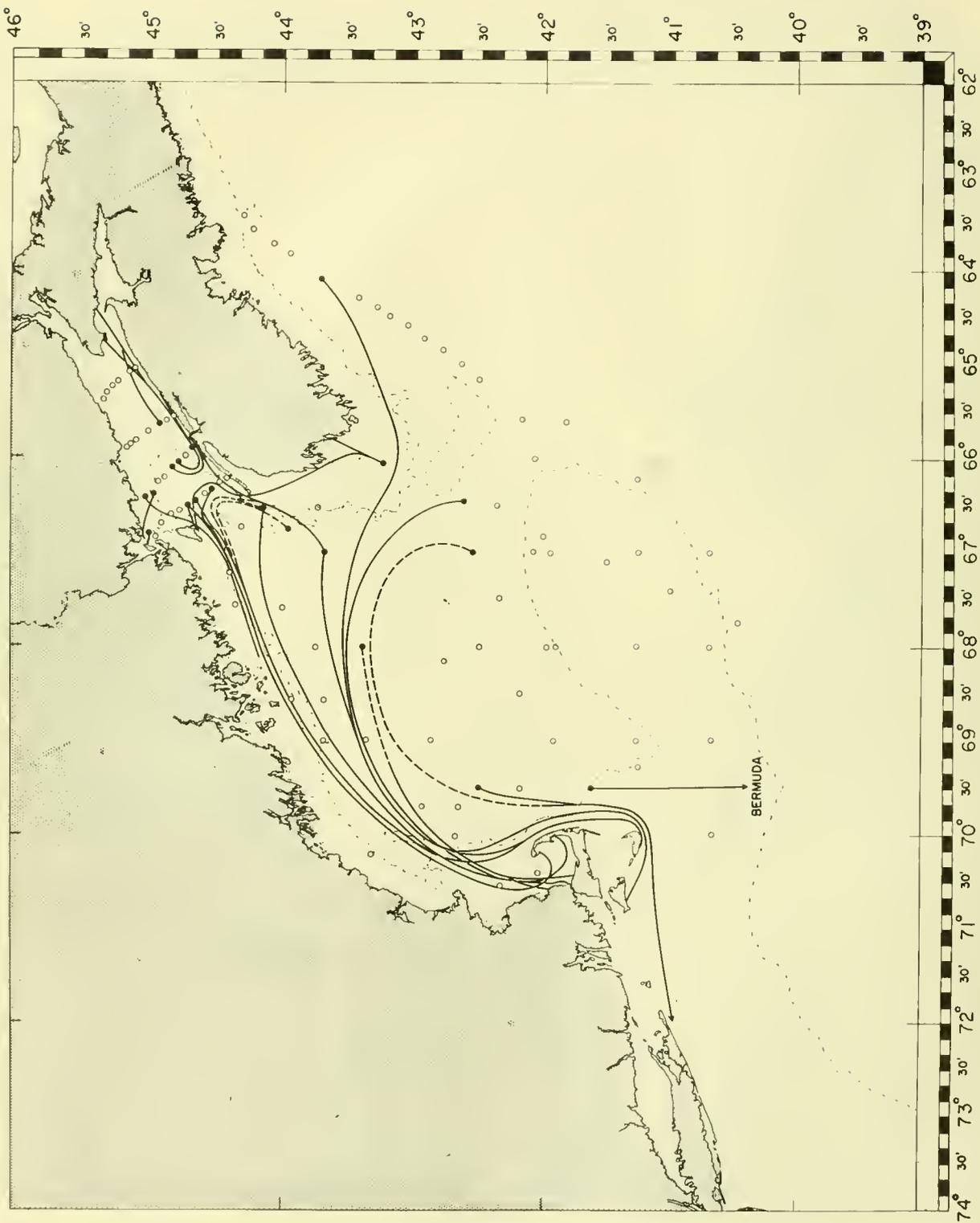


FIGURE 15. --Surface circulation deduced from recoveries of drift bottles launched on Sackville Cruise 37. February 6-27, 1958.

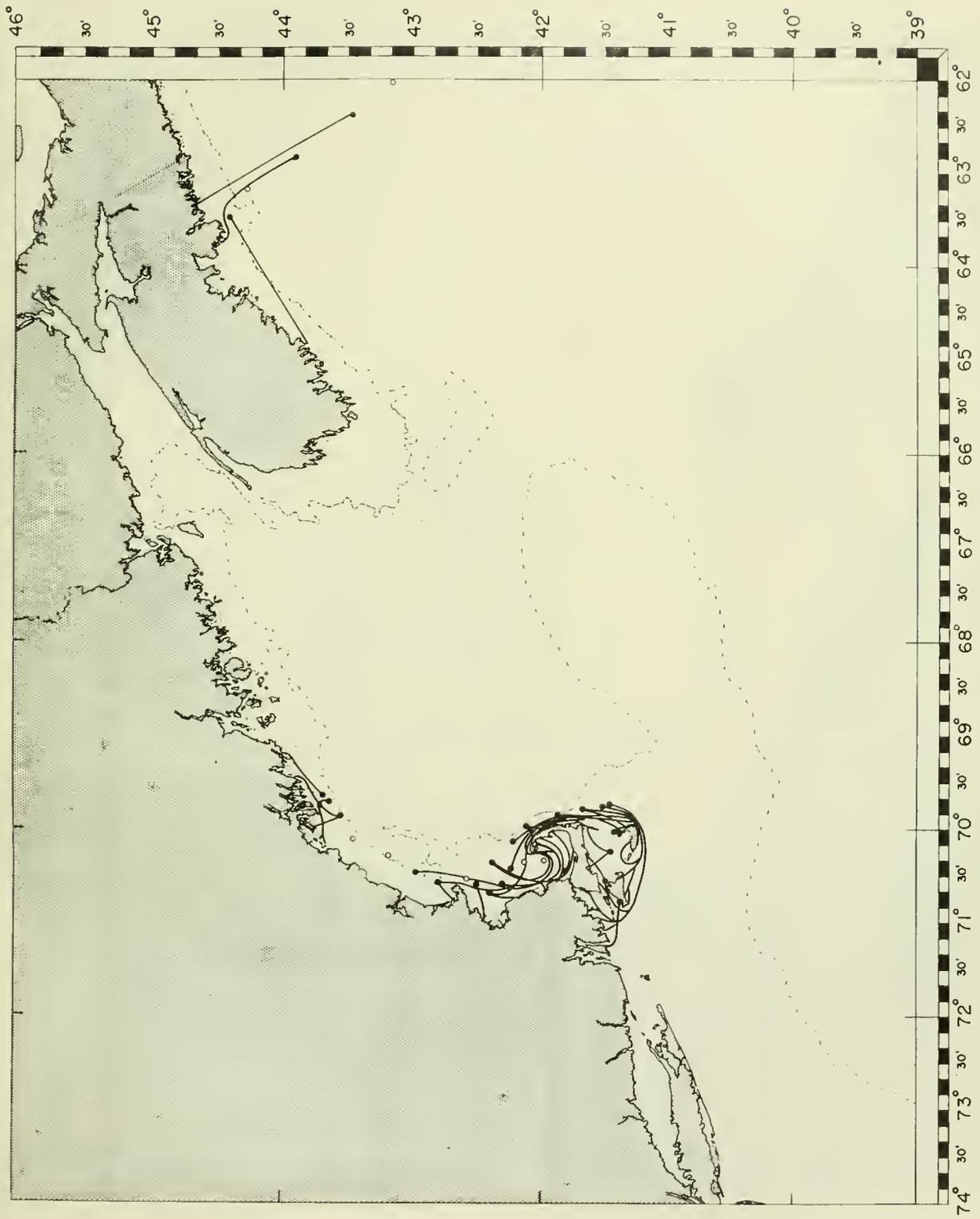


FIGURE 16. --Surface circulation deduced from recoveries of drift bottles launched on Sackville Cruise 38 and Metacomet Cruise 58-1. April 4-26, 1958.

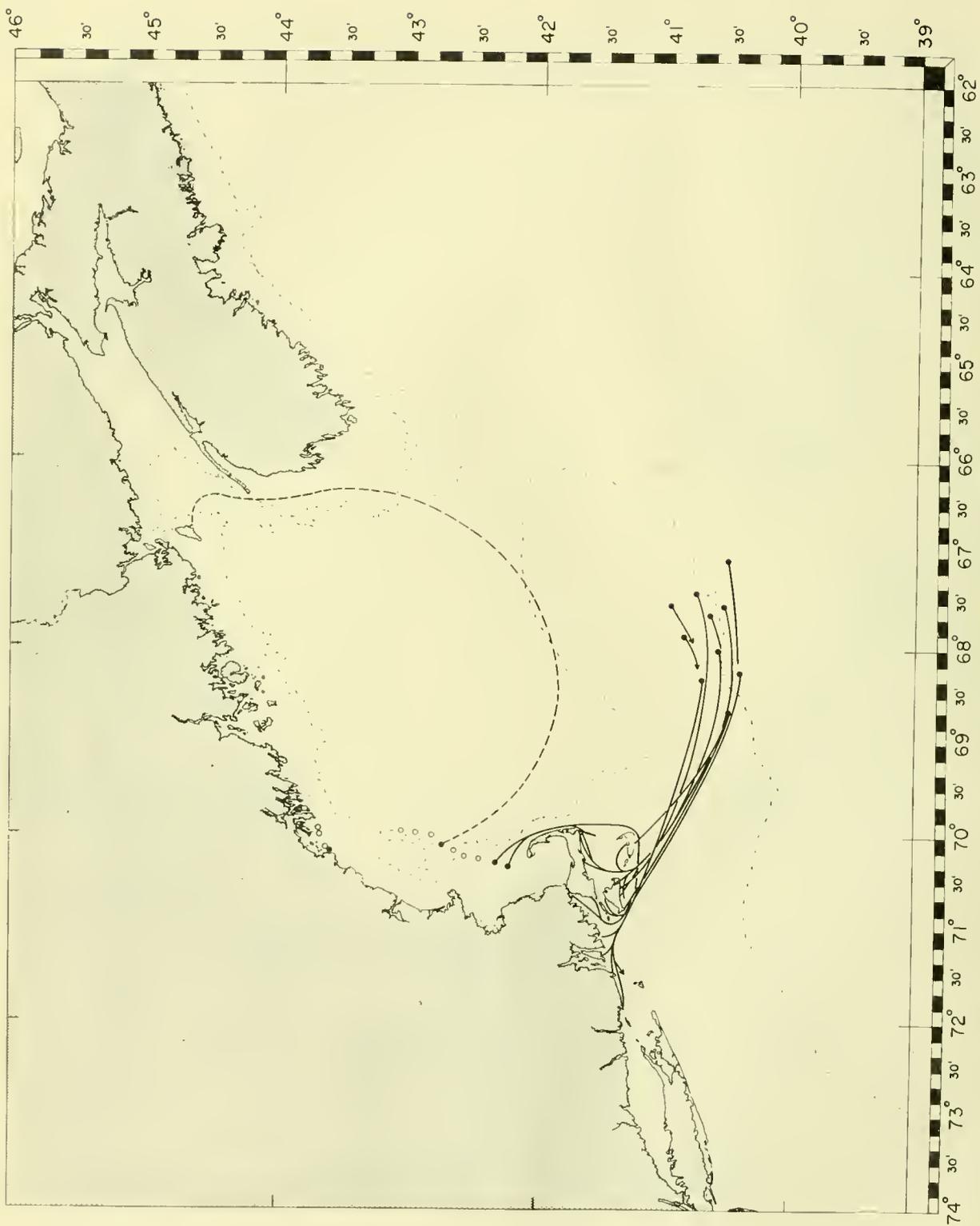


FIGURE 17. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 110 and *Metacomet* Cruise 58-2. May 6-11, 1958.

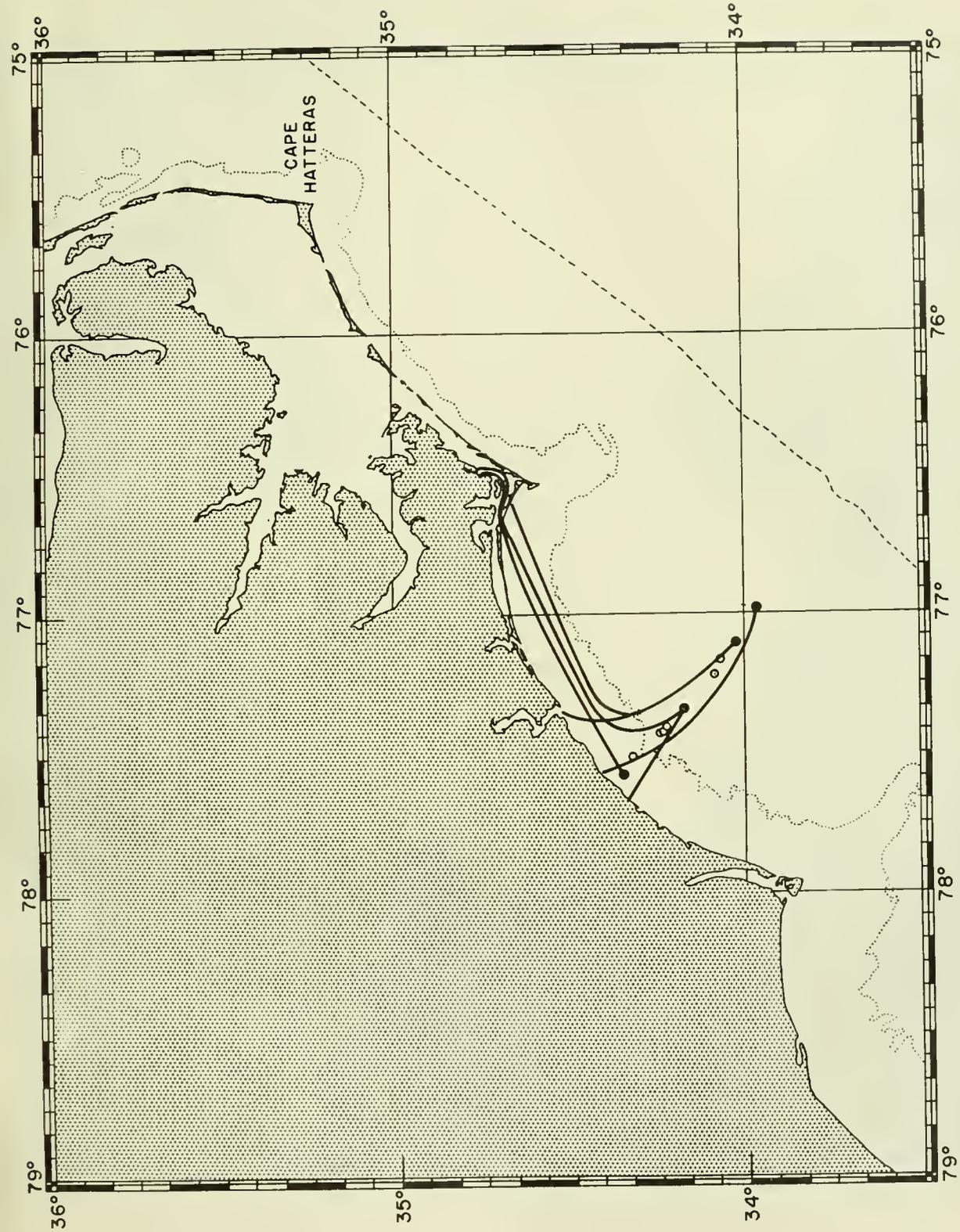


FIGURE 18. --Surface circulation deduced from recoveries of drift bottles launched on *Crawford* Cruise 18. May 17-June 3, 1958.

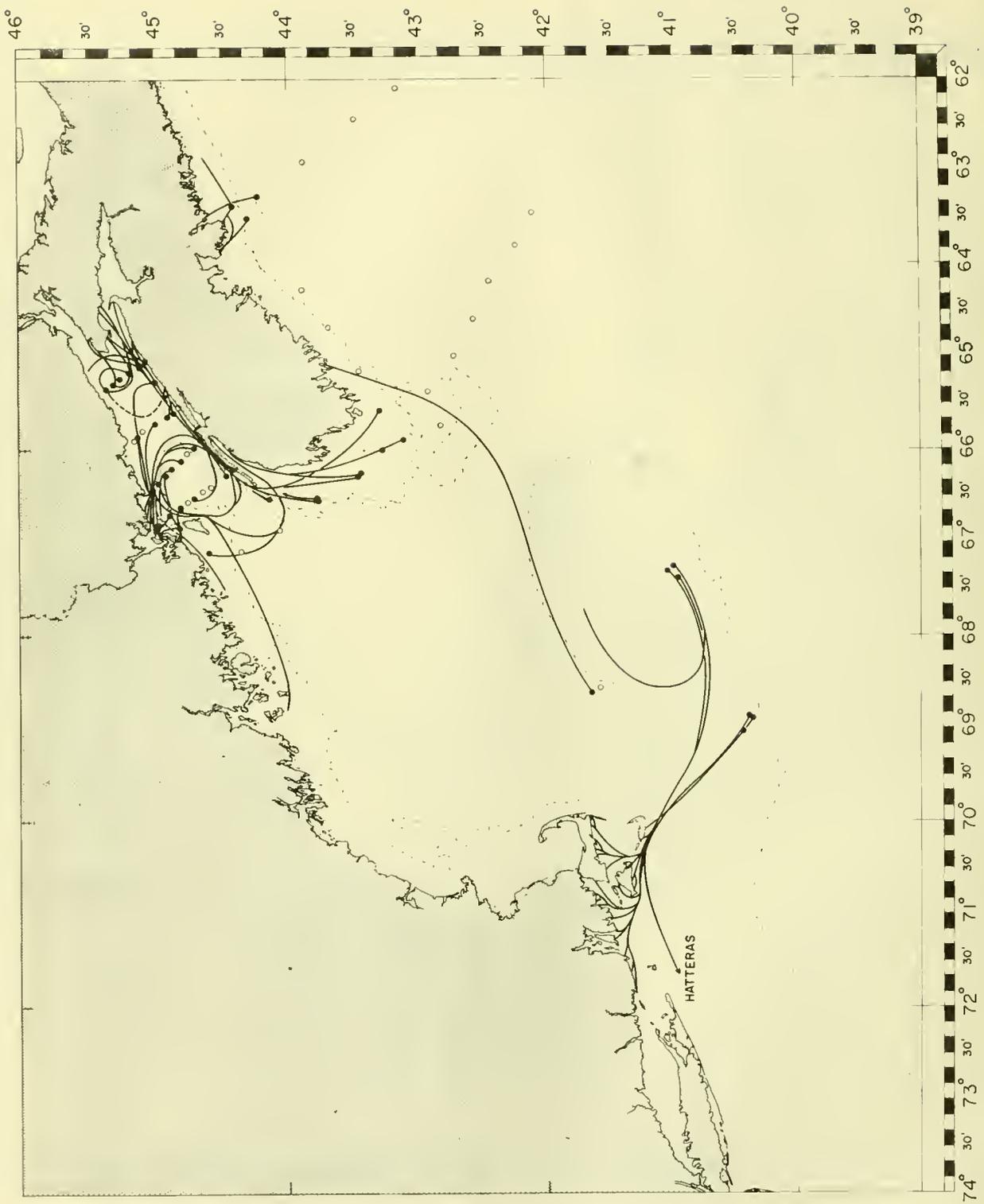


FIGURE 19. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 111 and *Sackville* Cruise 39. May 20-27, 1958.

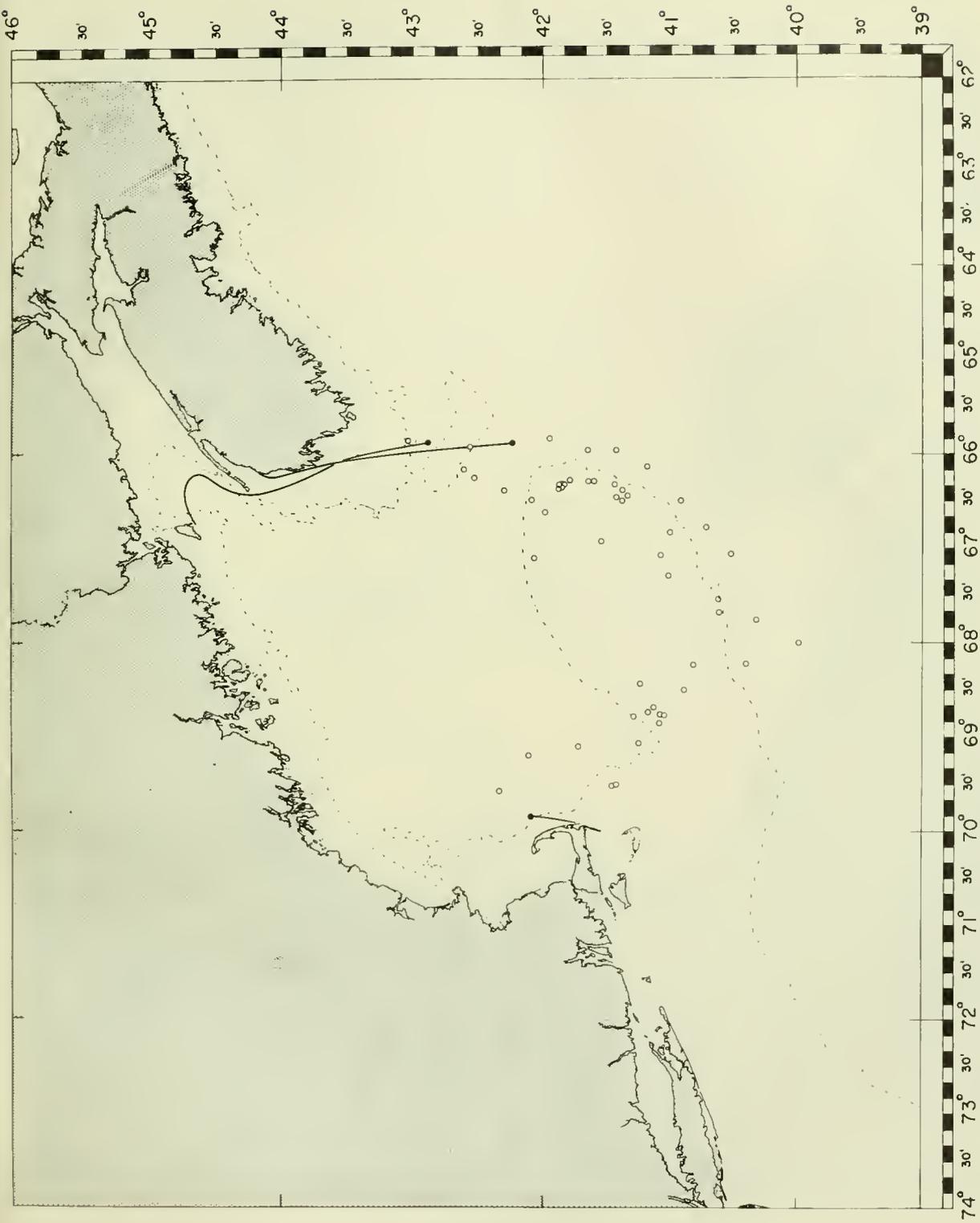


FIGURE 20. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruise 117 and *Dartmouth* Cruise 1, September 9-15, 1958.

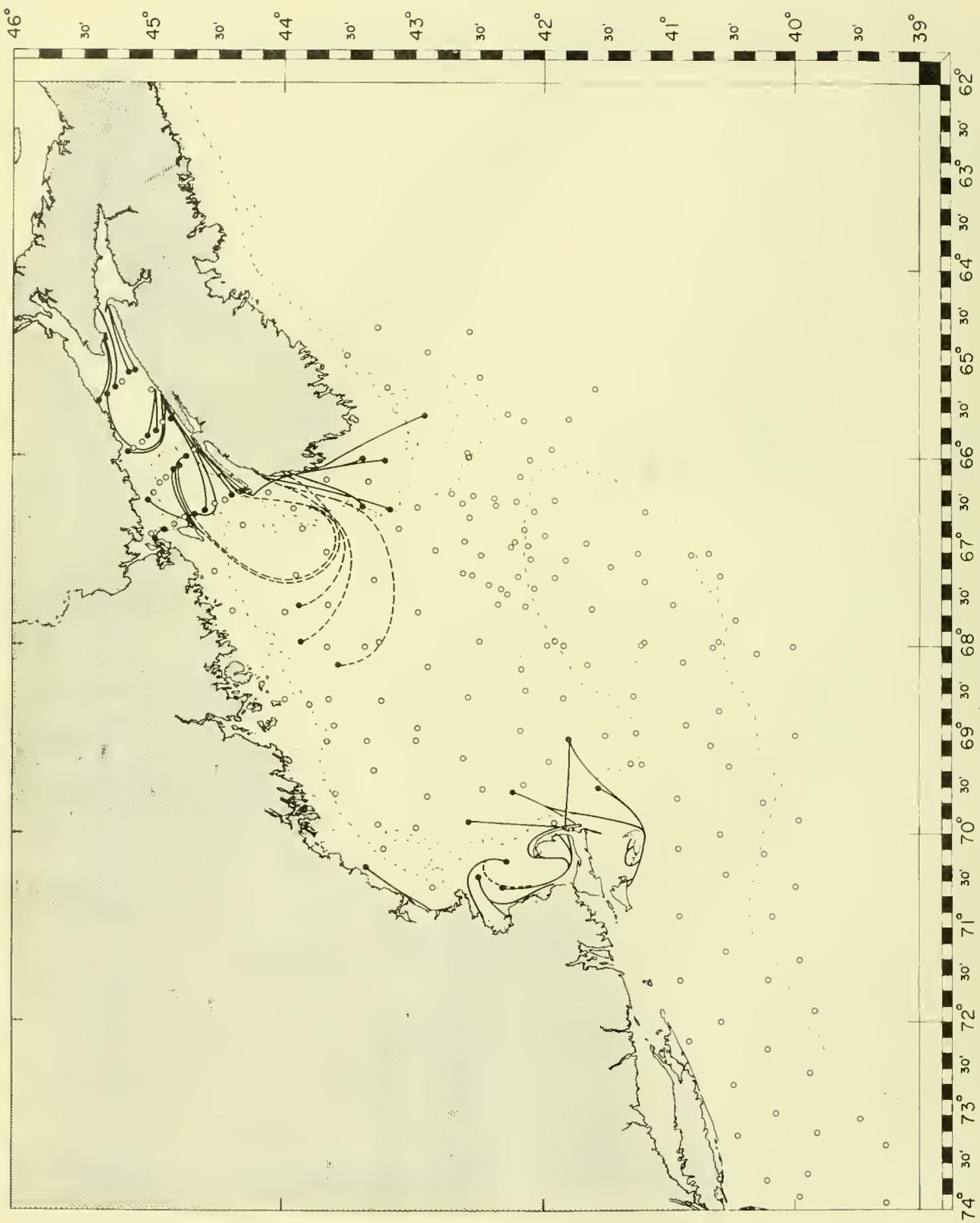


FIGURE 21. --Surface circulation deduced from recoveries of drift bottles launched on *Albatross III* Cruises 118, 119, and 120, Delaware Cruise 58-5 and *Harengus* Cruise 25. September 29-October 30, 1958.

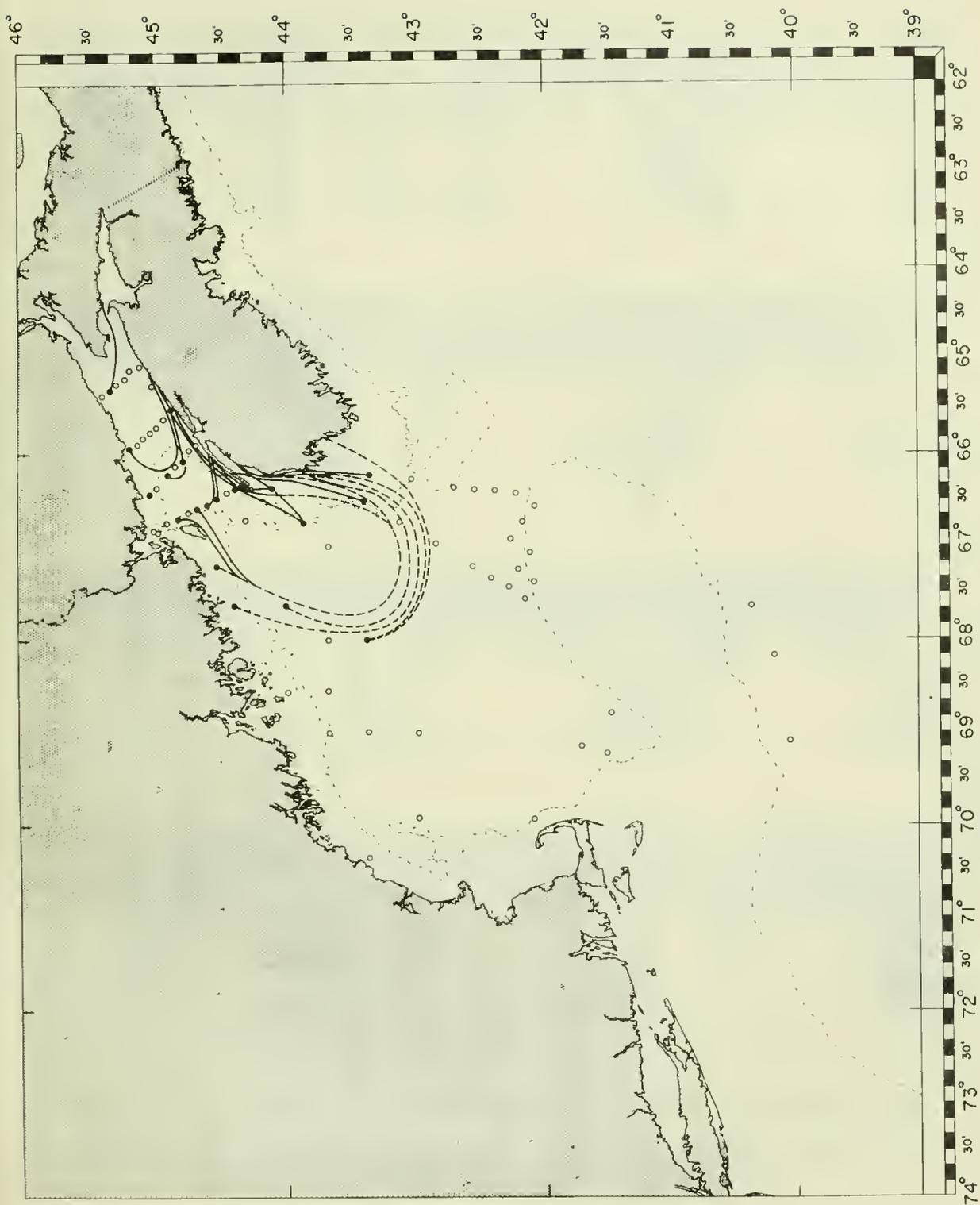


FIGURE 22.--Surface circulation deduced from recoveries of drift bottles launched on *Harengus* Cruise 27 and Delaware Cruise 58-7. November 10-24 and December 12, 18, and 19, 1958.

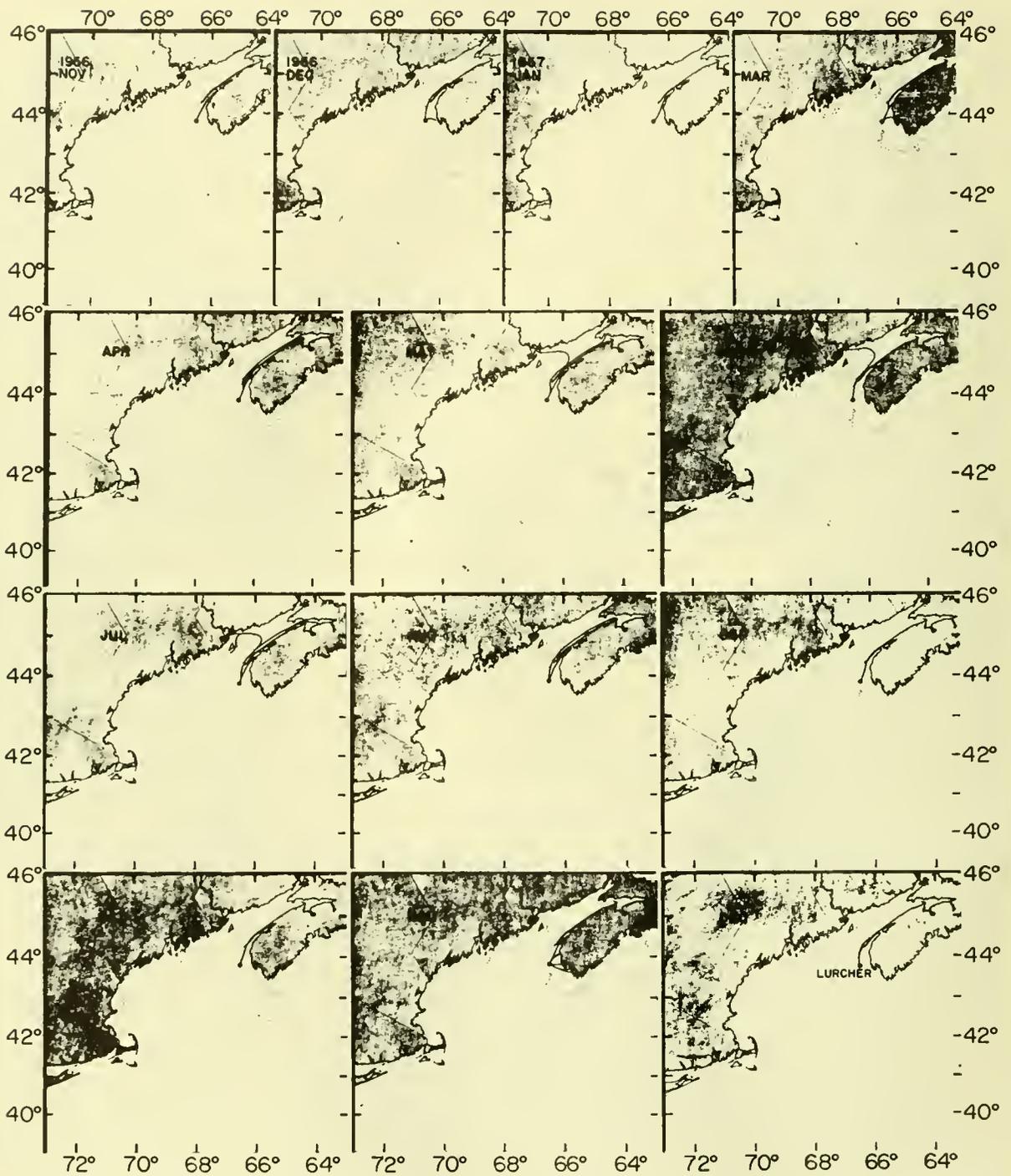


FIGURE 23.--Surface circulation deduced from recoveries of drift bottles launched from *Lurcher* Lightship each day during the period October 9, 1956-December 31, 1957.

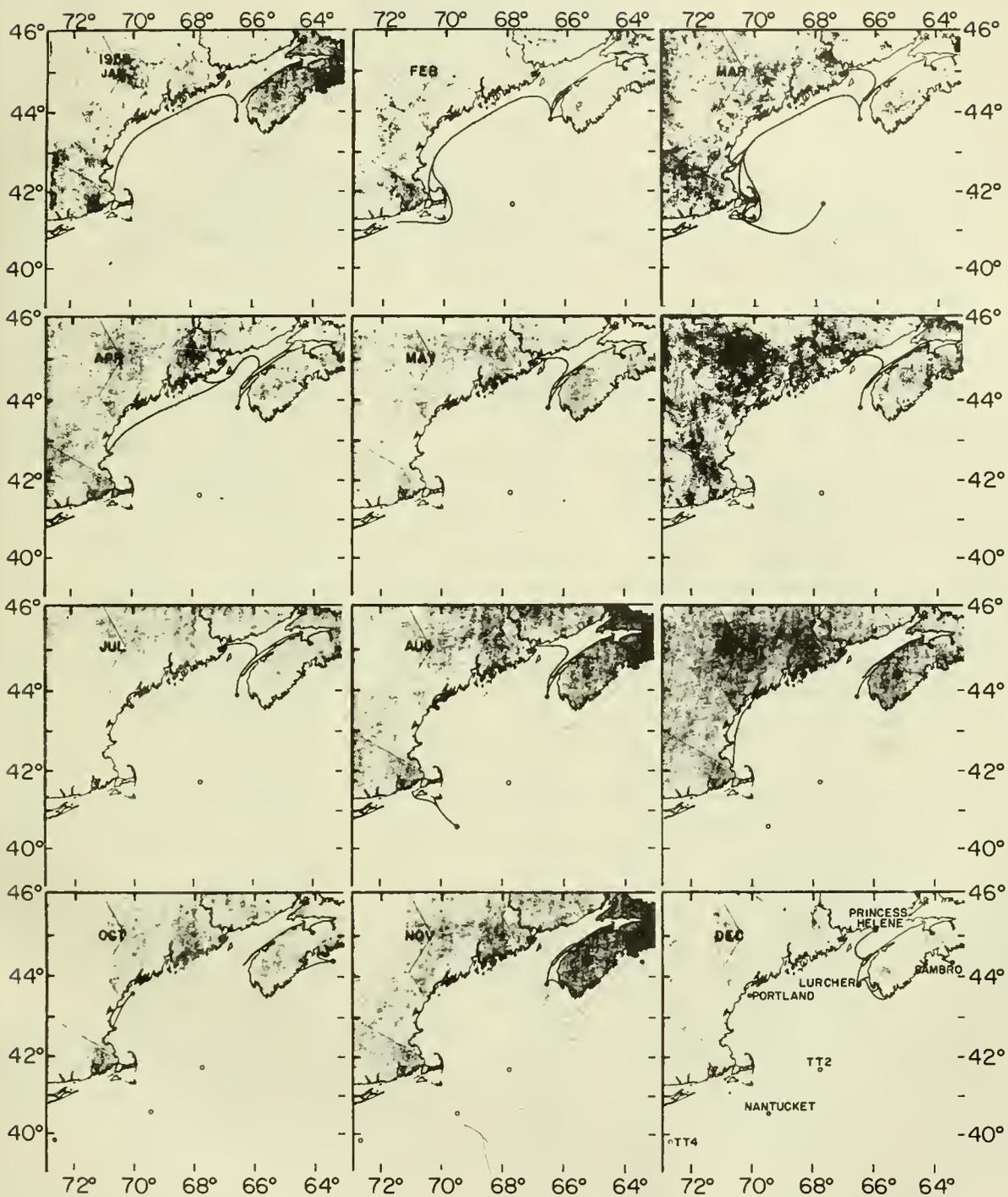


FIGURE 24.--Surface circulation deduced from recoveries of drift bottles launched from several positions each day during 1958.

MS #1051

Harengus Cruise AH5

19 September - 4 October

1956

Stations 1-35, 67-74, et seq., 6 bottles dropped, all ballasted.

Stations 36-66, 12 bottles dropped, even numbered bottles ballasted, odd numbered bottles not ballasted.

Sta.#	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1	24105	44 59.5	66 49.2	19 Sept.	45 01.1	66 51	27 Sept. '56
2		45 01.2	66 26.5	19 "		No Returns	
3		44 58.5	66 22.3	19 "		" "	
4		44 55.5	66 17.8	19 "		" "	
5		44 52.5	66 13.0	19 "		" "	
6		44 49.5	66 08.0	19 "		" "	
7	24141	44 46.5	66 03.5	19 "	44 48.5	65 33	20 Nov. '56
8		44 43.5	65 58.8	19 "		No Returns	
9	24149	44 40.2	65 54.0	19 "	45 10	64 46	6 Nov. '56
10		44 51.0	65 35.0	19 "		No Returns	
11		44 54.2	65 38.5	19 "		" "	
12		44 57.5	65 42.2	19 "		" "	
13		45 00.8	65 46.0	19 "		" "	
14		45 04.0	65 49.8	19 "		" "	
15		45 07.0	65 53.2	19 "		" "	
16		45 10.0	65 57.0	19 "		" "	
17		45 15.5	65 37.0	19 "		" "	
18		45 12.5	65 33.0	20 "		" "	
19		45 09.0	65 29.0	20 "		" "	
20		45 05.8	65 25.2	20 "		" "	
21		45 02.5	65 21.2	20 "		" "	
22		44 59.5	65 17.5	20 "		" "	
23	24234	45 05.8	65 03.0	20 "	45 06	64 57	30 Oct. '56
24	24242	45 09.2	65 07.0	20 "	45 11	64 42	17 Oct. '56
25	24245	45 12.5	65 11.0	20 "	45 10	64 46	4 Nov. '56
26		45 15.8	65 15.0	20 "		No Returns	
27		45 19.0	65 19.0	20 "		" "	
28	24266	45 22.2	65 22.8	20 "	45 20	64 27	21 Oct. '56
	24267	45 22.2	65 22.8	20 "	45 20.4	64 47.7	5 Oct. '56

Harengus Cruise AH5 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
29	24272	45 21.8	65 17.0	20 Sept.	44 05	66 12.8	22 Jan. '57
30		45 21.2	65 11.0	20 "		No Returns	
31	24285	45 20.8	65 05.2	20 "	45 28	64 50	20 Oct. '56
32		42 20.2	64 59.5	20 "		No Returns	
33		45 16.2	64 58.0	20 "		" "	
34		45 12.5	64 56.5	20 "		" "	
35		45 08.5	64 55.2	20 "		" "	
36		44 18.0	66 43.0	20 "		" "	
37	24364	44 07.0	66 21.0	21 "	44 05	66 11	29 Oct. '56
	24370	44 07.0	66 21.0	21 "	44 05	66 12.5	24 Oct. '56
	24372	44 07.0	66 21.0	21 "	44 05	66 12.5	24 Oct. '56
38		43 51.0	66 45.0	21 "		No Returns	
39	24388	43 40.0	66 12.0	24 "	44 17	66 08.2	12 Oct. '56
	24390	43 40.0	66 12.0	24 "	44 52	65 27	10 Nov. '56
40	24400	43 18.0	66 22.0	24 "	43 30	65 32	12 Dec. '56
41	24421	43 18.0	65 16.0	24 "	43 37	65 46	18 Oct. '56
	24422	43 18.0	65 16.0	24 "	44 52	65 27	10 Nov. '56
42	24430	43 00.0	65 16.0	25 "	43 29	01 32	29 Jun. '58
43		43 00.0	66 31.5	25 "		No Returns	
44	24452	43 41.0	67 00.0	25 "	43 29	65 40	20 Dec. '56
45		43 41.0	68 00.0	25 "		No Returns	
46		43 22.0	68 00.0	25 "		" "	
47	24483	43 22.0	68 33.0	26 "	43 48.5	66 09	28 Jan. '57
48		43 00.0	68 33.0	26 "		No Returns	
49	24512	43 00.0	69 31.5	26 "	42 01.9	70 05.6	23 Nov. '56
50		42 39.5	69 31.5	26 "		No Returns	
51	24532	41 55.5	70 27.0	29 "	41 59.5	70 05	24 Oct. '56
	24534	41 55.5	70 27.0	29 "	41 58	70 05	20 Oct. '56
	24537	41 55.5	70 27.0	29 "	42 02	70 05.7	13 Oct. '56
	24538	41 55.5	70 27.0	29 "	41 57.5	70 04.7	13 Oct. '56
	24539	41 55.5	70 27.0	29 "	41 47	70 30	19 Oct. '56
	24540	41 55.5	70 27.0	29 "	41 58	70 05	30 Oct. '56
	24542	41 55.5	70 27.0	29 "	41 55.5	70 00.8	8 Oct. '56
52	24543	42 20.0	70 38.5	29 "	41 17.5	70 05.7	10 Nov. '56
	24547	42 20.0	70 38.5	29 "	41 47	69 56	25 Oct. '56
	24550	42 20.0	70 38.5	29 "	41 16	70 12.5	21 Jan. '58
	24554	42 20.0	70 38.5	29 "	41 35	69 59	27 Oct. '56

Harengus Cruise AH5 (cont'd)

Sta. #	Bottle #	Released				Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date	
53		42 42.5	70 00.0	29 Sept.			No Returns	
54	24573	42 42.5	70 31	29 "	41 48	69 56	27 Oct. '56	
	24575	42 42.5	70 31	29 "	41 51	69 57	28 Oct. '56	
	24578	42 42.5	70 31	29 "	41 54	69 58	4 Nov. '56	
55		43 04.5	70 00.0	30 "			No Returns	
56	24598	43 22.5	70 20.0	30 "	42 28	70 55	31 Oct. '56	
57		43 22.5	69 00.0	30 "			No Returns	
58		43 41.5	69 00.0	30 "			" "	
59		43 41.5	68 34.0	30 "			" "	
60		44 00.0	68 34.0	30 "			" "	
61		44 00.0	67 37.0	30 "			" "	
62		44 23.5	67 37.0	1 Oct.			" "	
63	24682	44 00.0	67 00.0	1 "	44 50.8	65 29	16 Nov. '56	
	24683	44 00.0	67 00.0	1 "	44 40	66 43.5	28 Mar. '57	
	24684	44 00.0	67 00.0	1 "	44 24	66 14	13 Oct. '56	
64	24689	44 31.5	67 11.5	1 "	43 59.5	66 09	14 Dec. '56	
65		44 53.8	66 45.0	1 "			No Returns	
66	24717	44 57.8	66 51.0	1 "	44 39.5	66 47.5	10 Oct. '56	
	24718	44 57.8	66 51.0	1 "	44 56.8	65 15.8	5 Dec. '56	
67	24314	44 49.2	66 42.0	4 "	44 53	65 24	9 Nov. '56	
68		44 44.8	66 38.8	4 "			No Returns	
69	24327	44 40.5	66 35.8	4 "	44 20	66 07.5	3 Dec. '57	
70		44 35.8	66 32.8	4 "			No Returns	
71		44 31.5	66 29.5	4 "			" "	
72		44 27.0	66 26.5	4 "			" "	
73		44 22.5	66 23.5	4 "			" "	
74	15921	44 18.0	66 20.5	4 "	44 37	65 55	15 Oct. '56	
Y		43 55	66 23.2	4 "			No Returns	
X		43 49	66 31	7 "			" "	
Y		43 55	66 23	7 "			" "	
C		44 40	67 00	9 "			" "	
B		44 45.8	66 55	9 "			" "	
C		44 40	67 00	9 "			" "	

Silver Bay Cruise 1

21 September - 5 October

1956

12 bottles dropped at each station, all ballasted.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1	25806	43 40	69 46.2	21 Sept.	42 04.5	70 13.2	11 Nov. '56
7		43 25.8	68 31	21 "		No Returns	
16		43 07.5	66 58.2	22 "		" "	
22		42 41.7	67 00	22 "		" "	
28		42 31.8	68 03	22 "		" "	
38	25868	42 29.5	69 29	23 "	41 59.5	70 04.8	18 Jan. '57
	25871	42 29.5	69 29	23 "	41 23	70 30.3	30 Jan. '57
X	25877	42 07	69 30.8	23 "	42 04.9	70 11.9	29 Sept. '56
46		42 12.7	68 33.2	24 "		No Returns	
51	25902	41 59.5	68 01	24 "	32 17.8	64 48.2	8 May '58
54	25914	42 14.5	67 28.7	24 "	32 14.9	64 49.7	6 Apr. '57
57		42 07.5	67 04.2	24 "		No Returns	
61		42 22.7	66 31	24 "		" "	
65		42 02.5	66 00	24 "		" "	
68		42 10	65 36.2	25 "		" "	
71		41 46.5	65 35.5	25 "		" "	
79		41 46.5	67 02.7	25 "		" "	
85		41 52	67 56.5	26 "		" "	
91		41 48.5	69 01	26 "		" "	
95	26018	41 37	69 44.7	26 "	41 18	70 05	4 Oct. '56
	26023	41 37	69 44.7	26 "	41 20	70 02	28 Jul. '57
	26025	41 37	69 44.7	26 "	41 18.2	70 01.7	19 Mar. '57
	26026	41 37	69 44.7	26 "	41 23.5	70 02.8	23 Dec. '56
	26027	41 37	69 44.7	26 "	41 21.6	70 08.1	5 May '58
	26029	41 37	69 44.7	26 "	41 19	70 03	27 Oct. '56
103		41 25.5	68 37	26 "		No Returns	
109		40 50.5	69 06.5	29 "		" "	
115		41 15	69 00	30 "		" "	
121		41 15.7	68 00	30 "		" "	

Silver Bay Cruise 1 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
127		41 14	67 02	30 Sept.			No Returns
133		41 15	66 12.5	30 "			" "
139		40 40	66 59	1 Oct.			" "
144	26116	40 39.5	68 00.5	1 "	55 44	08 08 E	1 Jan. '59
149		40 38.5	68 59	1 "			No Returns
155		40 40.5	69 58.7	1 "			" "
159	26161	40 00	70 00	1 "	51 40	10 00	24 Feb. '59
165		39 58.5	68 51	2 "			No Returns
171		40 03	67 54	2 "			" "
173		40 25	67 48	2 "			" "
178		40 57	67 27	2 "			" "
182		41 29.5	67 04.5	2 "			" "
186		41 59.5	66 49	3 "			" "
192		42 40.7	66 30.5	3 "			" "
202		42 31.5	65 03.5	3 "			" "
210		42 40.5	66 59	4 "			" "
215		42 47.2	68 00.5	4 "			" "
220		42 53.5	68 59	5 "			" "
228	26294	43 00	70 27.5	5 "	42 18	70 53	4 Nov. '56
	26295	43 00	70 27.5	5 "	42 18.5	70 53	3 Nov. '56
	26296	43 00	70 27.5	5 "	41 59.5	70 04.3	28 Aug. '57
	26297	43 00	70 27.5	5 "	42 03	70 13	26 Jul. '57
	26304	43 00	70 27.5	5 "	42 22	70 58	29 Oct. '56

Silver Bay Cruise 2

15 - 25 October

1956

12 bottles dropped at each station, all ballasted.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1		43 39.9	69 45	15 Oct.			No Returns
3	26325	43 25.5	69 59.2	15 "	43 10.6	70 36.5	2 Nov. '56
7	26339	43 00	70 27.5	16 "	42 39.5	70 35.9	4 Nov. '56
	26341	43 00	70 27.5	16 "	42 36	70 40	14 Nov. '56
10	26342	42 57.2	70 00	16 "	42 14.5	70 46	29 Nov. '57
	26344	42 57.2	70 00	16 "	42 17.7	70 53.2	12 Nov. '56
	26350	42 57.2	70 00	16 "	42 16.5	70 53	23 Nov. '56
	26351	42 57.2	70 00	16 "	42 25.9	70 56.2	22 Nov. '56
	26353	42 57.2	70 00	16 "	42 18	70 55	5 Nov. '56
15		42 52	69 01.8	16 "			No Returns
19		42 46.2	68 00	16 "			" "
24		42 40	66 59.8	16 "			" "
29	26392	42 35.4	66 04.4	17 "	45 06	64 56.5	24 Dec. '56
	26396	42 35.4	66 04.4	17 "	44 56.8	65 15.8	5 Dec. '56
34		42 29.8	65 00	17 "			No Returns
40	26416	43 12	65 49.2	17 "	44 24	66 13	9 Jan. '57
	26421	43 12	65 49.2	17 "	44 29	65 57	24 Nov. '56
43	26430	43 10	66 08.2	17 "	43 49	66 08	29 Mar. '57
47	26443	42 37.8	66 28.2	17 "	44 17.2	66 19.6	3 Jan. '57
53		41 48	66 57.9	18 "			No Returns
57		41 16.2	67 15.9	18 "			" "
59		40 58.5	67 26.5	18 "			" "
63		40 25.2	67 44	18 "			" "
66		40 01	67 57	18 "			" "
71		40 00.5	68 48.5	18 "			" "
75		40 02	69 58	19 "			" "
79		40 37	70 05.5	19 "			" "
85		40 38.5	69 02	20 "			" "
92		40 40.2	67 53.4	20 "			" "
97		40 40.5	66 59	20 "			" "
98		40 40	66 52	20 "			" "

Silver Bay Cruise 2 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
104		41 16	66 13.5	20 Oct.			No Returns
108		41 15.5	66 59.5	21 "			" "
112		41 15.5	68 00	21 "			" "
118		41 17.3	69 01.5	21 "			" "
120		41 13.8	69 22.3	21 "			" "
123		40 52	69 05.2	21 "			" "
127		41 26	68 38	21 "			
133	26679	41 37.2	69 46	22 "	41 25	70 33	2 May '57
	26680	41 37.2	69 46	22 "	41 21	70 27	1 Nov. '56
	26688	41 37.2	69 46	22 "	41 24	70 27	1 Nov. '56
136		41 46.5	69 04.5	22 "			No Returns
141		41 50.5	68 01	22 "			" "
154		41 47	65 36.5	23 "			" "
156	26730	42 07.9	65 38.5	23 "	53 51	03 15 E	15 Apr. '59
158		42 03.5	66 00.5	23 "			No Returns
161		42 21	66 31.5	23 "			" "
165		42 02.3	67 00	23 "			" "
167		42 17.5	67 22	23 "			" "
172	26796	42 05.5	67 58	23 "	44 17.5	66 19	5 Feb. '57
176		42 09.5	68 28.7	24 "			No Returns
180	26816	42 10.8	69 30.6	24 "	41 48	69 56	5 Jan. '57
182		42 29.2	69 26	24 "			No Returns
190		42 31	68 00.8	24 "			" "
195		42 29.5	67 02.2	24 "			" "
201	26868	43 08.8	67 15	25 "	41 49.3	70 00.3	23 Mar. '58
206		43 22	68 01.2	25 "			No Returns
209	26891	43 27.6	68 36.5	25 "	44 20.6	66 06.7	26 Feb. '57
211		43 32	69 01	25 "			No Returns

Harengus Cruise AH6

16 - 25 October 2 - 8 November

1956

Stations 1-35, 67-74, X, Y, and Z; 6 bottles dropped, all ballasted.

Stations 36-66; 12 bottles dropped, even numbered bottles ballasted, odd numbered bottles not ballasted.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1		44 59.5	66 49.2	16 Oct.			No Returns
2		45 01.2	66 26.5	16 "			" "
3		44 58.5	66 22.5	16 "			" "
4		44 55.5	66 17.8	16 "			" "
5		44 52.5	66 13	16 "			" "
6		44 49.5	66 08	16 "			" "
7		44 46.5	66 03.5	16 "			" "
8		44 43.5	65 58.8	16 "			" "
9		44 40.2	65 54	16 "			" "
10	24806	44 51.0	65 35.0	16 "	44 54	65 22.4	19 Nov. '56
11		44 54.2	65 38.5	16 "			No Returns
12		44 57.5	65 42.2	16 "			" "
13		45 00.8	65 46.0	16 "			" "
14		45 04.0	65 49.8	16 "			" "
15		45 07.0	65 53.2	16 "			" "
16		45 10.0	65 57.0	16 "			" "
17		45 15.5	65 37.0	16 "			" "
18		45 12.5	65 33.0	17 "			" "
19	24864	45 09.0	65 29.0	17 "	45 00.4	65 09.4	7 Dec. '56
20		45 05.8	65 25.2	17 "			No Returns
21		45 02.5	65 21.2	17 "			" "
22		44 59.2	65 17.5	17 "			" "
23		45 05.8	65 03.0	17 "			" "
24		45 09.2	65 07.0	17 "			" "
25		45 12.5	65 11.0	17 "			" "
26	24901	45 15.8	65 15.0	17 "	45 03	65 04	28 Oct. '56
	24903	45 15.8	65 15.0	17 "	45 10	64 46	6 Nov. '56
	24904	45 15.8	65 15.0	17 "	45 03	65 04	27 Oct. '56

Harengus Cruise AH6 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
27		45 19.0	65 19.0	17 Oct.			No Returns
28		45 22.2	65 22.8	17 "			" "
29	24922	45 21.8	65 17	17 "	45 10	64 46	4 Nov. '56
30		45 21.2	65 11.0	17 "			No Returns
31		45 20.8	65 05.2	17 "			" "
32		45 20.2	64 59.5	17 "			" "
33		45 16.2	64 58.0	17 "			" "
34	24950	45 12.5	64 56.5	17 "	45 10	64 46	9 Nov. '56
	24954	45 12.5	64 56.5	17 "	45 10	64 46	14 Nov. '56
35	24959	45 08.5	64 55.2	17 "	45 10	64 46	6 Nov. '56
74		44 18.1	66 21.0	17 "			No Returns
73		44 22.5	66 23.5	17 "			" "
72		44 27.0	66 26.5	17 "			" "
71		44 31.5	66 29.5	17 "			" "
70		44 35.8	66 32.8	17 "			" "
69	24933	44 40.5	66 35.8	17 "	45 10	64 45	11 Nov. '56
68		44 44.8	66 38.8	17 "			No Returns
67		44 49.2	66 42.0	17 "			" "
36		44 18.0	66 43.0	18 "			" "
37	25027	44 07.0	66 21.0	18 "	44 11.5	66 10	12 Nov. '56
38		43 51.0	66 45.0	18 "			No Returns
39		43 40	66 12.0	18 "			" "
40		43 18.0	66 22.0	18 "			" "
41		43 18.0	65 16.0	18 "			" "
42		43 00.0	65 16.0	22 "			" "
43		43 00.0	66 31.5	22 "			" "
44		43 41.0	67 00.0	23 "			" "
45		43 41.0	68 00.0	23 "			" "
46		43 22.0	68 00.0	23 "			" "
47		43 22.0	68 33.0	23 "			" "
48		43 00.0	68 33.0	23 "			" "
49		43 00.0	69 31.5	24 "			" "
50	25184	42 39.5	69 31.5	24 "	41 59.5	70 05	5 Jan. '57
	25188	42 39.5	69 31.5	24 "	42 01.9	70 05.6	23 Nov. '56
51	25189	41 55.5	70 27.0	24 "	41 47	70 30	25 Oct. '56
	25190	41 55.5	70 27.0	24 "	41 47	70 30	26 Oct. '56
	25191	41 55.5	70 27.0	24 "	41 47	70 30.5	26 Oct. '56

Harengus Cruise AH6 (cont'd)

Sta. #	Bottle #	Released				Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date	
51	25195	41 55.5	70 27.0	24 Oct.	41 46.9	70 30.1	26 Oct. '56	
	25197	41 55.5	70 27.0	24 "	41 47	70 30	25 Oct. '56	
	25200	41 55.5	70 27.0	24 "	41 46.7	70 29.9	26 Oct. '56	
52	25201	42 20.0	70 38.5	24 "	42 08.5	70 41.5	25 Oct. '56	
	25210	42 20.0	70 38.5	24 "	42 08.5	70 41.5	27 Oct. '56	
53		42 42.5	70 00.0	26 "			No Returns	
54		42 43.0	70 19.1	26 "			" "	
55		43 04.5	70 00.0	26 "			" "	
56		43 22.5	70 20.0	26 "			" "	
57		43 22.5	69 00.0	27 "			" "	
58		43 41.5	69 00.0	27 "			" "	
59		43 41.5	68 34.0	27 "			" "	
60		44 00.0	68 34.0	27 "			" "	
61		44 00.0	67 37.0	27 "			" "	
62		44 23.5	67 37.0	27 "			" "	
63		44 00.0	67 00.0	28 "			" "	
64		44 31.5	67 11.5	28 "			" "	
65		44 53.8	66 45.0	28 "			" "	
66	25379	44 57.8	66 51.0	28 "	44 51	67 00	24 Feb. '57	
Z		44 01	66 16	2 Nov.			No Returns	
Y		43 55	66 23	2 "			" "	
X		43 49	66 31	2 "			" "	
Z		44 01	66 16	2 "			" "	
Y		43 55	66 23	2 "			" "	
Y	15683	43 55	66 23	5 "	44 25	66 03	14 Nov. '56	
	15684	43 55	66 23	5 "	44 11.2	66 10.3	28 Nov. '56	
Z		44 01	66 16	8 "			No Returns	

Silver Bay Cruise 4

14 - 30 November

1956

12 bottles dropped at each station, all ballasted.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1	27008	43 39.5	69 47	14 Nov.	43 42	69 53.7	27 Jul. '59
	27010	43 39.5	69 47	14 "	43 45.1	69 46.6	18 Jun. '59
3		43 25.2	69 58.2	14 "		No Returns	
7		42 54.2	70 14.5	15 "		" "	
9		42 54.6	69 59	15 "		" "	
13		42 52.6	69 00.5	15 "		" "	
18		42 48.8	68 03.3	15 "		" "	
24		42 36.5	66 48	15 "		" "	
26		42 37.8	66 28.8	15 "		" "	
28		42 33.5	66 03	16 "		" "	
34		42 33	65 02	16 "		" "	
40	27131	43 15	65 49.8	16 "	45 17.5	64 47	7 Jul. '57
42	27137	43 09.8	66 08	16 "	44 48.8	65 32.3	11 Jan. '57
59	27145	41 16.5	67 16	17 "	41 07	71 26	30 Dec. '59 *
69		40 01	67 52.2	17 "		No Returns	
75		40 00.5	68 50	17 "		" "	
81		40 06.5	69 51.8	17 "		" "	
87	27198	40 44	70 05.8	18 "	41 09.5	70 24	15 May '57
	27199	40 44	70 05.8	18 "	41 07	70 31	26 Mar. '57
95		40 37.7	69 02.6	18 "		No Returns	
102		40 39	68 00	19 "		" "	
108		40 43	67 01.5	19 "		" "	
109		40 41.3	66 50.2	19 "		" "	
115		41 16.5	66 14.5	19 "		" "	
119		41 20.2	67 08	19 "		" "	
123		43 26	68 59.5	23 "		" "	
125		43 24	68 31.2	23 "		" "	
133	27308	43 10.2	66 58	24 "	45 12	64 23	9 Dec. '57
140		42 26.5	66 58	24 "		No Returns	
146		42 29.5	67 57	25 "		" "	

* In 31 fathoms

Silver Bay Cruise 4 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
154		42 30	69 29	25 Nov.			No Returns
156		42 10.5	69 29.5	25 "			" "
162		42 10	68 28.5	27 "			" "
165		41 59.8	68 03	27 "			" "
169		42 18.2	67 35.5	27 "			" "
172		42 07.5	66 58.5	27 "			" "
176		42 22.3	66 34.8	27 "			" "
180		42 04.5	65 52	27 "			" "
181		42 03	65 36.5	27 "			" "
183		41 48.2	65 36.5	28 "			" "
196		41 44.5	66 55	28 "			" "
200		41 12.2	68 00	28 "			" "
206		41 16.5	69 01	29 "			" "
207		41 17.5	69 19.5	29 "			" "
211		40 51.5	69 05.8	29 "			" "
216		41 27.5	68 41.2	29 "			" "
221		41 29.5	69 32.5	29 "			" "
224	27549	41 45.5	69 04	29 "	56 22	08.08 E	27 Apr. '60
230		41 52.5	67 59	30 "			No Returns

Harengus Cruise AH7

14 November - 8 December

1956

Stations 1-35, 67-74, P, Q, R, S, T, U; 6 bottles dropped, all ballasted.

Stations 36-66; 12 bottles dropped, even numbered bottles ballasted, odd numbered bottles not ballasted.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1	25419	44 59.5	66 49.2	14 Nov.	44 55.9	66 54.4	19 Nov. '56
2		45 01.2	66 26.5	14 "		No Returns	
3		44 58.5	66 22.5	14 "		" "	
4		44 55.5	66 17.8	14 "		" "	
5		44 52.5	66 13.0	14 "		" "	
6		44 49.5	66 08.0	14 "		" "	
7		44 46.5	66 03.5	14 "		" "	
8		44 43.5	65 58.8	15 "		" "	
9		44 40.2	65 54.0	15 "		" "	
10		44 51.0	65 35.0	15 "		" "	
11	25495	44 54.3	65 38.5	15 "	45 10	64 46	21 Dec. '56
12		44 57.5	65 42.2	15 "		No Returns	
13		45 00.2	65 46.0	15 "		" "	
14		45 04.0	65 49.8	15 "		" "	
15	25500	45 07.0	65 53.2	15 "	45 03	65 04	22 Dec. '56
16		45 10.0	65 57.0	15 "		No Returns	
17		45 15.5	65 37.0	15 "		" "	
18		45 12.5	65 33.0	15 "		" "	
19		45 09.0	65 29.0	15 "		" "	
20		45 05.8	65 25.2	15 "		" "	
21		45 02.5	65 21.2	15 "		" "	
22	25543	44 59.2	65 17.5	15 "	44 56	65 18	4 Dec. '56
23		45 05.8	65 03.0	15 "		No Returns	
24		45 09.2	65 07.0	15 "		" "	
25		45 12.5	65 11.0	15 "		" "	
26		45 15.8	65 15.0	15 "		" "	
27		45 19.0	65 19.0	15 "		" "	

Harengus Cruise AH7 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
28	25575	45 22.2	65 22.7	15 Nov.	44 56.7	65 16.5	20 Dec. '56
29		45 21.8	65 17.0	15 "		No Returns	
30	25589	45 21.2	65 11	15 "	45 17	64 20	17 Dec. '56
31		45 20.8	65 05.2	15 "		No Returns	
32		45 20.2	64 59.5	15 "		" "	
33		45 16.2	64 58.0	15 "		" "	
34	25612	45 12.5	64 56.5	15 "	45 19.6	64 46.5	24 Nov. '56
35	25618	45 08.5	64 55.2	15 "	45 22	64 20	20 May '57
74		44 18.0	66 20.5	16 "		No Returns	
73		44 24.2	66 22.3	16 "			
72		44 29.4	66 23.3	16 "			
71		44 35.0	66 24.8	16 "			
70		44 44.4	66 26.0	16 "			
69	25653	44 45.6	66 27.0	16 "	44 42	66 43	15 Sept. '57
	25657	44 45.6	66 27.0	16 "	44 55.2	65 19	22 Dec. '56
68	25660	44 50.6	66 28.0	16 "	44 44.6	66 50.6	19 Nov. '56
67	25665	44 55.8	66 29.8	16 "	45 05.3	66 28.2	24 Nov. '56
36		44 18.0	66 43.0	16 "		No Returns	
37	25687	44 07	66 21	16 "	44 26.4	66 01	25 Nov. '56
38		43 51.0	66 45.0	19 "		No Returns	
39	25715	43 40.0	66 12.0	20 "	43 48.8	66 08.7	22 Nov. '56
40	25725	43 18.0	66 22.0	20 "	44 05	66 12.6	27 Nov. '56
41		43 18.0	65 16.0	20 "		No Returns	
42		43 00.0	65 16.0	21 "		" "	
43	25763	43 00.0	66 31.5	21 "	44 30	66 06	17 Oct. '58
44		43 41.0	67 00.0	22 "		No Returns	
64		44 31.5	67 11.5	27 "		" "	
62	15761	44 23.5	67 37	27 "	44 03	66 10	11 Apr. '57
	15763	44 23.5	67 37	27 "	43 48	66 10	14 Feb. '57
61		44 00.0	67 37.0	27 "		No Returns	
60		44 00.0	68 34.0	27 "		" "	
59		43 41.5	68 34.0	28 "		" "	
58		43 41.5	69 00.0	28 "		" "	
57		43 22.5	69 00.0	28 "		" "	
56		43 22.5	70 20.0	28 "		" "	
55		43 04.5	70 00.0	28 "		" "	

Harengus Cruise AH7 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
53		42 42.5	70 00.0	28 Nov.			No Returns
52		42 20	70 39	28 "			" "
51	15876	41 55.5	70 27	29 "	42 00	70 05	6 Dec. '56
	15879	41 55.5	70 27	29 "	41 59.5	70 04.8	13 Apr. '57
	15882	41 55.5	70 27	29 "	41 52	70 00.6	21 Dec. '56
50		42 39.5	69 31.5	29 "			No Returns
49		43 00.0	69 31.5	29 "			" "
48		43 00.0	68 33.0	30 "			" "
47		43 22.0	68 33.0	30 "			" "
46	25405	43 22.0	68 00.0	30 "	43 48.5	66 10	23 Feb. '57
45	24731	43 41.0	68 00.0	30 "	44 09	66 12	25 Jan. '57
63	24743	44 00.0	67 00.0	30 "	41 14.5	70 03	4 Jul. '57
65		44 53.8	66 45.0	30 "			No Returns
66		44 57.8	66 51.0	1 Dec.			" "
Q		45 05.4	65 53.2	4 "			" "
P	28308	45 10.0	65 57.5	5 "	44 15.3	66 20.6	5 Jan. '57
	28309	45 10.0	65 57.5	5 "	44 26	66 10.6	11 Jul. '57
S		44 58.4	65 44.2	5 "			No Returns
T		45 08.5	65 51.4	7 "			" "
U		44 59.2	66 02.6	8 "			" "

Delaware Cruise 57-1

26 January - 4 February

1957

12 ballasted bottles released at each station.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1		42 31.5	68 56.5	26 Jan.			No Returns
2		42 27.5	67 59	26 "			" "
4		42 32	67 02	26 "			" "
6		43 03	66 59	26 "			" "
10	27897	43 13	67 50	27 "	41 37.5	70 25	6 Oct. '57
12		43 22	68 15	27 "			No Returns
15		43 24	68 37	27 "			" "
20		43 26.5	69 32	27 "			" "
22		43 28.5	69 57	27 "			" "
27	27956	43 08	70 20.5	28 "	41 48.4	69 57.4	8 Jan. '58
29		42 58	69 54.5	28 "			No Returns
33		42 53	69 00	29 "			" "
39		42 47	67 49	29 "			" "
44		42 42	66 58	29 "			" "
53		42 35.5	65 54	29 "			" "
58		42 28.5	65 02	30 "			" "
64		43 13	65 47.5	30 "			" "
66	28050	43 00	66 14	30 "	44 11.7	66 09.8	31 May '57
70		42 36.5	66 29	30 "			No Returns
76		41 46.5	67 05.5	30 "			" "
79		41 20	67 17	31 "			" "
83		40 44	67 40	31 "			" "
87		40 11	67 53	31 "			" "
90		40 00	68 30	31 "			" "
92		39 58	69 00	31 "			" "
95		39 57.5	69 28.5	31 "			" "
97		40 00	70 00	31 "			" "
101		40 37	70 02	31 "			" "
106		40 39	68 55	1 Feb.			" "
111		40 40	68 05	1 "			" "

Delaware Cruise 57-1 (cont'd)

Sta.#	Bottle #	Released				Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date	
116		40 40	66 54	1 Feb.			No Returns	
121		41 14	66 21	1 "			" "	
129		41 14.5	68 00.5	2 "			" "	
133		41 13.5	68 54	2 "			" "	
135		41 12.5	69 16	2 "			" "	
137		41 05	69 06	2 "			" "	
141	28280	41 27	68 39.5	2 "	66 00	12 01 E	29 Oct. '59	
146		41 36	69 35	2 "			No Returns	
149		41 45.5	69 02.5	2 "			" "	
154		41 48.5	67 58.5	3 "			" "	
163		41 47	65 58	3 "			" "	
165		41 46	65 41.5	3 "			" "	
167		42 09.5	65 36.5	3 "			" "	
169		42 06	66 00	3 "			" "	
171		42 19.5	66 30.5	3 "			" "	
175		42 04.5	66 58	4 "			" "	
178		42 20	67 32.5	4 "			" "	
182		41 57.5	67 59	4 "			" "	
184		42 10	68 30	4 "			" "	
189		42 08.5	69 27	4 "			" "	
193		42 20	70 07	4 "			" "	
194		42 21.5	70 23.5	4 "			" "	
196	28511	42 21	70 41	4 "	41 48	70 00.7W	28 Apr. '57	
	28514	42 21	70 41	4 "	42 01.8	70 37.5	7 Apr. '57	
	28517	42 21	70 41	4 "	42 01	70 05	9 Mar. '57	
	28518	42 21	70 41	4 "	41 49	70 00	26 Oct. '57	

Albatross III Cruise 88

19 - 28 February

1957

12 ballasted bottles released at each station.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
7		40 49.4	72 00	19 Feb.			No Returns
13		40 00	72 00	20 "		" "	
20		40 00	71 00.5	20 "		" "	
26		40 00	70 00	20 "		" "	
35		40 59	69 05	21 "		" "	
48	28527	42 08	70 05.5	21 "	41 27.5	71 11	26 Jun. '57
52	28532	41 49.7	70 27.7	21 "	41 45	70 10	21 Mar. '57
	28535	41 49.7	70 27.7	21 "	41 44.5	70 24	10 Mar. '57
	28537	41 49.7	70 27.7	21 "	41 46.9	70 02.4	10 Jun. '57
	28538	41 49.7	70 27.7	21 "	41 45.5	70 07.5	9 Mar. '57
	28539	41 49.7	70 27.7	21 "	41 45	70 10	21 Mar. '57
	28540	41 49.7	70 27.7	21 "	41 55.5	70 02	14 Apr. '57
	28542	41 49.7	70 27.7	21 "	41 47.6	70 01.2	16 Jul. '57
59	28547	42 38	70 30	22 "	41 39.5	69 59	14 Jul. '57
	28549	42 38	70 30	22 "	41 20	70 02	6 Jul. '57
64		43 06.7	70 23	22 "			No Returns
70	28568	43 40	69 45	22 "	41 20.8	70 28	4 Jul. '57
	28573	43 40	69 45	22 "	41 38.2	70 20	1 Jul. '57
78		43 59	68 20	22 "			No Returns
83		44 22.5	67 37	23 "		" "	
88	19775	44 46.5	66 53	23 "	45 20	64 46	3 Jul. '57
94		45 09.5	65 51.5	23 "			No Returns
101		45 34	64 46	23 "		" "	
105	19863	45 05	65 15	24 "	45 06	64 57	28 Feb. '57
	19878	45 05	65 15	24 "	45 06	64 57	28 Feb. '57
121	23954	43 40.5	66 20.5	24 "	44 36.6	65 55.3	31 Mar. '57
	23955	43 40.5	66 20.5	24 "	44 30	66 06	12 Mar. '57

Albatross III Cruise 88 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
125	23969	44 15	66 18	24 Feb.	45 41.7	64 27.3	20 Sept. '57
132	24018	44 05.3	66 28	25 "	44 29.8	66 06.1	22 Mar. '57
137		44 28.7	67 10.5	25 "			No Returns
141	23989	43 49	66 55.5	25 "	43 41.5	66 02	14 Apr. '57
	23995	43 49	66 55.5	25 "	44 33	66 02	12 Apr. '57
	23998	43 49	66 55.5	25 "	45 17	64 47	3 Jul. '57
	23999	43 49	66 55.5	25 "	44 17.5	66 19	24 Mar. '57
156	24010	43 39	68 35	26 "	45 03	66 48.5	27 Oct. '57
161	29611	43 25	69 01.5	26 "	44 30	66 06	28 Sept. '57
165	29616	43 22	69 53.5	26 "	41 19.4	70 45.4	13 Sept. '57
	29618	43 22	69 53.5	26 "	41 15.7	70 49	11 Jul. '57
	29619	43 22	69 53.5	26 "	41 36.5	69 59.4	22 Nov. '57
	29626	43 22	69 53.5	26 "	41 20.8	70 30	23 Sept. '57
169	29629	43 00.5	70 05	26 "	41 54	69 58	18 Mar. '57
174	29640	42 19.5	70 22	26 "	42 04	70 14	9 Mar. '57
	29641	42 19.5	70 22	26 "	35 50	75 33	15 Oct. '57
	29642	42 19.5	70 22	26 "	42 04	70 14.5	23 Mar. '57
	29644	42 19.5	70 22	26 "	42 04	70 14	9 Mar. '57
	29646	42 19.5	70 22	26 "	42 04	70 14	9 Mar. '57
	29650	42 19.5	70 22	26 "	41 21.5	70 28.3	7 Aug. '57
	29651	42 19.5	70 22	26 "	42 04	70 14	9 Mar. '57
181		42 01	69 13.5	27 "			No Returns
187		41 34	68 29	27 "		" "	
191	20008	44 44.5	65 47	24 "	44 40.5	65 48.6	25 Feb. '57
	20010	44 44.5	65 47	24 "	44 40.5	65 48.6	27 Feb. '57
	20011	44 44.5	65 47	24 "	44 37	65 41.5	30 Mar. '57
195		40 39	68 53	27 "			No Returns
202		40 40	70 00	28 "		" "	
205		40 40	70 35	28 "		" "	

Albatross III Cruise 90

11 - 17 April

1957

12 bottles released at each station, odd numbers - ballasted, even numbers - no ballast.

Sta. #	Bottle #	Released				Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date	
1	29719	41 36	69 49.5	11 Apr.	41 23	70 03	13 Jul. '57	
	29721	41 36	69 49.5	11 "	41 22.8	70 02	17 Jul. '57	
	29722	41 36	69 49.5	11 "	40 46	72 46	5 Sept. '57	
	29723	41 36	69 49.5	11 "	40 38	73 12	10 Sept. '57	
2		41 43.5	69 24	11 "		No Returns		
3	29740	41 50.5	68 59	11 "	45 21	64 51	1 Sept. '57	
4		41 56	68 40	11 "		No Returns		
5	29760	42 05.5	68 11	11 "	44 09	68 28	29 Jul. '57	
6		42 08.5	67 39.5	12 "		No Returns		
7		42 10	67 14	12 "		" "		
8	29801	42 12	66 48.5	12 "	45 20	64 46	3 Jul. '57	
9		42 13.5	66 19	12 "		No Returns		
10		42 08.3	65 23.9	12 "		" "		
11		42 01	65 24	12 "		" "		
12		41 55.5	65 26	12 "		" "		
13		41 54	65 50	12 "		" "		
14	29870	41 56	66 19	12 "	41 20	70 49.5	26 Jul. '57	
	29877	41 56	66 19	12 "	41 20.8	70 30.6	Jul. '57	
15		42 01	66 47	12 "		No Returns		
16		41 55.8	67 17.2	13 "		" "		
17	29912	41 54	67 36.8	13 "	41 20.8	70 30	8 Dec. '57	
	29913	41 54	67 36.8	13 "	41 21.1	70 46.3	24 Sept. '57	
18		41 38.7	67 36	13 "		No Returns		
19	29938	41 39	67 13.5	13 "	41 36.4	70 24	29 Jun. '57	
20	29951	41 42.5	66 45	13 "	41 21	70 02	13 Aug. '57	
21		41 42.2	66 16	13 "		No Returns		
22		41 39.3	65 49	13 "		" "		
23		41 37.8	65 22.7	13 "		" "		
24		41 21.3	65 24	13 "		" "		
25		41 21.5	65 50	13 "		" "		

Albatross III Cruise 90 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
26		41 23	66 15	13 Apr.			No Returns
27	30034	41 23	66 37.5	13 "	41 20	70 49.5	15 Jul. '57
28		41 21	66 45.3	14 "			No Returns
29	30048	41 19	67 13	14 "	41 15.1	70 10	4 Jul. '57
30	30098	41 18.5	67 51	14 "	41 16.2	70 13	7 Jul. '57
31	30076	41 00.8	67 51.8	14 "	41 14.4	70 02.5	4 Jul. '57
32	30092	41 01.5	67 14	14 "	41 17	70 14.5	7 Jul. '57
33		41 00	66 54.5	14 "			No Returns
34		40 58	66 26.5	14 "		" "	
35		40 58.5	66 01	14 "		" "	
36		40 56.5	65 49	14 "		" "	
37		40 40	65 50	14 "		" "	
38		40 39.3	66 28.7	14 "		" "	
39		40 40.5	66 56	15 "		" "	
40	30186	40 40.5	67 26	15 "	41 28.5	71 09	31 Jul. '57
41		40 41.5	67 48.3	15 "			No Returns
42	30207	40 57	67 32.5	15 "	41 21	70 01.6	10 Jul. '57
	30210	40 57	67 32.5	15 "	41 17.1	70 14.9	5 Jul. '57
43	30218	41 13	67 09	15 "	41 14.6	70 05	2 Jul. '57
	30225	41 13	67 09	15 "	40 11.5	74 00.5	24 Aug. '57
44		41 23	66 48	15 "			No Returns
45	30250	41 33	66 35.7	15 "	41 26	70 54	9 Aug. '57
46	30260	41 46	66 19.7	15 "	42 47	66 01	8 Jun. '57
47		42 04	66 03	15 "			No Returns
48		41 23	67 04	16 "		" "	
49	30288	41 23	67 33	16 "	40 37.3	73 17.2	21 Sept. '57
50		41 28	68 16	16 "			No Returns
51	30312	41 32	68 43	16 "	43 58	59 48	1 Oct. '57
52		41 34	68 58.5	16 "			No Returns
53	30341	41 29	69 36	17 "	41 19	70 03	10 Mar. '58
	30343	41 29	69 36	17 "	41 14.6	70 07.7	25 Jun. '57
	30344	41 29	69 36	17 "	41 20.8	70 30.7	23 Jun. '57
54	30348	41 35.5	69 51	17 "	41 20	70 44	30 Jun. '57
	30351	41 35.5	69 51	17 "	41 20	70 49.5	23 Jun. '57
	30353	41 35.5	69 51	17 "	41 34	70 39	13 Oct. '57
	30354	41 35.5	69 51	17 "	41 19	71 49	29 Jul. '57
	30358	41 35.5	69 51	17 "	41 39	70 11.6	27 Jun. '57

Albatross III Cruise 92

25 April - 1 May

1957

12 bottles released at each station, odd numbers - ballasted, even numbers - no ballast.

Sta. #	Bottle #	Released				Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date	
1	30364	41 40	69 43	25 Apr.	43 32	65 29.5	29 Jun. '57	
2	30383	41 46.2	69 13.5	25 "	41 30.5	70 59	17 Apr. '58	
3	30384	41 50.7	68 52.5	25 "	43 56	60 03	29 Sept. '57	
4	30403	41 57.4	68 33	25 "	41 40	70 00	17 Oct. '57	
5		42 00.3	68 07.5	25 "		No Returns		
6		42 02.3	67 31.1	26 "		" "		
7	30432	42 04.5	67 19.5	26 "	45 07.3	66 28.7	12 Jul. '57	
	30439	42 04.5	67 19.5	26 "	44 16.2	66 20	17 Jun. '57	
	30441	42 04.5	67 19.5	26 "	44 30.5	65 55	Jul. '57	
8		42 05.9	66 56.2	26 "		No Returns		
9		42 05.6	66 30.6	26 "		" "		
10		42 02.2	66 11	26 "		" "		
11		41 59.3	65 55.7	26 "		" "		
12		41 58.3	65 31.5	26 "		" "		
13		41 44.6	65 46	26 "		" "		
14		41 44.6	66 10.7	26 "		" "		
15		41 44.6	66 36.3	27 "		" "		
16	30548	41 45.2	67 04.7	27 "	41 40	70 02.5	28 Jun. '57	
17	30558	41 45.2	67 32.5	27 "	41 14.6	70 05	13 Jul. '57	
18	30572	41 30.5	67 30	27 "	35 45.5	75 30.6	17 Oct. '57	
19	30584	41 29.3	67 09.2	27 "	41 29	71 09	29 Jul. '57	
20		41 31.1	66 34.5	27 "		No Returns		
21		41 25	66 30.2	27 "		" "		
22		41 30.4	66 11.4	27 "		" "		
23		41 31.4	65 45.8	27 "		" "		
24		41 26	65 24.8	28 "		" "		
25		41 17.6	65 28.5	28 "		" "		
26		41 09.7	65 46.3	28 "		" "		
27		41 10.2	66 14.8	28 "		" "		
28		41 10.2	66 42.4	28 "		" "		

Albatross III Cruise 92 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
29		41 12.3	67 09.1	28 "			No Returns
30		41 11.3	67 34.5	28 "			" "
31	30721	41 09.8	67 45.6	28 "	41 20.9	70 35	22 Nov. '57
32	30734	40 57.2	67 59.8	28 "	40 35.4	73 34.6	3 Sept. '57
	30736	40 57.2	67 59.8	28 "	41 19	70 03	7 Jul. '57
33		40 50.6	67 41.9	28 "			No Returns
34		40 52	67 18	28 "			" "
35		40 52.1	66 51.8	28 "			" "
36	30781	40 50.7	66 25.5	28 "	41 27.7	71 10.2	22 Sept. '57
37	30800	40 51.4	66 05.3	29 "	60	00	24 Nov. '58
38		40 50	65 42	29 "			No Returns
39		40 39	66 01.7	29 "			" "
40		40 33.9	66 25.2	29 "			" "
41		40 31.9	66 52.4	29 "			" "
42		40 30.2	67 22.4	29 "			" "
43		40 29.5	67 43.7	29 "			" "
44		40 28.9	68 11.7	29 "			" "
45	30888	40 29.6	68 38.2	29 "	41 21	70 27	19 Jul. '57
	30898	40 29.6	68 38.2	29 "	41 36.5	69 59.3	11 Jan. '58
46		40 12.2	68 41.7	29 "			No Returns
47		40 10.2	68 20.7	29 "			" "
48		40 11.4	67 52.2	29 "			" "
49		40 12.3	67 29.7	30 "			" "
50		40 12	67 04.2	30 "			" "
51		40 25.2	66 51.2	30 "			" "
52		40 43	66 46.8	30 "			" "
53		41 02.1	66 43.4	30 "			" "
54		42 02.4	66 11.8	1 May			" "
55		41 55.8	66 19.8	1 "			" "
56		41 37	66 32.7	1 "			" "
57		41 22.9	66 48.2	1 "			" "
58		41 08.2	67 10.8	1 "			" "
59		40 56.8	67 31.4	1 "			" "
60		40 44.7	67 50.7	1 "			" "

Albatross III Cruise 93

8 - 16 May

1957

12 bottles released at each station, odd numbers - ballasted, even numbers - no ballast.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1	31080	41 34.5	69 52	8 May	41 32.5	70 36.4	12 Jun. '57
	31081	41 34.5	69 52	8 "	41 42	70 39.8	17 Aug. '57
	31082	41 34.5	69 52	8 "	41 30	71 03	15 Jun. '57
	31084	41 34.5	69 52	8 "	41 29.7	70 42.5	3 Jul. '57
2		41 33	69 24	8 "		No Returns	
3		41 32.3	68 57.7	8 "		" "	
4		41 27.2	68 31.8	8 "		" "	
5		41 24.1	68 05.5	8 "		" "	
6	31152	41 22.2	67 41.8	9 "	52 31	09 10	28 Sept. '58
7		41 24.9	67 18.2	9 "		No Returns	
8		41 33.8	66 54.1	9 "		" "	
9	31192	41 32.5	66 30.2	9 "	41 39.1	70 47	20 Aug. '57
	31194	41 32.5	66 30.2	9 "	41 14.6	70 05	12 Jul. '57
10	31208	41 52	66 22.8	9 "	43 58	58 47	16 Sept. '57
11		42 10.9	66 10.5	9 "		No Returns	
12		41 50	65 55.4	9 "		" "	
13	31237	41 49.2	65 26.9	9 "	44 23.8	66 12.2	12 Aug. '57
	31241	41 49.2	65 26.9	9 "	44 40	66 45	20 Nov. '57
	31247	41 49.2	65 26.9	9 "	44 43.6	62 56	27 Jun. '59
14		41 37.9	65 16	10 "		No Returns	
15		41 30.6	65 25	10 "		" "	
16		41 30.5	65 48	10 "		" "	
17		41 28.7	66 08.5	10 "		" "	
18		41 54.4	65 40.3	10 "		" "	
19	31308	42 10	65 36.5	10 "	45 01	66 55.7	31 Aug. '57
	31312	42 10	65 36.5	10 "	58 35	03 25	6 Aug. '59
	31314	42 10	65 36.5	10 "	45 00.1	66 53.8	3 Jul. '57
	31315	42 10	65 36.5	10 "	44 28	65 59	19 Jul. '57
	31318	42 10	65 36.5	10 "	45 05.6	66 25	29 Jul. '57

Albatross III Cruise 93 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
20		42 09.3	66 02	10 May			No Returns
21	31342	42 08.5	66 21.5	10 "	45 22	64 20.3	2 Sept. '57
22		42 06	66 27.5	11 "			No Returns
23		42 05.5	66 49	11 "			" "
24	31374	42 06.7	67 13.5	11 "	66	12	E 7 Feb. '60
25	31384	42 03.6	67 32	11 "	45 22.4	64 34	21 Sept. '57
26		41 50	67 21	11 "			No Returns
27		41 48.2	66 51.8	11 "			" "
28		41 47.2	66 36.8	11 "			" "
29		41 48.8	66 13.8	11 "			" "
30		41 29.3	66 25.4	11 "			" "
31		41 15.8	66 30.8	11 "			" "
32		41 15.7	66 04.3	11 "			" "
33		41 00	66 19.5	12 "			" "
34	31492	40 57.9	66 47.5	12 "	41 40	69 57	30 Jun. '57
35	31510	40 58.8	67 15	12 "	41 18.5	70 48	21 Sept. '57
36		41 00.8	67 42.1	12 "			No Returns
37	31524	41 01	68 00	12 "	41 15	70 10	14 Jul. '57
	31526	41 01	68 00	12 "	41 40.1	70 00	17 Dec. '57
	31528	41 01	68 00	12 "	41 20	70 40	6 Jul. '57
	31530	41 01	68 00	12 "	41 20.8	70 29	23 Jun. '57
38		41 00	68 23.2	12 "			No Returns
39	31548	40 42	68 28.8	12 "	41 39.5	69 59	26 Jun. '57
	31549	40 42	68 28.8	12 "	41 30	71 02.5	3 Aug. '57
	31552	40 42	68 28.8	12 "	41 23	70 30.3	24 Jun. '57
	31555	40 42	68 28.8	12 "	41 28	70 34.6	9 Jul. '57
	31556	40 42	68 28.8	12 "	41 15.5	70 13.5	30 Jun. '57
	31558	40 42	68 28.8	12 "	41 32.9	70 31.9	30 Jun. '57
40	31568	40 38.5	68 06.8	12 "	41 16.5	70 13.5	6 Jul. '57
41	31572	40 39	67 42.9	12 "	41 16.5	70 13.5	6 Sept. '57
42	31586	40 38	67 20	12 "	41 36.5	69 59	26 Jul. '57
43		40 40.4	66 45	12 "			No Returns
44		40 31.6	66 38.5	13 "			" "
45		40 20.5	66 56.8	13 "			" "
46		40 19.5	67 19.5	13 "			" "
47		40 17.7	67 46	13 "			" "

Albatross III Cruise 93 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
48	31659	40 20.5	68 11	13 May	35 38	75 27.5	1 Sept. '57
49	31674	40 20.3	68 36	13 "	41 39.2	70 07.5	30 Jun. '57
50		40 14	68 46.6	13 "		No Returns	
51	31702	39 59.2	68 43.5	13 "	40 38	73 12	13 Sept. '57
52		40 00	68 21	13 "		No Returns	
53		40 04.5	67 57.5	13 "		" "	
54		40 22.7	67 45.8	13 "		" "	
55		40 39.5	67 33.4	13 "		" "	
56	31754	40 55	67 18.4	14 "	41 39.3	70 07.5	1 Aug. '57
57		41 08.2	67 03	14 "		No Returns	
58		41 24.8	66 55.2	14 "		" "	
59		41 08.2	65 23.8	14 "		" "	
60		41 25	65 38.5	14 "		" "	
61		41 40.5	65 56.8	15 "		" "	
62		41 31.6	66 05.8	15 "		" "	
63	31838	41 15.8	66 23.1	15 "	40 38.6	73 09.3	16 Sept. '57
64		41 02	66 44	15 "		No Returns	
65		40 56	66 54.8	15 "		" "	
66		40 54.5	67 28.7	15 "		" "	
67	31884	40 52	67 49.7	15 "	45 18	64 24	9 Nov. '57
68	31898	40 47.5	68 06	15 "	41 21.8	70 29	30 Jun. '57
69	31909	40 40.6	68 26	15 "	41 40.3	70 39.9	15 Jul. '57
	31910	40 40.6	68 26	15 "	41 37	70 16	28 Jul. '57
	31914	40 40.6	68 26	15 "	40 35	73 39	19 Sept. '57
	31915	40 40.6	68 26	15 "	41 21.7	70 28.5	12 Jul. '57
	31916	40 40.6	68 26	15 "	41 21	70 29	24 Jun. '57
	31919	40 40.6	68 26	15 "	41 20.9	70 34	25 Jun. '57
70	31921	40 37.4	68 51.5	15 "	41 39.2	70 07.5	29 Jun. '57
	31922	40 37.4	68 51.5	15 "	41 39.8	70 05.3	28 Jun. '57
	31925	40 37.4	68 51.5	15 "	41 39.5	69 59	8 Jul. '57
	31927	40 37.4	68 51.5	15 "	41 17.6	70 14.5	3 Jul. '57
	31929	40 37.4	68 51.5	15 "	41 20.5	70 42.5	30 Jun. '57
	31930	40 37.4	68 51.5	15 "	41 21	70 28	24 Jun. '57
	31931	40 37.4	68 51.5	15 "	41 39.2	70 07.5	27 Jun. '57
71	31933	40 39.5	69 15.5	15 "	41 20.8	70 30.6	Jul. '57
	31934	40 39.5	69 15.5	15 "	41 30.5	71 04.5	30 Jun. '57

Albatross III Cruise 93 (cont'd)

Sta.#	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
71	31937	40 39.5	69 15.5	15 May	41 20.8	70 30.6	Jul. '57
	31940	40 39.5	69 15.5	15 "	41 19	70 48.5	18 Jun. '57
	31941	40 39.5	69 15.5	15 "	41 39.2	70 07.5	25 Jun. '57
	31942	40 39.5	69 15.5	15 "	41 20	70 49.5	25 Jun. '57
	31943	40 39.5	69 15.5	15 "	41 23	70 30.3	24 Jun. '57
72	31944	40 37.4	69 40	15 "	41 38.4	70 13	25 Oct. '57
	31950	40 37.4	69 40	15 "	41 20.9	70 35	22 Nov. '57
	31954	40 37.4	69 40	15 "	40 52.5	72 22.5	12 Sept. '57
	31955	40 37.4	69 40	15 "	41 20.8	70 30.6	Jul. '57
73	31956	40 41	70 03	15 "	39 57.4	74 04	23 Aug. '57
	31957	40 41	70 03	15 "	41 38.6	70 15.3	10 Jul. '57
	31959	40 41	70 03	15 "	41 39.4	70 06.9	10 Jul. '57
	31966	40 41	70 03	15 "	41 35.3	70 50	1 Jul. '57
	31967	40 41	70 03	15 "	41 38.5	70 15	7 Jul. '57
74	31972	40 51.7	70 20	16 "	41 33	70 34.5	28 Jul. '57
	31974	40 51.7	70 20	16 "	41 30.5	71 04	1 Aug. '57
	31975	40 51.7	70 20	16 "	41 23.5	70 03	19 May '60

Albatross III Cruise 94

22 - 28 May

1957

12 bottles released at each station, odd numbers - ballasted, even numbers - no ballast.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1	31980	41 26.5	69 43.5	22 May	44 34	65 55	16 Aug. '57
2		41 22	69 24	22 "		No Returns	
3		41 11	69 05	22 "		" "	
4		41 02.5	68 40	22 "		" "	
5		41 00.8	68 14.8	22 "		" "	
6		41 01	67 47.8	23 "		" "	
7	32056	40 53	67 48.5	23 "	41 19	70 48.5	24 Aug. '57
8		40 42.2	67 49	23 "		No Returns	
9	32084	40 44	67 24	23 "	40 37.3	73 17	14 Sept. '57
10		40 45.2	67 01.1	23 "		No Returns	
11		40 46.5	66 55.5	23 "		" "	
12		41 03.2	67 02.2	23 "		" "	
13		41 16.3	67 09	23 "		" "	
14	32138	41 37	67 18.5	23 "	57 27	07 30	8 Nov. '58
15		41 48.4	67 19.2	23 "		No Returns	
16		41 50.2	66 51.5	23 "		" "	
17	32181	41 49.7	66 23.2	23 "		Norway	31 Dec. '58
18		41 49.9	65 55.8	23 "		No Returns	
19	32198	41 49.3	65 35.6	24 "	44 34	65 54.5	1 Aug. '57
	32207	41 49.3	65 35.6	24 "	45 19	64 25	15 Sept. '57
20		41 38.6	65 25.3	24 "		No Returns	
21		41 25.8	65 46.5	24 "		" "	
22		41 25.8	65 46.5	24 "		" "	
23		41 25.8	66 05	24 "		" "	
24		41 24	66 23.3	24 "		" "	
25		41 25	66 43	24 "		" "	
26		41 27	67 10	24 "		" "	
27		41 29.3	67 34.8	24 "		" "	
28	32308	41 16	67 36.2	24 "	41 20	70 49.5	7 Oct. '57

Albatross III Cruise 94 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
29		41 11.7	67 14.2	24 May			No Returns
30		41 10.3	66 45.2	24 "			" "
31		41 09.7	66 29.3	25 "			" "
32		41 08.5	66 01.6	25 "			" "
33		40 45	65 20	25 "			" "
34		41 04.1	66 14.3	25 "			" "
35		40 49.7	66 20.1	25 "			" "
36		40 49.8	66 39.1	25 "			" "
37	32416	40 39	67 17	25 "	41 17	70 13	6 Aug. '57
38		40 34.2	67 40.8	26 "			No Returns
39	32438	40 34.9	67 53	26 "	41 21	70 40	16 Jul. '57
40		40 36.5	68 23.1	26 "			No Returns
41	32464	40 45.9	68 40.8	26 "	43 56	60 03	29 Sept. '57
42		40 50.7	68 16.4	26 "			No Returns
43		40 50.4	67 49	26 "			" "
44		40 51.5	67 19.5	26 "			" "
45	32513	40 48.4	67 09.4	26 "	41 30.5	71 05	31 Jul. '57
46		40 44	66 53	26 "			No Returns
47		40 36.2	66 33	26 "			" "
48		40 28.5	66 05.8	26 "			" "
49		40 20	66 09.1	26 "			" "
50		40 20.2	66 22.6	26 "			" "
51		40 22	66 37.5	27 "			" "
52		40 23.5	66 56	27 "			" "
53	32604	40 24.5	67 15.5	27 "	51 08	04 15	17 Aug. '58
54	32620	40 27	67 34.5	27 "	41 17.5	70 14.5	25 Jun. '57
55	32628	40 20.9	67 57.2	27 "	41 17	70 14.5	6 Jul. '57
56		40 20.5	68 20.7	27 "			No Returns
57	32662	40 17.8	68 36	27 "	32 17	64 44	23 Nov. '57
58	32666	40 18.7	69 01.3	27 "	41 40	70 02.5	28 Jun. '57
	32668	40 18.7	69 01.3	27 "	41 39.8	70 04.5	28 Jun. '57
	32669	40 18.7	69 01.3	27 "	41 23	70 03	16 Jul. '57
	32670	40 18.7	69 01.3	27 "	41 36.5	69 59.5	23 Jan. '58
	32674	40 18.7	69 01.3	27 "	41 14.6	70 07.7	25 Jun. '57
	32675	40 18.7	69 01.3	27 "	41 29.8	71 02.5	12 Aug. '57

Albatross III Cruise 94 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
59		40 00	69 01	27 May			No Returns
60	32697	40 00	68 35.3	27 "	64 15	10 19 E	21 Jun. '59
61		40 02.8	68 10.8	27 "			No Returns
62		40 16	67 57.7	27 "		" "	
63	32726	40 23	67 47	28 "	41 14.5	70 07.1	14 Jul. '57
64		40 31.3	67 34.9	28 "			No Returns
65	32748	40 36	67 35	28 "	41 15.5	70 11.2	7 Jul. '57
	32750	40 36	67 35	28 "	40 50.5	72 29	24 Sept. '57
	32758	40 36	67 35	28 "	41 20.5	70 42.5	21 Sept. '57
66		40 55.3	67 32.4	28 "			No Returns
67		41 16	67 28	28 "		" "	
68		41 35.6	66 54	28 "		" "	
69		41 33.5	67 06	28 "		" "	
70		41 30	67 30	28 "		" "	
71	32828	41 25.2	68 19	28 "	44 34	65 51	28 Sept. '57

Albatross III Cruise 95

5 - 9 June

1957

12 bottles released at each station, odd numbers - ballasted, even numbers - no ballast.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
1		41 29	69 31	5 Jun.			No Returns
2	32862	41 34.5	69 09	5 "	44 40	67 20	15 Oct. '57
3	32870	41 39	68 46.8	5 "	43 30	65 35.5	19 Aug. '58
4	32886	41 44.8	68 20	5 "	43 58	58 47	9 Sept. '57
5		41 51	67 55	5 "			No Returns
6		42 00.5	67 34.2	6 "		" "	
7		42 07.7	67 10.4	6 "		" "	
8	32934	42 06.2	66 48.3	6 "	43 56	60 03	18 Sept. '57
9		41 48.1	66 49	6 "			No Returns
10		41 28.4	66 52.1	6 "		" "	
11		41 33.3	66 37.1	6 "		" "	
12		41 39.4	66 09.2	6 "		" "	
13		41 37	65 47	6 "		" "	
14		41 21.9	65 54.6	6 "		" "	
15		41 14.8	66 12.1	6 "		" "	
16		41 13.5	66 37.7	6 "		" "	
17		41 13.8	66 58.5	7 "		" "	
18		41 16.7	67 26.8	7 "		" "	
19		41 18.8	67 51.5	7 "		" "	
20		41 15.8	68 13.8	7 "		" "	
21		41 13	68 34.9	7 "		" "	
22		40 52.8	68 29.8	7 "		" "	
23		40 53.8	68 12.8	7 "		" "	
24		40 56.7	67 49.5	7 "		" "	
25		40 57.9	67 25	7 "		" "	
26		40 57	66 57.2	7 "		" "	
27		40 57.3	66 38	7 "		" "	
28		40 48.8	66 21.8	8 "		" "	
29		40 41.8	66 26.1	8 "		" "	
30		40 37.5	66 52	8 "		" "	

Albatross III Cruise 95 (cont'd)

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
31		40 40	67 17.5	8 Jun.			No Returns
32		40 41.6	67 42.7	8 "			" "
33		40 39.9	68 08.6	8 "			" "
34		40 39.2	68 33.7	8 "			" "
35	33258	40 39	68 52.9	8 "	41 20.5	70 42.5	21 Sept. '57
36	33268	40 25.8	68 58	8 "	41 39.3	70 07	17 Sept. '57
	33270	40 25.8	68 58	8 "	41 17.2	70 14.8	14 Jul. '57
37		40 25.5	68 15	8 "			No Returns
38		40 25.3	68 10	8 "			" "
39		40 23.5	67 44.7	8 "			" "
40		40 23	67 10.8	8 "			" "
41		40 12.8	67 20	9 "			" "
42		40 11.3	67 41	9 "			" "
43		40 11.2	67 51	9 "			" "
44		40 10.7	68 26.3	9 "			" "
45		40 09.6	68 50.5	9 "			" "
46	33395	40 09	69 15.5	9 "	40 36.8	73 24.4	22 Sept. '57

Harengus Cruise 17

9 - 26 September

1957

At stations where 12 bottles were released, six were ballasted, six had no ballast.

At stations where 6 bottles were released, all were ballasted.

Sta. #	No. Bottles Released		Released				Recovered			
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date		
95	12	37575 N	44 57.8	66 51.2	9 Sept.	44 55.9	66 56.4	17 Sept. '57		
		37576 N	44 57.8	66 51.2	9 "	44 57.4	66 54.3	20 Nov. '57		
94	12		44 30.0	67 13.0	10 "		No Returns			
92	12		44 00.0	67 38.8	10 "		" "			
91	12		44 00.0	68 34.0	10 "		" "			
90	12		43 41.0	68 51.0	10 "		" "			
89	12	37036 B	43 41.0	69 01.0	10 "	43 40	65 09	12 Dec. '57		
88	12	37611 N	43 22.2	69 01.0	10 "	44 06	66 13	21 Oct. '57		
		37607 N	43 22.2	69 01.0	10 "	43 41	66 01	29 Oct. '57		
87	12		43 22.0	70 21.5	11 "		No Returns			
86	12		42 35.2	69 29.5	11 "		" "			
85	12		41 51.0	70 26.0	11 "		" "			
84	12		42 20.0	70 38.8	11 "		" "			
82	12		42 31.2	70 18.2	11 "		" "			
83	12		42 41.8	70 00.0	12 "		" "			
81	12		42 57.5	70 00.0	12 "		" "			
80	12	37687 B	42 55.8	69 41.5	12 "	43 42.1	66 03.5	27 Dec. '57		
79	12		42 51.2	68 54.8	12 "		No Returns			
78	12		42 46.5	68 00.0	12 "		" "			
77	12		42 34.5	65 54.0	13 "		" "			
76	12		42 30.8	65 10.5	13 "		" "			
75	12	37689 B	43 22.1	66 02.1	13 "	44 20	66 07.6	2 Dec. '57		
		37118 B	43 22.1	66 02.1	13 "	44 54.3	65 21.2	13 Nov. '57		
96	12		43 40.5	66 11.0	18 "		No Returns			
97	12	37127 B	43 24.0	66 30.0	18 "	44 20	66 07.5	5 Oct. '57		
		37132 B	43 24.0	66 30.0	18 "	44 13.6	66 08.5	13 Jun. '59		
98	12		43 08.0	66 44.5	18 "		No Returns			
99	12		42 51.0	66 59.0	18 "		" "			

Harengus Cruise 17 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
100	12		42 34.0	67 13.5	18 Sept.			No Returns
101	12	37725 N	42 21.0	67 21.0	18 "	44 17	66 20	20 Jan. '58
102	12	37729 N	42 17.0	67 27.8	18 "	43 48	64 53	8 Apr. '58
103	12		42 09.0	67 34.5	18 "			No Returns
104	12		42 04.0	67 20.5	18 "		" "	
105	12		42 12.0	67 20.2	19 "		" "	
106	12		42 07.0	67 05.0	19 "		" "	
107	12		42 15.5	67 52.5	19 "	44 15.5	66 08	2 Dec. '57
108	12		42 10.0	66 46.5	19 "			No Returns
109	12		42 06.0	66 34.0	19 "		" "	
110	12		42 13.2	66 28.0	19 "		" "	
111	12		42 23.0	66 26.2	19 "		" "	
112	12	37222 B	42 32.5	66 24.5	19 "	44 15	66 23	23 Jan. '58
113	12	37226 B	42 42.5	66 22.5	19 "	44 03	64 38	20 Nov. '57
114	12		43 02.3	66 18.5	19 "			No Returns
115	12	37806 N	43 22.0	66 14.5	19 "	43 52	66 10.5	29 Sept. '57
116	12		43 40.5	66 10.8	19 "			No Returns
36	12	37250 B	43 40.5	66 10.8	24 "	44 18	66 08	20 Nov. '57
35	12		43 51.2	66 45.5	24 "			No Returns
34	12		44 06.2	66 21.0	24 "		" "	
33	12	37270 B	44 18.0	66 43.0	24 "	44 30	66 06	27 Sept. '57
32	11	37843 N	44 39.0	65 56.5	24 "	44 41	65 48	28 Sept. '57
31	6		44 51.5	66 03.5	24 "			No Returns
30	5		44 49.5	66 08.2	25 "		" "	
29	6		44 52.5	66 12.8	25 "		" "	
28	6	37298 B	44 55.5	66 17.8	25 "	44 57	65 16	13 Nov. '57
27	6		44 58.8	66 22.5	25 "			No Returns
26	12		45 01.2	66 28.8	25 "		" "	
Z	6		45 03.2	66 00.0	25 "		" "	
Y	6		45 04.2	66 16.2	25 "		" "	
25	6		45 10.2	65 56.8	25 "		" "	
24	6		45 07.0	65 53.5	25 "		" "	
23	6		45 03.8	65 49.7	25 "		" "	
22	12		45 00.5	65 46.0	25 "		" "	

Harengus Cruise 17 (cont'd)

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
21	6	37350 B	44 57.5	65 42.5	25 Sept.	45 10.2	64 45.8	5 Oct. '57	
20	6	37359 B	44 54.2	65 38.8	25 "	44 57	65 16	28 Sept. '57	
19	6		44 51.0	65 35.0	25 "		No Returns		
18	6	37370 B	44 54.2	65 22.5	25 "	45 13	64 31	20 Oct. '57	
17	6		45 06.0	65 03.0	25 "		No Returns		
16	6		45 09.2	65 06.0	25 "		" "		
15	6		45 12.5	65 11.0	25 "		" "		
14	12		45 15.8	65 18.8	25 "		" "		
13	6		45 18.8	65 18.8	25 "		" "		
12	6	37403 B	45 22.2	65 22.8	25 "	41 17.2	70 14.7	29 Jun. '58	
11	6		44 43.8	66 00.0	25 "		No Returns		
10	6		44 18.8	66 21.2	25 "		" "		
9	6	37421 B	44 22.5	66 23.7	25 "	44 30	66 06	27 Sept. '57	
7	6		44 31.5	66 29.8	26 "		No Returns		
6	12	37437 B	44 35.0	66 32.8	26 "	44 16.8	66 08.2	5 Oct. '57	
5	6		44 40.2	66 35.8	26 "		No Returns		
4	6		44 45.8	66 38.8	26 "		" "		
3	6	37452 B	44 49.0	66 42.0	26 "	44 46.3	66 45.5	8 Oct. '57	
2	6		44 53.5	66 45.0	26 "		No Returns		
1	12		44 59.8	66 48.2	26 "		" "		

Harengus Cruise 18

7 - 25 October

1957

At stations where 12 bottles were released, six were ballasted, six had no ballast.

At stations where 6 bottles were released, all were ballasted.

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
95	12	37878 N	44 57.8	66 51.2	7 Oct.	44 57.3	67 02.4	9 Oct. '57
		37879 N	44 57.8	66 51.2	7 "	44 52.2	67 00.1	12 Oct. '57
		37880 N	44 57.8	66 51.2	7 "	45 03.8	66 50	21 Nov. '57
		37882 N	44 57.8	66 51.2	7 "	44 54	67 00.5	2 Jan. '58
		37469 B	44 57.8	66 51.2	7 "	44 53	66 57.1	11 Oct. '57
		37470 B	44 57.8	66 51.2	7 "	44 57	66 54.7	3 Nov. '57
		37472 B	44 57.8	66 51.2	7 "	44 56.2	66 56	16 Oct. '57
		37473 B	44 57.8	66 51.2	7 "	44 50.4	66 56.4	11 Oct. '57
		37474 B	44 57.8	66 51.2	7 "	44 57.3	66 54.2	24 Oct. '57
94	12		44 31.2	67 12.0	7 "		No Returns	
93	12	37486 B	44 22.8	67 37.8	7 "	43 50.8	66 09	22 Dec. '57
92	12		44 00.0	67 37.5	7 "		No Returns	
91	12		44 00.0	68 33.5	7 "		" "	
90	12		43 41.5	68 33.8	8 "		" "	
89	12		43 41.5	69 00.0	8 "		" "	
88	12		43 22.0	70 21.0	8 "		" "	
87	12		43 01.5	69 50.2	8 "		" "	
86	12		43 00.0	69 00.0	8 "		" "	
85	12		43 22.5	69 00.0	8 "		" "	
84	12	37563 B	43 22.5	68 00.0	9 "	43 47.8	66 09.5	26 Dec. '57
		37564 B	43 22.5	68 00.0	9 "	43 48	66 08	2 Dec. '57
83	12		43 40.8	68 00.0	9 "		No Returns	
82	12		43 41.0	67 00.0	9 "		" "	
81	12		43 40.8	66 11.0	9 "		" "	
96	12		43 40.0	66 15.0	15 "		" "	
97	12	37978 N	43 24.0	66 30.0	15 "	St. Marys Bay		5 Nov. '57
98	12		43 07.8	66 44.5	16 "		No Returns	
99	12		42 51.0	66 59.0	16 "		" "	

Harengus Cruise 18 (cont'd)

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
100	12		42 34.0	67 13.5	16 Oct.			No Returns	
101	12		42 25.8	67 21.0	16 "		" "		
102	12		42 17.2	67 28.0	16 "		" "		
103	12		42 09.0	67 34.8	16 "		" "		
104	12		42 04.0	67 23.5	16 "		" "		
105	12		42 12.0	67 16.0	16 "		" "		
106	12		42 07.0	67 05.0	16 "		" "		
107	12		42 15.5	66 57.2	16 "		" "		
108	12		42 10.5	66 46.8	16 "		" "		
109	12		42 06.0	66 32.5	16 "		" "		
110	12		42 13.0	66 28.0	16 "		" "		
111	12	38266 B	42 23.0	66 26.0	16 "	44 38.6	65 39	23 Dec. '57	
112	12	38271 B	42 32.8	66 23.8	16 "	44 22	66 06	4 Dec. '57	
113	12		42 42.5	66 22.2	17 "			No Returns	
114	12	38080 N	43 02.5	66 18.5	17 "	43 26	65 38	14 Dec. '57	
115	12		43 22.2	66 14.5	17 "			No Returns	
116	12	38089 N	43 40.8	66 11	17 "	44 23.5	66 12.5	25 Oct. '57	
36	12	38093 N	43 40.5	66 10.8	22 "	43 50	66 07.5	22 Jan. '58	
35	12		43 51.2	66 45.5	22 "			No Returns	
34	12	38109 N	44 07.2	66 21	22 "	44 23.5	66 12.5	25 Oct. '57	
33	12	38114 N	44 17.0	66 44.0	22 "	43 29.5	65 43.5	1 Jan. '58	
		38319 B	44 17.0	66 44.0	22 "	43 27	65 35	23 Dec. '57	
32	12	38123 N	44 40.2	65 55.5	22 "	44 36	65 45	18 Nov. '57	
31	6		44 46.5	66 03.8	23 "			No Returns	
30	6		44 49.2	66 08.2	23 "		" "		
29	6		44 52.2	66 13.0	23 "		" "		
28	6		44 55.5	66 17.8	23 "		" "		
27	6		44 58.5	66 22.8	23 "		" "		
26	12	38358 B	45 01.0	66 26.8	23 "	45 05	66 28	13 Nov. '57	
		38359 B	45 01.0	66 26.8	23 "	45 05	66 28	9 Nov. '57	
		38360 B	45 01.0	66 26.8	23 "	45 05.2	66 28	7 Nov. '57	
25	6	38369 B	45 10.0	65 57.3	23 "	43 31	65 37	27 Dec. '57	
24	6	38371 B	45 06.8	65 53.5	23 "	44 36.8	65 55.4	29 Dec. '57	

Harengus Cruise 18 (cont'd)

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
23	6		45 03.8	65 50.0	24 Oct.			No Returns	
22	6	38384 B	45 00.8	65 46.5	24 "	45 22	64 20	17 Dec. '57	
21	6		44 57.5	65 42.5	24 "			No Returns	
20	6		44 54.2	65 38.8	24 "			" "	
19	6		44 51.0	65 35.2	24 "			" "	
18	12		44 59.2	65 17.5	24 "			" "	
17	12		45 06.0	65 03.0	24 "			" "	
16	6		45 09.0	65 07.0	24 "			" "	
15	6	38424 B	45 12.5	65 11.0	24 "	45 17.3	63 49.2	6 Dec. '57	
14	12		45 15.5	65 15.2	24 "			No Returns	
13	6		45 18.8	65 19.2	24 "			" "	
12	12	38447 B	45 22.0	65 25.2	24 "	44 30	66 15	8 Dec. '57	
11	6	38452 B	44 43.2	65 58.8	24 "	44 41.5	65 47	30 Oct. '57	
10	12	38163 N	44 18.8	66 21.2	24 "	45 14	64 31.5	2 Dec. '57	
9	6		44 22.2	66 23.8	25 "			No Returns	
8	6		44 26.8	66 26.8	25 "			" "	
7	6		44 31.2	66 29.8	25 "			" "	
6	6		44 35.8	66 33.0	25 "			" "	
5	6		44 40.0	66 36.0	25 "			" "	
4	6		44 44.8	66 38.8	25 "			" "	
3	6		44 49.0	66 42.0	25 "			" "	
2	12		44 53.5	66 45.0	25 "			" "	
1	12		44 59.7	66 49.5	25 "			" "	

Albatross III Cruise 104

9 - 17 October

1957

Odd numbered bottles - ballasted, even numbered - no ballast.

Sta. #	No. Bottles Released	Bottle #	Released				Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date	
3	24		41 31	69 32	9 Oct.			No Returns	
4	12		41 30	69 26	9 "			" "	
7	12		41 32	69 24	10 "			" "	
10	24		41 29	69 12.5	11 "			" "	
14	12		41 35	68 58	11 "			" "	
15	24		41 37	68 54	12 "			" "	
17	24		41 31	68 30	12 "			" "	
18	12	33534	41 35	68 28	12 "	68 25	15 56 E	6 Feb. '60	
19	12		41 48	68 15	12 "			No Returns	
22	12		42 02	67 42	12 "			" "	
23	12		42 05	67 38	12 "			" "	
24	12		42 08	67 26	12 "			" "	
25	12		42 08	67 04	12 "			" "	
28	12		41 58	66 18	14 "			" "	
32	12		42 20	65 42	14 "			" "	
33	12	33630	42 45	65 59	14 "	44 38	65 41	19 Jan. '58	
		33639	42 45	65 59	14 "	44 23	66 04	30 Dec. '57	
44	12		41 29	67 01	16 "			No Returns	
52	12		40 54	66 45	16 "			" "	
60	12		41 49	67 54	17 "			" "	
61	12		42 06	67 39	17 "			" "	
66	8		41 22	67 51	17 "			" "	

Albatross III Cruise 105

29 October - 8 November

1957

12 bottles dropped at each station, odd numbers - ballasted, even numbers - no ballast.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
20	33702	42 51	66 18	29 Oct.	44 30	66 06	21 Jan. '58
	33705	42 51	66 18	29 "	44 54.5	65 21	28 Nov. '57
21	33712	42 51	65 57	30 "	44 26	66 02	26 Nov. '57
23	33726	43 15	66 23	30 "	44 34	65 54	24 Dec. '57
25		43 31	66 26	30 "		No Returns	
27	33753	43 35	66 27	30 "	44 11.5	66 10	26 Dec. '57
31	33761	44 09	67 06	31 "	43 53.3	66 09.8	3 Dec. '57
	33762	44 09	67 06	31 "	44 10	66 10	18 Dec. '57
32	33772	44 08	67 04	1 Nov.	44 20	66 07.6	3 Dec. '57
	33778	44 08	67 04	1 "	44 02	66 10	1 Dec. '57
33	33786	44 01	67 18	1 "	44 03	66 10.2	29 Dec. '57
35		44 09	67 53	1 "		No Returns	
37	33806	43 47	68 13	1 "	45 05.4	66 55.0	27 Aug. '58
39	33826	43 43	68 36	2 "	41 42.5	70 20	20 Mar. '59
40	33832	43 35	68 39	2 "	41 43.7	70 14	10 Apr. '60
X		42 56	68 58	2 "		No Returns	
47		43 40	68 59	5 "		" "	
49	33867	43 37	68 35	5 "	43 59	66 09.3	13 Dec. '57
51		43 44	68 11	5 "		No Returns	
53	33889	43 54	67 43	5 "	44 18	66 07.5	2 Dec. '57
55		44 03	67 20	5 "		No Returns	
57	33913	44 11	66 53	5 "	43 59	66 09.3	3 Dec. '57
	33919	44 11	66 53	5 "	44 18	66 08	7 Dec. '57
59	33933	44 15	66 35	5 "	44 53	65 24	13 Nov. '57
60		44 24	66 22	6 "		No Returns	
79	33950	43 10	69 22	7 "	42 04.2	70 14.6	10 Apr. '58
82		42 51	69 23	7 "		No Returns	
88		42 23	70 11	7 "		" "	
89		42 04	69 53	8 "		" "	

Harengus Cruise 19

5 - 21 November

1957

At stations where 12 bottles were dropped, 6 were ballasted, 6 were without ballast.

At stations where 6 bottles were dropped, all were ballasted.

Sta. #	No. Bottles Released	Bottle #	Released				Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date	
95	12	38514 B	44 57.5	66 51.2	5 Nov.	44 46.5	66 49.4	7 Nov. '57	
		38515 B	44 57.5	66 51.2	5 "	45 00.2	66 56.7	17 Nov. '57	
94	12	38990 N	44 32.0	67 12.0	5 "	43 31.5	65 44	4 Dec. '57	
		38994 N	44 32.0	67 12.0	5 "	44 33	66 02	30 Dec. '57	
93	12	38996 N	44 24.0	67 44.0	5 "	43 27.5	65 39.3	14 Dec. '57	
92	12	38535 B	44 00.0	67 39.0	5 "	44 30	66 06	13 Jan. '58	
		39003 N	44 00.0	67 39.0	5 "	43 28.9	65 33.5	22 Dec. '57	
		39005 N	44 00.0	67 39.0	5 "	44 13	66 09	6 Jan. '58	
91	12		44 00.0	68 34.0	5 "	No Returns			
90	12		43 40.0	68 36.0	6 "	"	"		
89	12		43 41.5	69 01.0	6 "	"	"		
88	12		43 22.0	70 20.0	6 "	"	"		
87	12	39035 N	43 00.0	69 56.0	6 "	62 30	08 20 E	3 Aug. '59	
86	12	38605 B	43 00.0	69 00.0	6 "	43 31	65 38	6 Jan. '58	
		38609 B	43 00.0	69 00.0	6 "	43 29	65 40	9 Jan. '58	
		38610 B	43 00.0	69 00.0	6 "	43 32.3	65 47.5	1 Jan. '58	
		39039 N	43 00.0	69 00.0	6 "	43 25	66 01	14 Aug. '58	
85	12	38616 B	43 22.0	69 00.0	6 "	41 17	70 14.5	5 Apr. '58	
84	12	39054 N	43 22.5	67 58.0	7 "	44 22	66 06	31 Mar. '58	
83	12	38623 B	43 41.0	67 57.0	7 "	43 32	65 45.5	9 Jan. '58	
		39055 N	43 41.0	67 57.0	7 "	43 47	66 08	1 Dec. '57	
		39057 N	43 41.0	67 57.0	7 "	44 13.2	66 08.6	4 Dec. '57	
82	12		43 41.0	67 01.0	7 "	No Returns			
35	12		43 51.0	66 45.0	12 "	"	"		
96	12	38643 B	43 40.0	66 15.0	12 "	44 30.5	65 55	6 Dec. '57	
97	12	39083 N	43 24	66 22	12 "	44 55	65 21	26 Nov. '57	
98	12		43 07	66 45	12 "	No Returns			

Harengus Cruise 19 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released				Recovered			
			Lat.	Long.	Date	Lat.	Long.	Date		
99	12	39096 N	42 51	66 59	12 Nov.	44 03	66 10	27 Nov. '57		
		38659 B	42 51	66 59	12 "	44 23.7	66 12	26 Nov. '57		
		38661 B	42 51	66 59	12 "	43 37.5	66 03.5	4 Dec. '57		
100	12	39101 B	42 34.5	67 14	12 "	58 15	06 46	12 Aug. '59		
		39102 N	42 34.5	67 14	12 "	62	06	29 Apr. '59		
101	12		42 25.5	67 21	12 "			No Returns		
102	12		42 17	67 20	12 "			" "		
103	12		42 09	67 34.5	13 "			" "		
104	12		42 04	67 23	13 "			" "		
105	12		42 12	67 16	13 "			" "		
106	12		42 08	67 00	13 "			" "		
107	12		42 15	66 58	13 "			" "		
108	12		42 10	66 47	13 "			" "		
109	12		42 04.5	66 35	13 "			" "		
110	12		42 13	66 26	13 "			" "		
111	12		42 22	66 28	13 "			" "		
112	12	39169 N	42 34	66 25	13 "	43 24	65 37	11 Dec. '57		
		39172 N	42 34	66 25	13 "	44 20	66 07.6	4 Dec. '57		
113	12		42 44	66 22				No Returns		
114	12	38753 B	43 05	66 18	13 "	44 37	65 42	1 Dec. '57		
115	12	38758 B	43 22	66 14.5	13 "	43 47	66 08	25 Nov. '57		
34	12		44 06.5	66 21	15 "			No Returns		
33	12	38770 B	44 18.5	66 32	15 "	44 30	66 15	4 Dec. '57		
32	12		44 40.5	65 55.5	18 "			No Returns		
31	6	38784 B	44 46.5	66 05	18 "	45 00.5	65 09	2 Dec. '57		
30	6		44 49.4	66 08.4	18 "			No Returns		
29	6		44 52.5	66 13	18 "			" "		
28	6		44 55.2	66 17.3	18 "			" "		
27	6	38803 B	44 58.5	66 22.8	18 "	45 05	66 28	25 Nov. '57		
		38805 B	44 58.5	66 22.8	18 "	45 04.5	66 44.4	23 Nov. '57		
		38806 B	44 58.5	66 22.8	18 "	45 04.5	66 44.4	13 Jan. '58		
26	12	38812 B	45 01.2	66 26.8	18 "	45 07	66 21	7 Mar. '58		
25	6		45 10	65 57.2	18 "			No Returns		
24	6		45 06.8	65 53.5	18 "			" "		
23	6		45 03.8	65 50	18 "			" "		

Harengus Cruise 19 (cont'd)

Sta. #	No. Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
22	12	38838 B	45 00.8	65 46.5	18 Nov.	44 57.5'	65 14.5'	30 Nov. '57
21	6		44 57.5	65 42.5	18 "	No Returns		
20	6		44 54.2	65 38.8	18 "	"	"	
19	6		44 51	65 35.2	18 "	"	"	
18	12		44 59.2	65 17.5	18 "	"	"	
17	12	38863 B	45 09	64 59	18 "	45 18.5	64 45	25 Nov. '57
		38867 B	45 09	64 59	18 "	45 13	64 31.3	27 Nov. '57
16	6		45 09	65 07	18 "	No Returns		
15	6		45 12.5	65 11	18 "	"	"	
14	12	39240 N	45 15.5	65 15.2	19 "	45 18.4	64 47.3	5 Mar. '58
13	6	38892 B	45 18.5	65 19	19 "	45 19.5	64 46.5	27 Nov. '57
12	12	38894 B	45 21.8	65 23	19 "	45 20	64 46.5	29 Nov. '57
		39246 N	45 21.8	65 23	19 "	45 22.5	64 41.2	20 Dec. '57
11	6		44 43.2	65 58.8	21 "	No Returns		
10	12		44 18.8	66 21.2	21 "	"	"	
9	6		44 22.5	66 23.8	21 "	"	"	
8	6		44 27	66 26.8	21 "	"	"	
7	6	38927 B	44 31.5	66 29.8	21 "	44 40	65 46	28 Nov. '57
6	12		44 35.8	66 32.8	21 "	No Returns		
5	6		44 40	66 36	21 "	"	"	
4	6		44 44.5	66 39	21 "	"	"	
3	6		44 49	66 42	21 "	"	"	
2	12	38953	44 53.5	66 45	21 "	44 30	66 06	31 Dec. '57
1	12		44 59.5	66 49.2	21 "	No Returns		

Albatross III Cruise 106

3 - 19 December

1957

All bottles ballasted.

No. Bottles		Released				Recovered		
Sta. #	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
66	12		40 41	70 00	3 Dec.			No Returns
65	12		40 41	69 00	4 "			" "
64	12		40 40	68 00	4 "			" "
63	12		40 43.5	67 04	4 "			" "
62	12		41 13	66 24	5 "			" "
61	12		41 16	67 00	6 "			" "
59	12		41 15	69 01	6 "			" "
58	12		41 15.5	69 17.5	7 "			" "
57	12	40104	41 37	69 44.5	7 "	41 51	69 56.9	11 Feb. '58
56	12		41 48.8	69 00	7 "			No Returns
55	12		41 49	68 00	7 "			" "
47	12		41 58	68 00	7 "			" "
48	12	40148	42 21	67 28.5	7 "	44 15.5	66 21	29 Jan. '58
50	12		42 21.5	66 29.5	8 "			No Returns
51	12		42 02	66 00	8 "			" "
52	12		42 09	65 36	8 "			" "
36	12	40189	43 40	66 12	10 "	44 23.3	66 11.3	2 Jan. '58
		40194	43 40	66 12	10 "	43 59	66 09.4	19 Dec. '57
35	12	40211	43 51	66 44.5	10 "	45 41.6	64 27	6 Jul. '58
34	12		44 06	66 23	10 "			No Returns
33	12		44 19	66 42	10 "			" "
32	12		44 40.5	65 54	10 "			" "
31	12	40257	44 46.5	66 03	11 "	44 30	66 07	8 Mar. '58
30	12	40263	44 50	66 07	11 "	41 47.5	69 59	20 Mar. '58
		40271	44 50	66 07	11 "	44 17	66 19.5	5 Jan. '58
		40272	44 50	66 07	11 "	45 05.5	66 38.4	10 Jan. '58
29	12		44 52	66 13	11 "			No Returns

Albatross III Cruise 106 (cont'd)

Sta. #	No. Bottles		Released				Recovered			
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date		
28	12	40285	44 54	66 19	11 Dec.	44 55	65 20.5	25 Jan. '58		
		40290	44 54	66 19	11 "	44 24	66 13	7 Jan. '58		
		40292	44 54	66 19	11 "	45 13	66 07.5	2 Jan. '58		
27	12	40303	44 57.5	66 26	11 "	45 03.4	66 47.7	2 Jan. '58		
		40304	44 57.5	66 26	11 "	45 00.8	66 54	20 Dec. '57		
26	12	40311	45 01.5	66 27	11 "	44 48.5	66 58.7	7 Jan. '58		
		40314	45 01.5	66 27	11 "	45 05.8	66 38.6	14 Jan. '58		
		40317	45 01.5	66 27	11 "	45 01	66 51	20 Dec. '57		
25	12	40327	45 10	65 57	11 "	45 15	66 04	25 Dec. '57		
24	12		45 06	65 55	11 "			No Returns		
23	12	40352	45 04	65 49	11 "	45 20	64 46.5	29 Dec. '57		
		40354	45 04	65 49	11 "	42 04.8	70 13	13 May '58		
22	12		45 01	65 47	11 "			No Returns		
21	12	40369	44 57	65 43	11 "	45 20.3	65 47.5	4 Aug. '58		
20	12		44 54	65 38	11 "			No Returns		
19	12		44 51	65 35	11 "		" "			
18	12		44 59	65 19	11 "		" "			
17	12	40422	45 07	65 04	11 "	45 20	64 47	4 Jan. '58		
16	12	40430	45 10.5	65 06.5	11 "	45 20	64 47	9 Jan. '58		
		40433	45 10.5	65 06.5	11 "	45 28.5	64 51.5	27 Dec. '57		
15	12	40442	45 12.5	65 11	11 "	45 20	64 47	2 Jan. '58		
		40447	45 12.5	65 11	11 "	45 20	64 47	10 Jan. '58		
14	12	40458	45 16	65 14	11 "	45 20	64 47	7 Jan. '58		
		40459	45 16	65 14	11 "	45 10	64 46	25 Jan. '58		
		40522	45 16	65 14	11 "	45 23	64 19	20 Feb. '58		
13	12	40535	45 19	65 18	11 "	45 22	64 20.3	19 Jan. '58		
12	12	40545	45 22	65 22	12 "	44 26.2	66 10.8	4 Feb. '58		
11	12	40555	44 44	65 59	12 "	45 20	64 47	3 Jan. '58		
10	12	40561	44 19	66 21	12 "	45 04	66 42.8	30 Dec. '57		
9	12		44 22	66 23	12 "			No Returns		
8	12	40586	44 27	66 27	12 "	45 08	66 21	10 Mar. '58		
		40588	44 27	66 27	12 "	45 11	66 09	8 Apr. '58		
		40590	44 27	66 27	12 "	44 17	66 20	12 Jan. '58		
		40594	44 27	66 27	12 "	45 04.5	66 43.8	20 Apr. '58		
		40596	44 27	66 27	12 "	45 03.8	66 43.9	27 Dec. '57		

Albatross III Cruise 106 (cont'd)

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
7	12		44 31	66 29	12 Dec.			No Returns	
6	12	40614	44 38	66 30	12 "	44 44	65 42	13 Jan. '58	
5	12		44 40	66 36	12 "			No Returns	
4	12		44 45	66 39	12 "		" "		
3	12		44 49	66 42	12 "		" "		
2	12		44 53.5	66 46	12 "		" "		
1	12		44 58.5	66 50	12 "	44 30	66 06	2 Feb. '60	
94	12		44 31	67 12	14 "			No Returns	
93	12		44 23	67 37	14 "		" "		
92	12		44 00	67 36.5	14 "		" "		
91	12		44 00	68 30.5	15 "		" "		
90	12	40732	43 40	68 33	15 "	41 55.5	70 01.5	Apr. '58	
89	12		43 40	69 00	15 "			No Returns	
88	12		43 22	70 00	15 "		" "		
87	12		43 20	70 21	15 "		" "		
80	12		42 56	69 42	15 "		" "		
81	12		42 59	70 28	15 "		" "		
82	12		42 42	70 33	16 "		" "		
83	12		42 42	70 01	16 "		" "		
84	12		42 20	70 38	16 "		" "		
85	12	40837	41 57	70 24	16 "	42 01.5	70 10.5	22 Jul. '59	
		40845	41 57	70 24	16 "	42 03.8	70 13.8	11 Jun. '58	
79	12		42 53	69 00	17 "			No Returns	
78	12		42 45	68 00	17 "		" "		
41	12	40381	42 40	67 00	17 "	45 10.4	64 46	14 Jul. '58	
42	12		42 30	67 00	17 "			No Returns	
43	12		42 29	67 59	17 "		" "		
45	12		42 12	69 30	18 "		" "		
46	12		42 11	68 30	18 "		" "		
54	12		41 49.5	67 00	18 "		" "		
72	12		41 29	67 08	18 "		" "		
71	12		41 00	67 23	18 "		" "		
70	12		40 28	67 43	19 "		" "		
69	12		40 00	68 00	19 "		" "		
68	12		39 59	68 59	19 "		" "		
67	12		39 59	70 00	19 "		" "		

Delaware 57-9

17 - 19 December

1957

All bottles ballasted.

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
1	12	41171	43 39	66 33	17 Dec.	44 26	66 10.5	6 Jan. '58
3 +	12		43 42	67 00	17 "		No Returns	
8 +	12		43 41	68 00	18 "		" "	
10 +	12		43 22	68 00	18 "		" "	
15 +	12	41217	43 12	67 00	18 "	44 16	66 19	1 Feb. '58
		41209	43 12	67 00	18 "	44 17	66 19.5	5 Jan. '58
18	12		42 41	67 00	18 "		No Returns	
19 +	12	41233	42 30	66 55	18 "	41 40.2	70 00	21 Aug. '58
27 +	12		41 48	65 35	18 "		No Returns	
35	12		41 50	69 00	19 "		" "	

Albatross III Cruise 107

8 - 20 January

1958

Some ballasted, some not.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
66	12		40 40	70 00	8 Jan.			No Returns	
65	12		40 40	69 00	9 "			" "	
64	12		40 40.5	68 00	9 "			" "	
63	12		40 41	67 00	9 "			" "	
62	12		41 15.5	66 13	10 "			" "	
61	12		41 16	67 04.5	10 "			" "	
60	12		41 17	68 00	10 "			" "	
59	12		41 16	69 00	10 "			" "	
58	12		41 17	69 24	10 "			" "	
57	12		41 37	69 43	11 "			" "	
56	12		41 49	69 00	11 "			" "	
55	12		41 50	68 00	11 "			" "	
54	12		41 49	67 00	11 "			" "	
53	12		41 50	65 37	12 "			" "	
52	12		42 09	65 35	12 "			" "	
51	12		42 03	66 00	12 "			" "	
50	12		42 20	66 31	12 "			" "	
49	12		42 06	67 00	12 "			" "	
48	12		42 21	67 29	12 "			" "	
47	12		41 58	68 00	13 "			" "	
46	12		42 11	68 31	13 "			" "	
45	12		42 12	69 29	13 "			" "	
44	12		42 30	69 27	14 "			" "	
43	12		42 30	68 00	14 "			" "	
36	12		43 40	66 12	17 "			" "	
35	12	41376 B	43 51	66 46	18 "	41 27.2	70 35.9	31 Mar. '58	
34	12		44 05.5	66 22	18 "			No Returns	
33	12		44 18	66 43	18 "			" "	

Albatross III Cruise 107 (cont'd)

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
32	12		44 36.5	66 18	18 Jan.			No Returns	
31	12		44 43.5	66 14	18 "			" "	
30	12	41425 B	44 49	66 08	18 "	44 37	65 45	27 Jan. '58	
29	12		44 52	66 13	18 "			No Returns	
28	12		44 55	66 18	18 "			" "	
27	12		44 58	66 24	18 "			" "	
26	12		45 01	66 27	18 "			" "	
25	12	41480 N	45 10	65 56	18 "	41 35.3	70 50	21 Sept. '58	
24	12	41517 B	45 06.5	65 53	18 "	44 42	66 44	5 Feb. '58	
23	12	41491 N	45 03	65 50	18 "	44 52	65 26.5	1 Feb. '58	
21	12		44 57	65 43	18 "			No Returns	
20	12		44 53.5	65 39	18 "			" "	
18	12		44 58.5	65 18	18 "			" "	
17	12		45 06	65 04	18 "			" "	
16	11		45 09	65 07	18 "			" "	
15	12		45 12	65 11	18 "			" "	
14	12		45 16	65 14	18 "			" "	
13	12	41601 N	45 19	65 18	18 "	45 08	64 51	24 Jan. '58	
12	12	41606 N	45 22	65 22	18 "	44 33.2	66 02	31 Jul. '58	
		41607 N	45 22	65 22	18 "	44 40.5	65 42.7	27 Feb. '58	
		41608 N	45 22	65 22	18 "	44 57	65 17	24 Jan. '58	
		41631 B	45 22	65 22	18 "	44 54.5	65 21	6 Mar. '58	
10	12	41496 N	44 19	66 21	19 "	44 18	66 19	20 Jan. '58	
		41667 N	44 19	66 21	19 "	44 18	66 19	1 Feb. '58	
9	12		44 22	66 23	19 "			No Returns	
8	12		44 27	66 25	19 "			" "	
7	12		44 32	66 31	19 "			" "	
6	12		44 36	66 34	19 "			" "	
5	12		44 40	66 36	19 "			" "	
4	12	41706 N	44 40	66 41	19 "	44 15.3	66 20.3	25 Jan. '58	
		41709 N	44 40	66 41	19 "	44 11.5	66 10	4 Mar. '58	
3	12	41721 B	44 49	66 42	19 "	37 56.6	75 19.2	12 Oct. '59	
2	12		44 52	66 45	19 "			No Returns	
1	12		44 59	66 50	19 "			" "	

Albatross III Cruise 107 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
94	12		44 31	67 11	19 Jan.			No Returns
93	12		44 24	67 26	19 "		" "	
92	12		44 00	67 37	19 "		" "	
91	12		44 00	68 32	20 "		" "	
90	12		43 40	68 33	20 "		" "	
89	12		43 38	69 00	20 "		" "	
88	12	41826 N	43 22	70 00	20 "	41 50.5	70 00.3	1 Mar. '58
		41830 N	43 22	70 00	20 "	41 54	70 01	8 Apr. '58
		41832 N	43 22	70 00	20 "	42 42.3	70 46.3	23 Mar. '58
		41834 N	43 22	70 00	20 "	41 53	70 00.6	22 May '58
		41836 N	43 22	70 00	20 "	42 00	70 05	Spring '58

Delaware 57-9 III

28 - 29 January

1958

Odd numbers ballasted.

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
86	12		42 39.5	69 31.5	28 Jan.			No Returns
85	12	41902 N	41 56	70 26	28 "	41 50	70 00.2	3 Feb. '58
		41904 N	41 56	70 26	28 "	41 50	70 00.2	2 Mar. '58
		41906 N	41 56	70 26	28 "	41 50	70 00.2	2 Mar. '58
84	12	41839 B	42 20	70 38	28 "	41 59.3	70 04.4	30 Jul. '59
		41840 N	42 20	70 38	28 "	41 54	70 01.5	8 Jun. '58
		41841 B	42 20	70 38	28 "	42 03.7	70 14.6	4 May '58
		41843 B	42 20	70 38	28 "	41 59.5	70 04.5	4 Mar. '58
		41848 N	42 20	70 38	28 "	41 48	70 00.7	9 Mar. '58
83	12		42 42.5	70 00	28 "			No Returns
82	12		42 42	70 32	28 "	"	"	"
81	12		43 00	70 27	29 "	"	"	"

Sackville 37

6 - 27 February

1958

All bottles weighted.

8 oz. beverage bottles.

1/2 gal. weighted bottles with metal drags.

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
12	6		45 20	65 23	6 Feb.			No Returns
13	6		45 19	65 19	6 "			" "
14	6		45 16	65 15	6 "			" "
15	6		45 13	65 11.5	6 "			" "
16	6		45 09	65 07	7 "			" "
17	6		45 06	65 03	7 "			" "
18	6		44 59	65 17	7 "			" "
19 A	6		44 48.5	65 34	7 "			" "
20 A	6		44 52	65 36	7 "			" "
21 A	6	42430 B	44 55	65 39	7 "	45 12	64 54	15 Jul. '58
22 A	6		45 00.5	65 44	7 "			No Returns
23 A	6		45 06	65 49.5	7 "			" "
24 A	6		45 08.5	65 51.5	7 "			" "
25 A	6		45 10	65 54	7 "			" "
26	6	34402 L	45 01	66 26	7 "	44 10	68 08	31 Mar. '58
27	6	42446 B	44 58	66 23	7 "	45 02	66 51.4	3 Apr. '58
		42447 B	44 58	66 23	7 "	45 03	66 48.5	13 Feb. '58
28	6		44 55.5	66 17.8	7 "			No Returns
29	6		44 52.5	66 13.2	7 "			" "
30	6	42456 B	44 49.5	66 08.2	7 "	44 37	65 42	10 Mar. '58
31	6	34418 L	44 46.5	66 04	7 "	44 54.5	65 21	24 Feb. '58
		42460 B	44 46.5	66 04	7 "	44 52	65 26.7	22 Feb. '58
		34419 L	44 46.5	66 04	7 "	45 20	64 47	12 May '58

Sackville 37 (cont'd)

		Released					Recovered			
Sta. #	No. Bottles Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date		
11	6		44 43.5	65 59	7 Feb.				No Returns	
32	6	34425 L	44 40.5	65 54	7 "	44 56.6	65 17	15 Feb. '58		
10 A	6		44 25	66 14.2	8 "				No Returns	
9 A	6		44 28	66 17	8 "				" "	
8 A	6	34434 L	44 32	66 21	8 "	42 02.6	70 10.6	27 Apr. '58		
7 A	6		44 35	66 24	8 "				No Returns	
6 A	6	34440 L	44 39	66 28	8 "	41 15	70 10	24 May '58		
5 A	6	42484 B	44 42	66 31	8 "	41 17.5	70 13	17 Jun. '58		
		34443 D	44 42	66 31	8 "	44 39	65 51	24 Feb. '58		
4 A	6		44 46	66 35	8 "				No Returns	
3 A	6		44 49.5	66 38.5	8 "				" "	
2 A	6		44 53	66 42	8 "				" "	
1 A	5	42496 B	44 59.5	66 49	8 "	45 00.2	66 55.7	10 Mar. '58		
95	12		44 57	66 51	9 "				No Returns	
94	12		44 33	67 14	9 "				" "	
93 A	12		44 21	67 35	9 "				" "	
92	12		44 00	67 37	9 "				" "	
91 A	12		43 56	68 33	10 "				" "	
90	12		43 41	68 33	10 "				" "	
89	12		43 41	69 00	10 "				" "	
88	12		43 21.5	69 00	10 "				" "	
87 A	12		43 20	70 12	10 "				" "	
86	12		42 40	69 42	10 "				" "	
85 A	12		42 02	70 24	11 "				" "	
84 A	12		42 20	70 32	11 "				" "	
83	12		42 41	70 00	11 "				" "	
80	12		42 56	69 42	11 "				" "	
79	12		42 52	69 00	11 "				" "	
78	12		42 47	68 09	11 "				" "	
77	12		42 35	66 00	12 "				" "	
76	12		42 30	65 10.5	12 "				" "	
A	12		42 38.5	65 00	12 "				" "	
B	12		42 46.5	64 51	12 "				" "	
C	12		42 55	64 44	12 "				" "	
D	12		43 03	64 37	12 "				" "	

Sackville 37 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
E	12		43 11	64 30	12 Feb.			No Returns
F	12		43 18	64 25	12 "			" "
G	12		43 25	64 19	12 "			" "
H	12	43567 B	43 43	64 07	12 "	41 20	69 59.8	12 Aug. '58
I	12		43 57	63 51	12 "			No Returns
J	12		44 04	63 45	12 "			" "
K	12		44 14	63 36	12 "			" "
L	12		44 17.5	63 26	12 "			" "
75 A	12	42713 B	43 15	66 05	16 "	43 48	66 10	13 Mar. '58
		42723 B	43 15	66 05	16 "	44 38.5	66 42.1	30 Mar. '58
74	12	42734 B	42 37.5	66 28	18 "	41 46.5	70 29.7	3 Apr. '58
73	12		42 00	66 50.5	19 "			No Returns
72	12		41 30	67 07	19 "			" "
71	12		41 00	67 26	19 "			" "
70	12		40 28	67 45	19 "			" "
69	12		40 00	68 00	19 "			" "
68	12		40 00	69 00	20 "			" "
67	12		40 00	70 00	20 "			" "
66	12		40 40	70 00	20 "			" "
65	12		40 40.5	69 00	20 "			" "
64	12		40 40.5	68 00	20 "			" "
63	12		40 40.5	67 00	21 "			" "
62	12		41 15.5	66 13	21 "			" "
61	12		41 15	67 00	21 "			" "
60	12		41 15.5	68 00	21 "			" "
59	12		41 15.5	69 00	22 "			" "
58 A	12		41 15	69 16	22 "			" "
57 A	12	42935	41 37.5	69 39.5	22 "	32 18.3	64 51.4	3 Jun. '58
56	12		41 54	69 00	22 "			No Returns
55	12		41 53	68 00	22 "			" "
54	12		41 56	67 00	22 "			" "
53	12		41 49	65 37	23 "			" "
52	12		42 10	65 36	23 "			" "
51	12		42 03	66 00	23 "			" "

Sackville 37 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
50	12		42 21.5	66 30	23 Feb.			No Returns
49	12		42 04	67 00	23 "			" "
48	12		42 20	67 30	23 "			" "
47	12		41 58	68 00	23 "			" "
46	12		42 10.5	68 30	23 "			" "
45	12		42 11	69 30	24 "			" "
44	12	43090 B	42 30	69 30	25 "	40 50.8	72 27.5	5 Mar. '59
43	12		42 30	68 00	25 "			No Returns
42	12	43114 B	42 32	67 00	26 "	40 50.6	72 28.7	21 Sept. '58
41	12		42 40	67 00	26 "			No Returns
40	12		43 10.5	67 00	26 "			" "
39	12	43146 B	43 22.5	68 00	26 "	41 44.9	70 25.7	6 Dec. '58
		43153 B	43 22.5	68 00	26 "	41 56.7	70 36	27 Apr. '58
38	12		43 45	68 00	27 "			No Returns
37	12	43173 B	43 40.5	67 00	27 "	41 20.4	70 43	27 Jul. '58
		43178 B	43 40.5	67 00	27 "	45 23.2	64 27.4	10 Sept. '58
36 A	12		43 44	66 31	27 "			No Returns
35 A	12	43194 B	43 57	66 45	27 "	41 16	70 12.4	21 Jul. '59
34 A	12	43207 B	44 08	66 31	27 "	41 53.3	70 00.9	21 Jun. '58
33 A	12		44 18	66 43	27 "			No Returns

Sackville 38

4 - 5 April

1958

All bottles ballasted.

Sta. #	Released			Recovered		
	No. Bottles Released	Bottle #	Lat. Long. Date	Lat. Long. Date		
108	12		42 00 60 48 4 Apr.	No Returns		
109	12		42 32 61 24 4 "	" "		
110	12		42 51 61 44 4 "	" "		
111	12		43 10 62 03 4 "	" "		
112	12	43889	43 28 62 22 4 "	44 38.4	63 19	31 May '58
113	12	43905	43 54 62 48 5 "	44 27.3	63 44.7	21 Jun. '58
114	12		44 16 63 14 5 "	No Returns		
115	12	43924	44 24 63 28 5 "	43 49	64 50	15 May '58
		43929	44 24 63 28 5 "	43 49	64 50	4 Jun. '58

Metacomet 58-1

18 - 26 April

1958

All bottles ballasted.

Sta.#	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
1	6	45508	43 41.5	69 38.5	18 Apr.	43 55.5	69 15.5	15 Jul. '58
		45510	43 41.5	69 38.5	18 "	43 55.7	69 15.6	27 Apr. '58
2	6	45513	43 39	69 41.5	18 "	43 42.8	70 04.8	10 Jul. '58
		45516	43 39	69 41.5	18 "	43 40.6	70 10.1	10 May '58
4	6	45518	43 33.3	69 51	18 "	43 44.8	70 00.2	1 May '58
		45519	43 33.3	69 51	18 "	43 55.4	69 25.4	5 May '58
		45522	43 33.3	69 51	18 "	43 45	69 58.5	25 Apr. '58
5	6		43 28	70 06.8	19 "	No Returns		
7	6		43 11.5	70 16.9	19 "	" "		
9	6	45536	42 59	70 27.8	19 "	42 02.7	70 13.2	11 May '58
		45539	42 59	70 27.8	19 "	42 03.5	70 14.2	21 May '58
11	6	45545	42 48.6	70 33.3	19 "	42 40.5	70 44.2	9 May '58
		45546	42 48.6	70 33.3	19 "	41 14	70 03.7	17 Jun. '58
13	6		42 35.8	70 31	19 "	No Returns		
15	6	45555	42 24.5	70 40.3	19 "	42 13	70 44	8 May '58
		45556	42 24.5	70 40.3	19 "	41 56.6	69 59	11 Jun. '58
		45557	42 24.5	70 40.3	19 "	41 51	69 57	31 May '58
17	6	45560	42 19	70 34.5	19 "	42 05	70 12.5	12 May '58
		45562	42 19	70 34.5	19 "	41 30.3	70 41.9	3 Sept. '58
		45564	42 19	70 34.5	19 "	42 03	70 07	12 May '58
19		45565	42 14.5	70 25	19 "	41 39	69 58	15 Aug. '58
21	6		42 08	70 21	19 "	No Returns		
23	6		41 59	70 20	20 "	" "		
25	6	45586	41 49	70 27	20 "	41 56	69 59	4 May '58
26	6	45589	41 23	70 45	25 "	41 29.2	71 15.4	4 May '58
27	6	45595	41 29.5	70 33.5	25 "	41 27.4	70 40	22 Jun. '58
		45596	41 29.5	70 33.5	25 "	41 29.3	70 43.9	4 Jul. '58
		45598	41 29.5	70 33.5	25 "	41 37.5	70 19	17 May '58

Metacomet 58-1 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released				Recovered			
			Lat.	Long.	Date	Lat.	Long.	Date		
29	6	45603	41 28	70 13.5	25 Apr.	41 39	69 58	28 Jun. '58		
		45604	41 28	70 13.5	25 "	41 36.3	70 25.8	29 Jun. '58		
		45606	41 28	70 13.5	25 "	41 36.4	70 23.9	7 May '58		
31	6	45610	41 26	70 01	25 "	41 16.5	69 57.6	15 May '58		
		45612	41 26	70 01	25 "	41 31.7	70 57.3	14 Jun. '58		
33	6		41 26	69 49	25 "	No Returns				
35	6	45621	41 28	69 44	25 "	41 23.5	70 30.3	7 Sept. '58		
		45622	41 28	69 44	25 "	41 30	71 02.7	26 May '58		
37	3	45626	41 31	69 45.5	25 "	41 37	70 52	25 Aug. '58		
		45628	41 31	69 45.5	25 "	41 38.3	70 38.6	30 Jun. '58		
		45630	41 31	69 45.5	25 "	41 23.4	70 30.6	28 May '58		
39	6	45632	41 40.5	69 47	25 "	41 15	70 09	2 Jun. '58		
		45633	41 40.5	69 47	25 "	41 32.7	70 34.7	6 Jun. '58		
		45636	41 40.5	69 47	25 "	41 19.2	69 59.3	26 Jun. '58		
41	6	45637	41 52	69 50.5	25 "	41 22.6	70 30.4	27 May '58		
		45638	41 52	69 50.5	25 "	41 23	70 23	19 Jul. '58		
		45639	41 52	69 50.5	25 "	41 28	70 55	13 Jul. '58		
42	12	45644	42 06.5	69 58	26 "	42 04	70 07	8 May '58		
		45648	42 06.5	69 58	26 "	41 57	69 57	3 May '58		
		45652	42 06.5	69 58	26 "	41 57	69 59.2	24 May '58		
43	12	45655	42 13.5	70 08	26 "	41 17.4	70 05.5	21 Jun. '58		
		45660	42 13.5	70 08	26 "	41 22.8	70 02.5	17 Jun. '58		
		45661	42 13.5	70 08	26 "	41 22.6	70 41.4	4 Aug. '58		
		45662	42 13.5	70 08	26 "	41 30.5	71 04	8 Jul. '58		
		45664	42 13.5	70 08	26 "	41 39.8	70 39	23 Jul. '58		
44	12	45668	42 22	70 21	26 "	41 45.5	70 07.4	24 Apr. '59		
		45670	42 22	70 21	26 "	42 01.5	70 11.5	14 Jun. '58		
		45672	42 22	70 21	26 "	41 58.5	70 40.8	2 May '58		
		45673	42 22	70 21	26 "	41 50	69 56.5	24 Aug. '58		
		45674	42 22	70 21	26 "	41 45.6	70 08	17 May '58		
		45676	42 22	70 21	26 "	42 02	70 05.7	17 May '58		
		45677	42 22	70 21	26 "	41 18.5	70 47.6	17 Aug. '58		
		45678	42 22	70 21	26 "	42 02	70 13	11 May '58		

Metacomet 58-1 (cont'd)

Sta. #	No. Bottles		Released				Recovered			
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date		
45	12	45681	42 31	70 35	26 Apr.	42 27	70 56	29 Apr. '58		
		45684	42 31	70 35	26 "	42 27	70 56	29 Apr. '58		
		45685	42 31	70 35	26 "	42 27	70 56.3	28 Apr. '58		
		45688	42 31	70 35	26 "	42 27	70 56	29 Apr. '58		
		45690	42 31	70 35	26 "	42 27	70 56	29 May '58		

Albatross III Cruise 110

6 - 7 May

1958

All bottles ballasted.

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
6	24		41 10	67 10	6 May			No Returns
7	24		40 48	67 07.5	6 "			" "
8	24	45444	40 31.5	67 04.5	6 "	41 19.2	71 48.5	5 Aug. '58
		45446	40 31.5	67 04.5	6 "	41 19	70 47.6	6 Jul. '58
		45447	40 31.5	67 04.5	6 "	41 42	70 40	14 Jul. '58
		45451	40 31.5	67 04.5	6 "	41 29.2	71 15.4	3 Nov. '58
		45452	40 31.5	67 04.5	6 "	40 38	73 12	1 Sept. '58
		45457	40 31.5	67 04.5	6 "	41 20.8	70 50.3	10 Jul. '58
		45462	40 31.5	67 04.5	6 "	41 21.3	70 29.9	17 Sept. '58
		45464	40 31.5	67 04.5	6 "	41 22.5	71 28.9	27 Jul. '58
9	24	45470	40 47	67 25	6 "	41 20.8	70 40.8	3 Aug. '58
10	24	42170	40 59	67 32	6 "	41 27	70 48.3	18 Aug. '58
11	24	42174	40 51.5	67 51.5	7 "	41 41	70 08	9 Apr. '59
		42185	40 51.5	67 51.5	7 "	41 30.5	71 04	17 Jul. '58
		42196	40 51.5	67 51.5	7 "	41 26.4	71 28.3	7 Aug. '58
12	25	42347	40 40	67 39	7 "	41 22.5	71 33	7 Aug. '58
		42363	40 40	67 39	7 "	41 39.5	69 59	15 Aug. '58
13	23	42366	40 23	67 33	7 "	41 21.5	70 28.3	19 Jul. '58
		42369	40 23	67 33	7 "	41 38	70 38.6	10 Sept. '58
		42372	40 23	67 33	7 "	41 30.3	71 03.5	12 Sept. '58
		42374	40 23	67 33	7 "	41 37.5	70 17	13 Aug. '58
		42375	40 23	67 33	7 "	41 37.6	70 15	29 Jul. '58
		42381	40 23	67 33	7 "	41 30.5	71 04.5	12 Jul. '58
		42382	40 23	67 33	7 "	41 20.5	70 42.5	27 Jul. '58
14	24	42388	40 23	67 33	7 "	41 33	70 39.3	25 Jul. '58
		42333	40 35.5	68 01	7 "	41 28.2	70 38	21 Jul. '58
		42334	40 35.5	68 01	7 "	41 14.8	70 05	20 Jul. '58
		42395	40 35.5	68 01	7 "	41 20.9	70 33	8 Aug. '58

Albatross III Cruise 110 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released				Recovered			
			Lat.	Long.	Date	Lat.	Long.	Date		
15	24	42294	40 43	68 20	7 May	41 19	71 49	1 Aug. '58		
		42298	40 43	68 20	7 "	41 32.3	69 49.6	13 Jul. '58		
		42301	40 43	68 20	7 "	41 37.9	70 19.4	30 Jul. '58		
		42304	40 43	68 20	7 "	41 20	70 49.5	8 Aug. '58		
		42306	40 43	68 20	7 "	41 39.8	70 05.3	21 Jul. '58		
		42315	40 43	68 20	7 "	41 31.8	70 40.5	17 Jul. '58		
16	24	41910	40 25.5	68 16	7 "	41 22.2	70 50	5 Jul. '58		
		41914	40 25.5	68 16	7 "	41 23.4	70 30.2	15 Aug. '58		
		41920	40 25.5	68 16	7 "	41 27	70 48	24 Aug. '58		
		42321	40 25.5	68 16	7 "	41 18.5	70 05	24 Aug. '58		
17	23	41924	40 31	68 40.5	7 "	41 30.5	71 04	13 Aug. '58		
		41928	40 31	68 40.5	7 "	41 29.2	71 15.2	31 Jul. '58		
		41936	40 31	68 40.5	7 "	41 19	70 47.6	6 Jul. '58		
		41935	40 31	68 40.5	7 "	40 35	69 15	25 Apr. '59		

Metacomet 58-2

8 - 11 May

1958

Surface type bottles, odd numbers ballasted.

Sta. #	No. Bottles Released	Bottle #	Released				Recovered			
			Lat.	Long.	Date	Lat.	Long.	Date		
13	8	45698 N	43 37	70 10	8 May	43 28	65 28	10 Aug. '58		
18	8	45706 N	43 42	69 56	10 "	45 22	64 23.5	12 May '59		
19	8		43 42	69 59	10 "		No Returns			
21	8	45718 N	42 14	70 20	11 "	41 38.5	69 57.8	27 Jul. '58		
		45722 N	42 14	70 20	11 "	41 21	70 33	17 Jul. '58		
22	8	45730 N	42 21	70 18	11 "	41 20.8	70 50.4	14 Jun. '58		
23	8		42 28	70 15	11 "		No Returns			
24	8		42 35	70 13	11 "		" "			
25	8		42 40	70 09	11 "		" "			
26	8	45759 B	42 45	70 06	11 "	44 39.1	66 43.6	8 Nov. '58		
27	8		42 50	70 00	11 "		No Returns			
28	8	45778 N	42 57	69 58	11 "	58 54	03 10	13 Aug. '59		
29	4		43 04	69 57	11 "		No Returns			

Crawford 18

17 May - 3 June

1958

All 8 oz. ballasted bottles.

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
A	6	28331	33 58.5	76 59.5	17 May	34 25	77 33.6	1 Jun. '58
B	6		34 04	77 10.2	17 "		No Returns	
C	6	44507	34 11	77 20.6	17 "	34 20.3	77 40	28 Jun. '58
		44508	34 11	77 20.6	17 "	34 43.2	76 30	14 Sept. '58
D	6		34 19.5	77 31	17 "		No Returns	
E	6	44502	34 21	77 34.5	17 "	34 48	76 25	20 Jun. '58
F	6		34 14.5	77 25.9	18 "		No Returns	
F	6		34 14.3	77 25.7	20 "		" "	
G	6		34 05.8	77 13.2	20 "		" "	
H	6	44473	34 01.5	77 06.5	20 "	34 40	76 36	27 Jun. '58
		44471	34 01.5	77 06.5	20 "	34 31.4	77 21	6 Oct. '58
I	6		34 13.6	77 24.6	3 Jun.		No Returns	

Albatross III Cruise 111

20 - 27 May

1958

Odd numbers ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
1	56	41998	40 58.5	67 22.9	20 May	41 24	70 28	20 Jul. '58	
2	56	42002	41 01	67 15	21 "	41 42	67 45	4 Jul. '58	
		42003	41 01	67 15	21 "	35 13.8	75 31.6	23 Oct. '58	
		42014	41 01	67 15	21 "	41 30.5	71 05	13 Aug. '58	
		42021	41 01	67 15	21 "	41 19.5	70 45	29 Jul. '58	
		42043	41 01	67 15	21 "	41 39.5	69 59	15 Aug. '58	
		42054	41 01	67 15	21 "	41 39	70 10	30 Aug. '58	
		3	56	42057	41 03	67 16.8	21 "	41 38	70 38
42060	41 03			67 16.8	21 "	41 16.3	70 13.2	12 Jul. '58	
42066	41 03			67 16.8	21 "	41 20	70 34	18 Aug. '58	
42096	41 03			67 16.8	21 "	41 21.5	71 37.5	4 Aug. '58	
45106	41 03			67 16.8	21 "	41 25	70 56.7	17 Sept. '58	
4	47		41 36.2	68 33.8	23 "	No Returns			
5	48	42259	41 39.6	68 38	24 "	43 39	65 07	20 Oct. '58	
6	48	42198	40 21.4	68 53.2	26 "	41 39.2	70 07.5	27 Jul. '58	
		42199	40 21.4	68 53.2	26 "	41 19	71 49.5	6 Aug. '58	
		42206	40 21.4	68 53.2	26 "	40 23	70 30	21 Jul. '58	
		42207	40 21.4	68 53.2	26 "	41 27.5	71 25.5	5 Sept. '58	
		42214	40 21.4	68 53.2	26 "	41 21.7	70 28.5	9 Jul. '58	
		42229	40 21.4	68 53.2	26 "	41 17.6	70 06.1	2 Jul. '58	
		42230	40 21.4	68 53.2	26 "	41 23	70 30.3	15 Jul. '58	
		42234	40 21.4	68 53.2	26 "	41 26.8	70 51.7	28 Jun. '59	
		42237	40 21.4	68 53.2	26 "	41 38	70 20	29 Jul. '58	
		42241	40 21.4	68 53.2	26 "	41 49.2	71 51	30 Jul. '58	
42244	40 21.4	68 53.2	26 "	41 23	71 28.6	3 Aug. '58			

Albatross III Cruise 111 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released				Recovered			
			Lat.	Long.	Date	Lat.	Long.	Date		
7	56	45118	40 23.7	68 51.9	26 May	41 40	69 59.8	10 Jul. '58		
		45120	40 23.7	68 51.9	26 "	41 39.7	70 05	9 Jul. '58		
		45130	40 23.7	68 51.9	26 "	41 38	70 21.2	18 Aug. '58		
		45135	40 23.7	68 51.9	26 "	41 27.3	70 40	20 Jul. '58		
		45136	40 23.7	68 51.9	26 "	41 27.6	71 11.9	24 Jul. '58		
		45138	40 23.7	68 51.9	26 "	41 36.7	70 55.9	15 Jul. '58		
		45144	40 23.7	68 51.9	26 "	41 32.3	70 22.5	18 Jul. '58		
		45152	40 23.7	68 51.9	26 "	41 29	71 15	8 Jul. '58		
		45156	40 23.7	68 51.9	26 "	41 18.8	70 45.5	27 Jul. '58		
		45157	40 23.7	68 51.9	26 "	41 28	70 38	20 Sept. '58		
		45160	40 23.7	68 51.9	26 "	41 20.8	70 53.5	13 Jul. '58		
		45162	40 23.7	68 51.9	26 "	41 34.8	70 31.8	13 Jul. '58		
		8	56	45169	40 26.5	69 02.3	27 "	41 39.3	69 58	20 Aug. '58
				45173	40 26.5	69 02.3	27 "	41 19.2	71 49	13 Aug. '58
45180	40 26.5			69 02.3	27 "	41 39.3	70 48	15 Jul. '58		
45184	40 26.5			69 02.3	27 "	41 20.5	70 42.8	10 Jul. '58		
45192	40 26.5			69 02.3	27 "	41 19.4	70 45.5	9 Jul. '58		
45194	40 26.5			69 02.3	27 "	41 21.8	70 39	29 Jun. '58		
45196	40 26.5			69 02.3	27 "	41 00.5	71 04.3	9 Jul. '58		
45201	40 26.5			69 02.3	27 "	41 38.2	70 13.3	7 Aug. '58		
45204	40 26.5			69 02.3	27 "	41 21	70 50.3	18 Jul. '58		
45212	40 26.5			69 02.3	27 "	41 22.6	70 29.8	20 Jul. '58		
45213	40 26.5			69 02.3	27 "	41 31	70 40.6	16 Jul. '58		
45214	40 26.5			69 02.3	27 "	41 40	70 00	10 Jul. '58		
45216	40 26.5			69 02.3	27 "	41 17.6	70 06.1	2 Jul. '58		
45221	40 26.5			69 02.3	27 "	41 39.3	69 57.5	7 Oct. '58		

Sackville 39

22 - 27 May

1958

Ballast and drag bottles.

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
12	6	34696 L	45 22	65 21	22 May	45 20	64 46.5	16 Jun. '58
		51802 B	45 22	65 21	22 "	45 23.5	64 27	24 Aug. '58
13	6	34701 D	45 19	65 19	22 "	45 20	64 46.5	15 Jun. '58
14	6	34704 L	45 16	65 15	22 "	45 26	64 53.5	6 Aug. '58
15	6	51810 B	45 12.5	65 10.5	22 "	44 54.4	66 21	2 Nov. '58
16	6	34710 D	45 07.5	65 07	22 "	45 24	64 31.4	20 Jun. '58
		34713 D	45 07.5	65 07	22 "	45 10.4	64 46	14 Jul. '58
17	6	34711 B	45 05	65 03	22 "	45 10.3	64 46.8	14 Jul. '58
		34712 L	45 05	65 03	22 "	45 17	64 46.5	8 Jun. '58
18	6	51819 B	44 59.3	65 17.5	22 "	45 04	66 44	25 Jul. '58
		34714 D	44 59.3	65 17.5	22 "	44 57	65 54	2 Aug. '58
		34716 L	44 59.3	65 17.5	22 "	45 01.4	66 57.3	25 Nov. '58
19 A	6		44 49.5	65 33.5	22 "	No Returns		
20 A	6	34720 D	44 52.5	65 36.5	22 "	44 54.5	65 24	23 May '58
21 A	6	34723 D	44 55	65 39	22 "	45 20	64 46.5	14 Jun. '58
		34724 D	44 55	65 39	22 "	44 57	65 17	24 May '58
		34725 D	44 55	65 39	22 "	44 55	65 19	24 May '58
		51830 B	44 55	65 39	22 "	45 14	64 03.5	25 Oct. '58
22 A	6	34727 D	45 00.5	65 44	22 "	45 05.1	66 39.2	14 Jun. '58
23 A	6		45 06.5	65 49	22 "	No Returns		
24 A	6	34733 D	45 08.5	65 52	22 "	45 05.7	66 38	1 Aug. '58
25 A	6		45 10	65 54	22 "	No Returns		
26 A	6	34739 D	45 01.5	66 26.5	22 "	45 06	66 29	28 May '58
27 A	6	51847 B	44 58.5	66 22.5	22 "	44 32	65 52.1	7 Jul. '58
28 A	6	34746 D	44 55.5	66 18	22 "	44 50	66 59	6 Jun. '58
		51850 B	44 55.5	66 18	22 "	44 48.5	66 58.7	1 Jun. '58
29 A	6	34747 L	44 52.5	66 13	22 "	44 58	66 43.4	14 Jun. '58
		34749 L	44 52.5	66 13	22 "	45 29	65 10	28 Aug. '58
		51854 B	44 52.5	66 13	22 "	45 10.3	64 46.8	14 Jul. '58

Sackville 39 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
30 A	6	34750 L	44 49.5	66 08	22 May	44 02	68 49.6	3 Aug. '58
		51856 B	44 49.5	66 08	22 "	45 00.1	66 54.9	19 Jun. '58
31 A	6		44 46.5	66 04	22 "	No Returns		
11 A	6	51862 B	44 43.5	65 59	22 "	44 54.3	67 01.2	10 Jun. '58
32 A	6	34761 D	44 40.5	65 54	22 "	45 03.8	66 44	26 Jul. '58
		51866 B	44 40.5	65 54	22 "	45 03.3	66 54.4	18 Jun. '58
10 A	6	34762 D	44 25	66 14	23 "	44 38.4	67 12.5	10 Jun. '58
		51869 B	44 25	66 14	23 "	44 55.7	66 56.2	8 Jun. '58
9 A	6	34767 L	44 29	66 17.5	23 "	45 20	64 47.5	10 Aug. '58
8 A	6		44 32	66 21.5	23 "	No Returns		
7 A	6		44 35.5	66 25	23 "	"	"	
6 A	6		44 39	66 28	23 "	"	"	
5 A	6	51877 B	44 42.5	66 32	23 "	44 40	65 43	27 Jun. '58
4 A	6		44 46	66 35	23 "	No Returns		
3 A	6	34785 L	44 49	66 38.5	23 "	44 28.4	67 31.8	4 Sept. '58
		51888 B	44 49	66 38.5	23 "	44 48.5	66 58.7	24 May '58
2 A	6	34786 D	44 54	66 42	23 "	44 57.2	66 54	20 Jul. '58
		34787 D	44 54	66 42	23 "	44 55	66 59	23 Jun. '58
1 A	6	34790 D	44 59.5	66 49	23 "	45 00	66 54.5	13 Jul. '58
		51894 B	44 59.5	66 49	23 "	44 26	66 11	24 Jul. '58
		51896 B	44 59.5	66 49	23 "	44 56.1	66 54.5	4 Jun. '58
24	10	51234 B	44 49.5	66 51.5	23 "	44 56.2	66 56.2	26 Jun. '58
25	10	51231 B	44 36.5	67 08	23 "	44 27.5	66 06.5	27 Jul. '58
26	10	51246 B	44 22	67 06	23 "	45 00.1	66 54.8	8 Sept. '58
27	10		44 04	66 52.5	23 "	No Returns		
28	10	51273 B	43 46.5	66 34.8	23 "	45 11.5	64 39.2	24 Sept. '58
29	10	51281 B	43 28	66 18	24 "	45 05	66 48	10 Aug. '58
		51284 B	43 28	66 18	24 "	44 48.6	66 58.8	30 Jul. '58
30	10	51287 B	43 17	66 01	24 "	44 32.2	67 39.2	6 Jul. '59
		51292 B	43 17	66 01	24 "	45 18	64 24	27 Sept. '58
		51293 B	43 17	66 01	24 "	45 28.7	64 50.5	17 Nov. '58
31	10	51303 B	43 19	65 36	24 "	45 01.1	66 51	30 Jul. '58
32	10		43 28	65 10	24 "	No Returns		
33	10		43 41.3	64 43.5	24 "	"	"	
34	10		43 54	64 18	24 "	"	"	
35	10		44 05	63 55.5	24 "	"	"	
36	10	51348 B	44 18.5	63 31	24 "	44 36.8	63 56.9	7 Jun. '58

Sackville 39 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released				Recovered			
			Lat.	Long.	Date	Lat.	Long.	Date		
37	10	51356 B	44 26	63 24	24 May	44 35.6	63 55.5	17 Jun. '58		
		51357 B	44 26	63 24	24 "	44 31.6	63 56.7	27 Sept. '58		
		51358 B	44 26	63 24	24 "	44 40	62 52	18 Jun. '58		
		51359 B	44 26	63 24	24 "	44 34	63 55.7	2 Jul. '58		
		51360 B	44 26	63 24	24 "	44 36	63 29	30 May '58		
		51361 B	44 26	63 24	24 "	44 30	63 52	1 Jul. '58		
		51362 B	44 26	63 24	24 "	44 39.5	63 33.5	2 Jun. '58		
		51363 B	44 26	63 24	24 "	44 38	63 56	13 Jun. '58		
39	10	51366 B	44 15	63 17	24 "	44 37.5	63 56	30 Jun. '58		
		51370 B	44 15	63 17	24 "	44 35	63 27.1	31 May '58		
41	10		43 53.5	62 54	24 "	No Returns				
43	10		43 30	62 27.5	25 "	"	"			
45	10		43 12	62 07	25 "	"	"			
47	10		42 51	61 45	25 "	"	"			
49	10	51419 B	42 31	61 23	25 "	63 50	09 40 E	4 Oct. '59		
61	10		41 55.5	62 58	26 "	No Returns				
62	10		42 07.5	63 28	26 "	"	"			
63	10		42 17	63 49	26 "	"	"			
64	10		42 27	64 12	26 "	"	"			
65	10		42 35	64 37	26 "	"	"			
66	10		42 44	65 00	26 "	"	"			
67	10		42 56	65 23	26 "	"	"			
68	10		42 51	65 46	26 "	"	"			
69	10	51506 B	43 08	65 55	26 "	44 22	66 05.6	16 Apr. '59		
		51507 B	43 08	65 55	26 "	44 26.8	66 01	6 Jul. '58		
		51513 B	43 08	65 55	26 "	44 26.3	66 01	30 Jul. '58		
70	10		43 28	66 16	26 "	No Returns				
71	10	51525 B	43 47.5	66 32	26 "	45 20	64 48	15 Sept. '58		
72	10	51537 B	44 09	66 33.5	26 "	44 33	65 52	11 Aug. '58		
73	10		44 30	66 33.5	27 "	No Returns				

Albatross III Cruise 117

9 - 15 September

1958

All 8 oz. bottles, ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
1	12		41 21.8	69 31	9 Sept.			No Returns	
2	12		41 06	68 51	9 "			" "	
3	12		40 49.4	68 14.1	10 "			" "	
4	12		40 37.2	67 41	10 "			" "	
5	12		40 31.5	67 04.5	10 "			" "	
6	12		40 43	66 47.2	10 "			" "	
7	12		40 55.2	66 30	10 "			" "	
8	12		41 11	66 07.7	11 "			" "	
9	12		41 25.7	65 58.3	11 "			" "	
10	12		41 39	65 58	12 "			" "	
11	12		41 57	65 50	12 "			" "	
12	12	55817	42 14.3	65 53	12 "	43 59	66 09.2	23 Oct. '58	
		55821	42 14.3	65 53	12 "	44 11	66 10.5	1 Nov. '58	
13	12		42 34	65 55	12 "			No Returns	
14	12	55845	42 53	65 52	12 "	44 37.2	66 42.5	21 Oct. '58	
15	12		43 02	65 51	12 "			No Returns	
16	12	55867	42 37.3	66 10	12 "	43 26.5	65 38	1 Feb. '59	
17	12		42 32	66 15	12 "			No Returns	
18	12		42 18.6	66 24	12 "			" "	
19	12		41 59.6	66 37.6	12 "			" "	
20	12		41 32	66 56	13 "			" "	
21	12		41 05	67 15	13 "			" "	
22	12		40 37.4	67 34.3	13 "			" "	
23	12		40 20	67 46	13 "			" "	
24	12		40 00	68 00	13 "			" "	
25	12		40 24.2	68 13.7	13 "			" "	
26	12		40 53.8	68 30.2	13 "			" "	
27	12		41 18	68 46.5	14 "			" "	
28	12		41 43.4	69 06.8	14 "			" "	
29	12		42 06.8	69 12.2	14 "			" "	
30	12	56035	42 07.0	69 50	14 "	41 43.5	69 55.7	10 Oct. '58	
31	12		42 20.1	69 34	15 "			No Returns	

Dartmouth Cruise 1

9 - 15 September

1958

All 8 oz. bottles, ballasted.

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
1	12		41 26	69 30	9 Sept.			No Returns
2	12		41 15.5	68 26	10 "	"	"	
3	12		41 02	67 18	10 "	"	"	
4	12		41 01.5	66 50	10 "	"	"	
5	12		41 21	66 27	10 "	"	"	
6	12		41 23	66 30	10 "	"	"	
7	12		41 23	66 23.5	11 "	"	"	
8	12		41 27	66 20.5	11 "	"	"	
9	12		41 26	66 28	11 "	"	"	
10	12		41 37	66 17.5	12 "	"	"	
11	12		41 51	66 22	12 "	"	"	
12	12		41 52.5	66 23	12 "	"	"	
13	12		41 39	66 18.5	12 "	"	"	
14	12		41 47.5	66 17.5	13 "	"	"	
15	12		41 50.5	66 21	13 "	"	"	
16	12		41 52	66 20	13 "	"	"	
17	12		41 51	66 21.5	13 "	"	"	
18	12		41 51	66 20.5	14 "	"	"	
19	12		42 05.5	66 30	14 "	"	"	
20	12		42 04.5	67 07	14 "	"	"	
21	12		41 12	68 44	15 "	"	"	
22	12		41 09	68 41	15 "	"	"	
23	12		41 05.5	68 46	15 "	"	"	
24	12		41 04.5	68 46	15 "	"	"	
25	12		41 16	69 04	15 "	"	"	

Albatross III Cruise 118

23 September - 1 October

1958

Odd numbers ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
2	12		43 47.3	68 32.8	23 Sept.			No Returns	
3	12	56618	43 52.1	67 57.9	23 "	44 41.3	65 45.5	22 Oct. '58	
3 A	12	56631	43 52.7	67 34.8	23 "	44 41.2	65 47.5	22 Oct. '58	
4	12		43 53.9	67 16.4	23 "			No Returns	
5	12		43 54.5	66 32.3	23 "	"	"		
6	12		43 38.6	66 19.3	24 "	"	"		
7	12		43 33.7	66 52.8	24 "	"	"		
8	12		43 39.1	67 34	24 "	"	"		
9	12	56700	43 34.9	68 12.6	24 "	44 15.5	66 08	20 Oct. '58	
10	12		43 36.4	68 51	24 "			No Returns	
11	12		43 36.2	69 34.8	24 "	"	"		
12	12		43 13	70 10.3	25 "	"	"		
13	12		43 17.3	69 55.8	25 "	"	"		
14	12		43 18.8	69 19.7	25 "	"	"		
15	12		43 15	68 35.8	25 "	"	"		
16	12		43 16	67 58	25 "	"	"		
17	12		43 19	67 19	25 "	"	"		
18	12	56816	43 10.5	66 34	26 "	44 20	66 07.5	24 Feb. '59	
19	12	56819	43 12.9	66 02.5	26 "	43 49.5	66 09	7 May '59	
20	12		43 11.4	65 16.7	26 "			No Returns	
21	12		43 29.9	64 56.3	26 "	"	"		
24	12		43 16	64 38	26 "	"	"		
26	12		42 53	64 53.3	27 "	"	"		
27	12		42 54.9	65 33.3	27 "	44 15.7	66 08	3 Nov. '58	
28	12		42 58.4	66 32.8	27 "			No Returns	
34 A	12		42 51.5	70 36	27 "	"	"		
34	12		42 52	70 15.6	29 "	"	"		
33	12		42 53.5	69 38.2	29 "	"	"		
32	12		42 58.2	68 53	30 "	"	"		

Albatross III Cruise 118 (cont'd)

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
31	12		42 54.6	68 13.8	30 Sept.			No Returns
30	12		42 58.4	67 39.4	30 "			" "
40	12		42 37.5	67 15.1	30 "			" "
39	12		42 36.8	67 54.8	1 Oct.			" "
38	12		42 35.5	68 33.8	1 "			" "
37	12		42 37.5	69 11.8	1 "			" "
36	12	57032	42 34.6	69 52.1	1 "	41 49.8	69 56.6	25 Oct. '58
35	12	57033	42 30.1	70 28.8	1 "	42 18	70 53	25 Oct. '58
		57044	42 30.1	70 28.8	1 "	41 50.5	70 32	31 Oct. '58
53 A	12	57051	42 19.5	70 34.5	1 "	41 47.7	70 15.7	4 Mar. '59
		57047	42 19.5	70 34.5	1 "	41 41.2	69 57	22 Oct. '58
		57050	42 19.5	70 34.5	1 "	41 54	70 00.3	19 Nov. '58
		57048	42 19.5	70 34.5	1 "	41 56	70 33.7	27 Oct. '58
		57045	42 19.5	70 34.5	1 "	42 04	70 14.5	8 Nov. '58
		57056	42 19.5	70 34.5	1 "	42 03.7	70 14.8	29 Oct. '58
		57053	42 19.5	70 34.5	1 "	41 59.5	70 04.8	8 Oct. '59
53	12	57063	42 16.5	70 19.2	1 "	42 47.8	70 49.3	18 Jun. '59
		57065	42 16.5	70 19.2	1 "	42 26	70 56	27 Oct. '58
		57059	42 16.5	70 19.2	1 "	42 29.8	70 53.2	16 Nov. '58
		57064	42 16.5	70 19.2	1 "	41 55	70 32.8	26 Oct. '58
		57066	42 16.5	70 19.2	1 "	41 56	70 04.5	1 Nov. '58
		57058	42 16.5	70 19.2	1 "	41 49.2	70 00.2	13 Nov. '58

Delaware 58-5

6 - 14 October

1958

All bottles ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
44	12		42 29	69 31	6 Oct.			No Returns	
43	12		42 30	67 57	7 "		" "		
42	12		42 30	67 02	7 "		" "		
74	12		42 38	66 30	7 "		" "		
77	12		42 35	66 00	7 "		" "		
76	12		42 30	65 10	7 "		" "		
75	12	45984	43 24	66 03	8 "	43 52.5	66 09.8	18 Oct. '58	
		45987	43 24	66 03	8 "	44 33	66 02	2 Nov. '58	
		45991	43 24	66 03	8 "	43 59.5	66 09.2	16 Nov. '58	
73	12		42 00	66 50	8 "			No Returns	
72	12		41 29	67 10	8 "		" "		
71	12		40 59	67 26	8 "		" "		
70	12		40 29	67 44	9 "		" "		
69	12		40 02	68 01	9 "		" "		
68	12		40 01	68 59	9 "		" "		
67	12		39 59	69 52	9 "		" "		
66	12		40 37	70 00	9 "		" "		
65	12		40 41	69 05	10 "		" "		
64	12		40 40	68 01	10 "		" "		
63	12		40 42	67 01	10 "		" "		
61	12		41 16	67 01	10 "		" "		
60	12		41 15	68 00	11 "		" "		
59	12		41 16.5	68 57	11 "		" "		
58	12		41 14	69 18	11 "		" "		
56	12	46184	41 49	69 00	12 "	41 50.3	69 56.6	23 Oct. '58	
		46180	41 49	69 00	12 "	41 20	70 02.2	3 May '59	

Delaware 58-5 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
55	12		41 50.5	68 00.5	12 Oct.			
54	12		41 50	67 06	12 "			
53	12		41 48	65 37	13 "			
52	12		42 09.5	65 37.5	13 "			
51	12		42 07	66 02	13 "			
50	12		42 22	66 31.5	13 "			
49	12		42 07.5	66 58	13 "			
48	12		42 20	67 24.5	13 "			
47	12		41 58.5	68 00	14 "			
46	12		42 09.5	68 29	14 "			
45	12		42 10.5	69 29	14 "			

No Returns

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

Albatross III Cruise 119

8 - 16 October

1958

Odd numbers ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
41	12		42 35	66 38.5	8 Oct.			No Returns	
42	12		42 36.5	65 58	8 "		" "		
43	12		42 34	65 17.5	8 "		" "		
44	12		42 35	64 40	9 "		" "		
46	12		42 17	65 33	9 "		" "		
47	12		42 10.6	66 13	9 "		" "		
48	12		42 14	66 54	9 "		" "		
49	12		42 21.5	67 34	10 "		" "		
50	12		42 11	68 16	10 "		" "		
51	12		42 11.5	68 54.5	10 "		" "		
52	12	57190	42 15.3	69 33	10 "	41 25.2	70 27	15 Nov. '58	
		57192	42 15.3	69 33	10 "	41 20.9	70 35	21 Jan. '59	
		47199	42 15.3	69 33	10 "	41 42	69 57	28 Oct. '58	
56	12		41 58	69 14.3	10 "			No Returns	
55	12		41 56	69 53.5	11 "		" "		
67	12	57230	41 35	69 31	12 "	41 23.4	70 30.3	12 Nov. '58	
		57234	41 35	69 31	12 "	41 17.8	70 06.3	31 Oct. '58	
69	12		41 19.5	69 16.5	12 "			No Returns	
66	12		41 32	68 58	13 "		" "		
57	12		41 51	68 34	13 "		" "		
58	12		41 55.5	67 58	13 "		" "		
59	12		45 55	67 17	13 "		" "		
60	12		41 54.5	66 38.5	13 "		" "		
61	12		41 56	65 56	14 "		" "		
62	12		41 36	66 17.5	14 "		" "		

Albatross III Cruise 119 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
63	12		41 40.5	66 56	14 Oct.			No Returns
64	12		41 37.5	67 37.5	14 "	"	"	"
65	12		41 40	68 12.5	14 "	"	"	"
70	12		41 18.5	68 32.5	15 "	"	"	"
71	12		41 14	67 58.5	15 "	"	"	"
72	12		41 14	67 19.5	15 "	"	"	"
75	12		40 59	67 34	15 "	"	"	"
76	12		40 54.7	68 11	15 "	"	"	"
77	12		40 53	68 50.5	15 "	"	"	"
78	12		40 58.3	69 38	16 "	"	"	"
79	12		40 58	70 10	16 "	"	"	"

Harengus Cruise 25

15 - 30 October

1958

All 8 oz. bottles, ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
95	12	61001	44 57.8	66 51.2	15 Oct.	44 58.9	67 01.1	1 Nov. '58	
		61003	44 57.8	66 51.2	15 "	45 01.1	66 51	1 May '58	
		61005	44 57.8	66 51.2	15 "	44 53.6	67 05.2	21 Oct. '58	
		61008	44 57.8	66 51.2	15 "	44 55	66 56	16 Nov. '58	
		61009	44 57.8	66 51.2	15 "	44 56	66 58	25 Oct. '58	
94	12		44 31.2	67 12	15 "	No Returns			
93	12		44 22.8	67 38	15 "	"	"		
92	12		44 00	67 38	15 "	"	"		
91	12		44 00	68 33.5	16 "	"	"		
90	12		43 40.2	68 33.5	16 "	"	"		
89	12		43 40.2	69 00	16 "	"	"		
88	12	61085	43 22.4	70 21	16 "	42 59	70 45	21 Mar. '60	
		61088	43 22.4	70 21	16 "	42 59	70 45.8	9 Nov. '58	
		61092	43 22.4	70 21	16 "	42 59.6	70 45	30 Oct. '58	
		61095	43 22.4	70 21	16 "	42 53	70 49	29 Oct. '58	
87	12		43 00	69 55.2	16 "	No Returns			
86	12		43 00	69 00	17 "	"	"		
85	12		43 22.4	69 00	17 "	"	"		
84	12		43 22.4	68 00	17 "	"	"		
83	12		43 40.2	68 00	17 "	"	"		
82	12		43 40.2	67 00	17 "	"	"		
35	12		43 51.8	66 45.5	17 "	"	"		
81	12		43 40.2	66 13.4	20 "	"	"		
97	12	61202	43 24	66 30	20 "	43 59	66 09.5	27 Dec. '58	
98	12		43 07.2	66 44.5	20 "	No Returns			
99	12		42 50.5	66 58.5	20 "	"	"		
100	12		42 33.8	66 13.5	20 "	"	"		
101	12		42 25.5	67 20.5	20 "	"	"		

Harengus Cruise 25 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
102	12		42 17	67 27.5	20 Oct.			No Returns
103	12		42 09	67 34.5	21 "			" "
104	12		42 04.2	67 23.2	21 "			" "
105	12		42 12	67 16.5	21 "			" "
106	12		42 06.5	67 05	21 "			" "
107	12		42 15	66 57.2	21 "			" "
108	12		42 09.5	66 46.8	21 "			" "
109	12		42 04.5	66 35	21 "			" "
110	12		42 12.5	66 28	21 "			" "
111	12		42 22.8	66 25.5	21 "			" "
112	12		42 32.4	66 24	21 "			" "
113	12		42 42.2	66 22	21 "			" "
114	12		43 02	66 18	21 "			" "
115	12		43 21.5	66 14.5	22 "			" "
81	12		43 40.2	66 13.4	23 "			" "
34	12		44 06.8	66 21.5	23 "			" "
33	12		44 18.1	66 42.9	23 "			" "
32	12		44 40.2	65 54.2	23 "			" "
11	12	61471	44 43.2	66 58.8	23 "	44 38	66 41.7	30 Oct. '58
31	12	61492	44 46.5	66 03.8	23 "	43 59	66 09.4	1 Dec. '58
30	12	61494	44 49.2	66 05.2	23 "	44 39.7	66 45.5	11 Nov. '58
		61496	44 49.2	66 05.2	23 "	44 42	66 43.2	25 Apr. '59
29	12		44 52.2	66 13	23 "			No Returns
28	12		44 55.5	66 17.8	23 "			" "
27	12		44 58.5	66 22.8	23 "			" "
26	12	61541	45 01	66 26.8	23 "	44 12	66 09.5	8 Dec. '58
18	12		44 59.2	65 17.5	29 "			No Returns
17	12	61570	45 05.8	65 03.2	29 "	45 18	64 24	21 Nov. '58
16	12	61577	45 09	65 07.2	29 "	45 18	64 24	3 Apr. '59
15	12		45 12.2	65 11.2	29 "			No Returns
14	12	61612	45 15.5	65 15.1	29 "	45 22	64 20.2	11 Apr. '59

Harengus Cruise 25 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
13	12	61613	45 18.8	65 19	29 Oct.	44 54.5	65 21.2	13 Nov. '58
		61617	45 18.8	65 19	29 "	45 19	64 47	12 Apr. '59
12	12	61631	45 22	65 22.9	29 "	45 20	64 48	21 Nov. '58
25	12	61643	45 10	65 57.2	29 "	44 54.4	65 21.4	14 Nov. '58
24	12		45 06.8	65 53.5	29 "	No Returns		
23	12		45 03.8	65 50	29 "	" "		
22	12	61676	45 00.8	65 46.5	29 "	44 56.7	65 17	3 Nov. '58
		61677	45 00.8	65 46.5	29 "	44 54.2	65 21.2	2 Nov. '58
21	12	61691	44 57.5	65 42.5	29 "	44 56.7	65 17	2 Nov. '58
		61695	44 57.5	65 42.5	29 "	44 50	65 18.1	3 Nov. '58
20	12		44 54.2	65 38.8	29 "	No Returns		
19	12	61715	44 51	65 35.2	30 "	44 48.8	65 37.3	2 Nov. '58
		61720	44 51	65 35.2	30 "	44 53	65 24	2 Nov. '58
10	12	61732	44 18.8	66 21.2	30 "	44 48	65 34	14 Mar. '59
		61730	44 18.8	66 21.2	30 "	44 54	65 21	17 Nov. '58
9	12	61736	44 22.2	66 23.8	30 "	44 49	65 32.4	13 Nov. '58
8	12		44 26.9	66 26.8	30 "	No Returns		
7	12		44 31.2	66 29.8	30 "	" "		
6	12	61775	44 35.8	66 33	30 "	44 54	65 21	28 Nov. '58
5	12	61781	44 40.2	66 36	30 "	44 48	65 34.3	14 Nov. '58
		61787	44 40.2	66 36	30 "	44 56.7	65 17	14 Nov. '58
4	12		44 44.8	66 38.8	30 "	No Returns		
3	12		44 49	66 42	30 "	" "		
2	6	61818	44 53.5	66 45	30 "	44 54.9	66 56.5	1 Dec. '58
1	6		44 59.6	66 49.5	30 "	No Returns		

Albatross III Cruise 120

21 - 28 October

1958

Odd numbers ballasted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
80	12		40 56.8	70 52.5	21 Oct.			No Returns	
81	12		40 56	71 33.1	21 "			" "	
82	12	57496	40 52	72 11.6	22 "	40 37.5	73 14.4	19 Jul. '59	
83	12		40 36.3	71 59.5	22 "			No Returns	
84	12		40 34.3	71 14	22 "			" "	
85	12		40 33.2	70 37	22 "			" "	
86	12		40 36.7	69 59	22 "			" "	
87	12		40 32.5	69 18	23 "			" "	
88	12		40 37.2	68 41.5	23 "			" "	
89	12		40 37.7	67 58	23 "			" "	
90	12		40 35.7	67 16.8	23 "			" "	
74	12		40 50.3	67 01.8	23 "			" "	
73	12		41 12	66 34.6	24 "			" "	
91	12		40 19	68 07	24 "			" "	
92	12		40 18.7	68 51.8	24 "			" "	
93	12		40 16	69 40.2	25 "			" "	
94	12		40 15.8	90 12.3	25 "			" "	
95	12		40 00.6	70 34	25 "			" "	
96	12		40 12	70 52.6	25 "			" "	
98	12		40 13.5	71 32.5	25 "			" "	
103	12		40 14.7	73 39.5	26 "			" "	
104	12		39 58.7	73 51.3	26 "			" "	
110	12		39 35.3	73 37	27 "			" "	
113	12		39 17.7	73 55.4	27 "			" "	
114	12		39 17.5	73 19	27 "			" "	
109	12		39 29.1	73 00.5	27 "			" "	

Albatross III Cruise 120 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
105	12		39 50.2	73 10	27 Oct.			No Returns
101	12		40 11	72 57	27 "	"	"	
102	12		40 28.8	73 12.1	27 "	"	"	
100	12		40 31.3	72 39.5	27 "	"	"	
99	12		40 13.6	72 18	28 "	"	"	
106	12		39 53.5	72 32.2	28 "	"	"	
108	12		39 36	72 18.1	28 "	"	"	
107	12		39 51.5	71 53.7	28 "	"	"	
97	12		39 58.5	71 20	28 "	"	"	

Harengus Cruise 27

10 - 24 November

1958

All 8 oz. bottles, weighted.

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
95	12		44 57.8	66 51.2	10 Nov.			No Returns	
94	12	61849	44 31.2	67 12	10 "	44 54.1	65 21'	21 May '59	
93	12	61857	44 22.8	67 28	10 "	44 23.8	66 12'	8 Jan. '59	
92	12	61868	44 00	67 38	10 "	44 11.5	66 10	3 Dec. '58	
91	12		44 00	68 33.5	11 "			No Returns	
90	12		43 40.2	68 33.5	11 "		" "		
89	12		43 40.2	69 00	11 "		" "		
88	12		43 22.4	70 21	11 "		" "		
87	12		43 00	69 55.2	11 "		" "		
86	12		43 00	69 00	11 "		" "		
85	12		43 22.4	69 00	12 "		" "		
84	12	61965	43 22.4	68 00	12 "	43 39.5	65 49	20 Jan. '59	
		61972	43 22.4	68 00	12 "	44 00	66 09.3	18 Jan. '59	
83	12		43 40.2	68 00	12 "			No Returns	
82	12		43 40.2	67 00	12 "		" "		
81	12	61999	43 40.2	66 13.6	14 "	44 16	66 08	22 Nov. '58	
97	12	62011	43 24	66 30	14 "	44 22	66 05.5	14 Feb. '59	
		62016	43 24	66 30	14 "	44 33	66 02	27 Dec. '58	
		62020	43 24	66 30	14 "	44 11.5	66 10	28 Nov. '58	
98	12		43 07.2	66 44.5	14 "			No Returns	
99	12		42 50.5	66 58.5	14 "		" "		
100	12		42 33.8	67 13.5	14 "		" "		
101	12		42 25.5	67 20.5	15 "		" "		
102	12		42 17	67 27.5	15 "		" "		
103	12		42 09	67 34.5	15 "		" "		
104	12		42 04.2	67 23.2	15 "		" "		
105	12		42 12	67 16.5	15 "		" "		

Harengus Cruise 27 (cont'd)

Sta. #	No. Bottles		Released			Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date
106	12		42 36.5	67 05	15 Nov.			No Returns
107	12		42 15	66 57.2	15 "		" "	
108	12		42 09.5	66 46.8	15 "		" "	
109	12		42 04.5	66 35	15 "		" "	
110	12		42 12.5	66 28	15 "		" "	
111	12		42 22.8	66 25.5	15 "		" "	
112	12		42 32.4	66 24	15 "		" "	
113	12		42 42.2	66 22	15 "		" "	
114	12		43 02	66 18	15 "		" "	
115	12	62230	43 21.5	66 14.5	15 "	43 59	66 09.2	24 Nov. '58
		62233	43 21.5	66 14.5	15 "	44 11.5	66 09.7	8 Dec. '58
		62234	43 21.5	66 14.5	15 "	44 12	66 09.5	8 Dec. '58
81	12		43 40.2	66 13.4	16 "			No Returns
35	12	62252	43 51.8	66 45.5	18 "	44 16.5	66 08.2	5 Dec. '58
		62257	43 51.8	66 45.5	18 "	44 20	66 07.5	25 Nov. '58
		62258	43 51.8	66 45.5	18 "	44 49	65 32.5	1 Dec. '58
34	12	62263	44 06.8	66 21.5	18 "	44 20	66 07.5	14 Dec. '58
		62264	44 06.8	66 21.5	18 "	44 14.3	66 23	7 Dec. '58
		62271	44 06.8	66 21.5	18 "	44 20	66 07.5	24 Nov. '58
33	12		44 18.1	66 42.8	18 "			No Returns
32	12		44 40.2	65 54.2	18 "		" "	
11	12		44 43.2	65 58.8	18 "		" "	
31	12	62316	45 46.5	66 03.8	18 "	44 54.3	65 21.2	25 Nov. '58
30	12		44 49.2	66 08.3	19 "			No Returns
29	12	62335	44 52.2	66 13	19 "	44 54.5	65 21.3	10 Dec. '58
27	12		44 58.5	66 22.8	19 "			No Returns
26	12	62357	45 01	66 26.8	19 "	44 47	65 36.5	3 Dec. '58
25	12	62380	45 10	65 57.2	19 "	45 00.5	65 09.2	25 Nov. '58
24	12		45 06.8	65 53.5	19 "			No Returns
23	12		45 03.8	65 50	19 "		" "	
22	12		45 00.8	65 46.5	19 "		" "	
21	12		44 57.5	65 42.5	19 "		" "	
20	12		44 54.2	65 38.8	19 "		" "	

Harengus Cruise 27 (cont'd)

Sta. #	No. Bottles		Released				Recovered		
	Released	Bottle #	Lat.	Long.	Date	Lat.	Long.	Date	
19	12	62441	44 51	65 35.2	19 Nov.	44 57	66 16.5	23 Nov. '58	
		62445	44 51	65 35.2	19 "	44 57	66 16.5	22 Nov. '58	
		62451	44 51	65 35.2	19 "	44 57	66 16.5	22 Nov. '58	
18	12		44 54.2	65 17.5	19 "	No Returns			
17	12		45 05.2	65 03.2	19 "	"	"		
16	12		45 09	65 07.2	19 "	"	"		
15	12		45 12.2	65 11	19 "	"	"		
14	12		45 15.5	65 15.1	19 "	"	"		
13	12	62514	45 18.8	65 19	19 "	45 22	64 20	6 May '59	
12	12		45 22	65 22.9	19 "	No Returns			
10	12	62540	44 18.8	66 21.2	24 "	44 33	66 02	27 Dec. '58	
9	12	62555	44 22.2	66 23.8	24 "	44 17.7	66 10.7	15 Dec. '58	
		62556	44 22.2	66 23.8	24 "	44 17.7	66 10.7	15 Dec. '58	
8	12		44 26.9	66 26.8	24 "	No Returns			
7	12	62575	44 31.2	66 29.8	24 "	44 33	66 02	27 Dec. '58	
6	12	62588	44 35.8	66 33	24 "	44 34	66 01	28 Dec. '58	
5	12	62599	44 40.2	66 36	24 "	44 15.6	66 21	12 Oct. '59	
4	12		44 44.8	66 38.8	24 "	No Returns			
3	12	62622	44 49	66 42	24 "	43 55	66 07	22 Mar. '59	
2	12		44 53.5	66 45	24 "	No Returns			
1	6		44 59.6	66 49.5	24 "	"	"		

Delaware 58-7

12 - 19 December

1958

All bottles ballasted

Sta. #	No. Bottles Released	Bottle #	Released			Recovered		
			Lat.	Long.	Date	Lat.	Long.	Date
1	12		41 42	69 10	12 Dec.	No Returns		
3	12		41 30	69 15	12 "	"	"	
6	12		40 02	69 08	18 "	"	"	
8	12		40 10	68 12	18 "	"	"	
9	12		40 21	67 40	18 "	"	"	
11	12		41 28	68 49	19 "	"	"	
12	12		42 05	69 57	19 "	"	"	

Sambro Lightship, 44°21.7'N 63°24.3'W

2 ballasted bottles launched each day at noon

commencing on 9 October 1958

Bottle #	Release Date	Lat.	Recovery		Date
			Long.		
44658	15 Oct.	44 33.8	63 56		28 Oct. '58
44676	24 Oct.	44 07.6	64 31		29 Aug. '59
44835	3 Dec.	44 28	63 42.6		12 Jun. '59
44856	3 Dec.	44 26.5	63 46		10 Dec. '58
*	31 Dec.				

* No bottles released.

Lurcher Lightship, 43°48.5'N 66°31.8'W

2 ballasted bottles launched each day at noon

commencing on 28 October 1956

Bottle #	Release Date	Lat.	Recovery	
			Long.	Date
1956				
15947	8 Nov.	44 23	66 04	7 Dec. '56
15950	6 Dec.	44 37.5	65 45.5	12 Apr. '57
15996	11 "	44 33.1	66 02	20 Dec. '56
16024	17 "	43 48	66 10	24 Dec. '56
1957				
16059	3 Jan.	44 27.5	66 00	24 Jan. '57
16069	5 "	44 22	66 05.5	24 Jan. '57
16072	13 "	44 11.5	66 10	4 Mar. '57
16095	14 "	44 13.2	66 08.8	24 Jan. '57
16093	15 "	44 11.5	66 10	24 Jan. '57
16084	18 "	44 23	66 05	18 Mar. '57
*	23 Jan.-2 Mar.			
28641	4 Mar.	44 17	66 08	26 Mar. '57
28622	8 "	44 15	66 08	26 Mar. '57
28625	15 "	43 53	66 10	5 Apr. '57
28651	16 "	44 18	66 19	5 Apr. '57
*	2 - 4 Apr.			
28671	10 Apr.	44 14	66 20	30 Apr. '57
28687	18 "	44 29.8	66 06.1	30 Apr. '57
28693	20 "	45 19	64 27	29 Apr. '57
28694	21 "	44 21.6	66 06.3	8 Jul. '57
28697	23 "	45 17	64 24	14 Nov. '57
28704	26 "	45 22.3	64 25.5	8 Dec. '57
28711	30 "	45 19	64 27	29 Sept. '57
28714	1 May	44 36.6	65 55.3	8 Feb. '58
28719	2 "	45 07.8	67 02.5	21 Jul. '57
28717	4 "	45 06.3	64 56	3 Nov. '57
28718	4 "	45 24.5	64 34	6 Oct. '57

* No bottles released.

Lurcher Lightship (cont'd)

Bottle #	Release Date	recovery		
		Lat.	Long.	Date
	1957			
28725	7 May	44 33.3	65 51.5	15 Jun. '57
28732	10 "	44 23	66 04	13 Aug. '57
28734	11 "	45 18	64 24	19 Oct. '57
28754	21 "	45 15	64 26	6 Oct. '57
28769	29 "	45 04	66 48	25 Jul. '57
28770	29 "	45 10	67 02	2 Aug. '57
28775	2 Jun.	44 58.7	67 03	19 May '58
28777	2 "	44 44	66 45	27 Jun. '57
28779	3 "	44 59.6	66 56.3	27 Jul. '57
28781	4 "	45 03.8	66 44	26 Aug. '57
28793	16 "	44 15	66 23.5	23 Jun. '57
28795	11 "	45 02.7	66 50.6	28 Aug. '57
*	14 Jun.-2 Jul.			
35101	3 Jul.	45 22	64 20	14 Nov. '57
35102	4 "	44 33.2	65 51.4	30 Jul. '57
35104	5 "	45 01.4	66 56	20 Aug. '57
35109	7 "	45 12	64 37.5	2 Nov. '57
35110	8 "	44 55	66 56	15 Sept. '57
35112	9 "	44 27.5	66 00	21 Jul. '57
35113	9 "	45 18	64 24	10 Mar. '58
35121	13 "	45 16.2	63 52.7	4 Oct. '57
35144	25 "	45 09	64 49.7	4 Oct. '57
35148	27 "	45 18	64 24	2 Nov. '57
35158	1 Aug.	45 17.6	64 24	6 Oct. '57
35165	4 "	44 34	65 52	16 Sept. '57
35172	8 "	45 19	64 27	2 Oct. '57
35202	23 "	44 34	65 52	10 Sept. '57
35205	24 "	44 28	66 09	30 Dec. '57
35215	29 "	44 59	65 12	12 Oct. '57
35217	30 "	44 34	65 51	29 Sept. '57
35221	1 Sept.	44 17	66 20	29 Sept. '57
*	6 Sept.-5 Oct.			

* No bottles released.

Lurcher Lightship (cont'd)

Bottle #	Release Date	Lat.	Recovery	
			Long.	Date
1957				
29471	18 Oct.	44 17.5	66 19.3	25 Oct. '57
29503	3 Nov.	44 20	66 07.6	4 Dec. '57
29512	7 "	44 26.5	66 00.5	30 Nov. '57
29535	19 "	44 20	66 07.6	6 Dec. '57
29538	20 "	43 48	66 10	26 Nov. '57
29539	21 "	44 02	66 10.3	3 Dec. '57
29540	21 "	43 36	65 46.6	8 Dec. '57
29543	23 "	43 41	65 49	30 Nov. '57
29558	30 "	44 03.3	66 10.2	2 Dec. '57
29581	12 Dec.	44 28	66 09	29 Dec. '57
29588	15 "	44 28	66 08.5	6 Jan. '58
29595	19 "	44 15.9	66 21.2	14 Jan. '58
39286	29 "	44 17	66 20	7 Jan. '58
1958				
39336	23 Jan.	42 02	70 37.5	30 Mar. '58
*	24 - 28 Jan.			
39347	3 Feb.	44 16.7	66 20	21 Feb. '58
39359	9 "	43 52	66 10.3	17 Feb. '58
39361	10 "	44 36.6	65 55.3	10 Feb. '58
39366	12 "	44 30	66 07	13 Mar. '58
39512	13 "	41 11.5	71 34	17 May '58
39514	14 "	42 04	70 14.7	13 Apr. '58
39520	17 "	43 52.5	66 09.8	27 Feb. '58
39532	23 "	41 45.3	70 27.1	29 Mar. '58
39544	1 Mar.	41 49.3	70 00.2	10 May '58
39546	2 "	41 46.5	70 29.7	5 Apr. '58
39547	3 "	41 45.4	70 09	12 Apr. '58
39548	3 "	41 36.5	69 59.3	29 Sept. '58
39554	6 "	41 38	69 57	1 Sept. '58
39417	10 "	41 21	70 48	30 Aug. '58
39418	10 "	41 45	70 12	13 Apr. '58
39419	11 "	45 05.6	66 38	26 Aug. '58
39421	12 "	41 21	70 34	21 Sept. '58

* No bottles released.

Lurcher Lightship (cont'd)

Bottle #	Release Date 1958	Lat.	Recovery	
			Long.	Date
39422	12 Mar.	42 28	70 55.4	30 Apr. '58
39424	13 "	41 46	70 05	13 Apr. '58
39443	23 "	42 41	70 45	10 May '58
39449	26 "	44 57.2	66 54.4	20 Sept. '58
39461	1 Apr.	42 41.3	70 46.1	29 Jun. '58
39467	4 "	44 20	66 07.6	3 May '58
39470	5 "	45 18.4	64 47.3	18 Jun. '58
39472	6 "	44 28.5	67 40.5	27 May '58
39447	9 "	45 10.2	64 44.7	3 Sept. '58
*	13 - 25 Apr.			
39486	26 Apr.	44 37	66 52	20 May '58
39491	29 "	44 38	66 43	11 May '58
39496	1 May	45 02.5	66 50.8	29 Jul. '58
39499	3 "	44 48.5	66 58.7	30 May '58
39373	12 "	44 23	66 04	3 Sept. '58
39377	14 "	44 42	66 44	5 Jun. '58
39383	17 "	45 00.2	66 56.8	6 Jun. '58
39388	19 "	44 48.6	66 58.7	27 Aug. '58
39414	1 Jun.	45 18	64 24	4 Apr. '59
*	2 - 7 Jun.			
51625	15 Jun.	44 54	65 20	20 May '59
51640	23 "	44 53	66 57.2	2 Nov. '58
51649	28 "	45 23	64 19	17 Jan. '59
51652	29 "	44 48.6	66 58.8	31 Jul. '58
51658	2 Jul.	45 00.2	66 55.9	24 Sept. '58
51691	19 "	45 18	64 24	27 Sept. '58
51710	28 "	45 00.5	65 08.5	6 Oct. '58
51711	29 "	44 55.6	67 01	20 Sept. '58
51727	6 Aug.	44 23	66 04	19 Sept. '58
51761	23 "	45 02.4	66 53.5	12 Oct. '58
51783	3 Sept.	44 20	66 07.5	13 Sept. '58
*	5 Sept.-28 Oct.			
51898	7 Nov.	44 48.8	65 32.5	27 Nov. '58
51921	19 "	43 48	66 09.5	3 Mar. '59

* No bottles released.

Lurcher Lightship (cont'd)

Bottle #	Release Date 1958	Lat.	Recovery	
			Long.	Date
51937	23 Nov.	44 30	66 06	1 Dec. '58
51965	9 Dec.	44 33	66 02	27 Dec. '58
51967	10 "	43 59.2	66 09.3	22 Dec. '58
51971	12 "	43 59.2	66 09.3	22 Dec. '58
51986	19 "	43 26.5	65 38	4 May '59
51999	26 "	43 42.4	65 50	10 Jun. '59

Princess Helene

2 ballasted bottles released each day at

45°07'N, 65°59'W

beginning 18 December 1958

Bottle #	Release Date	Lat.	Recovery	
			Long.	Date
	1958			
*	21 Dec.			
50448	26 "	44 23.7	66 12	10 Jan. '59
50449	27 "	44 33	66 02	10 Feb. '59
*	28 "			

Portland Lightship

43°32'N 70°06'W

2 ballasted bottles released each day

beginning 23 July 1958

Bottle #	Release Date	Lat.	Recovery		Date
			Long.		
	1958				
55388	24 Jul.	43 41	70 10.4		31 Jul. '58
55368	25 "	43 31.6	70 18.9		27 Jul. '58
55369	25 "	43 33.5	70 17		29 Jul. '58
55378	26 "	43 30	70 23		27 Jul. '58
55367	26 "	43 31	70 22.5		27 Jul. '58
55380	Aug.	43 44.4	70 11		7 Aug. '58
55389	1 "	43 44.3	70 00		6 Aug. '58
55409	10 "	43 42.1	69 50.0		22 Aug. '58
55397	11 "	43 45.5	69 58.4		19 Aug. '58
55401	12 "	43 46.5	69 59.5		23 Aug. '58
55126	15 "	43 33.2	70 14.6		22 Aug. '58
55128	16 "	42 00	70 05		17 May '59
55139	19 "	43 33.2	70 14.6		1 Sept. '58
55138	19 "	43 35.2	70 12.3		30 Oct. '58
55137	21 "	43 32.5	70 19.5		31 Aug. '58
55142	23 "	43 33.2	70 14.6		1 Sept. '58
55141	25 "	43 45	70 03.3		31 Aug. '58
55143	25 "	43 45	69 47		8 May '59
55165	28 "	43 46.7	70 01		12 Nov. '58
55167	28 "	43 49	69 58		20 Jun. '59
55156	30 "	43 44	69 51.2		5 Sept. '58
55164	3 Sept.	43 47	69 54		14 Sept. '58
55146	3 "	43 39.4	70 02.2		16 Oct. '58
53395	23 "	42 01.7	70 37.5		19 Oct. '58
55432	6 Oct.	42 41	70 44.7		26 Oct. '58
55417	22 "	43 10.5	70 36.4		2 Nov. '58
*	9 Nov.-18 Dec.				

* No bottles released.

Texas Tower #2

41°41'N 67°45'W

2 ballasted bottles released near noon each day

commencing on 31 January 1958 and continuing through 31 December 1958

Bottle #	Release Date	Lat.	Recovery	
			Long.	Date
44325	4 Mar.	41 39	70 12	7 Sept. '58
*	5 - 21 Mar.			
*	25 Apr.			
44398	24 Jun.	41 50	67 23	31 Jan. '59 **
*	30 "			
*	21, 22 Sept.			

* No bottles released.

** Apparently over ballasted, picked up in 31-32 fathoms of water.

Nantucket Lightship

40°33'N 69°28'W

2 ballasted bottles released each day

commencing on 28 July 1958

Bottle #	Release Date	Lat.	Recovery		Date
			Long.		
53171	17 Aug.	41 25.3	70 54.6		7 Sept. '58
53172	17 "	41 25.3	70 54.6		7 Sept. '58
53242	28 "	41 15.5	70 13.5		11 Sept. '58
*	15, 20, 30 Oct.				
*	15, 16, 26 Nov.-3 Dec.				
*	6, 7, 24, 25, 28-31 Dec.				

* No bottles released.

Texas Tower #4

39°48'N 72°40'W

2 ballasted bottles released near noon each day commencing on 7 October 1958 and continuing through 31 December 1958 except for 4, 5, 9, 25 - 30 November and 1 - 6 December.

No Returns

Appendix

Returns from Albatross III cruises of 1953, 1955, and 1956 received since 22 October 1957, subsequent to returns published in S.S.R. No. 242.

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
<u>Albatross III, Cruise 48</u>							
33	13302 N	41 44.2	69 50.2	30 Apr. '53	41 41	69 56	18 Jun. '58
43	13421 B	41 11	69 15	1 May '53	41 05	70 40	12 Jun. '58 *
<u>Albatross III, Cruise 58</u>							
27	17069 B	42 45	65 57	24 Mar. '55	66 20	22 40	15 May '58
47 or 48	1738?	42 26.5	66 25	30 Mar. '55	44 44	66 00	13 Jul. '58 *
		42 27.3	66 00				
57	17502	41 03	67 14	31 Mar. '55	37 14	76 00.6	25 Apr. '60
<u>Albatross III, Cruise 60</u>							
2	17597 B	41 00.5	71 01.5	19 Apr. '55	35 24	75 29	5 Dec. '59
25	17887 B	43 01.5	70 21	22 Apr. '55	42 41.4	70 46.5	3 Apr. '58
30	17945 B	42 52.5	67 05	23 Apr. '55	41 02.5	71 58.0	9 Aug. '58
34	17988 N	42 39.2	64 57	23 Apr. '55	44 36.6	65 55.3	22 Jan. '58
36	18011 B	42 16	65 31	23 Apr. '55	44 55	67 00	22 Mar. '58
37	18027 B	42 15.5	65 59.3	23 Apr. '55	45 20.3	64 54	22 Jul. '60
<u>Albatross III, Cruise 61</u>							
24	19092 N	42 33	64 38.8	21 May '55	40 56	72 14	30 Mar. '58

* Bottle recovered from bottom.

Sta. #	Bottle #	Released				Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date	
<u>Albatross III, Cruise 71</u>								
19	20343 B	43 44	68 05.5	23 Feb. '56	44 35	01 15	7 Mar. '59	
31	19886 N	42 35.3	64 51.5	24 Feb. '56	50 44	00 13 E	7 Nov. '57	
31	19888 N	42 35.3	64 51.5	24 Feb. '56	41 28.7	70 45.5	30 Mar. '58	
46	20090 N	41 46.5	66 50	29 Feb. '56	49 32	01 55	27 Dec. '57	
48	20122 N	41 36	66 00	29 Feb. '56	44 30	01 14	9 Jan. '58	
48	20124 N	41 36	66 00	29 Feb. '56	56 45	08 15 E	28 Oct. '57	
54	20196 N	40 47	68 19	1 Mar. '56	48 50	03 18	12 Jan. '58	
58	20236 N	40 35.5	69 39	2 Mar. '56	65 41.7	12 26.3E	16 Nov. '57	

<u>Albatross III, Cruise 72</u>							
4	20307 B	40 01	70 13.5	22 Mar. '56	45	01	20 Mar. '58
5	20326 N	40 01	69 26	22 Mar. '56	37 50	25 30	8 Jun. '57
15	20496 N	42 59	64 40	23 Mar. '56	58 30	06 28	7 Oct. '57
16	20506 N	42 35.5	64 38.5	23 Mar. '56	43 25	08 25	25 Oct. '57
18	20523 B	42 50	67 23	24 Mar. '56	43 48	01 26	9 Nov. '58
20	20545 B	42 47	68 54.5	24 Mar. '56	64 50	07 20 E	23 Sept. '58
32	20707 B	41 45.5	65 53	28 Mar. '56	54 58	08 30	1 Jan. '58
33	20714 N	41 50.5	67 02.5	28 Mar. '56	54 36	08 35	9 Oct. '57
37	20762 N	41 30	69 30	29 Mar. '56	44 20	01 18	27 Jan. '58
38	20777 B	41 25	68 44	29 Mar. '56	63	09 E	18 Apr. '58
40	20802 N	41 24.5	66 27	29 Mar. '56	57 07	06 00	12 Nov. '57
41	20818 N	41 20	66 05	29 Mar. '56	44 38	01 16	11 Jun. '58
42	20839 B	41 05	67 17	29 Mar. '56	63	08 E	20 Mar. '58
45	20859 B	40 45	66 44	30 Mar. '56	43 50	01 24	29 Jun. '58
46	20874 N	40 26	67 18	30 Mar. '56	50 05	05 42	1 Nov. '57
46	20875 B	40 26	67 18	30 Mar. '56	43 39	01 29	14 Jul. '58
47	20884 N	41 04.3	68 07.5	30 Mar. '56	63 08	07 45 E	1 Jan. '58
19	20534 N	42 48	68 05	24 Mar. '56	45 23.2	64 27.5	20 Jul. '60

Sta. #	Bottle #	Released				Recovered			
		Lat.	Long.	Date	Lat.	Long.	Date		
<u>Albatross III, Cruise 73</u>									
2	20973 B	40 31.4	71 00.2	17 Apr. '56	44 08	01 15	12 Jan. '58		
4	20991 B	40 01.5	69 53.8	18 Apr. '56	52 05	10 00	21 Jan. '58		
6	21023 B	40 00	68 00	18 Apr. '56	47 54	04 00 W	22 Mar. '60		
6	21024 N	40 00	68 00	18 Apr. '56	62 40	06 18 E	23 Dec. '57		
13	21081 B	43 22.2	66 20.4	19 Apr. '56	45 53.2	64 32.7	4 Oct. '58		
16	21126 N	43 40.5	69 00	19 Apr. '56	41 51	69 57	17 May '58		
21	21187 B	42 48.5	68 03.0	20 Apr. '56	58 20	11 20 E	19 Oct. '58		
25	21235 B	42 01	65 12	21 Apr. '56	55 27	05 42	26 Jan. '58		
25	21240 N	42 01	65 12	21 Apr. '56	55 33	08 05 E	21 Oct. '57		
26	21249 B	42 01.5	66 02	21 Apr. '56	56 30	06 12	4 Jan. '58		
37	21373 B	41 30	66 54	23 Apr. '56	53 39	09 58	30 Oct. '57		
48	21494 N	42 13.2	65 46.8	25 Apr. '56	55 28	08 25 E	30 Oct. '57		
48	21495 B	42 13.2	65 46.8	25 Apr. '56	52 46	04 47	31 Jul. '58		
50	21525 B	42 59.5	65 10.1	26 Apr. '56	47	04	23 Feb. '58		
53	21559 B	42 19.8	66 56.7	26 Apr. '56	44 30	01 17	17 Aug. '58		
63	21684 N	40 44.5	68 08	28 Apr. '56	36 42	75 55.5	11 Nov. '57		
66	21712 N	41 04.4	70 34.7	28 Apr. '56	41 39.6	70 00.7	28 May '58		

Albatross III, Cruise 75

1	21737 B	41 01.7	70 57.7	16 May '56	41 24.3	70 31	22 Feb. '60
3	21762 N	40 00.5	71 00	16 May '56	47 48	04 20	11 Feb. '58
4	21771 B	39 57.8	69 33	17 May '56	39 00	32 50	21 Jul. '58
4	21776 N	39 58.7	69 33	17 May '56	65 30	12 15 E	31 Jan. '58
14	21891 B	43 17	66 43	18 May '56	41 52.5	70 00.6	2 Aug. '58
14	21894 N	43 17	66 43	18 May '56	41 46	69 56	26 Jan. '58
19	21952 N	44 15.5	66 55	19 May '56	42 03.5	70 14.7	9 Mar. '58
19	21960 N	44 15.5	66 55	19 May '56	44 05.7	66 12.5	8 Jan. '58
32	22107 B	43 40	68 58	20 May '56	39	28	14 Feb. '60
33	22123 B	43 32.4	70 01.9	20 May '56	42 03.6	70 14.7	21 May '60
47	22293 B	41 59.2	65 04.2	23 May '56	52 16	10 04	3 Nov. '57
70	22568 N	40 40.6	67 55	26 May '56	38 02.0	75 20.3	30 May '58
71	22584 N	40 37.2	67 24	26 May '56	51 35	10 00	6 Dec. '57
72	22596 N	40 38.5	66 46.6	26 May '56	48	04	23 Feb. '58

Sta. #	Bottle #	Released			Recovered		
		Lat.	Long.	Date	Lat.	Long.	Date
<u>Albatross III, Cruise 76</u>							
6	22876 N	40 03	68 00	12 Jun. '56	52 37	09 48	30 Oct. '57
6	22884 N	40 03	68 00	12 Jun. '56	48 30	04 40	23 Feb. '58
8	22908 N	41 05	67 17	12 Jun. '56	46 53	02 10	5 Nov. '57
15	22984 N	43 33.8	66 15.3	13 Jun. '56	28 00	15 30	10 Feb. '57
29	23151 B	43 39	69 38	15 Jun. '56	41 42	70 38	7 Aug. '57
31	23174 N	43 05.5	70 05	15 Jun. '56	45 22.8	64 26.8	22 Dec. '57
32	23193 B	43 01.5	69 30.5	16 Jun. '56	42 04	70 14.5	13 Jun. '59
34	23210 N	42 53	67 52	16 Jun. '56	42 58	70 04	27 Oct. '57
36	23233 B	42 45	66 19	16 Jun. '56	38 25	28 40	21 Sept. '57
40	23292 N	42 22.8	65 45.1	17 Jun. '56	57 21	07 25	8 Jan. '58
42	23313 B	41 53.5	65 43.5	17 Jun. '56	50 25	05 06	1 Feb. '58
46	23364 N	41 31	68 13.5	18 Jun. '56	36 29	75 51	2 Sept. '58
47	23365 B	41 29.5	69 30	18 Jun. '56	40 48	70 09	27 Sept. '57
55	23467 B	42 05	67 36	19 Jun. '56	48 38	04 10	21 Mar. '58
58	23506 N	41 28	66 25	20 Jun. '56	64 32	10 49 E	2 Nov. '58
62	23548 N	41 01	68 16	20 Jun. '56	51 46	10 20	19 Feb. '59
65	23588 N	40 43.5	68 28	10 Jun. '56	65 19	10 55 E	19 Dec. '57
85	23831 B	39 50.5	72 47	23 Jun. '56	47 20	03 18	25 Feb. '58
93	23920 N	40 51.5	71 28	23 Jun. '56	35 49	75 33	20 Oct. '57

T. N. Gill, Cruise 8

69	15102	34 31.5	76 49	28 Sept. '54	34 38.5	77 07	19 Mar. '60
----	-------	---------	-------	--------------	---------	-------	-------------

MBL WHOI Library - Serials



5 WHSE 01506

