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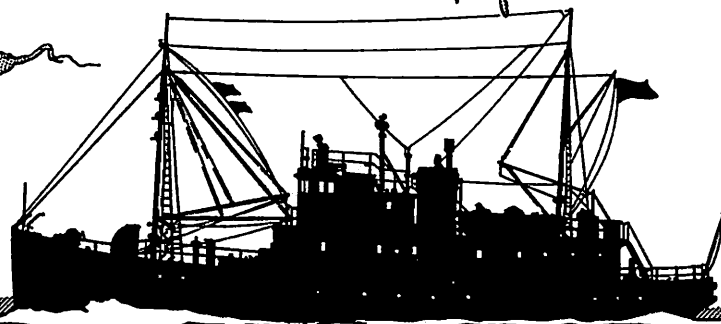
Technical Report No. 271

CURRENT MEASUREMENTS IN PUGET SOUND
AND ADJACENT WATERS
JULY 1948-NOVEMBER 1955

COMPILED BY
EUGENE E. COLLIAS

Office of Naval Research
Contract NONR-477 (10)
and
Contract 400014-67A-0103-0014
Project NR 083 012

Reference M71-64
October 1971



SEATTLE, WASHINGTON 98105

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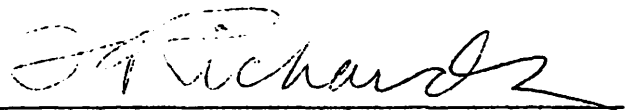
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Francis A. Richards
Assistant Chairman for Research

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ABSTRACT

This report presents a tabulation of current measurements made at various locations in Puget Sound and the San Juan Islands from July 1948 through November 1955. Measurements were made by continuously indicating meters, but only values at selected times are reported.

INTRODUCTION

This report presents a tabulation of measurements of water currents in Puget Sound and the San Juan Islands made by personnel of the University of Washington, Department of Oceanography, from July 1948 through November 1955. Observations were made at 64 locations as shown in Figures 1, 2, and 3. A summary of the stations precedes the data.

Surface currents in Puget Sound have been studied for many years by the U. S. Coast and Geodetic Survey, but measurements of currents at depth were practically negligible. Hence, the measurements tabulated in this report supply information on the deeper currents. An analysis of a portion of these data was made by Paquette (1951) and by Paquette and Barnes (1955).

Most of the observations were made from anchored vessels, but the data obtained in Admiralty Inlet (Stations 25-28, 37-39, and 42-46) were made from a drifting ship. The water currents relative to the ship were measured simultaneously with the ship's drift. By means of vector diagrams, the true water motion was computed.

On many cruises, water samples were collected for various chemical analyses to provide a more complete picture of the transport of salt and water. A good example of this was the study made in Hood Canal (Stations 50-51).

EQUIPMENT

Vessels

Three vessels were used as platforms for the current meters. The 55-foot fish packer, MV *Hydah*, was chartered to make most of the observations in the San Juan Islands. The RV *Onchorhynchus*, a 50-foot Navy motor launch converted for scientific use, owned by the University of Washington, School of Fisheries, was used in Puget Sound from 1949 to 1954. The third vessel, the RV *Brown Bear*, a 114-foot ship operated by the Department of Oceanography, was used for the longer period time studies. Each of the vessels was equipped to anchor in deep water and in currents over four knots. The position of the vessels when at anchor was checked frequently to ascertain if the anchors were holding and to determine any change in position with change in tide.

Current Meters

To insure that peak velocities were observed, it was necessary to use continuously recording current meters simultaneously at two or more depths. For this application nondirectional meters of the Price type, manufactured by the W. and L. E. Gurley Company, were modified for continuous operation in salt water at depth. The output of these meters was first fed into a two-pen chronography adapted from a Fries anemometer recorder. But since these records were very difficult to interpret, an electronic system composed of a D. C. amplifier feeding and recording integrator was developed and used with considerable success (Paquette, 1951).

For some of the records, a Roberts current meter (Roberts, 1947) was used. This instrument was modified so that the direction pulse was electrically separated from the speed pulse. The speed pulse was fed into the amplifier-integrator while both the direction and speed pulses were occasionally recorded on a high speed chronograph to obtain direction.

To obtain the speed and direction and any desired depth, Ekman-type current meters (Ekman, 1932) were used. These are propeller-type meters equipped with magnetic compasses and messenger-operated from the surface. This type of meter must be raised to the surface each time a measurement is made; thus the repetition rate with this type of meter is once every ten minutes or more.

Suspension Gear and Electrical Cables

At depths greater than ten meters, the Price current meters were usually suspended from a 5/32-inch wire rope. A length of Belden No. 20 vinyl-coated flexible wire was carefully bound to the wire rope and this wire was attached to the current meter. This combination was carefully wound on an insulated cable spool and handled on a power winch. The wire rope formed the return path for the electrical impulses.

ACKNOWLEDGEMENTS

The observations reported in this report were supported by contracts with the Office of Naval Research and the Puget Sound Naval Shipyard at Bremerton, Washington. The author wishes to thank the many persons who contributed to the field-work and analysis of the observations. Dr. Robert G. Paquette originally started this technical report. His efforts are gratefully acknowledged.

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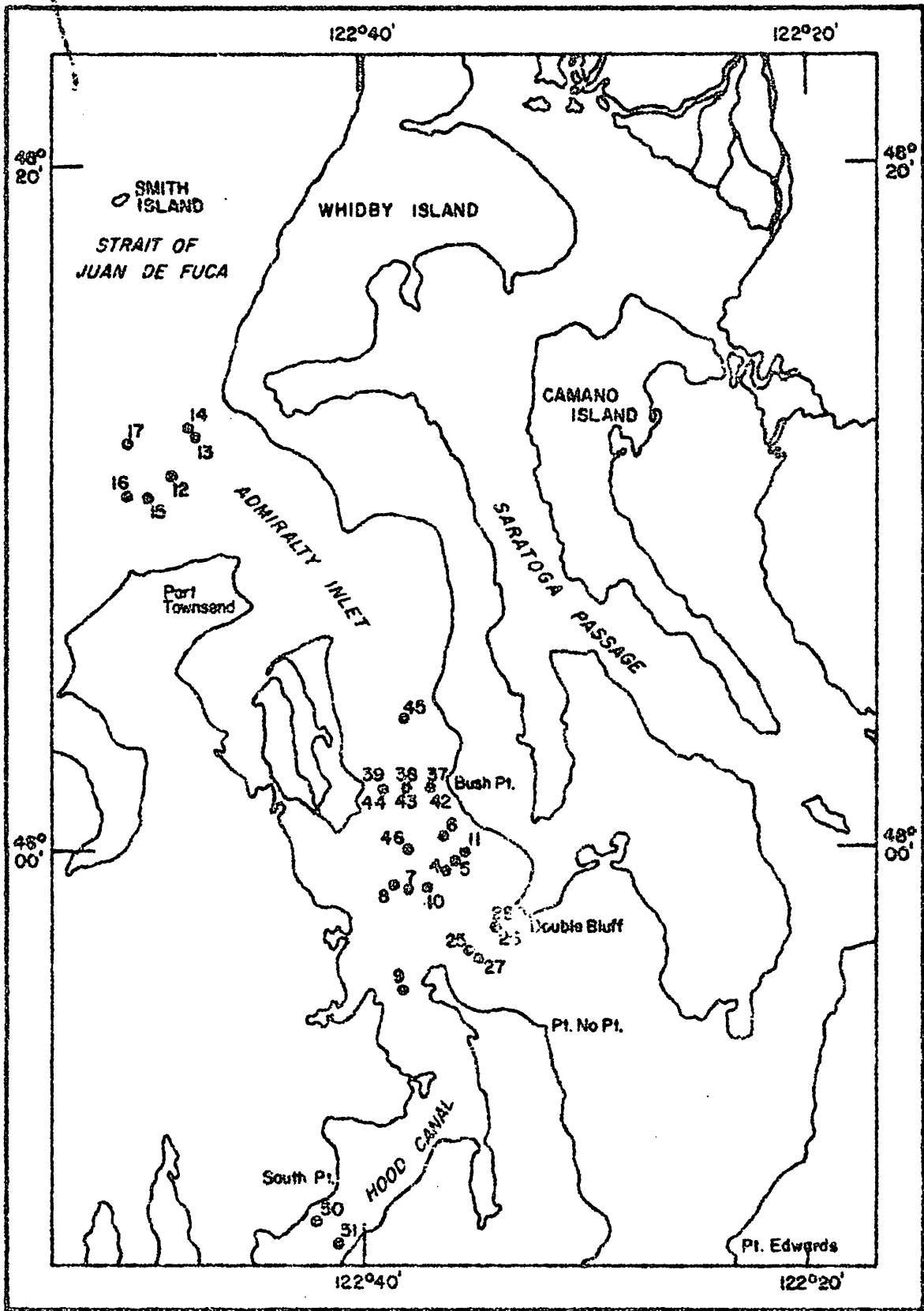


Figure 1. Current meter stations in Admiralty Inlet and Hood Canal.

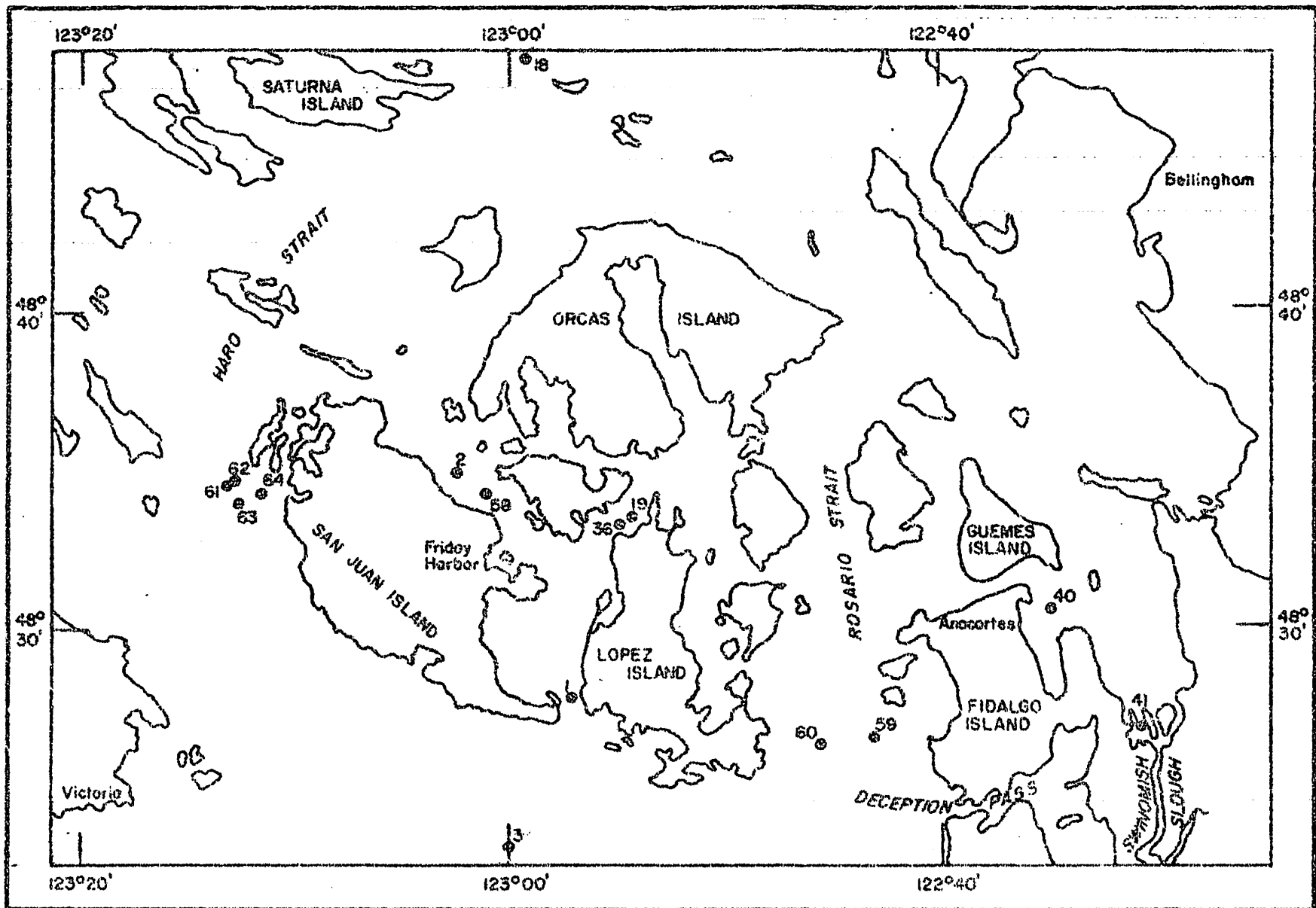


Figure 2. Current meter stations in the San Juan Islands.

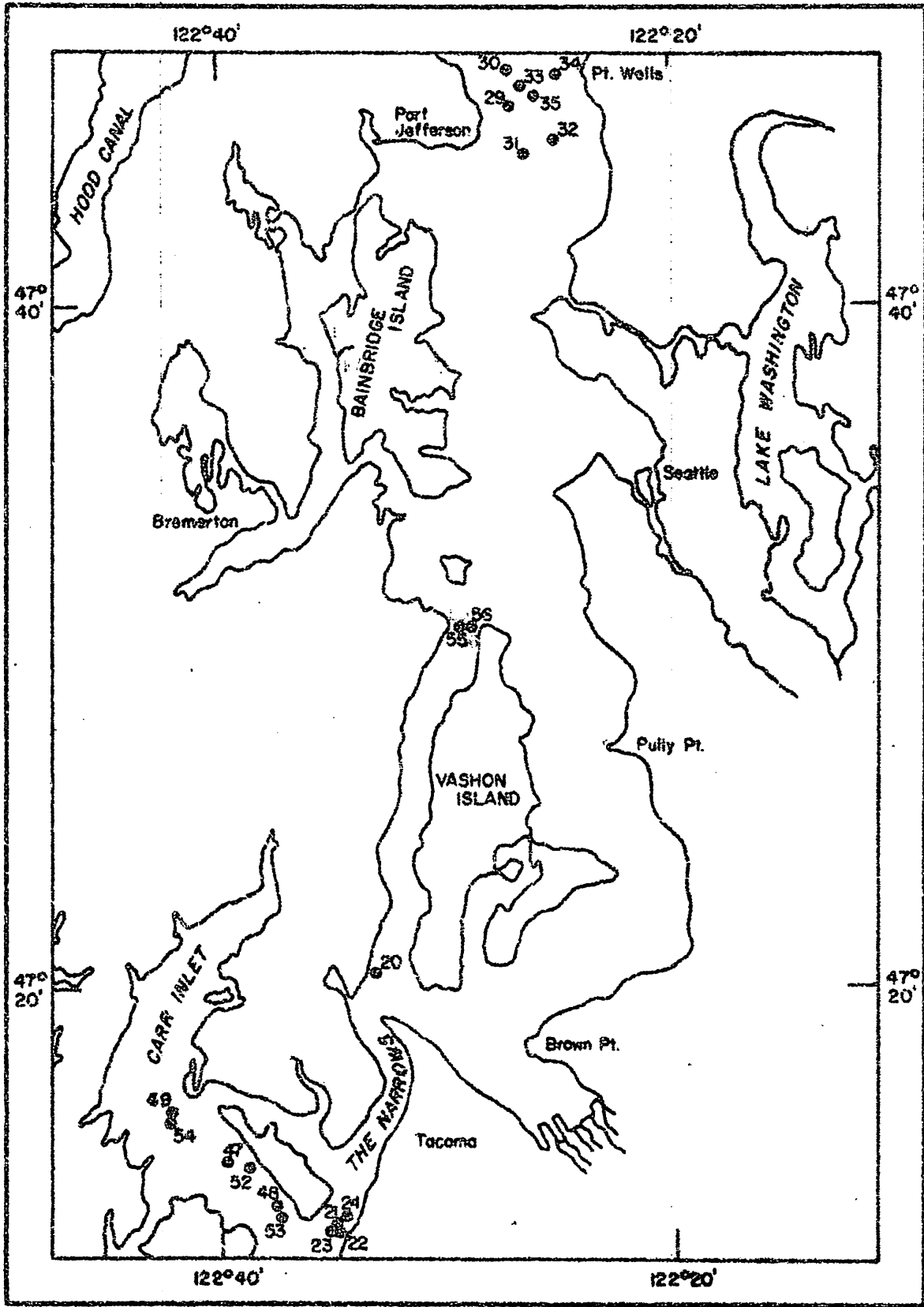


Figure 3. Current meter stations in the Puget Sound Basin.

SUMMARY OF CURRENT STATIONS

Station No.	Date	Area*	Position (North Lat) (West Long)	Depth of water (meters)	Measurements made		Period (hours)
					at depth (meters)	by**	
1	7/30/48	SJ	48° 27.9' 122° 57.0'	132	S,3,10,20,23, 25,27,30,34	D,E	6
2	8/6/48	SJ	48° 35.0' 123° 02.6'	120	S,5,10,15,25, 30,40,50,60, 75,100,130	E,C, P	5
3	8/7/48	ST	48° 23.0' 123° 00.0'	154	miscellaneous	E	5
4	12/8-9/49	AI	47° 59.5' 122° 36.0'	99	5,74	PC	20
5	1/11/50	AI	47° 59.8' 122° 35.7'	110	5,80	PC	11
6	2/8/50	AI	48° 00.4' 122° 36.3'	100	5,75	PC	11
7	2/9/50	AI	47° 58.9' 122° 38.0'	64	5,40	PC	11
8	3/1/50	AI	47° 59.1' 122° 38.4'	66	5,40	PC	9
9	3/28-29/50	HC	47° 56.0' 122° 38.1'	95	2,5,30,45 60,90	PC,E	24
10	3/29-30/50	AI	47° 59.0' 122° 37.2'	101- 80	2,5,20,30,60 90,102	PC,E	12
11	3/30-31/50	AI	47° 59.8' 122° 35.4'	68	5,36, misc.	PC,E	5
12	4/26/50	ST	48° 10.6' 122° 48.5'	76	5,50	PC,E	4
13	5/1/50	ST	48° 12.2' 122° 47.4'	81	5,58	PC	6

* AI, Admiralty Inlet; CI, Carr Inlet; CP, Colvos Passage; GC, Guemes Channel; HC, Hood Canal; HS, Haro Strait; PS, Puget Sound; RS, Rosario Strait; SJ, San Juan Islands; ST, Strait of Juan de Fuca; SS, Swinomish Slough; TN, Tacoma Narrows.

** Type of meter: B, biplane; E, Ekman; D, captive drift pole; Di, Disk; G, Gemware; M, magnesyne type; P, Price; R, Roberts; S, drifting ship.
Type of recorder: A, integrator-amplifier; C, chronograph; I, integrator

SUMMARY OF CURRENT STATIONS (Cont'd)

Station No.	Date	Area	Position		Depth of water (meters)	Measurements made at depth (meters)		by	Period (hours)
			(North Lat)	(West Long)					
14	5/2/50	ST	48° 12.4'	122° 47.5'	71	5,48		FC	9
15	5/15-16/50	ST	48° 10.4'	122° 49.3'	51	2,5,20,34 40		PC,E	24
16	6/28/50	ST	48° 10.6'	122° 50.2'	76	2,5,4,8		PI	7
17	6/29/50	ST	48° 11.9'	122° 50.2'	73	2,5,50		PC,PI	9
18	7/7/50	SJ	48° 48.0'	122° 59.5'	160	30,10,50 miscellaneous		PC,PA E	4
19	7/11/50	SJ	48° 33.6'	122° 54.3'	54	2,5,29		PC,PA E	4
21	11/6-8/50	TN	47° 13.2'	122° 34.9'	75	5,25,50		RA,PA	38
22	11/8/50	TN	47° 13.0'	122° 34.7'	70	5,47		RA,PA	2
24	11/9-10/50	TN	47° 13.4'	122° 34.4'	61	5,40		RA,PA	16
25	4/30-5/2/51	AI	47° 57.2'	122° 35.1'	48	5,50		PI	38
26	5/2-3/51	AI	47° 57.7'	122° 34.1'	50	5,50, 60		PI	24
27	5/21-22/51	AI	47° 56.8'	122° 35.0'	60	1,5,40,10, 20,40		PI,E	20
28	5/23-24/51	AI	47° 57.7'	122° 34.0'	60	60 misc.		E	10

SUMMARY OF CURRENT STATIONS (Cont'd)

Station No.	Date	Area	Position (North Lat) (West Long)	Depth of water (meters)	Measurements made		Period (hours)
					at depth (meters)	by	
29	1/31/52	FS	47° 46.8' 122° 26.9'	196	bottom misc.	E	3
30	2/6/52	FS	47° 47.1' 122° 26.9'	189	5, bottom	E	4
31	7/21/52	FS	47° 44.4' 122° 26.3'	58	5,20,30,50	PA,E	2
32	7/21-22/52	FS	47° 45.0' 122° 25.0'	220	3,5,10,20,30 40,50,80,100,50	PI,E	20
33	9/30-10/1/52	FS	47° 46.5' 122° 26.6'	200	5,20,50,100, 150, bottom	E	15
34	10/1-2/52	FS	47° 46.8' 122° 25.0'	182	5,20,50,100, 150, bottom	E	24
35	6/26-27/53	FS	47° 46.6' 122° 25.8'	185	5,20,50,100, 150, bottom	PI,E	24
36	7/6/53	SJ	48° 33.6' 122° 55.0'	55	2,4,3,10,20, 30, misc.	P,E	5
37	11/30-12/1-3/53	AI	48° 01.9' 122° 36.9'	117	5,10,20,40, 80	B,E,G, S	74
38	11/30-12/1-3/53	AI	48° 01.9' 122° 38.1'	110	5,10,20,40, 80	B,E,G, S	74
39	11/30-12/1-3/53	AI	48° 01.9' 122° 39.1'	47	5,10,20,40	B,E,G, S	74
40	1/30-31/54	GC	48° 31.4' 122° 34.9'	79	5	P	28
41	3/23/54	SS	48° 27.1' 122° 30.7'	4	1	P	10
42	6/1-4/54	AI	48° 01.9' 122° 36.9'	117	5,10,20,30, 40,70,100	E,G,S	75

SUMMARY OF CURRENT STATIONS (Cont'd)

Station No.	Date	Area	Position (North Lat) (West Long)	Depth of water (meters)	Measurements made at depth (meters)	by	Period (hours)
43	6/1-5/54	AI	48° 01.9' 122° 38.1'	110	5,10,20,30, 40,70,100,110	E,G,S	102
44	6/1-4/54	AI	48° 01.9' 122° 38.1'	47	5,10,20,40	E,G,S	18
45	6/4-5/54	AI	48° 03.9' 122° 38.2'	114	5,10,20,40 70	E,G,S	26
46	6/4-5/54	AI	48° 03.9' 122° 38.0'	122	5,10,20,40	E,G,S	26
47	7/19-20/54	CI	47° 14.8' 122° 39.8'	108	3-5,30	B,E,P	25
48	6/20-21/54	CI	47° 13.5' 122° 37.6'	115	3-5,30	B,E,P	23
49	6/22-23/54	CI	47° 16.4' 122° 42.1'	90	3-5,30	B,E,P	24
50	12/6-8/54	HC	47° 48.9' 122° 41.9'	51	2,5,10,20, 30,50	E,G	52
51	12/8-10/54	HC	47° 48.5' 122° 41.2'	55	2,5,10,20, 30,50	E,G	51
52	1/31-2/1/55	CI	47° 14.8' 122° 38.7'	120	7.5,30	M,P	26
53	2/1-3/55	CI	47° 13.2' 122° 37.6'	150	3,7.5,30	M,P	26
54	2/3-4/55	CI	47° 16.3' 122° 42.2'	90	7.5,30	M,P	26
55	2/19/55	CP	47° 30.6' 122° 29.6'	104	2,10,20,30, 50,100	G,P	10
56	4/29-30/55	CP	49° 30.6' 122° 29.0'	95 approx	2,5,10,20,30, 60,90	E,G	25

SUMMARY OF CURRENT STATIONS (Cont'd)

Station No.	Date	Area	Position (North Lat) (West Long)	Depth of water (meters)	Measurements made		Period (hours)
					at depth (meters)	by	
57	7/19/55	HS	See page	290 approx	miscellaneous	E,S	9
58	8/5/55	SJ	48° 34.3' 123° 01.2'	133	5, misc. bottom	E,P	5
59	9/23-24/55	RS	48° 26.6' 122° 43.1'	79	S,bottom	Di,P	15
60	9/24-25/55	RS	48° 26.5' 122° 45.5'	79	S,bottom	Di,P	15
61	10/15-16/55	HS	48° 34.7' 123° 13.0'	276	5,bottom	Di,G,P	13
62	11/1/55	HS	48° 34.7' 123° 12.9'	277	5,bottom	Di,P	9
63	11/28-29/55	HS	48° 34.2' 123° 12.8'	284	5,bottom	Di,P	14
64	11/29/55	HS	48° 34.5' 123° 11.5'	211	5,bottom	Di,P	21

CURRENT STATION NO. 1

Middle Channel
 LAT. 48° 27.9' N LONG 122° 57.0' W
 30 July 1948

Currents at depth with the Ekman meter											
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
3	1027	2.95	010	4	1305	1.60	000	5	1436	0.51	325
3	1044	1.71	350	4	1316	1.42	010	30	1440	0.04	---
3	1046	1.76	020	10	1321	1.41	355	20	1445	0.31	005
3	1049	1.67	355	20	1325	1.37	330	5	1449	0.46	000
10	1055	1.61	010	25	1330	1.17	000	30	1453	0.07	---
20	1101	1.57	010	30	1334	0.76	320	5	1458	0.39	010
27	1108	0.42	320	34	1339	0.73	---	30	1501	0.10	---
23	1113 ¹ / ₂	1.52	340	30	1352	0.56	350	5	1505	0.45	015
30	1125	1.10	340	25	1356	0.68	350	20	1511	0.26	115
5	1140	1.52	005	20	1400	0.84	355	5	1520	0.12	---
5	1143	1.61	030	10	1404	0.98	005	30	1531	0.44	180
25	1144	1.16	---	5	1407	0.96	005	5	1537	0.31	160
25	1150	1.46	013	30	1412	0.17	345	5	1600	0.51	165
10	1153	1.74	000	5	1417	0.78	005	20	1605	0.81	160
30	1158	1.65	320	10	1421	0.70	005	10	1609	0.65	150
20	1205	1.39	000	20	1427	0.44	355				
4	1209	1.19	355	30	1431	0.15	105				

Surface currents by captive drift pole								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
1008	2.37		1105	2.25		1257	1.42	
1010	1.51		1107	1.82		1328	1.31	
1013	2.09		1110	2.03		1330	1.39	
1014	1.95	335	1116	1.92		1354	1.13	005
1015	2.54	330	1119	2.84		1401	0.92	355
1019	2.45	000	1134	2.29		1426	0.72	---
1051	1.73		1137	1.73		1411	0.54	000
1054	2.37		1140	1.73		1416	0.55	005
1055	2.26		1143	1.73		1454	0.34	355
1058	1.97		1214	1.65				

CURRENT STATION NO. 2

San Juan Channel (off Yellow Island)
 LAT. 48° 35.0' N LONG. 123° 02.6' W
 6 August 1948

Surface currents by Price meter and captive drift pole								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
0956	1.12		1105	1.17		1323	0.33	
1000	0.98		1106	1.28		1325	0.33	
1002	1.11		1109	1.17		1330	0.56	
1007	0.88		1113	1.33	063	1336	0.78	056
1014	0.95		1117	1.29		1338	0.54	
1016	1.17		1124	1.28	058	1340	0.52	
1019	1.26		1130	0.95		1342	0.30	
1027	1.17		1136	0.95		1343	0.39	
1028	1.28		1142	0.98		1350	0.69	
1031	0.96		1149	1.15		1355	0.61	100
1038	0.95		1154	1.10	062	1357	0.61	
1041	1.06		1200	1.08	072	1427	0.78	
1044	1.00		1217	0.95		1429	0.28	
1049	0.93		1225	0.88		1433	0.34	
1053	0.94		1249	0.65		1437	0.26	
1059	0.98		1250	0.12		1444	0.24	168
1101	1.20		1320	0.19		1455	0.21	133
1103	1.28		1322	0.13				

Currents at depth with the Ekman														
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)			
5	0959	1.04	---	25	1350	0.20	---	75	1609	1.48	093			
	1017	1.23	268		1400	0.20	343		100	1036	1.05	238		
	1057	1.23	293		1435	0.40	043			1127	0.52	235		
	1146	1.14	286		1525	0.82	103			1222	0.15	355		
	1238	0.73	266		1602	0.66	073			1407	1.29	080		
	1313	0.46	323		30	1200	1.14		263		1420	1.44	085	
	1430	0.25	283		40	1203	0.95		290		1450	1.59	067	
	1527	0.21	133		50	1027	1.16		263		1510	1.34	055	
	1605	0.51	063			1108	1.06		283		1538	0.39	070	
	1617	0.31	---			1207	1.01		293		1548	1.06	070	
	1618	0.42	043			1354	0.21		073		1615	1.29	080	
	10	1149	1.09		283	1443	0.88		073		about 130	1048	0.65	225
		1347	0.42		323	1523	0.77		073			1136	0.32	220
	15	1150	1.04		283	1559	1.22		070			1244	0.45	355
25		1021	1.02	266	60	1555	1.33	093		1504	1.06	056		
	1103	1.36	267	75	1217	0.32	263		1531	0.79	040			
	1156	1.19	276		1518	1.42	056							
	1255	0.51	233		1543	1.48	086							

CURRENT STATION NO. 3

Northeast of Hein Bank
 LAT. 48° 23' N LONG. 123° 00' W
 7 August 1948

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1041	1.35	220	25	1356	0.07	240
10	1045	1.33	230	5	1400	0.73	310
23 $\frac{1}{2}$	1048	1.63	215	25	1404	0.18	330
55	1058	1.43	210	50	1408	0.56	120
71 $\frac{1}{2}$	1105	0.37	190	38	1414	0.13	340
86	1110	0.40	275	74	1423	1.23	150
96	1116	0.10	---	102	1428	0.51	060
99	1128	0.31	120	5	1433	0.54	340
5	1140	1.23	220	25	1437	0.06	---
23 $\frac{1}{2}$	1144	1.23	210	15	1442	0.28	030
53	1148	1.19	210	38	1446	0.51	110
74	1154	0.57	210	50	1452	0.87	140
64	1159	0.85	220	76	1500	0.96	120
82	1203	0.63	190	101	1506	0.52	040
103	1210	0.72	180	128	1515	0.65	010
126	1219	0.33	160	5	1522	0.90	330
3	1225	0.66	---	25	1525	0.40	065
5	1230	0.66	250	49	1530	0.69	110
5	1340	0.68	310	74	1536	0.92	130
107	1343	0.32	110	120	1543	0.40	010
53	1352	0.54	120				

CURRENT STATION NO. 4

Admiralty Inlet
 LAT. 47° 59.5' N LONG. 122° 36.0' W
 8 - 9 December 1949

Price meter with chronograph								
Time	Current (Kts.) at			Dir	Time	Current (Kts.) at		
	5 m	7 1/2 m				5 m	7 1/2 m	Dir
	<u>8 Dec '49</u>					<u>8 Dec '49</u>		
1350	0.50			Ebb	1910	1.31	1.38	Flood
1400	0.39				20	1.59	1.39	
10	0.36				30	1.85	1.54	
20	0.21				40	1.95	1.57	
30	0.29				50	2.29	1.69	
40	0.24				2000	2.50	1.69	
50	0.13				10	2.64	1.97	
1500	0.12				20	2.77	2.11	
10	0.20				30	3.03	2.25	
20	0.41				40	3.05	2.37	
30	0.53				50	3.10	2.50	
40	0.48	0.97			2100	2.90	2.50	
50	0.50	0.99			10	3.17	2.77	
1600	0.33	1.10			20	3.24	2.77	
10	0.26	1.06			30	2.90	2.91	
20	0.28	1.14			40	2.90	2.91	
30	0.44	1.06			50	2.70	2.91	
40	0.44	1.00			2200	2.90	2.77	
50	0.37	0.92			10	2.90		
1700	0.21	0.79			20	2.70	2.50	
10	0.06	0.60			30	2.56	2.63	
20	0.02	0.57			40	2.63	2.50	
30	0.29	0.51			50	2.50	2.31	
40	0.41	0.31			2300	2.24	2.31	
50	0.43	0.23			10	2.25	2.11	
1800	0.33	0.20		Flood	20	1.98	1.98	
10	0.52	0.20			30	1.98	1.85	
20	0.49	0.32			40	1.80	1.65	
30	0.48	0.44			50	1.65	1.45	
40	1.06	0.57				<u>9 Dec '49</u>		
50	1.11	1.10			0000	1.52	1.33	
1900	1.16	1.11			10	1.27	1.11	

CURRENT STATION NO. 4 (Cont'd)

Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	74 m	Dir		5 m	74 m	Dir
0020	1.20	0.77	Flood	0500	3.03		Ebb
30	0.98	0.42		10	2.76		
40	0.76	0.15		20	2.76		
50	0.58	0.18		30	2.50		
0100	0.40	0.40	Ebb	40	2.50		
10	0.39	0.42		50	2.30		
20	0.35	0.50		0600	1.85		
30	0.43	0.83		10	1.85		
40	0.52	0.64		20	1.72		
50	0.76	1.14		30	1.45		
0200	1.06	1.51		40	1.43		
10	0.95	1.47		50	1.31		
20	1.32	1.28		0700	1.71		
30	1.57	1.34		10	1.85		
40	1.40	1.40		20	1.71		
50	1.39	1.31		30	1.57		
0300	1.85	1.65		40	1.52		
10	1.43			50	1.37		
20	1.63			0800	1.26		
30	2.50			10	1.15		
40	2.11			20	1.09		
50	2.11			30	1.04		
0400	2.37			40	0.98		
10	2.76			50	0.90		
20	2.91			0900	0.79		
30	3.17			10	0.73		
40	3.03			20	0.66		
50	2.91			30	0.47		

Currents at depth with the Ekman meter 8 December 1949								
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)	
5	1047	1.61	000	45	1218	0.60	355	
	1130	1.58	000		1551	0.34	150	
	1222	1.24	010		60	1623	0.55	165
	1546	0.49	120		60	1633	0.55	165
	1654	0.41	050		75	1602	0.83	175
	1719	0.26	020		75	1706	0.68	160
	10	1713	0.33		030	90	1205	0.18
20	1701	0.16			1230	0.41	230	
30	1645	0.19	105		1615	0.91	160	
45	1147	0.74	340					

CURRENT STATION NO. 5

Admiralty Inlet
 LAT. 47° 59.8' N LONG 122° 35.7' W
 11 January 1950

Price meter with chronograph								
Time	Current (Kts.) at			Time	Current (Kts.) at			
	5 m	80 m	Dir		5 m	80 m	Dir	
1150	---	1.08	Ebb	1720	1.07	0.40	Ebb	
1200	↓	1.06	↓	30	0.53	0.39	↓	
10		1.04		40	0.41	0.45		
20		0.98		50	0.35	0.35		
30		0.97		1800	0.24	0.30		Flood
40		0.84		10	0.20	0.55		
50		0.66		20	0.18	0.47		
1300		0.66		30	0.17	0.50		
10		0.76		40	0.25	0.66		
20		0.66		50	0.26	0.53		
30		0.64		1900	0.24	0.64		
40		1.39		10	0.35	0.72		
50	↓	1.50		20	0.42	0.72		
1400	3.03	1.57		30	0.43	0.71		
10	2.90	1.52		40	0.46	0.71		
20	2.77	1.19		50	0.39	0.77		
30	2.77	0.98		2000	0.61	0.59		
40	2.90	0.84		10	0.92	1.32		
50	2.64	0.71		20	1.13	1.66		
1500		0.59		30	0.96	1.23		
10	2.64	0.37		40	0.99			
20	2.51	0.37	50	0.96				
30	1.98	0.33	2100	0.96				
40	1.98	0.35	10	1.03				
50	1.66	0.48	20	0.90				
1600	1.66	0.36	30	0.90				
10	1.69	0.41	40	0.94				
20	1.61	0.43	50	0.96				
30	1.27	0.17	2200	0.86				
40	1.29	0.19	10	0.85				
50	----	0.30	20	0.86				
1700	----	0.18	30	0.75				
10	----	0.37						

Currents at depth with the Ekman meter											
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1603	1.84	355	35	1451	1.58	355	75	1525	0.55	330
5	1646	1.24	000	48	1631	0.81	010	77	1608	0.54	330
10	1535	1.81	355	55	1438	0.74	335	80	1543	0.44	325
22	1500	1.69	355	61	1511	1.14	340	85	1637	0.17	293
25	1650	0.84	350	70	1620	0.43	340				

CURRENT STATION NO. 6

Admiralty Inlet
 LAT. 48° 00.4' N LONG. 122° 36.3' W
 8 February 1950

Price meter with chronograph							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	75 m	Dir		5 m	75 m	Dir
1110	----	1.79	Ebb	1600	0.60	----	Ebb
20	----	1.53	↓	10	0.48	↓	Ebb
1130	2.94	1.82		20	0.41		Ebb
40	3.82	2.16		30	0.36		Slack
50	3.51	2.14		40	0.31		Flood
1200	3.82	2.37		50	0.38		
10	3.75	2.11		1700	0.51		
20	3.56	1.98		10	0.55		
30	3.56	1.60		20	0.59		
40	3.56	----		30	0.75		
50	3.49			40	0.70		
1300	3.37			50	0.68		1.48
10	3.49			1800	0.72		1.77
20	3.42			10	0.70		1.56
30	3.29			20	0.76		1.87
40	3.18			30	1.07		1.87
50	2.90		40	1.22	2.01		
1400	2.65	1.33	50	1.15	----		
10	2.50	1.20	1900	1.26	----		
20	----	0.91	10	1.35	----		
30	2.10	0.63	20	1.29	1.94		
40	1.98	0.91	30	1.28	1.80		
50	1.87	0.46	40	1.29	1.69		
1500	1.49	0.30	50	1.24	1.65		
10	1.38	0.24	2000	1.05	1.71		
20	1.26	0.68	10	0.93	1.47		
30	1.10	----	20	0.92	1.26		
40	0.60	----	30	1.13	1.06		
50	0.78	----					

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1448	1.60	355	80	1455	0.33	315
5	1512	1.24	355	85	1417	0.84	345
25	1443	1.74	350	90	1143	2.64	355
50	1503	0.70	010	90	1359	1.52	145
60	1432	1.05	010				

CURRENT STATION NO. 7

Admiralty Inlet
 LAT. 47° 58.9'N LONG. 122° 38.6'N
 9 February 1956

Price meter with chronograph								
Time (+8)	Current (Kts.) at			Dir	Time (+8)	Current (Kts.) at		
	5 m	40 m	Dir			5 m	40 m	Dir
1010	0.90			Ebb	1550	1.34	0.33	Ebb
20	1.38				1600	1.22	0.27	
30	----				10	1.06	0.18	
40	1.20				20	0.88	0.17	
50	1.20				30	0.75	0.15	
1100	1.56				40	0.69	0.13	
10	1.24				50	0.55	0.28	
20	1.24	1.05			1700	0.41	0.37	
30	1.43	0.97			10	0.30	0.44	
40	1.38	1.20			20	0.09	0.43	
50	----	1.21			30	0.04	0.49	
1200	----	1.36			40	0.07	0.64	Flood
10	1.28	1.34			50	0.17	0.77	
20	1.08	1.21			1800	0.26	0.84	
30	1.10	1.16			10	0.17	0.86	
40	1.26	1.24			20	0.19		
50	1.20	1.27			30	0.32		
1300	1.01	----			40	0.33		
10	1.08	----			50	0.45		
20	1.13	----			1900	0.46		
30	1.06	0.93			10	0.59		
40	1.20	0.89			20	0.72		
50	1.30	0.85			30	0.78		
1400	1.45	0.78			40	0.89		
10	1.58	0.72			50	0.81		
20	1.50	0.63			2000	0.75		
30	1.39	0.63			10	0.75		
40	1.45	0.65			20	0.78		
50	1.34	0.55			30	0.78		
1500	1.30	0.54			40	0.70		
10	1.30	0.37			50	0.80		
20	1.36	0.44			2100	0.74		
30	1.45	0.34			10	0.59		
40	1.47	0.30						

CURRENT STATION NO. 7 (Cont'd)

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1041	1.20	018	40	1029	0.52	310
	1136	1.19	003		1124	0.91	073
	1331	0.97			1149	1.21	325
	1337	1.02	003		1317	0.87	353
	1422	1.37	023		1410	0.64	245
	1538	1.31	023		1435	0.66	355
	1656	0.42	033		1526	0.19	003
	1900	0.54	170		1719	0.41	158
	1652	0.06			1838	1.12	
10	1036	0.51	013	60	1847	1.04	183
	1131	1.00			1019	0.78	310
20	1139	1.03	345	1115	0.89	320	
	1325	1.08	333	1155	1.72	015	
	1417	0.78	018	1251	1.50	000	
	1533	0.41	028	1517	0.43	043	
	1647	0.30	263	1632	0.60	123	
	1855	0.81	180	1702	0.80	133	
	1046	0.42	058	1815	0.58		
	1143	1.08	303	1827	0.61	185	
30							
30							

CURRENT STATION NO. 9

Hood Canal
 LAT. 47° 56.0' N LONG. 122° 38.1' W
 28 - 29 March 1950

Price meter with chronograph							
Time	Current (Kts.)			Time	Current (Kts.)		
	at				at		
	5 m	60 m	Dir	5 m	60 m	Dir	
(28 March 50)				(28 March 50)			
1540	1.00	0.82	Ebb	2110	0.68	0.39	Flood
50	1.42	1.11		20	0.65	0.41	
1600	1.60	0.98		30	0.54	0.40	
10	1.51	0.81		40	0.36	0.37	
20	1.34	0.68		50	----	0.48	
30	1.30	0.51		2200	----	0.44	
40	1.24	0.64		10	0.62	0.41	
50	1.27	0.52		20	0.63	0.49	
1700	1.20	0.50		30	0.50	0.54	
10	1.25	0.40		40	0.39	0.44	
20	1.16	0.32		50	0.66	----	
30	1.21	0.26		2300	0.60	0.40	
40	1.03	0.26		10	0.55	----	
50	0.95	0.34		20		----	
1800	0.91	0.33		30			
10	0.88	0.18		40			
20	0.76	0.17		50			
30	0.47	0.10		(29 March 50)			
40	0.22	----		0000			
50	0.22	----	Flood	10			
1900	0.29	0.04		20			
10	0.36	0.18		30			
20	0.36	0.06		40			
30	0.32	0.22		50			
40	0.43	0.36		0100		0.36	Ebb
50	0.43	0.32		10	0.28	0.45	
2000	0.50	0.38		20	0.12	0.48	
10	0.36	0.34		30	0.17	0.47	
20	0.49	0.46		40	0.22	0.30	
30	0.45	0.45		50	0.20	0.28	
40	0.58	0.44		0200	0.28	0.24	
50	0.54	0.47		10	0.40	0.25	
2100	0.49	0.45		20	0.36	0.21	

CURRENT STATION NO. 9 (Cont'd)

Time	Current (Kts.)			Time	Current (Kts.)		
	at				at		
	5 m	60 m	Dir		5 m	60 m	Dir
	(29 March 50)				(29 March 50)		
0230	0.36	0.20	Ebb	0800	0.32	0.30	
40	0.42	0.13		10	0.32	0.32	Flood
50	0.45	0.17		20	----	----	
0300	0.48	0.16		30	0.35	0.27	
10	0.46	0.14		40	0.24	0.03	
20	0.45	0.12		50	0.22	0.05	
30	0.45	0.08		0900	0.24	0.05	
40	0.35	0.04		10	0.22	0.18	
50	0.35	0.03		20	0.20	0.19	
0400	0.40	0.10		30	0.33	0.08	
10	0.49	0.07		40	0.37	0.00	
20	0.33	0.03		50	0.24	0.06	
30	0.26	----		1000	0.26	0.05	
40	0.18	0.15		10	0.55	0.06	
50	0.18	0.18		20	0.55	0.10	
0500	0.27	0.22		30	0.57	0.06	
10	0.49	0.18		40	0.45	0.06	
20	0.30	0.30		50	0.35	0.00	
30	0.40	0.23		1100	0.21	0.10	
40	0.58	0.35		10	0.26	0.05	
50	0.63	0.30		20	0.13	0.04	
0600	0.64	0.17		30	0.11	0.06	
10	0.76	0.14		40	0.02	0.05	Flood
20	0.68	0.19		50	0.10	0.11	
30	0.65	0.21		1200	0.14	0.16	Ebb
40	0.61	0.17		10	0.12	0.14	
50	0.56	0.25		20	0.05	0.12	
0700	0.51	0.24		30	0.25	0.06	
10	0.39	0.22		40	0.38	0.09	
20	0.34	0.13		50	0.43	0.12	
30	0.50	0.22		1300	0.36	0.11	
40	0.32	0.10		10	0.33	0.12	
50	----	0.10		20	0.35	0.15	

CURRENT STATION NO. 9 (Cont'd)

Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	60 m	Dir		5 m	60 m	Dir
<u>29 March 1950</u>				<u>29 March 1950</u>			
1330	0.32	0.19	Ebb	1540	0.49	0.50	Ebb
40	0.35	0.17		50	0.42	0.48	
50	0.38	0.15		1600	0.44	0.47	
1400	0.37	0.17		10	0.52	0.56	
10	0.30	0.20		20	0.60	0.56	
20	0.28	0.20		30	0.60	0.58	
30	0.29	0.21		40	0.57	0.82	Ebb
40	0.35	0.27		50	0.86	0.85	
50	0.30	0.26		1700	0.79	0.77	
1500	0.32	0.43		10	0.68	0.70	
10	0.33	0.44		20	0.66	0.66	
20	0.38	0.43		30	0.64	0.61	
30	0.40	0.45		40	0.55	0.54	

Currents at depth with Ekman meter								
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)	
<u>28 March 1950</u>				<u>29 March 1950</u>				
2	1748	0.92	323	5	0938	0.35	133	
5	1645	1.09	253		1048	0.36	153	
	1719	0.98	143		1140	0.14	153	
	1741	0.84	203		1312	0.32	---	
30	1638	0.51	000		1657	0.92	350	
	1650	0.46	350	30	0942	0.28	153	
	1713	0.47	153		1053	0.20	163	
	1723	0.30	153		1134	0.00	---	
45	1633	0.54	---		1148	0.35	233	
60	1617	0.69	223		1306	0.20	153	
	1655	0.50	163		1700	1.01	003	
	1728	0.28	233	60	0950	0.07	153	
90	1605	0.59	163		1100	0.00	---	
	1703	0.24	333		1123	0.07	053	
	1735	0.04	---		1316	0.40	048	
	1752	0.24	133		1706	0.65	010	
<u>29 March 1950</u>					80	1717	0.58	025
2	1014	0.48	143	90	1002	0.26	163	
	1145	0.03	---		1110	0.17	233	
	1300	0.35	003		1325	0.27	---	
	1651	0.97	263					

CURRENT STATION NO. 10

Admiralty Inlet
 LAT. 47° 59.0' N LONG. 122° 37.2' W
 29 - 30 March 1950

Price meter with chronograph								
Time	Current (Kts.) at			Dir	Time	Current (Kts.) at		
	5 m	66 m				5 m	66 m	Dir
	(29 Mar 50)					(29 Mar 50)		
1645	0.87	0.88			2330	1.55	1.66	Flood
50	0.90	0.87	Ebb		40	1.50	1.90	
55	0.85	0.80			50	2.00	1.66	
1700	0.85	0.73				(30 Mar 50)		
05	0.83	0.76			0000	1.91	1.55	
10	0.77	0.70			10	1.82	1.30	
15	0.75	0.60			20	1.82	1.37	
20	0.87	0.66			30	1.65	1.20	
25	0.81	0.57			40	1.75	1.14	
30	0.80	0.64			50	1.74	1.10	
35	1.00	0.68			0100	1.62	0.73	
40	0.90	0.55			10	1.53	0.69	
1910	2.05	----			20	1.25	0.65	
20	1.70	0.64			30	1.26	0.65	
30	1.41	0.81			40	1.10	0.55	
40	1.60	0.38			50	1.12	0.51	
50	1.24	0.65			0200	1.14	0.34	
2000	1.07	0.97			10	1.21	0.13	
10	1.38	0.44			20	1.09	0.11	
20	0.82	0.63			30	1.00	0.17	
30	0.80	0.54	∇		40	0.94	0.17	
40	0.75	0.71	Flood		50	0.75	0.19	Ebb
50	0.63	0.42			0300	0.66	0.20	
2100	0.36	0.45			10	0.47	0.28	
10	0.52	0.65			20	0.40	0.22	
20	0.63	0.76			30	0.23	0.27	
30	0.70	0.62			40	0.19	0.26	
40	0.96	0.60			50	0.27	0.28	
50	1.15	0.79			0400	0.21	0.27	
2200	0.73	1.01			10	0.29	0.52	
10	0.80	0.93			20	0.26	0.58	
20	0.70	0.94			30	----	----	
30	1.25	1.13			40	0.36	0.60	
40	1.28	1.38			50	0.38	0.47	
50	1.35	1.45			0500	0.43	0.67	
2300	1.40	1.35			10	0.36	0.62	
10	1.42	1.45			20	0.35	0.77	
20	1.47	1.56			30	0.33	0.45	

CURRENT STATION NO. 10 (Cont'd)

Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	66 m	Dir		5 m	66 m	Dir
	(30 Mar 50)				(30 Mar 50)		
0540	0.29	1.00	Ebb	1230	----	----	Flood
50	0.58	0.94		40	----	----	
0600	0.63	0.70		50	----	----	
10	0.45	0.65		1300	----	0.59	
20	1.02	1.25		10	----	0.45	
30	1.16	0.80		20	----	0.53	
40	2.00	0.97		30	----	0.36	
50	2.20	0.86		40	----	0.19	Ebb
0700	2.25	0.90		50	----	0.13	
10	2.30	0.74		1400	----	0.15	
20	2.33	0.72		10	----	----	
30	2.28	0.46		20	----	0.19	
40	1.89	0.62		30	0.33	0.24	
50	1.47	0.72		40	0.32	0.24	
0800	1.38	0.51		50	0.18	0.37	
10	1.17	0.37		1500	0.22	0.46	
20	1.05	0.49		10	0.28	0.35	
30	1.00	0.61		20	0.34	0.43	
40	1.36	0.34		30	0.35	0.48	
50	1.35	0.33		40	0.42	0.39	
0900	1.17	0.55		50	0.56	0.21	
10	1.10	0.12		1600	1.55	0.74	
20	1.04	0.37		10	2.16	0.69	
30	1.12	0.36		20	2.40	1.00	
40	0.97	0.49		30	2.28	1.13	
50	0.88	0.45		40	2.15	1.10	
1000	0.76	0.49	Flood	50	2.20	1.35	
10	0.60	0.16		1700	2.35	1.32	
20	0.42	0.21		10	2.45	1.30	
30	0.34	0.16		20	2.48	1.38	
40	0.45	0.12		30	2.45	1.50	
50	0.24	0.28		40	2.57	1.48	
1100	0.24	0.35		50	2.23	1.49	
10	0.36	0.45		1800	2.40	1.50	
20	0.24	0.24		10	2.16	1.80	
30	0.38	0.25		20	2.10	1.95	
40	0.42	0.32		30	2.04	2.00	
50	0.58	0.32		40	1.60	1.97	
1200	0.40	0.50		50	1.98	1.42	
10	0.39	0.65		1900	2.07	1.25	
20	0.19	0.75					

CURRENT STATION NO. 10 (Cont'd)

30 March 1950

Currents at depth with the Ekman meter								
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)	
2	0948	0.86	213	30	1701	1.43	340	
	1121	0.27	153		60	1002	0.35	118
	1435	0.40	183			1141	0.30	163
5	0952	0.95	005	1453	0.51	300		
	1023	0.34	183	1633	0.99	353		
	1130	0.45	153	1705	1.12	353		
	1440	0.18	153	90	1010	0.21	153	
	1510	0.36	003		1146	0.25	153	
20	1018	0.27	243	1500	0.36	353		
20	1655	1.72	335	1650	0.41	343		
30	0957	0.60	113	1711	0.72	353		
	1135	0.80	143	102	1159	0.27	158	
	1445	0.37	183					

CURRENT STATION NO. 11

Admiralty Inlet
 LAT. 47° 59.8' N LONG. 122° 35.4' W
 30 - 31 March 1950

Price meter with chronograph							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	36 m	Dir		5 m	36 m	Dir
	(30 Mar 50)				(31 Mar 50)		
1950	1.50	0.37	Flood	0030	2.70	2.11	Flood
2000	1.33	0.18		0040	----	----	
2010	1.08	0.57		0050	2.50	2.29	
2020	0.87	0.32		0100	2.96	----	
2030	0.72	0.15		0110	2.50	----	
2040	0.53	0.22		0120	2.34	1.98	
2050	0.36	0.28		0130	2.22	1.86	
2100	0.46	0.57		0140	1.88	----	
2110	0.35	0.74		0150	1.58	1.79	
2120	0.79	0.90		0200	1.33	1.80	
2130	0.69	1.00		0210	1.16	1.42	
2140	0.96	0.99		0220	1.12	1.17	
2150	0.90	0.95		0230	1.46	1.12	
2200	0.90	0.95		0240	1.19	1.04	
2210	1.12	1.13		0250	1.20	0.92	
2220	1.21	1.45		0300	1.16	0.80	
2230	1.21	1.71		0310	1.13	0.34	
2240	1.20	1.65		0320	0.54	0.15	
2250	2.42	2.10		0330	0.52	0.27	Ebb
2300	2.70	2.04		0340	0.47	0.55	
2310	2.33	2.05		0350	----	0.64	
2320	2.05	2.25		0400	0.58	0.64	
2330	2.20	2.10		0410	0.50	0.63	
2340	2.10	2.08		0420	0.86	0.73	
2350	2.00	2.02		0430	0.75	0.87	
	(31 Mar 50)			0440	0.67	0.88	
0000	2.25	2.05		0450	0.62	0.85	
0010	2.70	2.19		0500	0.60	0.92	
0020	2.80	2.23					

CURRENT STATION NO. 11 (Cont'd)

30 March 1956

Currents at depth with Ekman meter			
Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1950	1.31	---
20	1954	0.79	338
36	1958	0.49	328
60	2005	0.16	293

CURRENT STATION NO. 12

Strait of Juan de Fuca
 LAT. 48° 10.8' N LONG. 122° 48.5' W
 26 April 1950

Price meter with chronograph							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	50 m	Dir		5 m	50 m	Dir
0935	0.25	----	Ebb	1205	1.35	0.30	Ebb
40	0.25	0.65		10	1.35	0.30	
45	0.35	0.70		15	1.40	0.35	
50	0.30	0.60		20	1.30	0.40	
55	0.60	0.70		25	1.50	0.40	
1000	0.75	0.65		30	1.55	0.45	
05	0.88	0.45		35	1.55	0.45	
10	0.90	0.40		40	1.60	0.45	
15	0.85	0.50		45	1.58	0.45	
20	0.90	0.60		50	1.60	0.45	
25	0.92	0.65		55	1.60	0.45	
30	0.90	0.58		1300	1.70	0.45	
35	0.85	0.55		05	1.65	0.50	
40	0.85	0.60		10	----	0.65	
45	0.90	0.50		15	2.00	0.65	
50	0.90	0.45		20	2.00	0.65	
55	0.90	0.42		25	2.15	0.70	
1100	0.85	0.40		30	2.10	0.65	
05	0.90	0.38		35	0.70	2.15	
10	0.80	0.40		40	0.75	2.10	
15	0.90	0.40		45	0.80	2.20	
20	0.95	0.38		50	0.80	2.20	
25	1.00	0.38		55	0.90	2.30	
30	1.00	0.38		1400	0.95	2.25	
35	1.02	0.35		05	1.00	2.15	
40	1.05	0.32		10	1.00	2.35	
45	1.05	0.30		15	1.05	----	
50	1.10	0.30		20	1.05	2.40	
55	1.20	0.30		25	1.02	----	
1200	1.30	0.30					

Currents at depth with the Ekman meter			
Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1116	0.94	260
20	1119	0.94	265
50	1126	0.35	083
70	1141	0.31	123

CURRENT STATION NO. 13

Strait of Juan de Fuca
 LAT. 48° 12.2' N LONG. 122° 47.4' W
 1 May 1950

Price meter with chronograph							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	58 m	Dir		5 m	58 m	Dir
1145	2.40	2.50	Flood	1735	0.65	0.30	Ebb
30	2.50	2.40		40	0.65	0.35	
35	2.15	2.30		45	0.75	0.38	
40	2.30	2.35		50	0.70	0.30	
45	2.25	2.25		55	0.75	0.35	
50	2.05	2.15		1800	0.90	0.40	
55	2.25	2.00		05	1.00	0.45	
1500	2.30	2.05		10	0.90	0.40	
05	2.05	2.05		15	1.00	0.45	
10	1.85	1.95		20	0.95	0.45	
15	1.95	1.90		25	----	0.45	
20	1.85	1.75		30		0.45	
25	1.65	1.80		35		0.60	
30	1.70	1.80		40		0.55	
35	1.50	1.70		45		0.55	
40	1.40	1.65		50		0.60	
45	1.65	1.55		55		0.60	
50	1.60	1.55		1900		0.60	
55	1.15	1.50		05		0.60	
1600	1.25	1.45		10		0.60	
05	1.20	1.50		15		0.95	
10	0.85	1.30		20		1.15	
15	1.15	1.35		25		1.35	
20	1.10	1.30		30		1.40	
25	1.00	1.20		35	✓	1.45	
30	1.25	1.30		40	1.30	1.35	
35	1.05	1.25		45	----	1.40	
40	0.70	1.20		50	1.25	1.40	
45	0.95	1.15		55	1.15	1.40	
50	0.60	1.05		2000	1.40	1.75	
55	0.55	0.80		05	1.30	2.00	
1700	0.50	0.75		10	1.10	2.10	
05	0.50	0.70		15	----	1.90	
10	0.40	0.55		20		2.20	
15	0.35	0.45		25		2.30	
20	0.40	0.45		30		2.15	
25	0.40	0.45		35	1.60	2.45	
30	0.45	0.32	✓	40	----	2.30	✓

CURRENT STATION NO. 14

Strait of Juan de Fuca
 LAT. 48° 12.4' N LONG. 122° 47.5' W
 2 May 1950

Price meter with chronograph							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	48 m	Dir		5 m	48 m	Dir
1210	----	1.05	Flood	1550	1.90	2.30	Flood
1215	----	1.20		1555	2.05	2.25	
1230	----	1.40		1600	2.20	2.45	
1235	----	1.90		1605	1.95	2.10	
1245	2.10	----		1610	2.00	2.20	
1250	2.00	----		1615	1.85	----	
1315	2.45	3.00		1620	1.75	2.05	
1320	2.40	2.95		1625	1.80	2.10	
1325	2.85	2.85		1630	2.05	2.15	
1330	2.70	2.95		1635	1.80	1.95	
1335	2.95	2.75		1640	1.85	2.00	
1340	3.10	2.75		1645	1.75	1.70	
1345	3.15	2.70		1650	1.80	----	
1350	3.00	2.85		1655	1.35	1.75	
1355	2.45	2.95		1700	1.20	1.70	
1400	1.95	2.85		1705	1.20	----	
1405	2.20	2.90		1710	1.10	1.70	
1410	2.50	2.75		1720	0.85	1.35	
1415	2.55	2.85		1725	0.80	1.30	
1420	2.55	2.80		1730	0.85	1.30	
1425	2.50	2.70		1740	0.80	1.30	
1430	2.65	2.60		1745	0.80	1.25	
1435	2.55	2.50		1750	0.95	1.40	
1440	2.55	2.50		1755	0.95	1.15	
1445	2.45	2.60		1800	0.55	0.85	
1450	2.45	2.65		1815	0.60	0.90	
1455	2.45	2.55		1820	0.65	----	
1500	2.35	2.45		1825	0.75	----	
1505	2.40	2.60		1830	0.75	----	
1510	2.45	2.40		1835	0.70	0.55	
1515	2.45	2.45		1840	0.50	0.75	
1520	2.50	2.35		1845	0.65	0.75	
1525	2.55	2.35		1850	0.70	0.65	
1530	2.50	2.35		1855	0.65	0.70	
1535	2.45	2.35		1900	0.80	0.75	
1540	2.25	2.25		1905	----	1.40	Ebb
1545	2.15	----		1910	1.27	----	

CURRENT STATION NO. 14 (Cont'd)

2 May 1950

Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	48 m	Dir		5 m	48 m	Dir
1920	1.28	----	Ebb	2110	1.05	2.10	Ebb
2000	----	0.85	↓	2115	1.00	----	↓
2010	----	0.90					
2015	----	0.90					
2020	----	1.05					
2030	----	1.45					
2040	1.52	2.35					
2045	1.40	2.05					
2050	1.35	1.95					
2055	1.25	1.95					
2100	1.25	2.00					
2105	1.15	2.10					
				2150	1.35	1.80	
				2155	1.45	1.60	
				2200	1.35	1.40	
			2205	1.50	1.55		

CURRENT STATION NO. 15

Strait of Juan de Fuca
 LAT. 48° 10.4' N LONG. 122° 49.3' W
 15 - 16 May 1950

Price meter with chronograph										
Time	Current (Kts.)				Dir	Time	Current (Kts.)			
	at 2 m	5 m	34 m				at 2 m	5 m	34 m	Dir
	(15 May 50)						(15 May 50)			
1630	----	0.55	0.32		Flood	1935	----	1.95	1.30	Ebb
1635		0.50	0.25			1940		0.95	1.00	1.45
1640		0.48	0.22			1945		1.07	1.05	1.50
1645		0.35	0.30			1950		1.00	1.05	1.47
1650		0.40	0.30			1955	----	1.10	1.40	
1655		0.32	0.37			2000		1.10	1.05	1.30
1700		0.32	0.35			2005	----	1.10	1.05	
1705		0.28	0.45			2010		1.10	1.55	1.10
1710		0.28	0.45			2015		2.16	1.95	1.20
1715		0.20	0.50			2020		2.27	1.40	1.10
1720		0.22	0.50			2025	----	1.85	1.35	
1725		0.22				2030		2.30	2.15	1.25
1730		0.30				2035	----	1.50	1.55	
1735		0.25				2040		2.30	2.05	1.30
1740		0.40			Ebb	2045		1.99	2.15	1.10
1745		0.95				2050		2.22	1.90	1.50
1750		1.50	0.75			2055	----	1.85	1.00	
1755		1.30	0.65			2100		1.82	1.85	1.35
1800		1.15	0.60			2105	----	1.60	1.45	
1805		1.10	0.70			2110		1.57	1.30	1.20
1810		1.00	0.80			2115		1.46	1.40	1.05
1815		0.95	0.80			2120		1.41	1.30	0.85
1820		0.90	0.80			2125	----	1.20	0.70	
1825		1.10	0.75			2130		1.15	1.05	0.55
1830	1.07	----	----			2135	----	1.00	0.50	
1835	----	1.35	0.75			2140		1.00	0.95	0.47
1840	1.40	1.25	0.70			2145		0.93	0.90	0.45
1845	1.19	1.30	0.70			2150		0.76	0.80	0.50
1850	1.32	1.25	0.75			2155	----	0.65	0.50	
1855	----	1.20	0.80			2200		0.51	0.55	----
1900	1.22	1.00	0.80			2205	----	0.55	----	
1905	----	1.20	0.85			2210		0.41	0.50	
1910	1.20	1.10	0.85			2215		0.40	0.45	
1915	1.20	1.20	0.75			2220		0.35	0.40	
1920	1.32	1.35	0.90			2225	----	0.35		
1925	----	1.20	0.95			2230		0.20	0.30	Slack
1930	1.10	1.10	1.10			2235	----	0.50		"

CURRENT STATION NO. 15 (Cont'd)

15 - 16 May 1950

Time	Current (Kts.)				Dir	Time	Current (Kts.)				Dir
	2 m	5 m	34 m	at			2 m	5 m	34 m	at	
	(15 May 50)						(15 May 50)				
2240	0.46	0.50	----		Slack	0200	0.84	0.85	0.90	Flood	
2245	0.31	0.40				0205	----	0.90	0.85		
2250	0.28	0.45				0210	0.78	0.85	0.85		
2255	----	0.32			↓	0215	0.70	0.70	0.70		
2300	0.22	0.30	0.60		Flood	0220	0.60	0.60	0.65		
2305	----	0.10	----			0225	----	0.60	0.65		
2310	0.24	0.30	0.60			0230	0.46	0.55	0.55		
2315	0.32	0.32	0.55			0235	----	0.45	0.55		
2320	0.22	0.37	0.55			0240	0.30	0.40	0.50		
2325	----	0.40	0.65			0245	----	0.35	0.40		
2330	0.66	0.70	1.00			0250	0.26	0.37	0.45		
2335	----	0.65	1.02			0255	----	0.45	0.65		
2340	0.67	0.75	1.10			0300	0.28	0.45	0.58	Slack	
2345	0.86	0.85	1.10			0305	----	0.55	----	"	
2350	0.80	0.85	1.00			0310	0.40	0.45		Ebb	
2355	----	0.85	1.10		↓	0315	----	----			
	(16 May 50)					0320	----	----			
0000	0.76	0.80	1.20		Flood	0325	----	----			
0005	----	0.85	1.25			0330	----	----			
0010	0.80	0.85	1.20			0335	----	----			
0015	0.81	0.85	1.25			0340	----	0.95			
0020	0.93	0.85	1.20			0345	1.08	1.05			
0025	----	0.87	1.15			0350	0.90	0.95			
0030	0.92	0.95	1.10			0355	----	0.90			
0035	----	1.00	1.10			0400	1.22	----			
0040	0.97	1.00	1.05			0405	----	0.95			
0045	1.01	1.05	0.95			0410	1.00	1.10			
0050	1.12	1.10	0.90			0415	1.38	1.40			
0055	----	1.05	0.85			0420	1.48	1.40			
0100	1.12	1.10	0.85			0425	----	1.35			
0105	----	1.10	0.85			0430	1.43	1.40			
0110	1.08	1.15	0.85			0435	----	1.35			
0115	1.00	1.10	0.85			0440	1.50	1.45			
0120	1.10	1.05	0.85			0445	1.56	1.55			
0125	----	1.05	0.90			0450	1.70	1.65			
0130	1.06	1.05	0.90			0455	----	1.75			
0135	----	1.05	0.95			0500	2.01	1.80			
0140	1.10	1.00	0.85			0505	----	1.80			
0145	0.91	1.00	0.85			0510	1.82	1.80			
0150	0.90	0.95	0.85			0515	1.94	1.85			
0155	----	0.95	0.90		↓	0520	----	1.70		↓	

CURRENT STATION NO. 15 (Cont'd)

15 - 16 May 1950

Time	Current (Kts.)			Time	Current (Kts.)		
	at 2 m	5 m	Dir		at 2 m	5 m	Dir
	(16 May 50)				(16 May 50)		
0525	----	1.90	Ebb	0845	----	0.90	Ebb
0530		1.95		0850		0.70	
0535		1.95		0855		0.75	
0540		1.95		0900		0.90	
0545		2.10		0905		0.55	
0550		2.10		0910		0.52	
0555		2.80		0915		0.65	
0600		3.15		0920		0.55	
0605		3.25		0925		0.60	
0610		----		0930		0.62	
0615		3.55		0935		0.60	
0620		3.40		0940		0.40	
0625		3.50		0945		0.35	
0630		3.30		0950		0.25	
0635		3.30		0955		0.27	Flood
0640		3.10		1000		0.45	
0645		----		1005		0.45	
0650		----		1010		0.55	
0655		----		1015		0.75	
0700		3.05		1020		----	
0705		2.80		1025		1.00	
0710		2.30		1030		0.85	
0715		2.72		1035		0.85	
0720		2.40		1040		1.10	
0725		2.45		1045		1.37	
0730		2.50		1050		1.65	
0735		2.40		1055		1.50	
0740		2.35		1100		1.65	
0745		2.25		1105		1.90	
0750		2.25		1110		1.85	
0755		2.45		1115		1.25	
0800		2.40		1120		1.90	
0805		2.35		1125		1.90	
0810		2.30		1130		1.95	
0815		2.05		1135		2.05	
0820		1.75		1140		2.05	
0825		1.80		1145		2.10	
0830		1.90		1150		2.10	
0835		1.55		1155		2.20	
0840		1.20		1200		2.30	

CURRENT STATION NO. 15 (Cont'd)

15 - 16 May 1950

Time	Current (Kts.) at 5 meters	Dir	Time	Current (Kts.) at 5 meters	Dir
	(16 May 50)			(16 May 50)	
1205	2.40	Flood	1415	2.40	Flood
1210	2.45		1420	2.35	
1215	2.35		1425	2.40	
1220	2.35		1430	2.45	
1225	2.45		1435	2.35	
1230	2.45		1440	2.35	
1235	2.45		1445	2.35	
1240	2.45		1450	2.30	
1245	2.40		1455	2.25	
1250	2.40		1500	2.20	
1255	2.40		1505	2.05	
1300	2.50		1510	2.00	
1305	2.40		1515	2.10	
1310	2.45		1520	2.05	
1315	2.35		1525	1.95	
1320	2.25		1530	1.95	
1325	2.40		1535	1.85	
1330	2.45		1540	1.70	
1335	2.45		1545	1.80	
1340	2.55		1550	1.70	
1345	2.55		1555	1.55	
1350	2.60		1600	1.50	
1355	2.50		1605	1.45	
1400	2.55		1610	1.45	
1405	2.50		1615	1.20	
1410	2.55				

Currents at depth with Ekman meter

16 May 1950

Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	0915	0.72	238	20	1607	1.25	098
	0950	0.28	343		0900	0.75	133
	1050	1.41	033		0928	1.39	263
	1612	1.46	098		0937	0.92	040
20	0910	0.45	223	1036	1.25	042	
	0920	0.60	090	1053	1.60	053	
	0945	0.84	080	1600	0.95	105	
	1041	1.25	073				

CURRENT STATION NO. 16

Strait of Juan de Fuca
 LAT. 48° 10.6' N LONG. 122° 50.2' W
 28 June 1950

Price meter with integrator							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	48 m	Dir		5 m	48 m	Dir
1650	0.66	----	Ebb	2020	0.61	----	Flood
1700	0.62	0.92	↓	30	0.34	↓	↓
10	0.66	1.01					
20	0.72	0.84					
30	0.88	0.75					
40	0.84	0.42					
50	0.81	0.64					
1800	0.80	0.51					
10	0.96	0.47					
20	0.93	----					
30	0.93	↓					
40	0.90	↓					
50	0.65	↓					
1900	0.68	↓					
10	0.51	↓					
20	0.64	0.44					
30	0.55	0.45					
40	0.46	0.45					
50	0.20	0.60					
2000	0.43	----	↓				
10	0.40	----	Flood	30	0.66	1.04	↓
				2200	0.49	0.60	
				10	0.52	0.59	
				20	0.60	0.72	
				50	0.47	0.59	
				40	0.40	↓	
				30	0.46	↓	
				20	0.37	↓	
				10	0.37	↓	
				50	0.33	↓	
				40	0.31	↓	
				30	0.34	↓	
				2020	0.61	↓	

CURRENT STATION NO. 17

Strait of Juan de Fuca
 LAT. 48° 11.9' N LONG. 122° 50.2' W
 29 June 1950

Price meter with chronograph and integrator							
Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	50 m	Dir		5 m	50 m	Dir
0930	2.62	1.82	Ebb	1100	1.81	2.25	Flood
40	2.62	1.60		10	1.75	2.20	
50	2.35	1.00		20	1.85	2.38	
1000	2.04	0.78		30	1.77	2.35	
10	1.99	0.67		40	1.75	2.37	
20	1.73	1.22		50	1.95	2.67	
30	1.89	0.52		1500	1.84	2.43	
40	1.60	0.97		10	1.84	2.54	
50	1.45	1.06		20	1.85	2.55	
1100	1.14	1.09		30	1.69	----	
10	1.07	1.15		40	1.50	2.06	
20	0.96	1.20		50	1.33	1.90	
30	0.90	1.04		1600	1.31	1.95	
40	0.69	0.96		10	1.24	2.05	
50	0.61	0.90		20	1.15	1.71	
1200	0.52	0.94		30	1.00	1.78	
10	0.56	1.23	Flood	40	0.95	1.73	
20	0.61	1.30		50	0.77	1.64	
30	0.75	1.56		1700	0.76	1.50	
40	1.45	1.49		10	0.68	1.56	
50	1.50	1.21		20	0.57	1.44	
1300	1.39	1.52		30	0.52	1.41	
10	1.36	1.58		40	0.58	1.25	Ebb
20	1.09	1.75		50	0.67	1.23	
30	1.39	2.00		1800	0.65	1.00	
40	1.46	2.30		10	0.68	0.99	
50	1.85	2.52		20	0.69	0.90	

CURRENT STATION NO. 18

San Juan Islands
 LAT. 48° 48.0' N LONG. 122° 59.5' W
 7 July 1950

Price meter with chronograph							
Time	Current (Kts.)			Time	Current (Kts.)		
	3 m	at 50 m	°T		3 m	at 50 m	°T
1046	1.40	----	345-	1333	0.25	----	*115
55	1.05	----	350	43	0.70		
1111	1.00	0.40		48	1.05		
22	0.90	0.35		1403	0.70		
32	1.00	0.37		12	0.65	0.35	
42	0.95	0.33		23	0.55		
53	0.95	0.40		33	0.50		
1203	0.75	0.40		39	0.45		
13	0.65	0.35					
23	0.50	0.30					
33	0.50	0.32					
42	0.50	0.30					
53	0.45	0.35					
1303	0.35	0.43					
13	0.35	0.50					
23	0.30	0.30					

Price meter with integrator						
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	
44	0.65	350	12	0.17	* 115	
45	0.55		14	0.33		
47	0.72		16	0.30		
51	0.62		17	0.0		
55	0.80		18	0.80		
1212	0.30		20	0.15		
14	0.35		21	0.20		
17	0.20		22	0.20		
20	0.25		25	0.28		
29	0.22		27	0.01		
31	0.30		30	0.20		
35	0.30		34	0.01		
36	0.23		36	0.60		
45	0.23		40	0.78		
49	0.20		47	0.0		
59	0.23					

* Sudden change to 115°T with crossing of fresh water (1311)

Ekman meter							
Time	Depth (m)	Speed (Kts.)	Set (°T)	Time	Depth (m)	Speed (Kts.)	Set (°T)
05	10	0.44	088	34	50	0.13	---
10	20	0.33	203	42	60	0.16	103
19	30	0.55	236				

CURRENT STATION NO. 19

San Juan Islands
 LAT. 48° 33.6' N LONG. 122° 54.3' W
 11 July 1950

Price meter with chronograph and integrator								
Time	Current (Kts.) at			Dir	Time	Current (Kts.) at		
	5 m	50 m				5 m	50 m	Dir
1210	0.78	0.74		Ebb	1430	0.38	----	Ebb
1220	0.72	0.86			1440	0.26	0.54	
1230	0.61	0.59			1450	0.22	0.32	
1240	0.68	0.54			1500	0.20	0.19	
1250	0.80	0.47			1510	0.27	----	Flood
1300	0.76	0.24			1520	0.36		
1310	0.88	0.52			1530	0.34		
1320	0.89	0.40			1540	0.24		
1330	0.92	0.46			1550	0.21		
1340	0.86	0.35			1600	0.30		
1350	0.37	0.28			1610	0.27		
1400	0.55	0.22			1620	0.30		
1410	0.32	0.25			1630	0.30		
1420	0.39	0.20						

Currents at depth with the Ekman meter 11 July 1950							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1405	0.32	123	20	1505	0.20	343
	1457	0.19	133		29	1452	0.27
10	1410	0.20	093	45	1425	0.28	043
	1501	0.03	---		50	1445	0.20
20	1509	0.23	313	52	1514	0.20	313
	1415	0.29	103			1437	0.50

CURRENT STATION NO. 21

Tacoma Narrows
 LAT. 47°13.2' N LONG 122° 34.9' W
 6 - 8 November 1950

Currents (Kts.)				Currents (Kts.)			
Time	5 m	50 m	Dir.	Time	5 m	50 m	Dir.
6 November 1950							
2000	1.65	1.50	Ebb	0500	1.15	1.30	Ebb
15	1.30	1.05	Ebb	15	1.55	1.35	Ebb
30	1.05	0.85	Ebb	30	1.50	----	Ebb
45	0.85	0.70	Ebb	45	1.65	----	Ebb
2100	0.75	0.40	Ebb	0600	1.85	1.50	Ebb
15	0.45	0.05	Ebb	15	1.45	----	Ebb
30	0.70	----	Ebb	30	1.35	1.40	Ebb
45	0.35	----	Ebb	45	1.65	1.00	Ebb
2200	0.35	----	Ebb	0700	1.35	0.85	Ebb
15	0.80	----	Ebb	15	----	----	Ebb
30	0.50	----	Flood	30	1.15	0.95	Ebb
45	0.60	0.75	Flood	45	1.05	0.90	Ebb
2300	1.00	1.45	Flood	0800	0.95	0.65	Ebb
15	1.40	1.62	Flood	15	0.65	0.50	Ebb
30	1.70	1.85	Flood	30	0.10	----	Ebb
45	1.80	1.80	Flood	45	0.10	----	Ebb
7 November 1950							
0000	2.10	2.00	Flood	0900	----	----	
15	1.85	2.65	Flood	15	----	----	
30	2.10	2.15	Flood	30	----	----	
45	2.10	2.75	Flood	45	----	----	Flood
0100	2.15	2.25	Flood	1000	----	----	Flood
15	2.00	2.50	Flood	15	0.45	----	Flood
30	2.15	2.10	Flood	30	0.55	----	Flood
45	1.65	2.10	Flood	45	0.30	----	Flood
0200	1.25	1.70	Flood	1100	0.40	----	Flood
15	1.50	2.15	Flood	15	----	----	Flood
30	0.95	1.40	Flood	30	1.65	----	Flood
45	0.95	0.85	Flood	45	1.90	1.90	Flood
0300	0.30	----	Flood	1200	2.65	2.50	Flood
15	0.20	----	Flood	15	2.55	----	Flood
30	0.40	----	Ebb	30	2.75	2.50	Flood
45	0.50	----	Ebb	45	2.50	----	Flood
0400	1.10	0.60	Ebb	1300	2.95	2.70	Flood
15	1.10	0.65	Ebb	15	2.75	----	Flood
30	1.00	0.45	Ebb	30	2.55	2.85	Flood
45	1.10	1.20	Ebb	45	2.45	2.45	Flood
				1400	1.70	2.20	Flood
				15	1.45	1.65	Flood
				30	0.70	1.20	Flood
				45	0.35	1.10	Flood

Current Station No. 21 (continued)

Time	Currents (Kts.)			Time	Currents (Kts.)		
	5 m	50 m	Dir.		5 m	50 m	Dir.
1500	0.25	0.65	Flood	0200	2.10	2.35	Flood
15	0.25	----	Ebb	15	2.30	2.30	Flood
30	0.95	----	Ebb	30	2.25	2.25	Flood
45	1.00	----	Ebb	45	2.35	1.95	Flood
1600	0.75	----	Ebb	0300	2.10	1.80	Flood
15	1.15	----	Ebb	15	1.95	1.60	Flood
30	1.45	----	Ebb	30	1.65	1.55	Flood
45	1.55	----	Ebb	45	1.00	0.35	Flood
1700	2.20	----	Ebb	0400	0.20	0.65	Flood
15	----	1.95	Ebb	15	0.10	----	Ebb
30	1.95	1.85	Ebb	30	1.10	----	Ebb
45	2.35	----	Ebb	45	1.20	----	Ebb
1800	2.20	----	Ebb	0500	1.40	----	Ebb
15	2.15	----	Ebb	15	0.90	----	Ebb
30	2.05	2.10	Ebb	30	1.25	----	Ebb
45	----	----	Ebb	45	1.35	----	Ebb
1900	2.15	2.15	Ebb	0600	1.40	----	Ebb
15	2.20	1.60	Ebb	15	1.45	----	Ebb
30	2.30	2.30	Ebb	30	1.55	----	Ebb
45	2.15	2.00	Ebb	45	1.55	----	Ebb
2000	2.05	1.75	Ebb	0700	1.50	----	Ebb
15	1.85	1.85	Ebb	15	1.50	----	Ebb
30	1.50	1.15	Ebb	30	1.60	----	Ebb
45	1.35	0.75	Ebb	45	1.40	----	Ebb
2100	1.30	0.95	Ebb	0800	1.35	----	Ebb
15	1.05	0.75	Ebb				
30	0.65	0.55	Ebb				
45	0.45	0.20	Ebb				
2200	0.40	0.15	Ebb				
15	0.25	0.25	Flood				
30	0.30	0.30	Flood				
45	0.30	0.20	Flood				
2300	0.45	0.80	Flood				
15	1.00	1.50	Flood				
30	1.60	1.75	Flood				
45	0.40	1.90	Flood				
	8 November 1950						
0000	0.25	2.10	Flood				
15	----	----	Flood				
30	----	----	Flood				
45	----	----	Flood				
0100	2.00	1.35	Flood				
15	----	----	Flood				
30	----	----	Flood				
45	2.35	----	Flood				

CURRENT STATION NO. 22

Tacoma Narrows
 LAT. 47° 13.1' N LONG. 122° 34.7' W
 8 November 1950

Time	Price 5 m	Roberts 40 m
1445	0.50	0.45
1500	0.50	0.10
15	0.70	0.35
30	0.60	0.65
45	0.55	0.20
1600	0.30	0.30
15	0.85	----
30	0.70	----
45	0.75	----

CURRENT STATION NO. 24

Tacoma Narrows
 LAT. 47° 13.4' N LONG. 122° 34.4' W
 9 - 10 November 1950

* Price meter with integrater
 ** Roberts meter with integrater

Time	Currents (Kts.)			Time	Current (Kts.)		
	5 m*	40 m**	Dir.		5 m*	40 m**	Dir.
9 November 1950							
1710	0.45	----	Ebb	2300	0.90	----	Ebb
20	----	0.75	Ebb	10	0.60	----	Ebb
30	----	----	Ebb	20	0.55	----	Ebb
40	2.25	1.30	Ebb	30	0.30	----	Flood
50	2.45	1.85	Ebb	40	0.25	----	Flood
1800	2.35	2.05	Ebb	50	0.70	----	Flood
10	2.40	2.35	Ebb	10 November 1950			
20	2.00	----	Ebb	0000	0.75	0.95	Flood
30	2.10	----	Ebb	10	1.15	1.35	Flood
40	2.15	----	Ebb	20	1.35	1.50	Flood
50	2.20	2.10	Ebb	30	1.80	1.65	Flood
1900	2.30	2.25	Ebb	40	2.55	2.20	Flood
10	2.70	2.80	Ebb	50	2.25	2.20	Flood
20	2.35	----	Ebb	0100	1.65	1.90	Flood
30	2.35	2.45	Ebb	10	1.50	1.75	Flood
40	2.40	2.40	Ebb	20	1.45	1.35	Flood
50	2.40	2.25	Ebb	30	0.30	----	Flood
2000	2.35	2.25	Ebb	40	0.25	----	Flood
10	2.40	2.25	Ebb	50	0.25	----	Flood
20	2.45	2.20	Ebb	0200	0.75	----	Ebb
30	2.45	2.15	Ebb	10	0.90	----	Ebb
40	2.40	2.20	Ebb	20	1.15	----	Ebb
50	2.35	2.20	Ebb	30	0.25	----	Ebb
2100	2.30	1.90	Ebb	40	----	----	Ebb
10	----	2.15	Ebb	50	1.00	----	Ebb
20	2.15	2.05	Ebb	0300	----	----	Ebb
30	2.05	1.70	Ebb	10	1.15	----	Ebb
40	1.95	1.50	Ebb	20	1.30	----	Ebb
50	1.80	1.50	Ebb	30	0.75	0.50	Ebb
2200	1.65	1.25	Ebb	40	1.00	0.85	Ebb
10	1.60	1.25	Ebb	50	0.75	0.95	Ebb
20	1.45	0.95	Ebb	0400	0.70	0.55	Ebb
30	1.15	0.35	Ebb	10	0.50	0.45	Ebb
40	1.05	0.25	Ebb	20	0.95	0.40	Ebb
50	0.85	0.40	Ebb	30	1.20	1.15	Ebb
				40	1.15	0.50	Ebb
				50	1.00	1.25	Ebb

Current Stations No. 24 (continued)

Time	Currents (Kts.)		Dir.
	5 m*	40 m**	
0500	0.80	0.75	Ebb
10	1.30	1.10	Ebb
20	1.20	1.25	Ebb
30	1.20	1.15	Ebb
40	1.60	1.10	Ebb
50	1.40	1.30	Ebb
0600	1.30	0.65	Ebb
10	0.75	----	Ebb
20	0.85	0.35	Ebb
30	0.50	0.20	Ebb
40	0.20	----	Ebb
50	0.20	0.25	Ebb
0700	0.30	0.25	Ebb
10	0.35	0.55	Ebb
20	1.15	0.45	Ebb
30	1.25	0.75	Ebb

CURRENT STATION NO. 25

Admiralty Inlet
 LAT. 47° 57.2' N LONG. 122° 35.1' W
 30 April - 2 May 1951

Price meter with integrator

Time	Current (Kts.)			Time	Current (Kts.)			
	at				at			
	5 m	50 m	Dir		5 m	50 m	Dir	
	(30 Apr 51)				(1 May 51)			
1740	1.54	----	Ebb	0000	1.74	1.65	Flood	
1750	1.47	1.20	↓	0010	1.56	1.60	↓	
1800	1.31	1.11		0020	1.38	1.50		
1810	1.20	1.08		0030	1.27	1.50		
1820	1.11	0.78		0040	1.23	1.55		
1830	1.07	0.61		0050	1.20	1.28		
1840	1.02	0.58		0100	1.27	1.10		
1850	0.80	0.41		0110	1.17	1.19		
1900	0.71	0.41		0120	1.05	1.19		
1910	0.54	0.38		0130	1.02	0.89		
1920	0.37	0.31		0140	0.75	0.74		
1930	0.39	0.38		0150	0.51	0.95		
1940	0.40	0.41		Slack	0200	0.39		0.65
1950	0.49	0.41		↓	0210	0.26		0.55
2000	0.75	0.50	0220		0.35	----	Ebb	
2010	0.67	0.56	0230		1.23		↓	
2020	0.53	0.47	0240		0.94			
2030	0.47	0.49	0250		1.36			
2040	0.37	0.45	0300		1.97			
2050	0.19	0.50	0310		2.16			
2100	0.58	0.52	0320		2.12			
2110	0.79	0.26	Flood		0330	1.98		
2120	0.98	1.19	↓		0340	1.69		
2130	1.16	1.50			0350	1.61		
2140	2.05	1.90			0400	1.43		
2150	2.11	1.99			0410	1.33		
2200	2.26	1.99		0420	1.21			
2210	2.10	1.91		0430	1.05			
2220	2.25	2.01		0440	1.22			
2230	2.16	2.12		0450	1.69			
2240	2.23	2.27		0500	1.70			
2250	2.39	2.26		0510	1.69			
2300	2.52	(2.28)		0520	1.54			
2310	2.61	2.70		0530	1.92			
2320	2.22	2.09		0540	2.12			
2330	2.18	2.07	0550	2.10				
2340	2.00	----	0600	2.04				
2350	2.00	----	0610	1.92				

CURRENT STATION NO. 25 (Cont'd)

Time	Current (Kts.) at			Time	Current (Kts.) at		
	5 m	50 m	Dir		5 m	50 m	Dir
	(1 May 1951)				(2 May 1951)		
2040	0.55	0.26	Ebb	0310	1.00	-----	Ebb
2050	0.54	0.29		0320	1.00		
2100	0.56	(0.29)		0330	1.33		
2110	0.56	0.29		0340	1.57		
2120	0.54	0.26		0350	1.72		
2130	0.43	0.25		0400	1.71		
2140	0.47	0.26		0410	1.77		
2150	0.39	0.26		0420	1.61		
2200	0.31	0.20		0430	1.61		
2210	0.70	0.48	Flood	0440	1.61	1.71	
2220	1.01	0.57		0450	1.60	1.71	
2230	1.30	0.67		0500	1.73	1.60	
2240	1.85	1.51		0510	1.98	1.59	
2250	1.74	1.25		0520	2.09	2.00	
2300	1.75	1.50		0530	2.08	1.90	
2310	1.89	1.45		0540	2.24	1.75	
2320	1.72	1.74		0550	2.22	1.80	
2330	1.81	1.65		0600	2.03	1.80	
2340	1.83	1.61		0610	2.18	1.80	
2350	1.88	1.58		0620	2.20	2.10	
	(2 May 1951)			0630	2.22	2.25	
0000	1.74	1.40	Flood	0640	2.19	2.12	
0010	1.80	1.22		0650	1.92	2.05	
0020	1.52	1.02		0700	1.97	1.85	
0030	1.34	1.33		0710	1.97	1.79	
0040	1.47	0.90		0720	1.97	1.71	
0050	1.33	0.88		0730	1.88	1.40	
0100	1.41	1.17		0740	1.66	1.35	
0110	1.40	1.26		0750	1.63	1.49	
0120	1.34	1.27		0800	1.63	1.49	
0130	1.10	0.97		0810	1.25	1.26	
0140	1.15	1.03		0820	(1.19)	1.24	
0150	0.75	0.90		0830	1.17	0.46	
0200	1.05	0.60		0840	1.17	0.76	
0210	0.40	0.22		0850	0.98	0.60	
0220	0.20	0.15		0900	0.78	0.57	
0230	(0.19)	0.06	Slack	0910	0.57	0.16	
0240	(0.19)	0.06	Slack	0920	0.43	0.13	
0250	0.68	0.59	Ebb	0930	0.43	0.12	
0300	1.00	0.57	Ebb	0940	0.76	0.29	

CURRENT STATION NO. 26

Admiralty Inlet
 LAT. 47° 57.7' N LONG. 122° 34.1' W
 2 - 3 May 1951

Price meter with integrator									
Time	Current (Kts.) at				Time	Current (Kts.) at			
	5 m	50 m	60 m	Dir		5 m	50 m	60 m	Dir
(2 May 51)					(3 May 51)				
1820	2.20	-----	1.44	Ebb	0000	1.87	1.79	-----	Flood
1830	1.55		1.35		0010	1.75	1.91		
1840	1.86		1.28		0020	1.71	1.84		
1850	1.86		1.06		0030	1.80	1.83		
1900	1.86		1.02		0040	1.87	1.99		
1910	1.75		0.99		0050	1.90	1.78		
1920	1.71		0.99		0100	1.89	1.92		
1930	1.68		0.79		0110	1.70	1.87		
1940	1.55		0.81		0120	1.60	1.79		
1950	1.32		0.85		0130	1.48	1.83		
2000	1.09		0.80		0140	1.41	1.68		
2010	0.87		0.78		0150	1.31	1.58		
2020	0.80		0.71		0200	1.30	1.49		
2030	0.82		-----		0210	0.93	1.14		
2040	0.84				0220	0.75	1.01		
2050	0.43				0230	0.53	0.40		
2100	0.50				0240	0.38	0.21		
2110	0.45				0250	0.50	-----		Ebb
2120	1.11				0300	1.20			
2130	0.42			Flood	0310	1.31			
2140	0.45	1.05			0320	0.87			
2150	0.61	1.07			0330	1.52	0.07		
2200	0.70	1.15			0340	1.88	0.13		
2210	0.74	1.30			0350	1.87	0.13		
2220	1.00	1.42			0400	2.06	0.16		
2230	0.99	1.11			0410	2.06	0.72		
2240	1.20	1.21			0420	2.06	0.77		
2250	1.28	1.05			0430	2.00	1.22		
2300	1.38	1.63			0440	2.09	1.29		
2310	1.39	1.67			0450	2.44	0.57		
2320	1.27	1.66			0500	2.52	1.27		
2330	1.37	1.61			0510	2.49	2.00		
2340	1.60	1.61			0520	2.50	2.08		
2350	1.80	1.72			0530	2.52	2.34		

CURRENT STATION NO. 26 (Cont'd)

Time	Currents (Kts.)			Time	Currents (Kts.) at		
	5 m	50 m	Dir		5 m	50 m	Dir
	(3 May 51)				(3 May 51)		
0540	2.80	2.57	Ebb	1200	1.93	2.02	Flood
0550	2.85	2.45		1210	1.96	2.04	
0600	2.81	2.30		1220	2.25	1.90	
0610	2.87	2.64		1230	2.15	1.85	
0620	2.76	2.59		1240	2.14	1.81	
0630	2.78	2.49		1250	2.26	1.87	
0640	2.73	2.49		1300	2.24	2.10	
0650	2.60	2.61		1310	2.22	2.30	
0700	2.78	2.63		1320	2.20	2.03	
0710	2.66	2.61		1330	2.24	1.92	
0720	2.48	----		1340	2.27	2.08	
0730	2.50			1350	2.26	2.05	
0740	2.54			1400	2.26	1.75	
0750	2.37			1410	2.17	1.97	
0800	2.26			1420	2.10	1.90	
0810	2.02			1430	1.98	1.65	
0820	1.93			1440	1.92	1.56	
0830	1.75	1.92		1450	1.76	1.45	
0840	1.53	1.94		1500	1.61	1.42	
0850	(1.52)	1.85		1510	1.33	1.36	
0900	(1.51)	1.28		1520	1.05	1.28	
0910	1.34	----		1530	0.95	1.00	
0920	0.90			1540	0.72	0.81	
0930	0.65			1550	0.61	0.07	
0940	0.57			1600	0.50	----	
0950	0.25			1610	0.44		
1000	0.13			1620	0.38		
1010	0.30		Flood	1630	0.31		
1020	0.35			1640	0.26		
1030	0.37			1650	1.54		Ebb
1040	0.26	----		1700	1.65		
1050	0.44			1710	1.66		
1100	0.82			1720	1.50	1.36	
1110	0.96			1730	1.63	1.30	
1120	1.17	1.40		1740	1.85	0.81	
1130	1.09	1.50		1750	1.80	1.27	
1140	1.36	1.60		1800	1.81	1.20	
1150	1.74	1.77					

CURRENT STATION NO. 27

Admiralty Inlet
 LAT. 47° 56.8' N LONG. 122° 35.0' W
 21 - 22 May 1951

Price meter with integrator								
Depth - 5 meters								
Time	Speed (Kts.)	Dir	Time	Speed (Kts.)	Dir	Time	Speed (Kts.)	Dir
	(21 May 51)			(21 May 51)			(22 May 51)	
1742	0.97	Ebb	2125	1.2	Ebb	0115	1.50	Flood
1748	0.87		2131	1.4		0125	1.40	
1754	0.68		2137	1.0		0136	1.15	
1800	0.75		2143	1.15		0142	1.20	
1805	0.70		2149	1.1		0150	1.30	
1810	1.00		2155	1.0		0157	1.40	
1815	0.75		2201	1.1		0202	1.25	
1820	0.65		2207	0.85		0208	1.23	
1825	0.50		2215	0.90		0215	1.37	
1830	0.30		2221	0.75		0222	1.43	
1835	0.60		2227	0.5±0.3		0227	1.40	
1840	0.70		2233	0.25±0.15		0233	1.57	
1845	0.55		2240	0.3		0239	1.45	
1852	1.40		2245	0.35		0245	1.40	
1903	1.45		2250	0.3		0252	1.40	
1909	1.42		2255	0.25		0258	1.42	
1915	1.30		2300	0.2		0304	1.39	
1921	1.18		2305	0.2		0311	1.48	
1927	1.07		2310	0.3		0317	1.47	
1933	1.30		2315	0.3	Flood	0324	1.47	
1939	1.64		2320	0.32		0330	1.50	
1946	1.57		2325	0.30		0337	1.42	
1952	1.7		2332	0.30		0343	1.40	
1958	1.85		2340	0.25		0349	1.25	
2004	1.91		2345	0.22		0356	1.27	
2011	1.80		2350	0.22		0402	1.20	
2017	1.77		2357	0.45		0408	1.12	
2023	1.80			(22 May 51)		0414	1.05	
2030	1.75		0000	0.55		0421	1.00	
2036	1.80		0009	1.05		0427	0.83	Ebb
2042	1.75		0015	0.85		0433	0.70	
2048	1.75		0021	1.0		0440	0.68	
2054	1.72		0028	1.02		0446	0.57	
2101	1.57		0034	1.18		0452	0.78	
2107	1.4		0040	1.27		0500	0.70	
2113	1.68		0046	1.33		0508	0.70	
2119	1.2		0104	1.40		0514	0.65	

CURRENT STATION NO. 27 (Cont'd)

Depth - 5 meters								
Time	Speed (Kts.)	Dir	Time	Speed (Kts.)	Dir	Time	Speed (Kts.)	Dir
	(22 May 51)			(22 May 51)			(22 May 51)	
0520	0.95	Ebb	0803	3.05	Ebb	1147	1.52	Ebb
0526	1.31		0809	3.15		1149	1.80	
0532	1.38		0816	3.15		1151	1.62	
0539	1.32		0822	3.12		1154	1.85	
0551	1.55		0828	3.00		1203	1.53	
0557	1.80		0842	2.95		1210	1.45	
0603	2.12		0850	2.7		1215	1.45	
0609	2.16		0859	2.78		1220	1.33	
0616	2.10		0919	2.4		1225	1.42	
0623	2.20		0935	2.09		1230	1.25	
0629	2.27		0943	2.45		1235	1.25	
0634	2.25		1002	1.5		1240	1.10	
0637	2.75		1016	1.5		1245	0.97	
0643	2.87		1020	1.35		1250	1.00	
0649	2.90		1030	1.65		1255	0.85	
0703	2.95		1040	1.0		1300	0.87	
0706	3.20		1050	0.95		1305	0.77	
0715	2.90		1101	0.63		1310	0.79	
0718	2.95		1110	0.8		1315	0.67	
0724	3.05		1115	0.55		1320	0.55	
0730	3.05		1120	0.55		1325	0.75	
0738	3.15		1125	0.65		1330	0.60	
0745	2.90		1130	0.47		1335	1.13	
0749	2.70		1141	1.55		1340	1.35	
0752	3.25		1142	1.37		1345	1.60	
0757	3.1		1145	1.7		1350	1.5	

∇
Flood

CURRENT STATION NO. 27 (Cont'd)

Depth - 40 meters								
Time	Speed (Kts.)	Dir	Time	Speed (Kts.)	Dir	Time	Speed (Kts.)	Dir
	(21 May 51)			(22 May 51)			(22 May 51)	
2046	1.00	Ebb	0237	1.05	Flood	0705	2.8	Ebb
2052	1.17		0243	0.8		0708	2.5	
2058	1.10		0249	0.7		0717	2.5	
2104	1.4		0255	0.7		0722	2.45	
2110	1.3		0301	0.9±0.2		0728	2.25	
2116	1.2		0308	1.0		0729	2.55	
2122	1.2		0314	1.1		0734	2.35	
2128	1.2		0320	1.0		0740	1.8	
2134	1.15		0326	1.0		0746	2.0	
2140	1.15		0332	1.0		0754	2.5	
2146	1.2±0.5		0338	0.9		0800	2.3±0.2	
2152	0.8		0345	0.9		0807	2.45	
2158	1.1		0351	0.85		0813	2.3±0.25	
2204	0.7		0357	0.95		0819	2.1	
2211	0.7		0404	0.6		0826	2.6	
2218	0.75		0410	0.8		0832	2.6	
2224	0.7		0417	0.8		0838	2.4	
	(22 May 51)		0423	0.5		0845	2.2	
0005	0.32	Flood	0432	0.5	Ebb	0855	2.2	
0012	0.25		0437	0.5		0905	2.3	
0018	0.35		0443	0.25		0910	2.4	
0024	0.6		0449	0.2		0915	2.2	
0031	0.75		0456	0.25		0922	2.1	
0037	0.7		0516	0.5		0930	2.05	
0044	0.85		0522	0.55		0933	2.05	
0053	0.8±0.5		0529	0.6		0939	2.0	
0110	0.75±0.15		0535	0.68		0945	1.85	
0121	0.6		0541	0.74		1005	1.6	
0130	0.6		0547	1.55		1010	1.55	
0140	0.8		0553	1.35±0.15		1022	1.4	
0147	1.0		0603	1.5		1027	1.4	
0153	0.95		0605	1.5		1034	1.15	
0159	0.95		0613	1.7		1045	1.0	
0205	1.12		0619	1.9		1055	0.7	
0211	1.1		0626	1.85		1105	0.55	
0217	1.17		0632	1.9		1130	0.35	
0223	1.22		0645	2.2		1138	0.35	
0231	1.10		0654	2.4		1158	0.15	

CURRENT STATION NO. 28

Admiralty Inlet
 LAT. 47° 57.7' N LONG. 122° 34.0' W
 23 - 24 May 1951

Ekman meter at depth							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
	(23 May 51)				(23 May 51)		
1	1735	2.85	155	60	2203	1.2	310
5	37	2.6	150		14	0.6	340
5	1936	0.7	275		25	0.35	(340)
10	1739	2.6	145		37	1.0	330
20	40	2.4	150		50	1.35	260
30	41	2.2	135		2300	1.35	290
38	43	2.3	135		10	1.5	275
50	2110	0.3	---		21	1.55	275
	2028	0.7	025		31	1.1	300
↓	39	0.38	340		41	1.75	295
56	1744	2.1	140		53	1.75	290
60	1801	1.9	145		(24 May 51)		
	03	1.85	155	60	0000	1.9	290
	13	2.0	155		07	1.8	310
	24	2.15	155		18	1.7	315
	36	1.95	145		29	1.35	325
	46	1.7	145		38	1.2	315
	56	1.4	140		48	1.0	315
	1907	1.3	140		58	1.05	315
	17	0.4	---		0103	0.5	300
	31	0.0	---		18	0.45	(225)
	2053	0.63	025		29	0.0	---
	2106	0.37	315		0340	0.8	180
	18	0.7	045		42	0.9	145
	28	0.9	355		59	0.5	065
	41	0.9	310		0410	2.15	130
	52	0.9	310				

CURRENT STATION NO. 29

Puget Sound
 LAT. 47° 46.8' N LONG. 122° 26.9' W
 31 January 1952

Currents with Price meter and integrator at 5 meters			Currents 0.5 meters off bottom with Ekman meter			
Time	Speed (Kts.)	Set	Depth (m)	Time	Speed (Kts.)	Set (°T)
1230	0.6	Ebb	* 196	1140	0.15	---
1300	0.5		* 196	1209	0.15	340
1310	0.4		* 194	1313	0.03	320
1356	0.25		100	1330	0.25	340
			50	1340	0.33	020
			20	1350	0.30	000
			5	1356	0.27	320
			* Bottom			

CURRENT STATION NO. 30

Puget Sound
 LAT. 47° 47.1' N LONG. 122° 26.9' W
 6 February 1952

Currents with Price meter and integrator at 5 meters			Currents 0.5 meters off bottom with Ekman meter			
Time	Speed (Kts.)	Set	Depth (m)	Time	Speed (Kts.)	Set (°T)
1130	0.27	Ebb	189	1140	0.02	030
1200	0.27		184	1340	0.02	---
1230	0.25		189	1445	0.08	---
1300	0.35					
1330	0.20					
1400	0.35					
1412	0.20					
1416	0.25					
1422	0.22					
1450	0.50					

CURRENT STATION NO. 31

Puget Sound
 LAT. 47° 44.4' N LONG. 122° 26.3' W
 21 July 1952

Price meter at 5 meters.			Elman meter at depth			
Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
1332	1.05		5	1451	0.29	105
39	1.05		5	1555	0.04	---
46	1.02		20	1428	0.49	015
1403	0.90			1456	0.14	095
13	0.72	210	↓	1605	0.01	---
20	0.67		30	1439	0.88	000
28	0.53		↓	1501	0.76	005
39	0.57		↓	1538	0.13	005
44	0.47		50	1402	0.96	355
51	0.55		↓	1413	0.92	155
56	0.35		↓	1444	0.93	345
1501	0.28		↓	1507	0.66	245
07	0.30		↓	1542	0.71	355
14	0.40		58 ^B	1420	0.48	355
23	0.24		↓	1514	0.99	335
28	0.15	185	↓	1547	0.50	345
32	0.10					
38	0.10					
42	0.10					
47	0.10					

B Lead on bottom

CURRENT STATION NO. 32

Puget Sound
 LAT. 47° 45.0' N LONG. 122° 25.0' W
 21 - 22 July 1952

Price meter with integrator					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
<u>Depth-5 m</u>	(21 July 52)		<u>Depth-3 m</u>	(22 July 52)	
1758	0.31		0605	0.1	025
1802	0.30		0622	0.25	
1810	0.27		0630	0.30	
1815	0.28		0637	0.22	
1918	0.30		0640	0.24	
1930	0.37	000	0647	0.33	
1943	0.40		0700	0.33	
1952	0.50		0710	0.25	
2000	0.45		0713	0.25	
2010	0.45	350	0714	0.25	
2017	0.47	350	0730	0.25	
2145	0.2		0800	0.35	
2200	0.45		0830	0.47	
2230	0.3		0835	0.44	
2300	0.2		0837	0.46	
2330	0.15		0841	0.51	
	(22 July 52)		0843	0.51	
0000	0.1		0846	0.51	
0030	0.1		0848	0.51	
0100	0.1		0853	0.51	
0130	0.1		0855	0.51	
0200	0.1		0904	0.49	
0230	0.17		0911	0.38	
0300	0.20		0913	0.36	
0330	0.30		0915	0.36	
0400	0.40		0916	0.38	
0430	0.3		0918	0.37	
0500	0.2		0920	0.40	
0530	0.2		0924	0.39	

CURRENT STATION NO. 32 (Cont'd)

Currents at depth with Ekman meter							
21 July 1952							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	1758	0.23	225	50	2000	0.27	155
	2017	0.23	225		2033	0.11	355
	2023	0.24	235		2037	0.31	145
30	1802	0.24	235	100	1815	0.11	355
	2010	0.41	190		1918	0.31	145
	2028	0.09	345		1952	0.21	135
50	1810	0.09	345	150	1943	0.29	---

CURRENT STATION NO. 32 (Cont'd)

Price meter with integrator Depth - 3 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(22 July 52)			(22 July 52)	
0929	0.38		1207	0.1	
0944	0.47		1230	0.45	
0951	0.45		1300	0.30	
0956	0.43		1301	0.30	
1003	0.47		1310	0.30	
1009	0.49		1312	0.30	
1012	0.50		1314	0.30	
1017	0.49		1316	0.30	
1018	0.48		1318	0.35	
1024	0.45		1322	0.35	
1027	0.43	325	1325	0.40	
1042	0.41		1328	0.48	
1045	0.45		1334	0.53	
1048	0.43		1337	0.58	
1051	0.42		1341	0.55	
1055	0.40		1345	0.50	
1100	0.34		1347	0.50	
1103	0.35		1349	0.50	
1107	0.35		1355	0.40	
1112	0.37		1358	0.50	
1115	0.40		1408	0.50	
1128	0.47		1411	0.47	
1131	0.47		1415	0.43	
1132	0.47		1417	0.42	
1136	0.43		1420	0.38	
1139	0.41		1422	0.37	
1143	0.31		1425	0.38	
1147	0.23		1427	0.44	
1200	0.13		1430	0.52	

CURRENT STATION NO. 32 (Cont'd)

Price meter with integrator 22 July 1952							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
0	0835	0.44	Ebb	100	0647	0.37	Ebb
5	0837	0.51			0710	0.35	
	0911	0.40			0848	0.50	
	0944	0.40			0918	0.42	
	1024	0.40			1009	0.43	
	1112	0.26			1048	0.17	
	1128	0.46			1136	0.13	
	1301	0.26	Flood	150	0630	0.29	
	1334	0.29			0640	0.28	
	1408	0.38			0713	0.40	
10	0841	0.71	Ebb		0853	0.55	
	0913	0.53			0920	0.47	
	0951	0.46			1012	0.33	
	1027	0.43			1051	0.30	
	1115	0.26			1100	0.40	
	1310	0.28	Flood		1139	0.20	
	1337	0.43			1318	0.31	Flood
	1411	0.49			1349	0.38	
20	0843	0.60	Ebb		1422	0.47	
	1312	0.43	Flood	200	0637	0.38	Ebb
	1341	0.37			0714	0.57	
	1415	0.43			0855	0.63	
30	0600	0.11	Ebb		0924	0.54	
	0915	0.48			1017	0.43	
	0956	0.33			1107	0.40	
	1047	0.13			1143	0.13	
	1131	0.17			1322	0.36	Flood
40	1314	0.32	Flood		1355	0.14	
	1345	0.31			1425	0.23	
	1417	0.55		218	1018	0.59	Ebb
50	0605	0.06	Ebb		1103	0.40	
	0846	0.47			1147	0.22	
	0916	0.41		219	0904	0.83	
	1003	0.16		219	0929	0.66	
	1045	0.13		225	1328	0.23	Flood
	1132	0.20			1358	0.44	
80	1316	0.38	Flood		1427	0.19	
	1347	0.49		226	1325	0.16	
	1420	0.60		240	1430	0.30	
100	0622	0.29	Ebb				

CURRENT STATION NO. 33 (Cont'd)

Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
		(1 Oct 52)				(30 Sept 52)	
150	0826	0.32	175	# 206	1917	0.03	---
150	1050	0.70	205	# 207	2100	0.16	135
		(30 Sept 52)		# 197	2245	0.38	055
* 205	1939	0.14	155			(1 Oct 52)	
* 206	2120	0.23	205	# 208.5	0104	0.30	085
* 196	2307	0.44	040	# 206	0204	0.0	155
		(1 Oct 52)		# 204	0347	0.13	145
* 205	0222	0.09	170	# 202	0432	0.08	035
* 201	0739	0.19	355	# 203	0532	0.06	295
* 198	0905	0.0	---	# 202	0719	0.13	335
		(30 Sept 52)		# 199	0845	0.16	160
# 208	1553	0.07	110	# 205	1111	0.55	185
# 205	1633	0.0	---				
* 1 meter off bottom							
# bottom							

CURRENT STATION NO. 34

Puget Sound
 LAT. 47° 46.8' N LONG. 122° 25.0' W
 1 - 2 October 1952

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
	(1 Oct 52)				(2 Oct 52)		
5	1349	0.29	185	20	1059	0.10	205
	1649	0.49	315		1232	0.39	225
	1849	0.65	155		1314	0.14	---
	1952	0.39	175		(1 Oct 52)		
	2142	0.19	195	50	1406	0.15	175
	2300	0.19	035		1501	0.13	310
	2355	0.40	175		1554	0.31	005
	(2 Oct 52)				1644	0.47	005
	0227	----	---		1904	0.58	320
	0343	0.18	205		2005	0.47	175
	0530	0.60	195		2156	0.28	255
	0541	0.67	195		2315	0.24	200
	0709	0.58	195		(2 Oct 52)		195
	0727	0.54	095		0010	0.29	195
	0822	0.49	215		0141	0.24	205
	0930	0.14	175		0236	0.13	205
	(1 Oct 52)				0355	0.30	295
10	0202	0.18	215		0455	0.43	325
10	0506	0.49	195		0555	0.56	215
20	1356	0.05	190		0740	0.62	105
	1455	0.26	315		0835	0.37	235
	1549	0.41	285		0941	0.19	255
	1638	0.43	355		1025	0.20	225
	1856	0.37	175		1106	0.23	175
	1957	0.54	185		1238	0.53	195
	2150	0.28	185		1322	0.23	190
	2308	0.05	185		(1 Oct 52)		
	(2 Oct 52)			100	1416	0.49	150
	0003	0.28	185		1508	0.29	210
	0135	0.14	215		1600	0.31	345
	0231	0.12	205		1653	0.41	285
	0347	0.24	---		1908	0.52	335
	0416	0.22	275		2015	0.57	185
	0502	0.61	325		2217	0.09	205
	0546	0.72	225		2321	0.30	175
	0732	0.60	110		(2 Oct 52)		
	0828	0.51	205		0017	0.62	175
	0935	0.57	205		0059	0.59	135
	1018	0.13	295		0147	0.63	155

CURRENT STATION NO. 35

Puget Sound
 LAT. 47° 46.6' N LONG. 122° 25.8' W
 26 - 27 June 1953

Price meter and integrator					
Depth - 5 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(26 June 53)			(27 June 53)		
1100	0.15	340	0030	0.2	255
1130	0.20	315-005	0100	0.15	(300)
1200	0.20	025-295	0130	0.1	350
1230	0.28	205	0200	0.1	(325)
1300	0.40	205	0230	0.1	295
1330	0.50	185	0300	0.35	105
1400	0.15-0.5		0330	0.4	000
1430	0.35-0.7	150	0400	0.45	000
1500	0.20-0.75	180	0430	0.6	355
1530	0.4	180	0500	0.75	(350)
1600	0.1-0.7	160	0530	0.85	340
1630	0.25	175	0600	0.7	310
1700	0.05	175	0630	0.6	010
1730	0.42	185	0700	0.65	
1800	0.15	240	0730	0.7	
1830	0.5	245	0800	0.9	(355)
1900	0.55	300	0830	1.0	000
1930	0.5	355	* 0853	1.2	---
2000	0.5	355	0900	0.95	000
2030	0.25	355	0930	0.9	000
2100	0.2-0.75	025-070	1000	0.75	000
2130	0.8	000	1030	0.55	000
2200	0.9	005	1100	0.5	101
2230	0.65	350	1130	0.6	045
2300	0.1-0.6	175-335	1200	0	---
2330	0.0-0.45	170	1230	0.1	005
2400	0-0.4	(210)			

* Maximum

CURRENT STATION NO. 35 (Cont'd)

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
	(26 June 53)				(26 June 53)		
5	1102	0.16	315	20	1805	0.23	125
	1254	0.53	225		1928	0.21	235
	1346	0.45	190		2037	0.44	350
	1516	0.53	165		2127	0.41	345
	1606	0.22	190		2215	0.07	
	1707	0.18	135		2220	0.15	270
	1758	0.27	195		(27 June 53)		
	1923	0.64	330		0035	0.23	025
	2032	0.50	025		0127	0.21	105
	2123	0.61	005		0325	0.10	215
	2210	0.89	010		0533	0.54	345
	2321	0.19	335		0618	0.22	035
	(27 June 53)				0816	0.78	005
	0119	0.05	325		0902	0.74	015
	0316	0.32	355		1001	0.57	
	0439		855		1040	0.52	005
	0448	0.04			1120	0.46	005
	0459	0.22	025		1349	0.31	015
	0528	0.59	005		1405	0.23	360
	0611	0.51	025		1433	0.25	015
	0810	0.51	025		1511	0.31	015
	0857	1.00	015		1526	0.29	355
	0957	0.79			1609	0.23	035
	1253	0.09	255		1646	0.25	040
	1604	0.36	045		(26 June 53)		
	1636	0.64	195	50	1116	0.16	055
	1642	0.35	135		1306	0.42	205
	(26 June 53)				1403	0.45	180
10	1521	0.39	095		1530	0.38	170
20	1108	0.19	315		1617	0.27	105
	1300	0.13	205		1813	0.07	045
	1351	0.40	145		1933	0.20	355
	1526	0.24	070		2041	0.21	005
	1611	0.21	075		2133	0.34	015
	1753	0.08	---				

CURRENT STATION NO. 35 (Cont'd)

Currents at depth with Ekman meter								
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth	Time	Speed (Kts.)	Set (°T)	
50	(26 June 53)			150	(26 June 53)			
	2228	0.30	360		1545	0.92	180	
	(27 June 53)				1633	0.92	150	
	0040	0.26	120		1834	0.59	210	
	0134	0.33	165		2012	0.23	350	
	0337	0.01			2100	0.51	345	
	0538	0.15	315		2147	0.40	035	
	0623	0.09	355		2245	0.27	025	
	0824	0.68	350		(27 June 53)			
	0911	0.60	005		0058	0.26	195	
	1008	0.43	335		0230	0.31	205	
	1044	0.60	335		0405	0.07	145	
	1124	0.31	255		0552	0.29	035	
	1615	0.50	195		0838	0.42	020	
	1651	0.45	195		0926	0.40	015	
	V	(26 June 53)				1020	0.19	005
	100	1122	0.39		155	1057	0.03	
		1313	0.76		200	1140	0.33	175
		1410	0.65		195	1355	0.68	170
		1538	0.62		185	1411	0.62	190
		1625	0.48		145	1518	0.65	205
		1822	0.57		075	1533	0.59	205
	2055	0.32	345	1630	0.62	190		
	2049	0.22	(355)	V	(26 June 53)			
	2139	0.23	095	185	1144	0.44	195	
	2237	0.19	245	186	1242	0.57	210	
	(27 June 53)			189	1336	0.80	165	
	0048	0.33	210	188	1434	0.70	175	
	0204	0.42	220	189	1555	0.31	135	
	0347	0.16	140	188	1643	0.85	065	
	0546	0.45	065	188	1657	0.21	175	
	0631	0.45	010	188	1845	0.52	205	
	0830	0.60	005	186	2021	0.04	320	
	0919	0.34	360	185	2111	0.30	320	
	1013	0.27	005	185	2159	0.17	015	
	1050	0.10	005	185	2308	0.10	065	
	1130	0.29	200		(27 June 53)			
	1623	0.75	195	186	0109	0.11	255	
	1656	0.59	150	184	0603	0.69	055	
V	(26 June 53)			184	0846	0.23	025	
150	1131	0.62	180	182	1030	0.06	225	
	1324	1.07	185	183	1111	0.17	195	
	1420	0.98	180	183	1147	0.13	195	

CURRENT STATION NO. 36

San Juan Islands
 LAT. $48^{\circ} 33.6'$ N LONG. $122^{\circ} 55.0'$ W
 6 July 1953

Price meter at 4.3 meters					
Time	Vel. (Kts.)	Dir ($^{\circ}$ T)	Time	Vel. (Kts.)	Dir ($^{\circ}$ T)
0956	1.14	042	1225	0.30	092
1001	1.24	116	1239	0.28	084
05	1.12	134	1251	0.13	090
10	1.25	126	1310	0.13	094
14	1.39	100	28	0.41	244
19	1.41	106	30	0.33	280
23	1.42	112	33	0.30	292
31	1.26	100	38	0.30	300
38	1.19	108	42	0.34	322
42	1.23	112	47	0.26	330
49	1.13	114	50	0.27	332
55	1.05	108	55	0.20	284
1112	0.86	104	1400	0.22	282
22	0.83	106	05	0.23	304
25	0.80	096	11	0.26	284
29	0.77	116	15	0.14	250
32	0.76	102	20	0.36	242
36	0.68	116	25	0.21	230
40	0.54	108	30	0.26	230
45	0.52	106	34	0.41	234
50	0.53	104	38	0.26	218
55	0.44	098	43	0.21	212
1200	0.44	110	47	0.15	218
05	0.34	090	50	0.20	252
10	0.43	080	53	0.27	202
15	0.39	072	57	0.26	186

CURRENT STATION NO. 36 (Cont'd)

6 July 1953

Currents at depth with Ekman meter							
Depth (m)	Time	Vel. (Kts.)	Dir (°T)	Depth (m)	Time	Vel. (Kts.)	Dir (°T)
2	0858	1.87	022	20	1207	0.09	016
↓	0958	1.17	034	↓	1305	0.22	016
↓	1037	1.16	022	↓	1339	0.35	248
↓	1121	0.87	008	↓	1403	0.18	270
↓	1200	0.53	024	30	0929	1.42	026
↓	1255	0.17	002	30	1019	1.21	030
↓	1332	0.31	272	30	1104	0.85	020
↓	1356	0.20	214	33	1144	0.63	022
↓	1430	0.25	234	30	1444	0.25	208
10	0910	1.91	022	38	0946	1.70	016
↓	1004	1.17	016	41	1027	1.16	018
↓	1046	1.26	024	45	1113	0.62	020
↓	1129	0.70	022	↓	1152	0.67	012
↓	1437	0.18	240	↓	1216	0.16	320
20	0918	1.63	026	↓	1312	0.23	194
↓	1010	1.15	030	↓	1348	0.27	222
↓	1055	1.08	008	↓	1410	0.18	222
↓	1136	0.70	036	↓	1452	0.33	228

CURRENT STATION NO. 37

Admiralty Inlet
 LAT. 48° 01.9' N LONG. 122° 36.9' W
 30 November - 3 December 1953

BROWN BEAR Cruise No. 41

Drifting Ship Method					
Depth - Surface					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(30 Nov 53)			(2 Dec 53)		
1550	2.4	025	1053	0.6	110
1850	2.0	350	1217	0.7	095
2050	0.8	170	1331	0.8	040
2257	1.0	220	1458	1.6	330
(1 Dec 53)			1620	3.3	340
0045	1.1	210	1741	3.3	345
0222	0.6	355	1947	1.9	325
0401	0.86	355	2115	0.0	---
0540	1.3	330	2244	1.0	010
0725	1.3	330	(3 Dec 53)		
0854	0.30	155	0020	1.8	005
1034	0.7	150	0138	1.6	195
1215	0.2	330	0250	0.5	210
1347	1.3	000	0358	0.5	055
1525	2.7	350	0502	1.3	030
1801	2.2	340	0620	2.1	345
2029	0.33	020	0819	1.1	000
2303	1.3	235	0959	0.5	095
(2 Dec 53)			1130	0.7	135
0048	1.0	180	1245	0.6	160
0205	0.25	265	1357	1.0	070
0326	0.80	330	1455	0.8	035
0450	1.8	340	1600	1.6	355
0615	2.4	335	1705	2.2	000
0758	0.70	000	1900	3.2	345
0931	0.4	265			

CURRENT STATION NO. 37 (Cont'd)

Depth - 10 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1536	3.28	340	0935	0.23	190
1606	2.61	000	1057	0.45	155
1903	1.56	355	1222	0.69	170
2103	0.52	150	1328	0.61	015
2307	0.54	255	1506	1.90	325
	(1 Dec 53)		1615	3.57	330
0057	1.40	195	1754	2.94	335
0236	1.10	190	1949	1.54	300
0413	0.93	000	2118	0.82	235
0548	1.82	325	2243	1.43	170
0730	1.06	315		(3 Dec 53)	
0901	0.64	210	0017	2.38	180
1046	0.74	180	0132	2.63	185
1220	0.29	260	0246	1.26	175
1352	1.00	000	0354	0.79	150
1532	1.85	000	0457	0.26	080
1814	1.48	350	0625	1.74	335
2056	0.90	170	0819	0.87	335
2257	1.07	150	1003	0.33	105
	(2 Dec 53)		1135	0.28	355
0045	2.08	170	1238	0.44	225
0208	1.58	185	1345	0.35	045
0329	0.10	010	1449	0.88	335
0452	1.46	295	1544	2.22	345
0613	1.96	340	1700	2.52	355
0759	0.77	345	1904	3.12	335

CURRENT STATION NO. 37 (Cont'd)

Depth - 20 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1545	3.48	010	1049	0.62	170
1857	1.34	000	1213	0.61	160
2100	1.16	165	1336	0.53	355
2300	0.96	270	1501	1.82	330
	(1 Dec 53)		1620	2.84	340
0055	1.62	200	1741	2.76	340
0231	0.37	355	1942	0.91	345
0409	0.76	350	2109	0.65	215
0547	1.45	330	2234	1.88	165
0726	0.81	330		(3 Dec 53)	
0857	0.92	205	0022	2.97	180
1042	1.06	175	0138	2.57	180
1216	0.35	240	0251	1.42	205
1350	0.76	350	0359	0.67	175
1526	1.32	005	0501	0.62	025
1810	2.02	355	0613	1.09	355
2047	0.97	195	0810	1.25	310
2250	2.36	205	0954	0.67	205
	(2 Dec 53)		1125	0.91	185
0039	2.18	175	1242	0.67	235
0158	0.79	190	1350	0.51	010
0321	0.97	205	1454	1.02	340
0445	0.57	025	1600	2.24	340
0606	0.82	350	1705	2.36	354
0751	0.77	350	1855	2.34	345
0925	0.76	210			

CURRENT STATION NO. 37 (Cont'd)

Depth - 40 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(30 Nov 53)			(2 Dec 53)		
1603	1.56	350	1053	1.21	200
1841	1.38	345	1220	1.24	200
2054	1.08	175	1335	0.48	190
2247	1.75	155	1456	1.14	005
(1 Dec 53)			1621	2.25	350
0043	1.25	185	1753	2.47	345
0217	0.20	080	1952	1.68	345
0359	0.93	335	2120	1.48	205
0534	0.73	340	2243	2.15	185
0707	0.34	200	0022	3.06	180
0855	0.93	195	0137	2.97	185
1034	1.20	185	0253	1.92	205
1212	0.48	245	0400	0.39	160
1347	0.88	000	0506	0.42	340
1527	1.30	015	0630	1.54	335
1806	1.82	355	0828	0.25	345
2037	0.64	185	1003	1.20	200
2303	2.76	175	1131	1.36	195
(2 Dec 53)			1245	0.85	215
0055	2.36	185	1353	0.35	230
0333	0.26	345	1456	1.26	005
0454	0.65	320	1602	2.37	350
0621	1.22	340	1708	2.16	350
0759	0.14	295	1908	2.95	335
0935	1.03	200			

CURRENT STATION NO. 37 (Cont'd)

Depth - 80 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1556	1.84	345	1045	1.13	170
1855	0.61	010	1208	1.05	180
2040	1.90	165	1328	0.23	160
2255	1.38	155	1455	0.86	335
	(1 Dec 53)		1616	2.76	335
0045	1.50	195	1745	2.55	350
0220	0.05	200	1942	0.63	350
0400	1.13	000	2109	1.66	215
0539	0.71	340	2236	1.88	175
0720	0.33	195		(3 Dec 53)	
0850	1.23	180	0017	2.42	175
1033	1.57	190	0132	2.64	195
1215	1.10	215	0248	2.25	190
1340	0.72	015	0355	0.77	270
1521	0.91	345	0459	0.07	105
1757	1.43	005	0614	2.08	240
2028	0.31	145	0623	1.01	350
2253	2.18	190	0821	0.32	115
	(2 Dec 53)		0953	0.93	175
0040	2.32	190	1124	1.50	180
0208	1.75	210	1240	0.83	180
0327	0.51	165	1349	0.48	210
0445	0.29	295	1452	0.95	010
0611	0.45	045	1558	1.60	000
0750	0.46	140	1703	1.65	010
0926	1.07	185	1859	1.98	330

CURRENT STATION NO. 38

Admiralty Inlet
 LAT. 48° 01.9' N LONG. 122° 38.1' W
 30 November - 3 December 1953

BROWN BEAR Cruise No. 41

Drifting Ship Method					
Depth - Surface					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1650	1.9	350	1121	0.5	030
1935	0.8	040	1244	1.5	065
2132	0.7	150	1358	1.0	030
2335	1.2	195	1528	1.4	000
	(1 Dec 53)		1640	3.4	345
0120	0.28	180	1829	3.3	340
0257	1.1	345	2011	1.8	330
0435	0.9	330	2140	0.4	110
0609	0.86	330	2309	1.1	000
0752	0.7	350		(3 Dec 53)	
0931	1.3	100	0047	1.6	200
1109	0.32	175	0206	0.8	195
1244	0.78	005	0310	0.8	110
1420	1.45	000	0417	1.1	015
1612	3.05	340	0527	2.1	020
1850	2.5	330	0708	1.3	350
2134	0.6	005	0854	0.4	030
2334	0.95	245	1033	0.6	210
	(2 Dec 53)		1200	0.7	115
0116	0.3	150	1306	0.4	035
0228	0.7	300	1413	0.7	035
0356	1.2	355	1516	1.1	020
0516	1.5	345	1620	1.9	345
0651	0.8	340	1738	3.2	000
0837	0.37	020	1936	3.1	335
1001	0.5	040	2020	1.3	350

CURRENT STATION NO. 38 (Cont'd)

Depth - 10 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1641	2.04	340	0959	0.18	120
1709	2.40	325	1123	0.23	190
1945	0.75	240	1241	1.01	075
2147	1.10	145	1400	0.80	020
2344	1.05	170	1534	1.58	345
	(1 Dec 53)		1636	2.70	000
0133	1.01	190	1834	2.60	355
0308	0.88	335	2017	1.52	330
0445	0.78	050	2145	0.90	155
0619	0.81	310	2320	2.26	180
0803	0.33	300		(3 Dec 53)	
0937	0.82	090	0041	0.91	180
1117	0.67	320	0201	1.84	190
1253	0.45	005	0306	1.87	140
1424	1.12	015	0412	0.72	090
1623	1.13	335	0522	1.06	025
1902	1.58	005	0710	1.18	330
2137	0.92	175	0904	0.37	025
2335	0.90	195	1034	0.58	210
	(2 Dec 53)		1205	0.09	190
0113	1.32	180	1301	0.69	040
0228	0.59	160	1408	0.83	020
0359	0.66	010	1510	1.56	350
0512	1.06	340	1615	2.41	335
0515	1.11	355	1730	3.40	355
0517	1.33	000	1740	2.92	355
0652	0.81	340	1942	2.46	345
0830	0.57	340			

CURRENT STATION NO. 38 (Cont'd)

Depth - 20 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1641	2.03	335	1119	0.92	213
1943	0.48	300	1238	0.64	154
2140	1.29	155	1403	0.77	010
2338	0.93	185	1530	1.56	345
	(1 Dec 53)		1640	2.72	330
0122	1.01	185	1826	2.62	350
0304	0.74	340	2006	1.28	335
0614	0.82	320	2136	0.47	140
0754	0.16	325	2309	2.28	185
0932	1.49	115		(3 Dec 53)	
1113	0.83	200	0047	2.48	190
1249	0.43	350	0208	2.00	185
1423	1.15	005	0312	1.73	175
1616	1.80	340	0416	0.18	192
1857	1.45	010	0526	0.97	025
2131	1.20	185	0700	1.25	330
2325	2.00	195	0845	0.58	295
	(2 Dec 53)		1027	0.65	250
0126	1.13	165	1155	0.73	160
0224	0.71	185	1306	0.17	245
0348	0.31	340	1415	0.48	360
0501	0.92	350	1515	1.67	340
0646	0.65	335	1619	2.44	345
0822	0.42	315	1735	3.40	000
0952	0.07	135	1934	2.37	350

CURRENT STATION NO. 38 (Cont'd)

Depth - 40 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(30 Nov 53)			(2 Dec 53)		
1703	2.26	335	1125	0.86	210
1937	0.25	185	1246	1.04	135
2133	1.80	165	1357	0.04	195
2333	1.28	180	1525	1.14	325
(1 Dec 53)			1641	2.07	350
0110	0.79	150	1837	2.24	355
0251	0.30	005	2013	0.98	340
0429	1.27	340	2145	0.97	130
0607	0.60	000	2317	2.31	195
0751	0.05	035	(3 Dec 53)		
0925	0.98	190	0047	2.46	190
1107	0.98	190	0209	2.10	195
1245	0.28	275	0313	1.93	180
1420	1.15	340	0418	0.66	225
1614	1.68	345	0528	0.69	010
1852	1.72	000	0707	1.29	325
* 2153	1.53	195	0853	0.27	030
2335	2.19	195	1034	0.82	210
(2 Dec 53)			1202	0.95	200
0017	7.46	175	1308	0.90	200
0234	0.82	200	1417	0.84	320
0357	0.77	345	1517	0.65	345
0518	1.00	335	1622	2.37	350
0655	0.93	005	1740	2.24	030
0832	0.16	020	1946	1.62	355
1000	0.81	195			
* 50 meters					

CURRENT STATION NO. 38 (Cont'd)

Depth - 80 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(30 Nov 53)			(2 Dec 53)		
1659	1.59	015	1118	1.14	190
1926	0.57	090	1240	0.35	215
2125	1.57	185	1353	0.23	235
2335	1.14	165	1521	1.14	320
(1 Dec 53)			1637	2.36	030
0115	0.67	165	1818	1.70	335
0254	0.67	135	2005	0.32	315
0440	0.68	005	2136	1.50	190
0610	0.50	350	2309	2.07	175
0750	1.03	215	(3 Dec 53)		
0925	1.23	185	0042	2.44	165
1110	1.23	190	0204	2.16	200
1245	0.50	215	0307	1.82	170
1414	1.75	309	0413	1.04	190
1605	1.47	355	0523	0.78	330
1841	0.98	300	0659	0.56	000
2135	1.26	220	0847	0.09	290
2326	2.32	190	1027	1.38	195
(2 Dec 53)			1155	1.28	165
0107	0.95	195	1303	0.75	215
0226	1.19	230	1411	0.47	180
0350	0.63	250	1513	0.83	355
0510	1.17	290	1618	1.98	000
0648	0.23	000	1733	2.92	015
0821	0.23	200	1938	1.30	345
0953	1.34	200			

CURRENT STATION NO. 39

Admiralty Inlet
 LAT. 48° 01.9' N LONG. 122° 39.1' W
 30 November - 3 December 1953

BROWN BEAR Cruise 41

Drifting Ship Method						
Depth - Surface						
Time	Speed (Kts.)	Set (°T)	/	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)				(2 Dec 53)	
1747	1.7	010		1150	0.5	050
2024	0.6	160		1310	0.9	050
2212	1.1	190		1426	1.5	000
	(1 Dec 53)			1550	1.7	005
0006	1.5	195		1704	3.3	345
0136	0.25	305		1913	2.8	150
0326	1.7	000		2042	1.0	350
0505	1.1	020		2203	0.6	235
0639	0.56	000		2345	2.6	135
0817	0.0	---			(3 Dec 53)	
1007	0.5	025		0112	1.0	200
1143	0.9	105		0226	0.5	025
1312	1.1	005		0332	1.3	000
1445	1.7	000		0438	2.4	015
1703	4.07	345		0548	1.7	015
1940	1.1	335		0738	1.6	025
2217	0.04	165		0924	0.3	305
	(2 Dec 53)			1055	0.4	130
0009	1.2	180		1219	0.8	015
0135	0.4	270		1324	0.6	300
0250	1.4	355		1430	1.1	015
0416	2.1	010		1535	1.3	030
0537	1.4	005		1638	1.8	010
0719	1.0	355		1813	3.2	345
0857	0.6	275				
1019	0.4	345				

CURRENT STATION NO. 39 (Cont'd)

Depth - 10 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1740	0.83	015	1143	0.19	228
1754	1.31	355	1304	0.50	070
2021	0.28	110	1429	1.90	325
2226	1.35	180	1548	1.64	015
	(1 Dec 53)		1703	2.28	350
0016	0.84	175	1708	2.70	350
0151	0.53	203	1907	1.70	345
0335	1.68	340	2037	0.23	020
0512	1.08	021	2201	1.04	205
0644	0.82	340	2341	2.98	135
0829	0.24	290		(3 Dec 53)	
1010	0.09	085	0109	2.01	175
1146	0.67	115	0227	0.56	145
1325	0.74	020	0332	0.35	030
1452	1.68	005	0438	1.37	025
1713	2.36	350	0547	1.34	020
1951	0.72	170	0732	1.20	000
2217	1.40	175	0928	0.59	315
	(2 Dec 53)		1052	0.08	315
0014	2.46	175	1215	1.34	255
0137	0.83	195	1325	1.19	270
0250	0.13	085	1433	0.94	350
0418	1.38	010	1535	1.54	000
0540	1.27	005	1639	3.12	000
0712	0.84	340	1810	3.00	345
0850	0.54	305	2019	0.51	345
1017	0.50	210			

CURRENT STATION NO. 39 (Cont'd)

Depth - 20 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts)	Set (°T)
(30 Nov 53)			(2 Dec 53)		
1746	2.11	000	1025	0.29	270
2003	3.82	155	1152	0.70	210
2017	0.40	160	1311	0.10	240
2205	1.96	180	1425	1.13	350
2356	0.66	200	1555	1.60	350
(1 Dec 53)			1703	2.36	355
0156	0.51	335	1916	1.92	340
0328	1.26	005	2045	0.58	290
0500	1.13	340	2211	0.76	115
0640	0.84	340	2351	3.33	130
0821	0.28	210	(3 Dec 53)		
1002	0.58	155	0109	1.68	140
1142	0.52	205	0225	0.56	160
1318	0.46	020	0331	0.40	200
1448	1.40	000	0437	0.62	010
1704	2.44	355	0747	0.86	205
1949	1.82	149	0739	1.18	355
2211	1.46	160	0929	0.30	305
2400	1.82	185	1054	0.50	125
(2 Dec 53)			1222	0.57	120
0137	0.83	195	1326	1.35	275
0253	0.75	280	1435	0.47	350
0417	0.91	325	1536	0.88	345
0537	0.96	355	1642	2.44	355
0722	0.68	005	1817	2.66	350
0900	0.52	315	2012	0.62	010

CURRENT STATION NO. 39 (Cont'd)

Depth - 40 meters					
Time	Speed (Kts)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(30 Nov 53)			(2 Dec 53)	
1747	1.76	00%	1016	0.64	190
2021	0.80	190	1306	0.41	125
2215	1.93	165	1419	0.91	015
2359	1.12	155	1550	1.50	005
	(1 Dec 53)		1658	1.80	000
0142	0.29	120	1911	1.35	335
0325	1.51	025	2038	0.73	220
0504	0.66	000	2200	1.99	195
0634	0.81	330	2343	2.92	125
0819	0.46	170		(3 Dec 53)	
1001	1.11	190	0105	2.20	160
1136	0.76	190	0220	0.61	180
1311	0.39	340	0328	1.66	250
1442	1.59	340	0432	0.63	270
1656	2.16	350	0543	0.29	320
1936	0.34	220	0730	0.84	350
*2213	1.03	175	0921	0.52	100
2400	2.86	190	1101	0.83	135
	(2 Dec 53)		1217	2.00	335
0133	1.16	155	1321	1.39	230
0248	1.09	245	1429	0.60	295
0414	1.07	270	1531	0.57	335
0535	1.00	310	1635	1.96	350
0715	1.21	000	1815	2.28	000
0851	0.25	080	2019	0.48	290
* 50 meters					

CURRENT STATION NO. 40

Guemes Channel
 LAT. 48° 31.54' N LONG. 122° 34.9' W
 30 - 31 January 1954

BROWN BEAR Cruise No. 48

Price meter at 5 meters (no directions)					
Time	Speed (Kts.)	Time	Speed (Kts.)	Time	Speed (Kts.)
(30 Jan 54)		(30 Jan 54)		(31 Jan 54)	
0935	0.48	1857	0.74	0415	0.52
1004	0.43	1900	0.38	0430	0.63
1015	0.21	1910	0.31	0445	0.42
1030	0.20	1930	0.10	0500	1.03
1045	0.30	1951	0.46	0515	0.94
1100	0.21	2012	0.13	0530	1.00
1115	0.39	2026	0.23	0545	0.90
1130	0.37	2045	0.19	0615	0.63
1145	0.24	2058	0.10	0630	0.38
1200	0.11	2115	0.04	0645	0.57
1215	0.00	2135	0.04	0700	0.61
1230	0.28	2150	0.00	0715	0.46
1245	0.27	2200	0.19	0735	0.40
1300	0.20	2215	0.15	0800	0.44
1315	0.28	2230	0.34	0815	0.53
1330	0.24	2243	0.32	0830	0.42
1345	0.21	2245	0.34	0848	0.36
1405	0.27	2307	0.46	0908	0.43
1415	0.28	2335	0.32	0928	0.42
1430	0.32	2350	0.42	0947	0.28
1445	0.44			1000	0.33
1505	0.39	(31 Jan 54)		1015	0.31
1515	0.44	0000	0.77	1030	0.28
1530	0.27	0015	0.61	1045	0.25
1600	0.28	0030	1.09	1100	0.30
1615	0.77	0045	1.83	1115	0.30
1630	0.62	0100	1.88	1130	0.30
1645	0.65	0125	1.34	1145	0.25
1700	0.59	0140	1.58	1200	0.30
1715	0.44	0200	1.40	1215	0.25
1730	0.42	0215	0.93	1230	0.23
1745	0.51	0230	1.49	1245	0.13
1800	0.65	0245	0.82	1300	0.17
1815	0.42	0300	1.11	1315	0.13
1835	0.52	0315	0.25	1330	0.15
1845	0.65	0330	0.00	1340	0.27
		0400	0.52		

CURRENT STATION NO. 40 (Cont'd)

Guemes Channel

Ship anchored at 48° 35.57'N, 122° 30.18' W

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
	(30 Jan 54)				(30 Jan 54)		
10	1117	0.37	228	20	1108	-	-
	1247	0.16	243		1239	0.01	143
	1454	0.38	247		1446	0.08	240
	1612	0.20	253		1559	0.12	243
	1731	0.17	170		1722	0.25	223
	1844	0.72	221		1836	0.59	220
	2011	0.46	183		2000	0.29	000
	2132	0.28	103		2123	0.51	148
	2305	0.57	076		2254	0.50	041
	(31 Jan 54)				(31 Jan 54)		
	0036	1.54	090		0019	1.27	120
	0216	0.50	239		0207	1.83	126
	0327	0.16	196		0315	0.23	081
	0442	0.42	173		0435	0.64	162
	0612	0.58	080		0604	0.68	096
	0722	0.57	138		0712	0.50	153
	0842	0.54	192		0833	0.53	202
	1020	0.38	198		1009	0.37	173
	1132	0.30	166		1122	0.27	151
	1233	0.36	150		1226	0.33	158
	1332	0.19	183		1323	0.00	-

CURRENT STATION NO. 40 (Cont'd)

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set ($^{\circ}$ T)	Depth (m)	Time	Speed (Kts.)	Set ($^{\circ}$ T)
30 ↓	(30 Jan 54)			40 ↓	(30 Jan 54)		
	1053	0.29	036		1048	0.37	116
	1230	0.22	206		1220	0.19	118
	1436	0.33	271		1422	0.63	241
	1532	0.46	241		1514	0.20	271
	1714	0.20	276		1702	0.00	-
	1824	0.50	228		1815	0.48	221
	1950	0.70	216		1940	0.34	145
	2113	0.69	136		2101	0.44	160
	2241	0.59	000		2231	0.64	082
	(31 Jan 54)				(31 Jan 54)		
	0010	1.27	-		0001	0.13	087
	0157	1.67	158		0149	1.27	128
	0306	0.53	128		0256	0.70	144
	0428	0.74	154		0419	0.58	165
	0533	0.68	170		0543	0.55	176
	0701	0.77	123		0653	0.73	126
	0821	0.46	199		0813	0.68	182
	1000	0.33	183		0948	0.36	193
	1111	0.23	136		1100	0.33	181
1238	0.34	133	1211	0.23	175		
1326	0.16	183	1307	0.27	199		

CURRENT STATION NO. 40 (Cont'd)

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
50 ↓	(30 Jan 54)			60 ↓	(30 Jan 54)		
	1037	0.44	213		1026	0.43	206
	1206	0.15	123		1154	0.20	196
	1411	0.35	255		1358	0.00	-
	1535	0.49	226		1523	0.64	243
	1653	0.49	219		1643	0.72	211
	1805	0.42	236		1756	0.29	299
	1929	0.21	228		1918	0.64	225
	2050	0.50	178		2040	0.59	173
	2222	0.48	090		2210	0.47	097
	2351	0.66	066		2338	0.72	098
	(31 Jan 54)				(31 Jan 54)		
	0140	1.88	107		0123	1.66	136
	0246	0.79	148		0237	1.25	112
	0410	0.91	174		0359	0.59	189
	0522	0.89	167		0512	0.93	183
	0644	0.93	158		0634	0.61	171
	0802	0.96	139		0748	0.73	164
	0938	0.23	188		0926	0.62	193
	1051	0.21	186		1043	0.35	191
	1203	0.20	193		1152	0.30	165
	1258	0.25	203		1250	0.40	159

CURRENT STATION NO. 40 (Cont'd)

Currents at depth with Ekman meter							
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
	(30 Jan 54)				(30 Jan 54)		
70	1015	0.33	135	75	1001	0.31	190
	1143	0.34	198	75	1129	0.40	205
	1339	0.31	218	75	1313	0.16	241
	1513	0.48	233	75	1504	0.27	251
	1631	0.72	213	75	1622	0.10	233
	1906	0.70	233	*73	1742	0.29	218
	2159	0.49	085	75	1854	0.36	259
	2327	0.58	021	75	2021	0.11	163
	(31 Jan 54)			75	2143	0.15	153
	0108	2.73	179	*77	2316	0.17	183
	0227	0.05	243		(31 Jan 54)		
	0348	0.70	166	*80	0045	1.70	130
*68	0501	0.90	184	75	0056	2.88	128
*68	0624	0.05	-	75	0337	0.05	333
*69	0733	0.00	-				
*67	0911	0.42	175				
*67	1033	0.04	-				
*66	1138	0.09	153				
70	1242	0.07	193				

*other than standard depth

CURRENT STATION NO. 41

Swinomish Slough
 LAT. 48° 27.1' N LONG. 122° 30.7' W
 23 March 1954

Vessel - Hydah

(Includes observations on water temperature,
 salinity, dissolved oxygen and winds)

Price meter at 1 meter							
Time	Current		Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	Wind	
	Speed (Kts.)	Set (°T)				Speed (Kts.)	From
0815	2.06	N		20.14	0.628	Calm	
0830	2.00	N	8.4				
0845	1.76	N					
0900	1.65	N	8.7	19.31	0.627		
0915	1.54	N					
0930	1.38	N					
0945	1.38	N					
1000	1.21	N	8.65	18.89	0.640	4	SE
1015	1.15	N					
1030	0.99	N				6	SE
1045	0.98	N					
1100	0.81	N	8.6	19.11	0.628	4	SE
1115	0.56	N				4	SE
1130	0.39	N				6	SE
1145	0.21	N				6	SE
1200	0.00	-	8.6	19.24	0.620	6	SE
1215	0.00	-				6	SE
1230	0.60	S				6	SE
1245	0.61	S					
1300	0.70	S	8.7	19.14	0.630	8	SE
1315	0.77	S					
1330	0.67	S					
1345	0.75	S					
1400	0.89	S	8.9	19.31		6	SE
1415	0.78	S					
1430	1.11	S					
1445	1.28	S					
1500	1.28	S	9.0	20.19	0.661	Calm	
1515	1.26	S					
1530	1.69	S					
1545	1.28	S					
1600	1.23	S	8.8	23.71			
1615	1.13	S					
1630	1.18	S					
1645	1.11	S				10	NW
1700	0.94	S	8.8	25.34		10	NNW
1715	0.67	S					
1730	0.60	S				10	NW
1745	0.41	S					
1800	0.40	S		25.52			

CURRENT STATION NO. 42

Admiralty Inlet
 LAT. 48° 01.9' N LONG. 122° 36.9' W
 1 - 4 June 1954

BROWN BEAR Cruise No. 60

Drifting Ship Method					
Depth - surface					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 Jun 54)			(3 Jun 54)	
1626	2.3	335	1105	2.67	330
1905	1.04	035	1210	0.88	265
2130	1.86	325	1330	1.01	230
2340	0.25	155	1615	4.8	170
	(2 Jun 54)		1842	0.47	120
0155	1.15	145	2000	1.30	355
0430	0.54	335	2138	2.12	355
0715	3.87	345	2336	2.02	000
1027	2.28	340		(4 Jun 54)	
1305	1.8	175	0125	0.21	274
1640	3.11	145	0340	0.54	140
1740	2.88	175	0444	0.53	155
2030	1.15	050	0626	0.55	350
2210	2.42	335	0800	2.66	345
	(3 Jun 54)		1033	3.70	345
0025	0.16	310	1230	1.75	345
0155	0.85	150	1405	1.41	130
0406	0.72	180	1602	4.29	180
0615	1.40	005	1759	3.07	180
0815	3.96	345	1936	2.16	170
0940	4.40	345			

CURRENT STATION NO. 42 (Cont'd)

Depth - 10 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 Jun 54)			(3 Jun 54)	
1527	2.42	140	1823	0.83	135
2145	1.55	020	1954	2.84	290
2352	0.40	050	2132	1.24	300
	(2 Jun 54)		2327	2.49	010
0439	1.10	025		(4 Jun 54)	
0727	4.19	350	0127	0.15	130
1048	2.29	340	0300	0.65	150
1306	1.48	185	0443	0.18	215
1510	3.22	145	0617	0.58	010
1752	1.88	170	0754	2.18	345
	(3 Jun 54)		1027	3.84	350
0025	0.14	310	1219	2.68	345
0602	1.66	010	1351	0.99	175
1110	2.30	300	1616	2.56	140
1223	1.63	225	1818	2.29	180
1348	0.80	180	2002	1.44	175
1615	3.07	180			

Depth - 20 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 Jun 54)			(3 Jun 54)	
1520	2.29	160	1107	2.49	305
2137	0.71	355	1218	1.58	230
2346	0.44	065	1342	1.06	160
	(2 Jun 54)		1609	3.30	170
0721	3.63	350	1829	0.91	160
1041	1.90	335	2004	0.02	180
1256	1.83	175	2142	2.47	340
1504	3.98	149	2148	1.96	310
1745	1.63	165	2332	2.16	010
2030	1.20	350		(4 Jun 54)	
2214	1.26	340	0119	0.71	045
	(3 Jun 54)		0253	0.68	165
0015	0.28	210	0436	0.51	170
0150	0.77	145	0625	0.68	010
0201	0.79	150	0801	2.70	345
0224	0.67	115	1032	3.80	350
0358	0.80	180	1226	1.95	335
0418	0.57	170	1403	1.60	175
0605	1.50	015	1611	3.56	140
0618	1.39	015	1813	2.36	180
0807	4.56	345	1958	1.52	170

CURRENT STATION NO. 42 (Cont'd)

Depth - 30 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(3 Jun 54)				
0607	1.25	011			
1104	3.00	305			
1211	1.57	250			

Depth - 40 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 Jun 54)			(3 Jun 54)	
1510	3.72	150	1102	2.49	030
1901	1.17	055	1206	1.30	250
2130	1.53	345	1335	1.20	155
2342	0.23	075	1640	3.68	190
	(2 Jun 54)		1841	1.42	165
0155	1.20	145	2010	0.10	070
0421	0.27	275	2150	3.53	340
0449	0.42	010	2342	0.93	010
0715	3.36	345		(4 Jun 54)	
1034	2.12	350	0133	0.19	050
1248	0.92	175	0309	0.74	150
1457	3.08	195	0449	0.86	200
1739	3.40	125	0637	0.54	350
2206	2.38	335	0811	2.66	355
	(3 Jun 54)		1042	3.60	350
0036	0.24	230	1234	1.61	355
0155	1.00	150	1404	2.03	175
0409	1.11	180	1606	3.79	165
0612	1.25	020	1806	3.30	175
0813	4.85	340	1950	1.92	190
0936	6.92	040			

CURRENT STATION NO. 42 (Cont'd)

Depth - 70 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 Jun 54)			(3 Jun 54)	
1612	2.48	150	1109	2.47	350
1853	0.53	000	1211	0.38	040
2124	1.33	025	1321	4.49	109
2332	0.28	090	1632	4.18	170
	(2 Jun 54)		1835	1.79	175
0145	2.06	170	2005	0.14	250
0413	0.71	210	2142	1.48	355
0710	3.28	350	2335	1.16	050
1026	0.65	295		(4 Jun 54)	
1228	1.24	190	0126	0.33	126
1449	3.01	180	0300	1.24	180
1732	1.06	170	0442	1.46	195
2029	1.32	350	0630	0.22	280
2213	1.18	005	0805	1.72	000
	(3 Jun 54)		1036	2.85	355
0024	0.70	085	1228	1.13	350
0149	1.75	180	1358	1.99	175
0403	1.25	180	1600	2.89	195
0635	0.42	280	1758	3.08	190
0812	3.11	000	1942	0.61	190
0940	3.30	355			

CURRENT STATION NO. 42 (Cont'd)

Depth - 100 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 Jun 54)			(3 Jun 54)	
1523	3.52	155	0935	3.32	000
1855	0.58	325	1101	1.76	340
2120	0.95	0.15	1203	0.39	185
2328	0.65	140	1319	4.46	125
	(2 Jun 54)		1614	4.12	170
0146	2.10	175	1827	0.52	180
0417	1.29	200	1957	1.90	340
0705	2.92	000	2133	1.42	295
1022	1.67	350	2326	1.76	035
1239	1.42	210		(4 Jun 54)	
1448	2.92	190	0119	0.39	100
1725	3.48	195	0253	1.63	170
2009	1.20	020	0435	0.98	185
2021	1.34	320	0622	0.38	245
2207*	1.59	355	0800	1.94	010
	(3 June 54)		1030	2.86	000
0016	0.48	130	1221	1.44	335
0141	1.48	185	1350	2.00	185
0356	1.08	225	1554	2.70	190
0630	0.39	335	1750	2.22	175
0802	2.92	005	1936	0.92	195
* Depth - 110 meters					

CURRENT STATION NO. 43

Admiralty Inlet
 LAT. 48° 01.9' N LONG. 122° 38.1' W
 1 - 5 June 1954 L

BROWN BEAR Cruise No. 60

Drifting Ship Method					
Depth - Surface					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 June 54)			(3 June 54)	
1620	2.13	345	2045	2.81	020
1945	2.18	035	2240	2.49	335
2220	0.92	335		(4 June 54)	
	(2 June 54)		0025	2.38	345
0020	0.03	335	0205	1.14	340
0300	0.50	190	0340	0.51	345
0535	1.31	020	0533	0.70	005
0837	4.40	345	0700	1.31	015
1113	1.07	340		(4 June 54)	
1342	3.08	190	0855	4.29	335
1650	3.38	185	1824	3.63	345
1920	1.40	070	1320	2.54	345
2020	1.71	030	1503	2.51	195
2335	1.83	000	1710	2.80	180
	(3 June 54)		1852	2.14	175
0015	0.35	065	2040	1.77	105
0320	0.33	185	2237	2.04	010
0500	0.64	345		(5 June 54)	
0717	1.75	350	0136	1.19	350
0850	4.35	340	0418	0.56	355
0935	3.66	345	0703	0.94	005
1135	2.16	340	1030	4.80	330
1248	0.93	235	1412	0.61	210
1507	2.63	190	1628	3.04	160
1623	1.55	190	1817	1.25	170
1840	0.30	180	2200	2.66	020

CURRENT STATION NO. 43 (Cont'd)

Depth - 10 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 June 54)			(3 June 54)	
1726	1.66	150	1905	1.53	165
2000	2.46	045	2037	1.87	040
2234	1.36	350	2238	1.62	355
	(2 June 54)			(4 June 54)	
0032	0.47	025	0027	2.26	185
0311	0.71	080	0210	0.62	355
0548	2.08	005	0350	0.33	085
0853	3.99	350	0533	0.62	030
1350	2.97	190	0849	3.59	335
1659	2.18	160	1302	0.58	040
1916	1.26	065	1528	1.18	175
2125	2.96	350	1720	2.30	180
2340	1.90	355	1913	0.71	210
	(3 June 54)		2049	1.67	130
0107	0.64	025	2233	2.52	010
0318	0.32	150		(5 June 54)	
0511	0.63	310	0121	1.18	350
0716	1.66	005	0400	0.78	050
0847	4.86	345	0655	0.93	030
1035	3.79	335	1023	5.98	305
1140	2.04	325	1351	0.08	260
1301	1.47	235	1621	2.51	150
1510	2.90	170	1856	0.76	180
1731	2.60	165			

CURRENT STATION NO. 43 (Cont'd)

Depth - 20 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 June 54)			(3 June 54)	
1718	1.98	170	1912	1.16	170
1951	1.77	025	2044	1.84	300
2228	1.61	345	2244	1.56	350
	(2 June 54)			(4 June 54)	
0020	0.27	330	0020	2.04	340
0302	0.29	180	0202	0.64	020
0523	1.60	022	0338	0.50	115
0845	4.82	350	0524	0.27	125
1123	1.03	025	0704	1.45	013
1657	3.08	195	1131	3.54	345
1911	0.79	090	1315	1.06	000
2120	1.66	010	1523	2.06	165
2347	1.38	000	1715	2.64	185
	(3 June 54)		1907	1.52	175
0100	0.50	045	2045	0.94	120
0310	1.91	175	2238	1.98	005
0455	0.65	320		(5 June 54)	
0517	0.18	220	0127	1.61	345
0720	1.32	015	0405	0.46	090
0850	4.38	340	0700	0.63	010
1032	4.58	335	1026	4.49	035
1138	2.90	330	1356	1.02	010
1255	1.53	245	1625	2.66	160
1500	2.64	180	1900	1.82	185
1738	1.36	165			

Depth - 30 meters		
Time	Speed (Kts.)	Set (°T)
	(3 June 54)	
0723	1.55	000
0848	5.19	330
1024	4.56	330
1031	5.12	332
1135	1.92	310
1250	1.38	260

CURRENT STATION NO. 43 (Cont'd)

Depth - 40 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 June 54)			(3 June 54)	
1710	1.53	165	1922	2.47	230
1943	1.03	025	2057	1.33	335
2222	0.73	345	2050	1.35	350
	(2 June 54)			(4 June 54)	
0014	0.35	140	0036	0.90	350
0254	0.56	150	0219	0.32	240
0516	1.29	020	0353	1.38	205
0831	4.21	345	0538	0.74	185
0837	4.41	345	0714	0.57	335
1117	0.78	015	0945	3.82	000
1335	3.28	185	1135	2.19	355
1636	3.69	180	1319	0.74	130
1859	0.37	150	1516	2.56	190
2114	1.75	025	1709	2.95	180
2336	1.14	000	1900	2.57	180
	(3 June 54)				
0117	0.39	150	2040	2.47	145
0303	1.50	170	2257	1.75	345
0500	0.37	210		(5 June 54)	205
0726	1.70	330	0146	1.20	250
0856	5.48	040	0427	0.98	330
1132	2.45	025	0716	0.22	170
1247	2.06	240	1049	3.66	130
1729	3.82	180	1416	0.51	
			1645	2.86	

CURRENT STATION NO. 43 (Cont'd)

Depth - 70 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 June 54)			(3 June 54)	
1701	1.44	180	1915	1.28	165
1936	0.86	080	2047	0.84	325
2217	1.56	265	2244	1.70	010
	(2 June 54)			(4 June 54)	
0005	0.58	185	0027	1.69	025
0245	0.65	200	0209	1.19	210
0502	0.47	345	0344	1.61	190
0825	3.42	350	0530	0.76	185
1111	0.78	045	0705	0.42	340
1326	1.68	170	1129	2.81	000
1646	2.52	170	1311	0.63	215
1910	0.96	095	1509	2.54	185
2127	1.86	345	1703	2.92	195
2334	0.53	280	1852	2.48	180
	(3 June 54)		2031	0.32	220
0110	0.71	215	2250	1.26	355
0255	1.84	175		(5 June 54)	
0453	0.61	220	0139	0.87	005
0723	2.46	005	0419	1.27	200
0854	3.77	355	0711	1.18	210
1034	2.60	000	1042	3.40	355
1140	0.75	325	1410	0.91	205
1245	1.08	130	1638	2.11	145
1505	2.94	175	1914	2.50	170
1721	3.80	190			

CURRENT STATION NO. 43 (Cont'd)

Depth - 100 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(4 June 54)			(5 June 54)	
2245	1.70	010	1031	4.14	000
	(5 June 54)		1403	0.51	145
0132	0.47	000	1631	1.89	145
0411	1.44	190	1905	2.21	205
0705	0.35	180			

Depth - 110 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(1 June 54)			(3 June 54)	
1705	1.19	155	1133	0.58	330
1935	0.80	330	1237	0.36	145
2204	0.70	295	1457	2.01	185
	(2 June 54)		1712	3.26	200
0514	0.29	010	1907	1.10	135
0822	2.73	345	2040	0.37	330
1107	0.89	290	2226	1.96	040
1637	2.68	175		(4 June 54)	
1903	0.17	020	0018	1.26	325
2116	0.96	030	0200	1.17	200
2324	1.96	340	0336	1.48	190
	(3 June 54)		0523	0.68	175
0102	1.91	200	0700	0.43	220
0246	1.63	175	1121	1.99	340
0446	0.93	110	1303	0.48	145
0717	1.19	000	1657	3.61	170
0847	4.05	005	1847	1.22	155
1025	2.37	000	2023	0.46	180

CURRENT STATION NO. 44

Admiralty Inlet
 LAT. 48° 01.9' N LONG. 122° 39.1' W
 1 - 4 June 1954

BROWN BEAR Cruise No. 60

Drifting Ship Method					
Depth - Surface			Depth - 10 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(1 June 54)			(2 June 54)		
1805	1.40	215	0108	0.43	355
2047	2.23	035	0347	0.67	205
2255	1.38	345	0634	3.15	000
(2 June 54)			0959	2.46	340
0105	0.4	350	1157	0.21	130
0345	1.00	160			
0630	2.90	005			
0950	2.25	325			
1148	0.34	325			
Depth - 20 meters			Depth - 40 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(1 June 54)			(1 June 54)		
1821	0.82	320	1758	2.34	180
2039	1.37	010	2026	2.00	335
2257	1.54	010	2034	1.81	340
(2 June 54)			2248	1.17	005
0100	0.80	170	(2 June 54)		
0339	0.87	180	0054	0.77	175
0628	2.76	350	0333	1.08	170
0953	3.36	350	0622	2.06	350
1150	0.22	025	0839	3.72	005
			0948	2.00	015
			1139	0.39	120
			1145	0.38	175

CURRENT STATION NO. 45

Admiralty Inlet
 LAT. 48° 03.9' N LONG. 122° 38.2' W
 4 - 5 June 1954

BROWN BEAR Cruise No. 60

Drifting Ship Method					
Depth - Surface			Depth - 10 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
2130	(4 June 54) 0.25	180	2138	(4 June 54) 0.79	225
0033	(5 June 54) 1.27	000	0017	(5 June 54) 1.52	350
0324	0.60	060	0309	1.01	045
0610	0.39	030	0559	0.14	260
0921	2.30	355	0913	1.82	185
1304	2.44	345	1536	2.00	190
1548	2.00	130			
2046	1.32	265			
2333	1.60	055			
Depth - 20 meters			Depth - 40 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
2133	(4 June 54) 1.00	205	2130	(4 June 54) 1.03	205
0023	(5 June 54) 1.50	000	0045	(5 June 54) 1.27	000
0314	0.35	020	0339	0.47	135
0603	0.13	185	0621	0.62	180
0916	1.58	350	0935	2.10	205
1250	1.05	340	1311	2.12	040
1540	1.72	175	1559	2.48	170
Depth - 70 meters			Depth - 100 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
2120	(4 June 54) 1.10	355	2115	(4 June 54) 0.74	232
0036	(5 June 54) 0.68	000	0030	(5 June 54) 0.16	105
0327	1.02	170	0320	1.09	175
0616	1.13	170	0608	0.90	170
0929	1.24	345	0921	1.16	350
1304	1.04	300	1257	1.32	050
1554	2.08	165	1547	1.94	155

CURRENT STATION NO. 46

Admiralty Inlet
 LAT. 48° 00.0' N LONG. 122° 38.0' W
 4 - 5 June 1954

BROWN BEAR Cruise No.60

Drifting Ship Method					
Depth - Surface			Depth - 10 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
2346	(4 June 54) 1.58	340	2333	(4 June 54) 2.07	000
0230	(5 June 54) 0.86	350	0234	(5 June 54) 1.29	350
0518	0.20	325	0521	0.42	245
0830	0.80	095	0830	1.30	100
1206	2.80	330	1455	0.45	155
1448	0.61	140	1716	1.67	120
1712	2.64	135	2001	0.98	125
1954	0.64	090			
2243	0.80	320			
0230	(6 June 54) 1.60	335			
Depth - 20 meters			Depth - 40 meters		
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
0229	(5 June 54) 1.54	350	2344	(4 June 54) 1.81	340
0516	0.51	215		(5 June 54)	
0834	0.72	080	0224	0.80	335
1216	1.70	000	0511	0.51	225
1451	0.82	170	0842	0.66	100
1711	1.72	140	1209	1.74	010
1957	1.02	220	1444	1.25	175
			1952	1.82	230

CURRENT STATION NO. 47

Carr Inlet
 LAT. 47° 14.8' N LONG. 122° 39.8' W
 19 - 20 July 1954

Price meter at 3 - 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(19 July 54)			(20 July 54)			(20 July 54)		
2115	0.20	130	0415	0.15	(115)	1130	<0.15	(100)
2130	0.16	(175)	0430	0.15	(115)	1145	<0.15	(085)
2145	0.16	220	0445	0.16	(110)	1200	<0.15	(070)
2200	0.15	(170)	0500	0.16	(105)	1215	(0.15)	055
2215	<0.15	105	0515	0.15	(100)	1230	0.36	095
2230	0.15	(090)	0530	<0.15	(100)	1245	0.29	095
2245	(0.15)	(070)	0545	<0.15	(095)	1300	0.32	080
2300	<0.15	055	0600	<0.15	(095)	1315	0.36	(110)
2315	0.15	045	0615	<0.15	(090)	1330	0.15	140
2330	0.15	(050)	0630	0.15	(090)	1345	0.15	(150)
2345	0.18	055	0645	<0.15	(080)	1400	0.15	(155)
2400	0.17	050	0700	<0.15	(080)	1415	0.16	(160)
(20 July 54)			0715	<0.15	(075)	1430	<0.15	(170)
0015	0.19	090	0730	0.25	(075)	1445	<0.15	(175)
0030	0.18	(105)	0745	<0.15	(070)	1500	<0.15	(180)
0045	0.18	120	0800	0.15	(070)	1515	<0.15	(190)
0100	0.21	(130)	0815	0.16	065	1530	<0.15	(195)
0115	0.21	140	0830	0.17	(060)	1545	<0.15	(205)
0130	0.18	(130)	0845	<0.15	(055)	1600	<0.15	215
0145	0.18	125	0900	0.15	050	1615	<0.15	(220)
0200	0.15	(130)	0915	0.17	(085)	1630	<0.15	225
0215	0.15	(140)	0930	0.18	125	1645	<0.15	(235)
0230	0.15	(140)	0945	0.18	(125)	1700	<0.15	(245)
0245	0.15	(135)	1000	0.15	125	1715	0.15	255
0300	0.16	(135)	1015	<0.15	140	1730	0.18	245
0315	0.15	(130)	1030	<0.15	(135)	1745	<0.15	---
0330	<0.15	(130)	1045	<0.15	130	1800	<0.15	---
0345	0.17	(125)	1100	<0.15	(115)	1815	<0.15	---
0400	0.16	(120)	1115	<0.15	(105)	1830	<0.15	---
						1834	<0.15	---

Note: Parentheses indicate interpolated values

CURRENT STATION NO. 47 (Cont'd)

Currents and Wind Biplane at 30 meters									
Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)	Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)
(19 July 54)					(20 July 54)				
2045	0.12	224	6	224	0530	0.10	239	6	154
2105	0.10	194			0550	0.07	144	4	154
2125	0.12	359	8	224	0610	<0.06	159	4	154
2140	0.08	357			0630	0.12	214	5	144
2200	0.12	284			0650	0.10	144	4	149
2230	0.08	154	7	224	0710	0.07	069	4	159
2255	0.10	047			0730	0.07	024	3	149
2320	0.11	319			0820	0.12	101	4	184
2340	0.10	061	7	224	0850	0.11	059		
2400	0.06	141			0930	0.08	(161)	4	194
(20 July 54)					1225	0.17	080	1	254
0020	0.10	204	7	224	1305	0.15	096	0	-
0040	0.06	024			1335	0.18	220		
0100	0.09	269			1405	0.11	179	2	234
0140	0.12	354	6	174	1434	0.08	169	1	234
0200	0.06	139			1450	0.11	144	2	244
0230	0.08	139	6	144	1512	<0.06	169	2	244
0250	0.07	145	6	144	1530	0.14	216	2	234
0305	0.07	139			1555	0.11	246	3	239
0325	0.15	219	7	144	1620	<0.06	229	2	244
0345	<0.06	-	7	144	1640	0.18	264	2	234
0405	0.10	169			1700	0.11	239		
0425	<0.06	174	5	154	1720	0.14	334	2	224
0444	<0.06	209	4	154	1740	0.16	294		
0510	<0.06	144	6	154	1830	0.08	004	2	234

CURRENT STATION NO. 48

Carr Inlet
 LAT. 47° 13.5' N LONG. 122° 37.6' W
 20 - 21 July 1954

Price meter at 3 - 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(20 July 54)			(21 July 54)			(21 July 54)		
2000	0.15	120	0445	0.44	(140)	1245	0.20	135
2015	<0.15	(125)	0500	0.43	140	1300	0.17	(140)
2030	<0.15	135	0515	0.47	155	1315	0.26	150
2045	0.15	230	0530	0.48	(170)	1330	0.24	(140)
2100	0.15	(235)	0545	0.51	190	1345	0.23	130
2115	0.15	(240)	0600	0.50	210	1400	0.17	115
2130	0.15	245	0615	0.42	(210)	1415	(0.21)	(165)
2145	0.20	(245)	0630	0.37	205	1430	0.25	215
2200	0.15	240	0645	0.40	(205)	1445	0.40	305
2215	0.20	235	0700	0.41	200	1500	0.15	(285)
2230	0.18	(235)	0715	0.36	185	1515	<0.15	(265)
2245	0.23	240	0730	0.36	205	1530	0.18	245
2300	<0.15	(240)	0745	0.23	230	1545	0.16	265
2315	<0.15	235	0800	0.15	(175)	1600	0.23	125
2330	0.20	235	0815	<0.15	125	1615	0.24	(120)
2345	0.16	(230)	0830	0.15	045	1630	0.25	115
2400	0.16	(220)	0845	0.34	(065)	1645	0.23	(160)
(21 July 54)			0900	0.42	(080)	1700	0.35	205
0015	<0.15	215	0915	0.35	(100)	1715	0.41	(145)
0030	<0.15	225	0930	0.26	(120)	1730	0.40	095
0045	0.15	(220)	0945	0.32	135	1745	0.29	145
0100	0.17	215	1000	0.38	135	1800	0.34	140
0115	0.16	170	1015	0.35	130	1815	0.31	(155)
0130	0.18	(160)	1030	0.36	125	1830	0.30	(170)
0145	0.23	155	1045	0.30	120	1845	0.19	(185)
0200	0.45	(145)	1100	0.30	180	1900	0.19	205
0215	0.49	(135)	1115	0.39	125	1915	0.17	(220)
0230	0.47	125	1130	0.38	(125)	1930	0.16	230
0245	0.34	(130)	1145	0.37	(125)	1945	<0.15	(230)
0300	0.35	(140)	1200	0.37	120	2000	0.15	225
0315	0.35	145	1215	0.36	(125)	2015	0.15	(225)
0330	0.26	(145)	1230	0.20	(130)	2030	0.16	(225)
0345	0.23	145						
0400	0.26	(140)						
0415	0.32	135						
0430	0.42	140						

Note: Parenthesis indicate interpolated values

CURRENT STATION NO. 48 (Cont'd)

Currents and Wind									
Biplane at 30 meters									
Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)	Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)
(20 July 54)					(21 July 54)				
1940	0.33	014	4	244	0715	0.21	322	0	-
2005	0.47	034	2	239	0730	0.32	327	0	-
2025	0.38	023			0750	<0.06	-	0	-
2045	0.38	023			0820	0.20	047		
2100	0.23	023	3	005	0900	0.33	108	4	334
2120	0.33	055			0920	0.24	176		
2140	0.23	035			0940	0.27	039		
2200	0.29	059	2	244	1000	0.40	054	4	069
2225	0.27	059			1025	0.34	039		
2240	0.26	057			1040	0.25	005		
2300	0.26	055	0	-	1136	0.25	041		
2325	0.18	035			1140	0.21	099		
2340	0.18	278	1	194	1200	0.27	066	1	324
2400	0.17	032			1245	0.22	097		
(21 July 54)					1340	0.12	099		
0020	0.12	338	0	-	1400	0.16	092		
0040	0.08	338			1420	0.17	234	4	284
0100	0.12	332			1440	0.56	296	10	284
0120	0.12	120	0	-	1500	0.17	358	6	284
0140	0.17	176			1523	0.15	301	5	284
0205	0.14	142	0	-	1540	0.15	189	4	284
0225	0.12	141			1605	0.08	320	5	284
0245	0.08	154	0	-	1625	0.08	315		
0305	0.08	150	0	-	1645	0.15	231		
0325	0.12	139	0	-	1705	0.17	264	6	289
0345	0.08	141	0	-	1725	0.17	286		
0409	0.14	181	0	-	1745	0.40	352	6	239
0434	0.08	151	0	-	1805	0.50	354		
0453	0.19	181	0	-	1825	0.36	016		
0515	0.12	222	0	-	1855	0.29	014		
0544	0.23	215	0	-	1925	0.32	030	10	274
0610	0.39	254	0	-	2010	0.37	026		
0630	0.15	313	0	-	2020	0.44	020		
0655	0.27	283	0	-	2040	0.54	043	3	254

CURRENT STATION NO. 49

Carr Inlet
 LAT. 47° 16.4' N LONG. 122° 42.1' W
 22 - 23 July 1954

Price meter at 3 - 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(22 July 54)			(22 July 54)			(22 July 54)		
0630		195	1445	<0.15	195	2300	0.15	(315)
0645	0.15	(220)	1500	0.19	(185)	2315	<0.15	(325)
0700	<0.15	245	1515	0.16	175	2330	<0.15	(330)
0715	<0.15	(295)	1530	<0.15	220	2345	<0.15	(335)
0730	<0.15	(350)	1545	<0.15	(220)	(23 July 54)		
0745	<0.15	045	1600	0.15	(225)	0000	0.15	340
0800	<0.15	065	1615	<0.15	225	0015	<0.15	015
0815	<0.15	(020)	1630	<0.15	165	0030	0.15	045
0830	<0.15	350	1645	<0.15	(225)	0045	<0.15	(045)
0845	<0.15	345	1700	<0.15	(280)	0100	<0.15	040
0900	<0.15	325	1715	<0.15	235	0115	<0.15	(035)
0915	<0.15	(000)	1730	0.40	(245)	0130	<0.15	035
0930	<0.15	040	1745	0.35	(250)	0145	<0.15	(020)
0945	<0.15	(065)	1800	<0.15	260	0200	<0.15	(005)
1000	<0.15	(085)	1815	<0.15	(240)	0215	<0.15	350
1015	<0.15	(110)	1830	<0.15	225	0230	0.17	(055)
1030	<0.15	(130)	1845	<0.15	(235)	0245	0.18	125
1045	<0.15	155	1900	<0.15	340	0300	0.17	(125)
1100	0.20	(190)	1915	0.38	305	0315	0.16	(130)
1115	0.20	(225)	1930	(0.29)	310	0330	0.15	135
1130	0.18	(265)	1945	0.20	335	0345	<0.15	335
1145	0.30	(300)	2000	<0.15	295	0400	0.15	205
1200	0.20	335	2015	0.15	(300)	0415	0.17	205
1215	0.32	(005)	2030	0.40	305	0430	0.15	(205)
1230	0.19	030	2045	0.50	355	0445	0.15	205
1245	0.17	(035)	2100	0.20	(345)	0500	0.15	185
1300	0.20	040	2115	0.20	335	0515	<0.15	175
1315	0.17	(125)	2130	0.20	(320)	0530	0.17	(225)
1330	(0.16)	210	2145	<0.15	(305)	0545	<0.15	270
1345	<0.15	(160)	2200	<0.15	295	0600	0.17	(270)
1400	<0.15	(105)	2215	0.16	(300)	0615	0.16	265
1415	0.15	050	2230	0.15	(300)	0630	0.15	(265)
1430	0.15	145	2245	0.18	305			

Note: Parentheses indicate interpolated values

CURRENT STATION NO. 49 (Cont'd)

Currents and Wind									
Depth - 30 meters									
Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)	Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)
(22 July 54)					(22 July 54)				
0610	0.19	289	0	-	1835	0.19	247		
0630	0.10	278	0	-	1900	0.19	237		
0640	0.15	256	0	-	1925	0.15	248		
0710	0.15	227	0	-	1945	0.09	297	0	-
0730	0.17	227	0	-	2005	0.17	236		
0740	0.21	249	0	-	2030	0.15	287	1	054
0800	0.19	283	0	-	2045	<0.06	-	2	064
0820	0.26	289	0	-	2100	0.17	248	2	064
0840	0.28	298	0	-	2120	0.15	257		
0900	0.27	291	0	-	2140	0.16	274		
0920	0.32	287	0	-	2210	0.09	229		
0940	0.27	278	0	-	2220	0.09	230		
1000	0.26	279			2240	0.14	230		
1020	0.23	278			2300	0.09	230		
1040	0.16	278			2330	0.09	300		
1100	0.06	303	0	-	2345	0.09	325		
1120	0.06	303			2400	0.10	325		
1140	0.09	303			(23 July 54)				
1200	0.09	313			0020	0.10	352		
1220	0.10	311			0040	0.10	352		
1240	0.10	338			0100	0.10	353	1	307
1300	0.09	008			0120	0.10	336		
1320	0.12	008			0140	0.10	007		
1340	0.09	008			0218	0.10	137		
1400	0.09	009			0248	0.09	146	5	344
1420	0.15	117	1	144	0330	0.13	204	3	344
1440	<0.06	-			0350	0.15	184		
1500	0.12	218	3	134	0400	<0.06	-	4	339
1520	0.12	263			0420	0.12	190		
1540	<0.06	-			0440	0.10	161		
1600	<0.06	-	2	154	0500	0.07	142	2	339
1620	0.06	085			0520	<0.06	-		
1640	<0.06	-			0540	<0.06	-	2	339
1700	<0.06	-			0600	<0.06	-		
1740	0.09	108			0625	0.16	268		
1750	0.23	229			0645	0.21	266	1	344
1800	0.12	239	0	-	0700	<0.06	-		

CURRENT STATION NO. 50

Hood Canal
 LAT. 47° 48.9' N LONG. 122° 41.9' W
 6 - 8 December 1954

BROWN BEAR Cruise No. 76

Price meter at 2 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(6 Dec 54)			(7 Dec 54)			(7 Dec 54)		
1000	0.28	006	0300	0.40	015	2030	0.42	056
1030	0.32	006	0330	0.03	020	2100	0.35	255
1100	0.37	343	0400	0.34	015	2130	----	----
1130	0.63	016	0430	1.15	015	2200	0.75	230
1200	0.87	026	0500	---	019	2230	0.72	210
1230	1.28	030	0530	0.88	015	2300	1.22	230
1300	1.26	030	0600	1.11	015	2330	1.22	259
1330	1.53	025	0630	0.71	025	(8 Dec 54)		
1400	1.69	025	0700	0.66	018	0000	1.34	250
1430	1.61	028	0730	0.72	038	0030	0.57	---
1500	1.73	025	0800	0.73	038	0100	0.60	---
1530	1.72	031	0830	0.27	205	0130	0.60	220
1600	1.83	031	0900	0.33	222	0200	0.33	220
1630	1.79	034	0930	0.33	251	0230	0.22	015
1700	1.65	034	1000	0.25	245	0300	0.20	015
1730	1.62	032	1030	0.17	165	0330	0.70	010
1800	1.65	034	1100	0.19	150	0400	0.89	005
1830	1.48	060	1130	0.17	245	0430	1.19	040
1900	1.39	040	1200	0.27	228	0500	1.16	035
1930	0.93	040	1230	0.31	235	0530	1.23	015
2000	0.57	042	1300	0.30	235	0600	1.21	030
2030	0.28	050	1330	0.88	048	0630	0.99	030
2100	0.19	085	1400	1.07	017	0700	0.89	015
2130	0.27	060	1430	1.42	038	0730	0.54	195
2200	0.52	030	1500	1.55	035	0800	0.64	023
2230	0.44	050	1530	1.52	030	0830	0.78	035
2300	0.39	060	1600	1.54	035	0900	0.85	049
2330	0.12	324	1630	1.51	035	0930	0.52	030
(7 Dec 54)			1700	1.52	041	1000	0.48	030
0000	0.30	060	1730	1.56	030	1030	0.38	054
0030	0.17	000	1800	1.59	030	1100	0.33	061
0100	0.10	323	1830	1.58	030	1130	0.14	061
0130	0.05	---	1900	1.46	027	1200	0.12	066
0200	0.07	015	1930	1.36	035	1230	0.07	034
0230	0.05	---	2000	0.90	056	1300	0.12	351

CURRENT STATION NO. 50 (Cont'd)

Gemware meter except where noted								
Depth - 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(6 Dec 54)			(7 Dec 54)			(7 Dec 54)		
1133	0.50	055	0707	0.74	045	2137	1.08	215
1340	2.82	050	0757	0.57	035	2236	1.08	230
1611	2.98	025	0837	0.37	020	2350	1.82	230
1705	1.46	045	0922	0.23	355	(8 Dec 54)		
1811	1.68	055	1006	0.36	220	0156	0.12	---
1849	1.21	055	^b 1051	0.46	233	0241	0.09	---
1951	0.22	045	^b 1124	0.46	255	0343	0.81	020
2032	0.73	230	^b 1144	0.62	252	0441	0.45	025
2110	0.38	165	1146	0.55	225	0532	1.30	025
2151	0.55	240	1232	0.00	---	0609	1.24	025
2234	0.64	255	1317	0.41	115	^e 0658	0.74	045
2311	0.28	235	1359	0.43	000	0747	0.75	025
(7 Dec 54)			1443	1.00	045	0835	0.17	025
^b 0020	0.32	262	1522	1.28	035	0939	0.38	025
^b 0101	0.23	170	1605	1.61	040	1025	0.41	145
0256	0.68	025	1657	1.91	025	1108	0.25	210
0339	0.81	045	1809	1.99	020	1150	0.39	245
0441	1.11	035	1855	1.20	050	1226	0.10	235
0524	0.55	065	1936	1.16	055	1259	0.05	---
^b 0611	0.64	045	2021	0.32	165			
0615	0.53	043	2059	0.37	250			

b = biplane

e = Ekman meter

CURRENT STATION NO. 50 (Cont'd)

Gemware meter except where noted								
Depth - 10 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(6 Dec 54)			(7 Dec 54)			(7 Dec 54)		
1031	1.24	240	0431	0.86	040	2011	0.35	030
1126	0.43	205	0518	0.55	045	2053	0.06	---
1253	0.30	120	0605	0.40	025	2130	1.14	245
1327	0.46	050	0655	0.15	185	2226	1.16	230
1424	0.58	345	0752	0.14	175	2343	1.27	225
1513	1.59	050	0824	0.28	100	(8 Dec 54)		
1520	0.99	055	0829	0.14	185	0150	0.91	210
1600	1.54	055	0912	0.27	270	0235	0.66	210
1655	1.13	040	0915	0.28	280	0336	0.25	245
1752	1.00	055	0957	0.33	215	0435	0.52	035
1837	0.17	025	1040	0.99	235	0518	0.37	060
1938	0.07	---	1135	1.16	225	0524	0.91	070
1942	0.32	260	1225	0.0	---	0600	0.99	040
2104	1.21	220	1309	0.26	265	^e 0653	0.31	045
2144	0.57	210	1352	0.15	025	0741	0.45	060
2220	1.17	245	1436	0.57	035	0827	0.45	010
2303	0.92	195	1515	0.80	045	0917	0.0	---
2320	0.71	242	^b 1517	0.67	040	1017	0.26	245
2347	0.28	192	1558	1.18	045	1059	0.47	215
(7 Dec 54)			1650	2.05	025	1143	0.86	245
0054	0.69	250	1803	1.06	035	1220	0.62	235
0152	0.14	230	1850	1.20	045	^e 1236	0.53	255
0246	0.31	290	^b 1930	0.85	035	1252	0.54	225
0330	0.39	030	1932	0.84	030	^e 1318	0.27	260

b = biplane

e = Ekman meter

CURRENT STATION NO. 50 (Cont'd)

Biplane except where noted								
Depth - 20 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(6 Dec 54)			(7 Dec 54)			(7 Dec 54)		
g 1022	1.12	240	0328	0.00	---	1927	0.98	037
g 1126	0.43	205	0425	0.30	075	2007	0.40	033
g 1236	0.23	220	0444	0.20	011	2055	0.16	248
1323	0.26	055	0523	0.16	022	2140	1.93	228
1410	0.36	040	0555	0.16	053	g 2146	0.98	245
1429	0.56	063	0649	0.16	040	g 2230	0.0	---
1447	0.54	034	0717	0.00	---	g 2334	1.11	235
1511	1.00	057	0747	0.30	234	(8 Dec 54)		
1600	1.31	065	0832	0.32	225	e 0012	1.77	226
1648	1.45	079	0912	0.55	251	e 0142	0.44	225
1716	1.41	069	1000	0.71	253	e 0225	0.96	245
1740	1.45	073	g 1048	0.99	235	e 0330	0.48	245
1831	0.78	058	g 1120	1.24	225	e 0414	0.34	265
1853	0.62	050	1212	0.52	275	e 0518	0.28	055
1947	0.23	315	g 1217	0.13	245	e 0610	0.16	055
2024	0.28	230	1240	0.43	134	e 0649	0.05	---
2047	0.74	235	* 1311	0.54	212	e 0752	0.10	130
2101	0.71	243	1317	0.43	151	e 0852	0.0	---
2154	1.49	246	1358	0.00	---	g 0930	0.30	220
g 2324	0.89	225	1438	0.36	032	e 1016	0.47	230
(7 Dec 54)			1525	0.83	040	e 1111	0.79	225
g 0011	1.11	230	1600	1.32	038	e 1146	0.77	230
g 0105	0.69	235	g 1706	1.52	045	e 1205	0.89	235
0145	0.64	265	g 1757	2.08	045	e 1245	0.84	245
0245	0.40	256	g 1846	1.16	035			

g = Gemware

e = Ekman meter

* Ship swinging

CURRENT STATION NO. 50 (Cont'd)

Ekman meter except where noted								
Depth - 30 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(6 Dec 54)			(6 Dec 54)			(7 Dec 54)		
0931	0.64	234	g 2226	0.83	225	b 1640	2.09	054
0953	0.71	238	2237	1.19	224	g 1715	2.06	045
1016	0.71	226	2249	1.00	246	1720	3.22	054
1048	0.85	203	g 2317	1.05	245	g 1751	2.04	035
1112	0.64	203	(7 Dec 54)			g 1840	1.32	045
1127	0.54	242	g 0000	1.00	230	1925	1.22	045
1151	0.43	236	0057	0.75	230	2003	0.40	042
1229	0.23	089	0149	0.52	239	2050	0.00	---
1314	0.23	073	0248	0.16	233	2032	0.16	285
1332	0.21	015	0323	0.	---	2223	0.97	230
1407	0.46	045	0423	0.42	013	2327	0.99	225
1426	0.54	046	0451	0.20	019	(8 Dec 54)		
1444	0.68	059	0511	0.16	016	0018	2.37	230
1528	1.28	057	0558	0.	---	0131	0.44	225
1546	1.31	079	0645	0.08	352	0238	0.68	225
1548	1.17	060	0721	0.	---	0340	0.31	215
1556	1.47	059	0743	0.11	217	0421	0.20	250
1644	1.92	078	0829	0.26	217	0512	0.17	055
1710	1.82	080	0908	0.54	250	0603	0.16	055
1737	1.62	067	0958	0.76	215	0640	0.08	---
1822	1.05	055	1029	0.76	237	0744	0.03	---
1826	1.04	057	1040	0.63	235	0831	0.06	265
1900	0.60	062	1118	0.66	231	0922	0.20	---
1949	0.28	087	1207	0.40	225	1010	0.50	235
2020	0.33	215	1305	0.43	256	1057	0.25	230
2043	0.62	253	1355	0.23	018	1136	0.59	225
2051	0.74	270	1428	0.43	067	1211	0.68	215
2149	0.58	057	1521	0.71	049	1248	0.38	225
2219	1.45	223	1556	1.10	051			

b = biplane

g = Gemware meter

CURRENT STATION NO. 50 (Cont'd)

Gemware meter except where noted								
Depth - 50 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(6 Dec 54)			(7 Dec 54)			(7 Dec 54)		
1013	0.52	185	0321	0.14	125	1921	0.69	035
1107	0.51	240	0423	0.67	085	2000	0.18	035
1226	0.34	050	0511	0.28	050	* 2045	0.06	---
1323	0.18	075	^b 0514	0.33	029	* 2122	0.04	---
1417	0.58	060	0558	0.10	---	* 2214	0.82	225
1458	0.24	015	0648	0.06	115	2316	1.05	195
1549	1.06	060	0743	0.17	355	(8 Dec 54)		
^b 1635	1.34	048	0820	0.11	025	0122	0.38	210
^b 1644	0.95	050	0902	0.07	205	0224	0.49	225
^b 1705	1.25	079	0946	0.53	220	0330	0.09	---
^b 1729	1.66	063	1030	0.48	215	0426	0.10	295
^b 1741	1.45	020	^b 1035	0.49	220	0511	0.33	075
^b 1806	1.26	064	1109	0.55	215	0554	0.23	015
1830	0.62	035	^b 1111	0.64	232	^e 0700	0.26	050
1945	0.39	115	1204	0.36	215	0733	0.06	---
2017	0.30	210	1259	0.22	255	0815	0.00	---
2054	0.17	240	1343	0.00	---	0908	0.00	---
2134	0.69	245	1427	0.53	045	1009	0.58	235
2212	0.66	245	1434	0.59	048	1050	0.62	245
2255	0.99	220	1505	0.72	045	1134	0.49	235
2352	0.36	225	1547	0.79	055	1213	0.65	215
(7 Dec 54)			1636	1.33	---	1246	0.17	245
0046	0.60	245	1643	1.05	045	1300	0.00	---
0140	0.80	255	1745	0.99	045	1320	0.13	295
0237	0.26	135	1832	1.16	040			

* 47 meters off the bottom

b = biplane e = Ekman meter

CURRENT STATION NO. 51

Hood Canal
 LAT. 47° 48.5' N LONG. 121° 41.2' W
 8 - 10 December 1954

BROWN BEAR Cruise No. 76

Price meter at 2 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(8 Dec 54)			(9 Dec 54)			(9 Dec 54)		
1400	0.40	050	0630	0.02	020	2330	1.52	220
1430	0.53	050	0700	0.00	---	(10 Dec 54)		
1500	1.10	030	0730	0.22	020	0000	1.38	225
1530	1.28	030	0800	0.95	040	0030	1.15	259
1600	1.34	032	0830	0.90	050	0100	1.19	250
1630	1.43	030	0900	0.68	045	0130	1.41	194
1700	1.42	035	0930	0.77	075	0200	1.43	205
1730	1.27	040	1000	0.56	055	0230	1.32	209
1800	1.29	046	1030	0.45	050	0300	1.12	211
1830	1.32	029	1100	0.43	048	0330	1.05	222
1900	1.50	013	1130	0.52	050	0400	1.11	230
1930	1.47	032	1200	0.47	040	0430	0.93	233
2000	1.48	(019)	1230	0.22	035	0500	0.58	141
2030	1.26	(006)	1300	0.05	025	0530	0.22	345
2100	0.81	353	1330	0.05	020	0600	1.33	036
2130	0.42	353	1400	0.66	025	0630	0.60	036
2200	0.24	125	1430	0.85	037	0900	0.74	045
2230	0.37	185	1500	0.90	038	0930	0.61	040
2300	0.77	239	1530	1.06	033	1000	0.62	017
2330	0.97	240	1600	1.27	029	1030	0.50	025
(9 Dec 54)			1630	1.35	029	1100	0.41	055
0000	0.94	245	1700	1.44	030	1130	0.31	036
0030	1.22	260	1730	1.52	033	1200	0.37	036
0100	1.23	250	1800	1.53	037	1230	0.31	055
0130	1.20	250	1830	1.57	039	1300	0.27	055
0200	1.12	250	1900	1.61	018	1330	0.25	019
0230	1.05	250	1930	1.72	027	1400	0.41	005
0300	1.16	215	2000	1.68	024	1430	0.61	008
0330	0.62	183	2030	1.53	021	1500	0.88	015
0400	0.53	199	2100	1.38	023	1530	1.03	028
0430	1.17	292	2130	1.13	010	1600	1.18	025
0500	1.40	003	2200	0.68	016	1630	1.35	023
0530	1.30	007	2230	0.22	330	1700	1.37	023
0600	0.20	018	2300	0.79	254			

CURRENT STATION NO. 51 (Cont'd)

Depth - 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Gemware meter (8 Dec 54)			Ekman meter (9 Dec 54)			Ekman meter (10 Dec 54)		
1435	0.78	035	1156	0.03	190	0435	0.73	255
1508	1.07	035	1230	0.26	195	0510	0.61	235
1544	1.22	035	1302	0.30	235	0555	0.71	030
1628	1.26	035	1328	0.11	195	0702	0.63	025
1706	0.91	025	1356	0.17	---	0734	0.84	025
1748	1.16	025	1440	0.08	020	0807	0.89	020
1838	0.83	015	1512	0.71	025	0831	0.86	015
1931	1.16	015	1536	0.91	035	0852	0.76	020
2022	1.01	005	1601	1.04	025	0927	0.60	025
2143	0.53	225	1658	1.25	025	0951	0.59	005
2235	0.83	225	1758	1.39	030	1026	0.46	010
(9 Dec 54)			1833	1.31	020	1057	0.41	025
0027	2.16	220	1905	1.46	015	1132	0.25	125
0109	1.12	205	1934	1.39	000	1157	0.09	015
0117	1.34	215	1958	1.39	015	1232	0.13	125
Ekman meter			2015	1.62	025	1300	0.22	125
0223	0.68	200	2049	1.12	015	1334	0.23	200
0257	1.18	215	2117	0.83	015	1409	0.09	---
0324	0.09	---	2158	0.35	320	1443	0.04	305
0358	0.76	215	2226	0.38	185	1513	0.17	285
0444	0.87	035	2303	1.08	225	1546	0.67	035
0603	1.06	030	2320	1.54	240	1620	0.75	035
0723	0.88	025	2353	1.40	205	1657	1.02	025
0826	0.48	015	(10 Dec 54)					
0923	0.44	015	0030	1.00	195			
1001	0.37	005	0122	1.69	215			
1045	0.03	---	0159	1.46	215			
1116	0.19	305	0257	1.16	215			
			0337	1.22	205			

CURRENT STATION NO. 51 (Cont'd)

Ekman meter except where noted								
Depth - 10 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(8 Dec 54)			(9 Dec 54)			(10 Dec 54)		
1402	0.26	015	0915	0.08	355	0153	1.40	215
g 1419	0.32	025	0957	0.03	---	0253	1.08	215
g 1502	0.94	050	1035	0.17	260	0334	1.16	225
g 1537	0.88	045	1112	0.18	200	0430	0.81	230
1555	0.0	---	1152	0.33	210	0503	0.33	205
g 1622	1.30	055	1225	0.61	205	0542	0.75	---
1634	1.02	045	1258	0.67	225	0552	0.46	055
g 1659	1.37	045	1326	0.35	225	0647	0.56	045
g 1737	1.30	045	1352	0.44	225	0729	0.60	045
1827	0.73	035	1436	0.03	---	0800	0.40	035
g 1832	1.33	045	1502	0.20	235	0827	0.38	035
g 1923	0.75	025	1532	0.44	030	0849	0.37	030
1927	0.93	015	1559	0.64	050	0924	0.30	060
g 2016	1.01	025	1650	1.08	035	0946	0.17	335
g 2055	0.25	010	1753	1.16	030	1021	0.30	045
g 2135	0.12	---	1829	1.29	025	1048	0.15	040
g 2228	1.04	210	1859	1.28	035	1127	0.26	185
g 2240	1.16	215	1931	1.30	030	1152	0.45	235
g 2335	1.37	230	1954	1.27	025	1229	0.36	225
(9 Dec 54)			2013	1.02	050	1255	0.36	165
g 0023	0.92	240	2046	1.09	050	1330	0.54	225
g 0103	1.36	225	2113	0.67	030	1402	0.42	220
g 0117	1.10	210	2156	0.22	340	1438	0.20	235
0252	1.47	235	2227	0.34	215	1507	0.12	250
0319	0.93	245	2259	1.08	235	1542	0.05	085
0356	0.77	215	2317	1.11	240	1613	0.35	020
0437	0.41	065	2351	1.67	215	1652	0.80	045
0554	0.71	035	(10 Dec 54)					
0711	0.59	060	0025	1.70	215			
0819	0.25	060	0117	1.70	225			

g = Gemware meter

CURRENT STATION NO. 51 (Cont'd)

Ekman meter except where noted								
Depth - 20 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(8 Dec 54)			(9 Dec 54)			(10 Dec 54)		
1458	0.26	035	1219	0.42	225	0248	0.88	220
1531	0.57	040	1254	0.57	235	0328	1.22	245
1618	0.81	035	1321	0.66	225	0418	0.69	205
1702	1.17	045	1347	0.54	185	0456	0.45	---
1755	1.33	045	1432	0.34	190	0535	0.69	210
1901	0.92	035	1500	0.11	185	0639	0.20	085
2004	0.80	---	1528	0.17	335	0725	0.36	040
2033	0.57	045	1556	0.41	030	0753	0.51	080
2155	0.57	245	1645	0.83	045	0823	0.35	060
2220	0.68	215	1747	1.12	040	0845	0.36	055
2307	1.64	220	1825	1.20	045	0921	0.20	055
(9 Dec 54)			1854	1.26	035	0943	0.16	045
0000	1.76	235	1926	1.30	050	1016	0.23	105
0107	1.52	230	1950	1.18	035	1043	0.09	235
0209	0.65	215	2010	1.16	035	1123	0.28	280
0248	1.36	235	g 2033	0.89	045	1147	0.44	265
0315	1.37	230	2110	0.63	(040)	1208	0.50	225
0351	0.58	215	2120	0.52	045	1251	0.45	205
0433	0.35	220	2152	0.14	055	1326	0.47	205
0524	0.16	055	2216	0.71	245	1356	0.51	200
0705	0.21	030	2255	0.87	215	1433	0.54	215
0808	0.26	---	2313	0.96	215	1502	0.42	305
0907	0.12	170	2347	1.35	215	1537	0.31	205
0950	0.29	215	(10 Dec 54)			1606	0.07	075
1027	0.30	200	0020	1.37	215	1640	0.28	020
1106	0.49	225	0112	1.54	235			
1146	0.61	225	0148	1.36	215			

g = Gemware meter

CURRENT STATION NO. 51 (Cont'd)

Ekman meter except where noted								
Depth - 30 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(8 Dec 54)			(9 Dec 54)			(10 Dec 54)		
1417	0.14	335	1214	0.64	220	0236	1.02	230
1517	0.60	035	1249	0.70	215	0323	1.06	230
1538	0.71	035	1316	0.71	215	0413	0.79	225
1613	0.97	035	1342	0.73	235	0446	0.84	230
1650	1.46	035	1417	0.37	---	0529	0.58	215
1739	1.30	040	1428	0.47	225	0632	0.46	085
1853	1.44	045	1456	0.16	205	0720	0.52	045
1954	0.91	055	1522	0.06	---	0747	0.40	055
^g 2028	0.68	068	1550	0.36	035	0819	0.36	015
^g 2049	0.35	265	1638	0.91	035	0841	0.34	060
2203	0.68	230	1735	1.41	---	0917	0.17	070
2316	1.25	225	1743	1.48	035	0938	0.38	090
(9 Dec 54)			1819	1.40	035	1012	0.03	---
0015	1.36	225	1845	1.47	040	* 1037	0.18	165
0057	1.62	250	1918	1.42	035	1118	0.05	205
0200	1.62	210	1946	1.37	045	1143	0.28	210
0245	1.06	245	2008	1.17	055	1215	0.60	210
0309	0.78	185	2038	0.97	040	1247	0.52	230
0346	0.0	---	2101	0.66	045	1321	0.68	235
0425	0.56	200	2147	0.25	065	1350	0.56	220
0524	0.10	---	* 2212	0.27	155	1429	0.75	235
0658	0.42	040	2253	0.44	220	1456	0.46	220
0800	0.11	335	2311	0.90	225	1529	0.21	185
0856	0.36	---	2344	1.30	215	1559	0.0	---
0941	0.05	215	(10 Dec 54)			1633	0.32	025
1016	0.18	195	0012	1.62	215			
1059	0.54	215	0106	1.37	205			
1139	0.62	220	0143	1.31	225			

* Ship swinging

g = Gemware meter

CURRENT STATION NO. 51 (Cont'd)

Ekman meter except where noted Depth - 50 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(8 Dec 54)			(9 Dec 54)			(10 Dec 54)		
g 1412	0.16	095	0653	0.16	025	0006	1.20	245
1426	0.37	035	0750	0.13	345	0057	1.12	215
g 1454	0.46	210	0845	0.11	025	0137	0.87	210
g 1531	0.85	045	0936	0.12	030	0230	0.57	215
1545	0.81	045	1018	0.05	---	0317	0.61	190
g 1612	0.95	045	1050	0.20	200	0404	0.43	235
g 1652	1.24	045	1127	0.51	215	0441	0.78	235
1710	1.31	035	1208	0.73	230	0521	0.38	195
g 1728	1.15	045	1240	0.64	210	0621	0.39	300
1819	1.27	035	1312	0.49	205	0710	0.32	045
g 1822	1.27	045	1335	0.38	215	0739	0.34	025
1910	1.14	055	1405	0.0	---	0815	0.38	020
1917	0.75	040	1412	0.15	---	0837	0.32	015
g 2010	0.64	055	1450	0.14	035	0913	0.32	005
g 2042	0.41	060	1517	0.31	030	0934	0.36	015
g 2122	0.26	280	1545	0.57	050	1009	0.21	345
2221	0.47	225	1627	0.84	035	1033	0.19	355
2231	0.49	215	1728	1.24	035	1110	0.07	---
2328	1.04	215	1810	1.16	035	1137	0.20	200
(9 Dec 54)			1837	1.35	040	1208	0.53	180
g 0013	1.24	215	1911	1.11	035	1240	0.88	225
0028	1.37	225	1941	1.02	030	1314	0.74	220
g 0054	1.21	290	2004	0.90	040	1345	0.71	220
0117	0.80	205	2032	0.90	045	1423	0.38	215
0212	0.61	210	2103	0.65	035	1450	0.44	230
0238	0.25	205	2142	0.14	015	1524	0.12	235
0304	0.27	---	* 2207	0.18	335	1553	0.13	025
0340	0.0	---	2246	0.19	255	1624	0.43	035
0412	0.87	225	2307	0.56	215			
0517	0.18	---	2340	1.10	235			

* Ship swinging

g = Gemware meter

CURRENT STATION NO. 52

Carr Inlet
 LAT. $47^{\circ} 14.8' N$ LONG. $122^{\circ} 38.7' W$
 31 January - 1 February 1955

Price and Magnesyn meters									
Depth - 7.5 meters									
Time	Speed (Kts.)	Set ($^{\circ}T$)	Wind (Kts.)	From ($^{\circ}T$)	Time	Speed (Kts.)	Set ($^{\circ}T$)	Wind (Kts.)	From ($^{\circ}T$)
<u>1 February</u>					<u>2 February</u>				
2220	0.63	000			1200	0.16	355		
2240	0.67	010			1220	0.17	035		
2300	0.58	025			1240	0.13	045	3	185
2320	0.52	050			1300	0.12	050		
2340	0.63	055	5	185	1320	0.11	050		
<u>2 February</u>					1340	0.11	050	3	185
0000	0.58	040			1400	0.21	125		
0020	0.54	045			1420	0.21	125		
0040	0.47	055	4	180	1440	0.23	130	3	185
0100	0.45	060			1500	0.24	135		
0120	0.42	050			1520	0.27	135		
0140	0.47	045	4	180	1540	0.29	135	0	-
0200	0.59	045			1600	0.30	135		
0220	0.56	050			1620	0.32	145		
0240	0.56	050	4	180	1640	0.37	150		
0300	0.49	055			1700	0.42	150	0	-
0320	0.36	060			1720	0.43	150		
0340	0.27	070	6	180	1740	0.47	150		
0400	0.18	075			1800	0.45	145	0	-
0420	0.12	090			1820	0.40	145		
0440	0.11	100			1840	0.39	140		
0500	0.16	145	6	185	1900	0.34	140	0	-
0520	0.09	155			1920	0.29	135		
0540	0.13	150			1940	0.22	135		
0600	0.08	260	3	185	2000	0.18	140	0	-
0620	0.14	208			2020	0.13	135		
0640	0.14	195			2040	0.11	150		
0700	0.11	155	0	-	2100	<0.05			
0720	0.08	135			2120	0.35	315		
0740	<0.05	115			2140	0.43	325		
0800	<0.05	050	1	270	2200	0.50	335	4	165
0820	0.22	285			2220	0.56	355		
0840	0.20	245			2240	0.55	010		
0900	0.17	270	4	075	2300	0.47	035	4	175
0920	0.20	275			2320	0.69	045		
0940	0.24	325			2340	0.47	005		
1000	0.30	325	0	-	<u>3 February</u>				
1020	0.30	340			0000	0.56	010	0	-
1040	0.31	355			0020	0.54	020		
1100	0.20	000	4	205	0040	0.54	020		
1120	0.16	005			0100	0.48	020	0	-
1140	0.10	045	3	185					

CURRENT STATION NO. 52 (Cont'd)

Depth - 30 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
<u>1 February</u>			<u>2 February</u>			<u>2 February</u>		
2209	0.44	335	0806	<0.02	-	1638	0.08	165
2240	0.35	035	0820	0.11	135	1652	0.20	170
2255	0.33	030	0835	0.09	(070)	1707	0.22	170
2315	0.23	085	0850	0.07	005	1720	0.23	175
2335	0.22	055	0905	0.06	220	1734	0.20	185
<u>2 February</u>			0920	0.08	320	1805	0.27	140
0006	0.22	050	0935	0.13	355	1818	0.26	145
0019	0.12	045	1005	0.23	355	1833	0.26	140
0035	0.09	070	1020	0.24	000	1846	0.23	140
0049	0.06	035	1035	0.22	015	1901	0.22	135
0103	0.24	045	1050	0.19	005	1916	0.19	140
0118	0.10	205	1105	0.18	015	1929	0.12	145
0132	0.21	055	1121	0.14	030	1943	0.18	135
0224	0.12	075	1135	0.05	055	2011	0.07	210
0237	0.12	095	1205	0.08	075	2025	0.09	195
0317	0.05	075	1218	0.05	075	2040	<0.02	-
0330	0.04	185	1232	0.12	075	2055	0.03	265
0343	0.05	205	1245	0.11	300	2110	0.06	(190)
0417	<0.02	-	1259	0.06	055	2125	0.23	120
0430	<0.02	-	1312	0.10	065	2140	0.19	015
0443	<0.02	-	1326	0.04	065	2209	0.34	015
0456	0.03	-	1340	0.12	070	2235	0.27	015
0509	0.10	100	1408	0.15	040	2250	0.34	025
0523	0.06	125	1422	0.24	145	2305	0.51	050
0538	0.12	095	1435	0.22	175	2320	0.57	060
0605	0.17	350	1450	0.26	155	2335	0.09	035
0619	0.11	345	1504	0.28	(155)	<u>3 February</u>		
0635	<0.02	-	1519	0.27	160	0008	0.20	020
0650	0.06	065	1532	0.29	155	0021	0.15	035
0703	<0.02	-	1609	0.28	155	0034	0.23	045
0717	0.10	255	1624	0.27	165	0047	0.27	060
0730	0.04	225						

CURRENT STATION NO. 53

Carr Inlet
 LAT. 47° 13.2' N LONG. 122° 37.6' W
 1 - 3 February 1955

Price and Magnesium meters									
Depth - 7.5 meters									
Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)	Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)
<u>31 January</u>					<u>1 February</u>				
1720	0.66	295			0640	0.44	330		
1740	0.50	285			0700	0.39	310	8	185
1800	0.54	285	24	170	0720	0.37	335		
1820	0.18	300			0740	0.32	325		
1840	0.17	330			0800	0.33	320	6	185
1900	0.18	280			0820	0.42	320		
1920	0.18	280			0840	0.40	330		
1940	0.14	280			*0900	0.23	335	7	180
2000	0.12	285	16	205	0920	0.24	335		
2020	0.11	285			0940	0.14	335		
2040	0.09	290			1000	0.18	320	7	185
2100	0.09	290	18	230	1020	0.15	305		
2120	0.11	280			1040	0.11	310		
2140	0.11	280			1100	0.09	315	0	-
2200	0.13	290	18	230	1120	0.05	-		
2220	0.17	295			1140	0.05	-		
2240	0.20	300			1200	0.16	230	5	205
2300	0.24	310	13	225	1220	0.07	275		
2320	0.21	320			1240	0.11	280		
2340	0.21	325			1300	0.17	315	6	200
<u>1 February</u>					1320	0.21	315		
0000	0.17	320	12	225	1340	0.20	310		
0020	0.23	(315)			1400	0.18	325	6	200
0040	0.25	(315)			1420	0.20	345		
0100	(0.27)	(315)			1440	0.20	345		
0120	(0.30)	(315)			1500	0.20	345	6	200
0140	(0.33)	(315)			1520	0.15	340		
0200	0.36	(315)			1540	0.12	335		
0220	0.39	(300)	16	160	1600	0.09	345	6	200
0240	0.39	295			1620	0.10	350		
0300	0.35	315	13	185	1640	0.16	350		
0320	0.26	330			1700	0.08	(340)	5	200
0340	0.48	335	12	180	1720	0.07	330		
0400	0.50	335			1740	0.07	350		
0420	0.60	330			1800	0.11	350	5	200
0440	0.59	325			1820	0.10	350		
0500	0.52	335	12	180	1840	0.09	315		
0520	0.50	330			1900	0.11	265	3	240
0540	0.55	325			1920	0.10	310		
0600	0.46	330	11	180	1940	0.13	310		
0620	0.48	330							

*All subsequent measurements at 7.5 meters, all previous at 3 meters

CURRENT STATION NO. 53 (Cont'd)

Depth - 30 meters					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	<u>31 Jan 55</u>			<u>1 Feb 55</u>	
1855	0.30	315	0840	(0.18)	(330)
1914	0.34	325	0854	0.19	315
1932	0.27	330	0921	0.09	015
1948	0.14	320	0940	0.09	020
2018	0.20	290	1008	0.05	035
2038	0.15	335	1025	0.02	(005)
2058	0.10	305	1037	0.05	335
2116	0.08	010	1055	0.07	015
2137	0.12	345	1115	0.05	325
2202	0.17	325	1137	0.07	255
2220	0.23	340	1205	0.06	245
2238	0.25	340	1223	0.05	215
2256	0.27	335	1239	0.05	215
2316	0.27	340	1253	0.12	135
2336	0.29	335	1309	0.12	325
	<u>1 Feb 55</u>		1324	0.07	340
0006	0.22	335	1329	0.06	(005)
0026	0.32	330	1405	0.06	(030)
0100	(0.27)	(340)	1419	0.03	(065)
0130	(0.27)	(350)	1432	0.12	265
0213	(0.27)	(000)	1446	0.07	345
0228	(0.23)	305	1501	0.06	335
0247	0.23	065	1515	0.02	-
0307	0.21	000	1529	0.04	345
0327	0.26	000	1543	0.06	005
0343	0.32	010	1612	0.05	335
0412	0.32	030	1625	0.05	355
0429	0.39	010	1640	0.03	295
0445	0.21	070	1654	0.06	345
0502	0.16	025	1709	0.07	310
0518	0.13	010	1723	0.07	000
0534	0.10	005	1738	0.07	005
0606	0.20	005	1808	0.02	-
0621	0.21	355	1823	0.08	010
0637	0.20	350	1837	0.13	020
0652	0.21	345	1850	0.11	005
0720	0.26	(350)	1904	0.11	015
0736	0.11	355	1918	0.11	000
0806	0.17	000	1932	0.20	015
0826	(0.18)	(345)			

CURRENT STATION NO. 54

Carr Inlet
 LAT. 47° 16.3' N LONG. 122° 42.2' W
 3 - 4 February 1955

Price and Magnesyn meters									
Depth - 7.5 meters									
Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)	Time	Speed (Kts.)	Set (°T)	Wind (Kts.)	From (°T)
<u>3 February</u>					<u>3 February</u>				
0300	0.25	350	2	250	1620	<0.05	-		
0320	0.16	350			1640	<0.05	-		
0340	0.15	335	0	-	1700	<0.05	-	3	180
0400	0.19	335			1720	<0.05	-		
0420	0.14	000			1740	<0.05	-		
0440	0.12	015			1800	0.07	015	3	180
0500	0.09	080	0	-	1820	0.06	335		
0520	0.10	055			1840	0.16	305		
0540	0.09	050			1900	0.16	295	4	225
0600	0.15	065	0	-	1920	0.11	345		
0620	0.12	055			1940	0.09	340		
0640	0.08	110			2000	0.11	345		
0700	<0.05	130			2020	0.13	000		
0720	0.08	055			2040	0.14	000		
0740	0.07	060			2100	0.16	340	6	165
0800	0.08	060	2	180	2120	0.17	000		
0820	<0.05	060			2140	0.20	005		
0840	<0.05	055			2200	0.20	005	8	175
0900	<0.05	055	1	165	2220	0.19	000		
0920	<0.05	045			2240	0.20	000		
0940	0.12	045			2300	0.19	350	7	205
1000	0.12	045	2	160	2320	0.17	000		
1020	0.08	045			2340	0.16	000		
1040	0.11	070			<u>4 February</u>				
1100	0.10	075	3	150	0000	0.16	340	11	185
1120	<0.05	-			0020	0.18	330		
1140	0.15	(325)			0040	0.19	315		
1200	0.22	305	5	170	0100	0.22	305	6	170
1220	0.19	345			0120	0.21	305		
1240	0.11	040			0140	0.21	325		
1300	0.13	040	6	170	0200	0.16	(005)	16	150
1320	0.12	355			0220	(0.11)	(005)		
1340	0.11	040			0240	0.14	005		
1400	0.09	005	6	170	0300	0.09	355	12	180
1420	0.10	(010)			0320	0.15	335		
1440	0.07	035			0340	0.12	355	10	180
1500	0.07	345	4	180	0400	0.13	065		
1520	<0.05	-			0420	0.12	085		
1540	<0.05	-			0440	0.08	(035)		
1600	<0.05	-	4	180	0500	(0.12)	355	12	180

CURRENT STATION NO. 54 (Cont'd)

Depth - 30 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
<u>3 Feb 55</u>			<u>3 Feb 55</u>			<u>3 Feb 55</u>		
0255	0.15	000	1219	0.08	350	2006	<0.02	-
0310	0.02	065	1232	0.02	-	2020	0.02	-
0324	<0.02	-	1245	0.09	075	2035	0.05	305
0337	<0.02	-	1259	0.08	095	2050	0.05	325
0413	0.09	065	-	-	-	2105	0.04	335
0429	<0.02	-	-	-	-	2122	0.03	345
0442	<0.02	225	-	-	-	2138	0.05	355
0456	<0.02	355	1313	<0.02	-	2218	0.06	015
0511	0.04	245	1327	<0.02	035	2235	0.11	000
0524	0.10	215	1339	<0.02	-	2250	0.11	005
0539	0.12	175	1404	<0.02	-	2308	0.11	345
0606	0.11	100	1416	<0.02	-	2320	0.14	345
0619	0.18	150	1429	0.06	125	2335	0.14	330
0634	0.20	150	1442	<0.02	-	<u>4 Feb 55</u>		
0648	0.11	155	1455	<0.02	-	0004	0.17	335
0701	0.12	155	1508	<0.02	-	0018	0.20	325
0714	0.16	150	1520	<0.02	-	0033	0.20	320
0727	0.12	155	1533	<0.02	-	0047	0.21	316
0740	0.17	150	1606	<0.02	-	0102	0.17	330
0807	0.10	155	1619	0.05	145	0115	0.21	355
0820	0.04	155	1632	0.06	135	0128	0.21	330
0835	0.05	215	1645	0.13	125	0141	0.20	345
0850	<0.02	-	1658	0.07	165	0206	0.23	330
0905	<0.02	-	1713	0.13	150	0219	0.11	205
0920	0.03	-	1727	0.12	155	0233	(0.12)	(275)
0935	0.10	260	1742	0.12	155	0246	0.12	354
1003	0.07	270	1810	0.08	175	0300	0.14	350
1016	0.04	250	1823	<0.02	-	0314	0.18	325
1030	0.09	160	1837	0.04	255	0328	0.18	345
1045	<0.02	-	1850	0.07	215	0341	0.14	350
1105	<0.02	-	1903	0.05	195	0410	0.12	005
1120	0.08	295	1916	0.03	(145)	0424	0.09	005
1135	0.14	315	1929	0.03	095	0437	0.14	350
1205	0.18	300	1942	<0.02	-	0450	0.08	305

CURRENT STATION NO. 55

Colvos Passage
 LAT. 47° 30.6' N LONG. 122° 29.6' W
 19 February 1955

Price meter at 2 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
0020	0.78	180	0340	0.50	204	0710	0.39	047
0030	0.76	185	0350	0.47	201	0720	0.17	007
0040	0.87	184	0400	0.47	208	0730	0.30	358
0050	0.87	178	0410	0.39	206	0740	0.34	356
0103	1.04	210	0420	0.26	197	0750	0.32	353
0110	0.95	215	0430	0.30	197	0805	0.32	346
0120	0.76	210	0440	0.13	197	0815	0.28	021
0130	0.93	195	0450	0.15	207	0825	0.26	024
0140	0.84	215	0500	0.22	206	0835	0.26	030
0150	1.04	220	0510	0.13	215	0855	0.28	020
0200	1.09	225	0520	0.26	235	0900	0.26	036
0210	0.78	215	0530	0.06	290	0910	0.26	046
0220	0.82	211	0540	0.09	320	0920	0.28	041
0230	0.78	197	0600	0.11	036	0930	0.22	005
0240	0.80	202	0610	0.19	037	0940	0.04	294
0255	0.73	200	0620	0.22	037	0950	0.00	041
0300	0.69	206	0630	0.34	046	1000	0.13	058
0310	0.73	212	0640	0.28	039	1020	0.24	135
0320	0.69	208	0650	0.19	044	1030	0.00	160
0330	0.73	201	0700	0.19	050			

CURRENT STATION NO. 55 (Cont'd)

Gemware meter								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
<u>Depth - 10 meters</u>			<u>Depth - 20 meters</u>			<u>Depth - 30 meters</u>		
0012	0.77	195	0019	0.32	205	0028	0.00	---
0106	0.68	215	0112	0.35	165	0119	0.15	145
0157	0.46	175	0207	0.34	155	0215	0.28	160
0256	0.26	205	0303	0.06	345	0311	0.08	---
0348	0.16	005	0359	0.32	035	0404	0.31	030
0453	0.40	035	0459	0.43	025	0508	0.57	035
0551	0.51	015	0600	0.61	025	0607	0.51	040
0654	0.59	065	0703	0.61	035	0712	0.61	040
0747	0.61	020	0755	0.68	030	0829	0.64	035
0900	0.49	020	0910	0.53	050	0919	0.58	050
<u>Depth - 50 meters</u>			<u>Depth - 100 meters</u>					
0038	0.12	345	0046	0.21	175			
0127	0.07	---	0136	0.04	---			
0228	0.25	195	0237	0.04	---			
0320	0.11	055	0328	0.28	030			
0417	0.31	040	0426	0.36	025			
0521	0.55	030	0531	0.69	035			
0616	0.61	035	0638	0.51	025			
0722	0.70	045	0734	0.49	015			
0838	0.51	015	0843	0.29	010			
0926	0.47	030	0935	0.37	---			

CURRENT STATION NO. 56

Colvos Passage, North End
 LAT. 49° 30.6' N LONG. 122° 29.0' W
 29 - 30 April 1955

BROWN BEAR Cruise No. 100

Ekman and Gemware meters								
Depth - 2 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Gemware meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1904	0.32	020	0513	1.23	025	1205	0.34	355
1956	<0.02	---	0555	1.15	025	1245	0.67	010
2057	0.19	355	0640	0.97	015	1327	0.65	005
2128	0.31	015	0709	0.92	015	1430	0.90	005
2157	0.43	015	0813	0.59	025	1532	0.90	010
2259	0.37	055	0850	0.17	015	1616	0.55	350
2335	0.47	020	0927	0.28	015	1744	0.85	030
	(30 Apr 55)		0959	0.30	005	1823	0.75	010
0005	0.61	010	1027	0.31	325	1851	0.55	005
0150	0.70	335	1102	0.43	345	1922	0.34	325
			1129	0.15	015	1952	0.10	---

Depth - 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Gemware meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1845	0.04	---	0448	1.33	025	1125	0.44	025
1855	0.30	015	0550	1.10	025	1159	0.55	025
1946	0.03	---	0636	0.96	025	1240	0.54	015
2050	0.12	295	0705	0.86	015	1323	0.69	005
2121	0.15	050	0739	0.59	025	1423	0.93	015
2151	0.28	020	0810	0.56	025	1526	0.79	015
2252	0.30	105	0844	0.15	015	1610	0.77	025
2325	0.40	030	0924	0.22	025	1738	0.89	020
	(30 Apr 55)		0955	0.34	030	1819	0.76	005
0000	0.70	005	1024	0.46	025	1848	0.60	015
0141	0.84	345	1058	0.41	015	1919	0.44	030
						1948	0.26	035

CURRENT STATION NO. 56 (Cont'd)

Depth - 10 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Gemware meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1833	0.20	305	0442	1.33	025	1234	0.53	015
1930	<0.02	---	0545	1.15	030	1315	0.70	010
2037	0.05	---	0632	0.94	025	1414	0.94	015
2043	0.03	---	0658	0.84	025	1520	0.80	010
2113	0.18	035	(0733)	0.64	010	1605	2 2 0.92	025
2144	0.04	085	0807	0.56	015	1730	0.86	015
2243	0.26	095	0837	0.42	025	1815	0.71	005
2317	0.32	065	0920	0.26	035	1845	0.65	015
2351	0.52	025	0951	0.33	025	1916	0.58	030
(30 Apr 55)			1021	0.32	020	1946	0.40	035
0131	0.18	---	1055	0.36	015			
0329	0.00	---	1122	0.42	015			
0337	0.89	005	1156	0.47	020			

Depth - 20 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Gemware meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1826	0.22	295	0435	1.06	025	1153	0.47	015
1912	<0.02	---	0540	0.98	025	1230	0.51	015
1918	0.04	---	0627	0.82	020	1310	0.60	015
2028	0.12	225	0702	0.71	015	1407	0.88	015
2104	0.00	---	0727	0.57	015	1515	0.58	015
2135	0.32	155	0803	0.51	025	1600	0.90	025
2220	0.20	045	0832	0.39	025	1725	0.89	005
2308	0.25	055	0915	0.29	050	1810	0.81	015
2343	0.44	025	0947	0.12	025	1840	0.60	355
(30 Apr 55)			1017	0.19	015	1911	0.42	015
0119	0.17	(020)	1051	0.28	005	1942	0.34	025
0210	0.34	015	1119	0.35	015			

CURRENT STATION NO. 56 (Cont'd)

Depth - 30 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Ekman meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1849	0.23	325	0116	0.66	015	1046	0.31	015
1907	0.00	---	0202	0.84	015	1116	0.30	015
1923	0.09	025	0232	0.98	020	1149	0.44	030
1945	0.03	---	0300	0.94	025	1225	0.41	025
2026	0.12	205	0325	1.00	015	1305	0.65	015
2048	0.13	---	0352	1.02	015	1401	0.77	015
2111	0.07	175	0427	1.12	025	1505	0.94	015
2138	0.29	175	0530	0.90	020	1555	0.86	020
2201	0.37	155	0622	0.94	015	1719	0.85	035
2243	0.20	065	0654	0.72	015	1804	0.71	025
2305	0.30	055	0723	0.52	005	1837	0.63	005
2326	0.30	045	0758	0.43	020	1906	0.47	015
2347	0.37	035	0827	0.32	025	1935	0.33	005
	(30 Apr 55)		0911	0.29	045			
0022	0.33	040	0941	0.17	020			
0049	0.30	015	1013	0.20	(020)			

Depth - 60 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Ekman meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1844	0.00	---	0041	0.30	025	0908	0.09	(000)
1901	0.00	---	0108	0.44	(020)	0937	0.15	005
1917	0.00	---	0148	0.75	015	1008	0.03	---
1937	0.20	---	0217	0.79	020	1112	0.17	020
2017	0.36	195	0247	0.97	015	1217	0.41	025
2041	0.47	175	0315	1.02	015	1300	0.59	025
2104	0.46	160	0343	1.06	020	1351	0.80	015
2128	0.43	165	0410	1.02	025	1457	0.98	020
2156	0.33	155	0520	1.02	015	1549	0.94	025
2237	0.34	080	0615	0.65	015	1711	0.94	015
2258	0.24	085	0649	0.69	005	1758	0.68	005
2317	0.40	050	0718	0.52	025	1832	0.46	015
2339	0.39	045	0752	0.41	010	1901	0.46	015
2359	0.46	035	0822	0.26	355	1931	0.07	---

CURRENT STATION NO. 56 (Cont'd)

Depth - 90 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
Ekman meter (29 Apr 55)			Ekman meter (30 Apr 55)			Ekman meter (30 Apr 55)		
1825	0.19	---	0028	0.32	020	0858	0.00	---
1855	0.05	---	0100	0.46	020	0932	0.00	---
1912	0.00	---	0140	0.70	025	1003	0.13	125
1930	0.18	165	0210	0.79	035	1131	0.38	---
1951	0.26	175	0239	0.90	020	1210	0.23	005
2033	0.50	175	0305	1.00	(020)	1255	0.45	015
2055	0.38	175	0330	0.95	020	1335	0.65	030
2120	0.49	165	0400	1.05	025	1450	0.83	015
2148	0.17	145	0500	0.92	015	1538	0.84	005
2225	0.20	095	0609	0.73	025	1700	0.90	015
2250	0.28	060	0644	0.56	035	1752	0.62	015
2312	0.30	075	0712	0.21	025	1827	0.24	030
2333	0.43	060	0744	0.21	025	1926	0.09	135
2352	0.34	---	0816	0.09	---			

CURRENT STATION NO. 57 (Cont'd)

<u>Track III</u>				<u>Track V</u>			
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
0	1437	2.40	001	0	1606	3.32	347
10	1440	2.25	359	10	1604	2.35	342
50	1426	4.39	357	50	1611	2.55	021
96	1432	3.44	340	96	1557	3.40	322
100	1438	2.25	338	98	1618	2.85	011
153	1428	1.33	325	170	1602	3.90	332
<u>Track IV</u>				<u>Track VI</u>			
0	1500	2.70	004	0	1801	3.87	336
10	1453	2.25	349	10	1755	3.11	335
50	1459	3.50	345	49	1805	1.63	340
97	1454	3.00	334	0	1820	2.55	337
100	1506	2.25	336	10	1820	1.40	332
150	1522	2.58	296	50	1832	1.16	338
228	1509	2.17	009	89	1813	3.08	036
				100	1832	1.72	337
				174	1822	1.58	305
				230	1808	2.50	293

CURRENT STATION NO. 58

San Juan Channel
 (North of Pt. Caution)
 LAT. 48° 34.3' N LONG. 123° 01.2' W
 5 August 1955

Depth - 75 fathoms (133 meters)							
(Price meter)				(Price meter)			
Depth (m)	Time	Speed (Kts.)	Set (°T)	Depth (m)	Time	Speed (Kts.)	Set (°T)
5	0845	1.41	---	5	1145	0.58	---
↓	0900	0.43	↓	↓	1200	0.22	↓
↓	0915	0.73	↓	↓	1215	0.54	↓
↓	0930	1.30	↓	↓	1230	0.50	↓
↓	0945	1.15	↓	↓	1245	0.45	↓
↓	1000	1.09	↓	↓	1300	0.24	↓
↓	1015	1.04	↓	↓	1315	0.26	↓
↓	1030	0.67	↓	↓	1330	0.15	↓
↓	1045	0.63	↓	↓	1345	0.43	↓
↓	1100	0.24	↓	↓	1400	0.58	↓
↓	1115	0.43	↓	↓	1415	0.47	↓
↓	1130	0.50	↓				
(Ekman meter)				(Ekman meter)			
S	1358	0.59	170	112	0905	1.26	110
5	0937	1.33	185	121	0942	1.07	120
5	1352	0.36	---	129	0951	0.55	130
5	1354	0.28	205	124	1000	0.45	110
10	1349	0.21	---	121	1010	0.67	130
25	0932	1.13	080	125	1014	0.29	180
↓	1055	0.73	095	125	1025	0.63	170
↓	1154	0.27	095	122	1035	0.72	185
↓	1345	1.26	290	130	1100	0.58	170
49	0929	1.10	105	130	1110	0.68	180
50	1051	0.71	110	131	1117	0.43	185
50	1150	0.22	---	130	1124	0.67	180
50	1339	1.30	310	124	1131	0.51	170
72	0925	1.33	120	133	1157	0.16	190
74	1048	1.18	120	130	1205	0.28	230
75	1144	0.32	205	133	1211	0.25	260
72	1334	0.87	290	130	1220	0.31	240
95	0850	1.02	140	133	1307	0.29	300
93	0916	1.68	130	131	1314	0.52	270
98	1041	0.74	130	124	1321	0.85	315
100	1137	0.57	100	130	1402	0.17	---
99	1329	0.76	290	126	1409	0.28	010
120	0840	0.77	140				

CURRENT STATION NO. 59

Rosario Strait
 LAT. 48° 26.6' N LONG. 122° 43.1' W
 23 - 24 September 1955

Price meter at surface					
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
	(23 Sept 55)			(24 Sept 55)	
2223	1.5	Ebb	0400	2.1	Ebb
2245	1.6		0415	1.8	
2301	1.65		0500	1.6	
2315	1.6		0530	1.35	
2330	1.65		0600	1.1	
2344	1.82		0630	0.7	
	(24 Sept 55)		0700	0.4	↓
0000	1.9		0730	0.0	Slack
0015	1.8		0806	0.1	Flood
0030	2.3		0836	1.2	
0045	2.4		0845	1.2	
0100	2.2		0900	1.1	
0115	2.3		0925	0.7	
0130	2.3		0945	1.0	
0145	2.4		1000	1.0	
0200	2.2		1015	1.1	
0215	2.1		1030	1.15	
0230	2.1		1100	1.03	
0245	2.1		1115	1.03	
0300	2.1		1130	0.8	
0315	2.0		1200	0.3	
0330	2.1		1230	0.2	↓
0345	2.1	↓	1300	-	Slack

* Surface flood sets approximately 345 °T. Surface ebb sets approximately 190 °T.

CURRENT STATION NO. 59 (Cont'd)

Disk meter 0.4 m from bottom (79 m)			
Time	Speed (Kts.)	Time	Speed (Kts.)
(23 Sept 55)		(24 Sept 55)	
2228	<0.25	0918	0.90
2305	<0.25	0945	1.10
2318	0.3	0950	0.80
2330	<0.25	0955	0.93
(24 Sept 55)		1000	0.88
0000	0.25	1005	0.91
0020	0.3	1010	0.72
0045	0.63	1031	0.87
0125	0.4	1036	0.70
0155	0.25	1040	1.00
0235	0.45	1044	0.93
0310	<0.25	1101	1.02
0340	0.3	1106	0.85
0415	<0.25	1109	0.88
0500	0.45	1112	0.55
0530	0.4	1115	0.76
0605	0.65	1131	0.95
0635	0.57	1136	0.87
0700	0.87	1140	0.82
0810	0.82	1144	0.60
0817	0.65	1147	0.85
0823	0.97	1201	0.79
0826	0.68	1204	0.83
0828	0.97	1208	0.85
0837	1.05	1211	0.57
0852	1.05	1215	0.57
0857	0.85	1250	0.63
0902	0.91	1256	0.70
0908	0.72	1300	0.57
0914	0.85	1305	0.55

CURRENT STATION NO. 60

Rosario Strait
 LAT. $48^{\circ} 26.5' N$ LONG. $122^{\circ} 45.5' W$
 24 - 25 September 1955

Price meter at surface					
Time	Speed (Kts.)	* Set ($^{\circ}T$)	Time	Speed (Kts.)	Set ($^{\circ}T$)
	(24 Sept 55)	Ebb		(25 Sept 55)	
2030	0.7		0430	2.9	Ebb
2145	0.7		0500	2.6	
2200	0.7		0540	2.3	
2230	0.75		0600	2.3	
2300	1.1		0700	1.4	
2330	1.4		0730	1.4	
	(25 Sept 55)		0800	1.0	
0000	1.65		0830	0.7	
0040	1.85		0845	---	Slack
0100	2.1		0900	0.55	Flood
0130	2.4		0930	0.3	
0200	2.2		1000	0.5	
0205	2.5		1035	0.6	
0230	3.0		1100	0.65	
0300	2.9		1130	0.8	
0330	2.6		1147	0.8	
0400	2.9	W			

* Surface flood direction approximately $330^{\circ}T$. Surface ebb direction approximately $190^{\circ}T$.

CURRENT STATION NO. 60 (Cont'd)

Disk meter 0.4 m from bottom (79 m)					
Time	Speed (Kts.)	Time	Speed (Kts.)	Time	Speed (Kts.)
	(24 Sept 55)		(25 Sept 55)		(25 Sept 55)
2040	0.51	0540	0.57	0834	0.35
2050	0.60	0545	0.55	0857	0.3
2146	0.35	0549	0.54	0901	0.15
2157	<0.25	0551	0.4	0903	0.4
2206	<0.25	0555	0.45	0905	0.3
2239	0.2	0557	0.55	0930	0.25
2244	0.3	0600	0.52	0932	0.25
2248	<0.25	0603	0.40	0934	<0.25
2253	0.35	0655	0.54	0940	0.40
2257	0.42	0658	0.35	0945	0.02
2339	<0.25	0700	0.54	0947	0.35
2345	<0.25	0702	0.25	0949	0.2
	(25 Sept 55)	0704	0.41	0951	0.2
0006	0.55	0705	<0.25	0953	<0.25
0047	0.3	0707	0.25	0955	0.3
0052	0.2	0709	<0.25	0956	<0.25
0055	0.3	0711	0.41	0958	0.2
0100	0.35	0713	0.40	1000	0.60
0105	0.25	0715	0.60	1002	0.42
0135	0.15	0717	0.60	1036	0.40
0146	0.2	0719	0.60	1042	0.42
0155	0.1	0721	0.42	1044	0.56
0205	<0.25	0723	0.45	1046	0.02
0235	<0.25	0725	0.45	1048	0.52
0250	0.50	0726	<0.25	1050	0.35
0258	<0.25	0728	0.42	1055	0.52
0303	<0.25	0730	0.15	1057	0.48
0335	0.45	0731	0.2	1059	0.48
0350	0.35	0803	0.35	1103	0.56
0354	0.25	0805	0.35	1131	0.52
0358	0.3	0807	<0.25	1132	0.59
0400	<0.25	0809	0.35	1134	0.54
0432	0.	0819	<0.25	1136	0.45
0437	0.4	0821	0.2	1138	0.48
0442	<0.25	0826	0.40	1140	0.45
0446	0.35	0828	0.40	1142	<0.25
0448	0.35	0829	0.43	1145	0.46
0452	0.48	0830	0.52	1147	0.4
0456	<0.25	0831	0.61		

CURRENT STATION NO. 61

Haro Strait
 LAT. 48° 34.7' N LONG. 123° 13.0' W
 15 - 16 October 1955

Price meter at 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(15 Oct 55)			(15 Oct 55)			(15 Oct 55)		
1415	0.34	---	1750	1.40	173	2200	2.30	---
1420	0.39	348	1758	1.98	163	2208	2.52	153
1427	0.67	351	1808	2.15	158	2217	2.80	143
1430	0.54	358	1812	2.11	---	2225	2.63	140
1436	0.33	002	1820	1.98	158	2231	2.40	155
1445	0.28	028	1830	1.98	158	2244	2.50	148
1450	0.43	013	1923	2.67	153	2250	2.52	153
1459	0.25	073	1931	2.85	156	2300	2.07	150
1515	0.35	036	1938	2.90	---	2310	1.73	156
1530	0.39	123	1942	2.90	---	2320	1.61	156
1552	0.37	163	1948	3.00	163	2330	1.77	163
1600	0.26	163	1955	3.00	161	2345	1.45	163
1607	0.54	193	2000	3.31	161	2350	1.27	163
1615	0.32	223	2009	3.24	157	(16 Oct 55)		
1622	0.72	193	2015	3.10	---	0000	1.08	168
1630	0.27	173	2020	2.90	158	0012	0.78	175
1637	0.67	193	2026	3.00	---	0020	0.92	201
1641	0.67	198	2050	2.80	158	0030	1.09	186
1650	0.67	218	2059	2.78	160	0040	0.78	194
1702	0.49	198	2110	2.63	165	0050	0.30	191
1710	0.50	188	2120	3.22	161	0100	0.47	150
1721	0.38	188	2129	2.74	163	0220	1.62	323
1728	1.23	183	2135	2.19	163	0229	1.94	323
1731	1.65	176	2140	2.08	163	0235	2.04	324
1735	1.65	163	2148	2.04	163	0240	2.22	328
1741	1.51	163	2155	1.93	163			

CURRENT STATION NO. 61 (Cont'd)

Gemware meter 1.4 m from bottom								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(15 Oct 55)			(15 Oct 55)			(15 Oct 55)		
1501	1.39*	290	1826	0.43	155	2243	1.30	160
1514	2.82*	310	1943	1.33	170	2254	0.54	170
1528	4.64*	330	1955	1.35	160	2308	0.65	140
1552	2.04	335	2008	1.64	160	2320	0.56	---
1610	2.02	330	2021	1.87	160	2334	0.51	160
1623	1.65	340	2111	1.32	160	(16 Oct 55)		
1652	0.61	330	2126	1.24	150	0015	0.44	000
1712	0.33	320	2143	1.38	160	0026	0.78	340
1720	0.37	300	2151	1.91	170	0039	1.75	310
1757	0.38	---	2206	1.57	185			
1811	0.72	160	2227	1.22	145			

Disk meter 0.4 m from bottom (276 m)					
Time	Speed (Kts.)	Time	Speed (Kts.)	Time	Speed (Kts.)
(15 Oct 55)		(15 Oct 55)		(15 Oct 55)	
1426	0.88	1712	0.32	2054	0.85
1435	0.80	1725	0.25	2111	0.75
1445	1.33	1735	0.81	2128	1.64
1450	1.24	1757	1.60*	2143	<0.25
1457	0.94	1811	0.38	2151	1.42
1514	1.05	1826	0.09	2227	0.99
1527	0.92	1830	0.55	2243	0.56
1552	0.62	1943	0.81	2254	0.62
1609	0.88	1955	<0.25	2308	0.45
1638	0.88	2008	1.38	2320	0.62
1654	<0.25	2022	1.42		

*Questionable measurement

CURRENT STATION NO. 62

Haro Strait
 LAT. $48^{\circ} 34.7'N$ LONG. $123^{\circ} 12.9' W$
 1 November 1955

Price meter at 5 m					
Time	Speed (Kts.)	Set ($^{\circ}T$)	Time	Speed (Kts.)	Set ($^{\circ}T$)
1438	0.40	230	1947	2.29	---
1452	0.25	180	1948	2.31	---
1506	0.22	042	1950	2.45	---
1518	0.55	092	1951	2.58	---
1531	0.46	090	2007	3.58	160
1538	0.32	135	2017	3.48	145
1545	0.37	115	2025	3.28	148
1552	0.25	175	2033	3.40	145
1602	0.45	115	2040	3.00	145
1615	0.63	152	2050	2.96	153
1629	0.73	125	2100	3.00	153
1639	0.57	160	2110	3.06	163
1644	0.66	162	2120	2.90	155
1654	0.57	140	2130	2.86	160
1658	0.61	---	2140	2.32	165
1704	0.85	145	2150	2.20	160
1715	0.95	152	2155	3.70	155
1733	1.51	170	2200	3.50	150
1740	1.53	172	2206	3.22	160
1745	1.52	---	2216	2.56	150
1753	1.66	170	2225	2.92	147
1804	1.80	175	2230	2.54	150
1810	1.90	175	2241	2.28	160
1833	1.95	---	2250	2.62	157
1908	2.16	185	2300	3.06	157
1921	2.16	170	2310	3.04	160
1931	2.35	170	2320	2.54	160
1937	2.34	---	2330	2.50	160
1940	2.33	---	2340	2.88	150
1942	2.33	---	2351	2.54	150
1945	2.23	---	2400	2.10	150

CURRENT STATION NO. 62 (Cont'd)

Disk meter 0.4 m from bottom (277 m)			
1 - 2 November 1955			
Time	Speed (Kts.)	Time	Speed (Kts.)
(1 Nov 55)		(1 Nov 55)	
1435	0.79	2105	2.00
1453	0.98	2116	0.45
1506	0.97	2126	1.42
1523	1.14	2137	0.50
1537	1.46	2150	1.60
1552	<0.25	2158	1.62
1615	0.54	2209	1.60
1629	1.28	2218	1.83
1644	0.82	2233	2.00
1704	<0.25	2243	1.53
1716	0.95	2254	1.55
1733	0.67	2305	0.68
1751	<0.25	2314	1.06
1920	1.17	2324	1.40
1929	1.18	2334	1.23
1957	0.85	2343	0.93
2016	1.56	2353	0.96
2030	1.43	(2 Nov 55)	
2040	1.67	0004	0.52
2051	1.92		

CURRENT STATION NO. 63

Haro Strait
 LAT. 48° 34.2' N LONG. 123° 12.3' W
 28 - 29 November 1955

Price meter at 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(28 Nov 55)			(28 Nov 55)			(29 Nov 55)		
1635	2.05	---	2210	1.79	175	0240	3.63	350
1652	2.05	175	2220	1.31	155	0250	3.20	350
1700	2.12	170	2230	1.40	180	0300	3.49	355
1710	2.14	160	2240	1.85	190	0310	3.23	345
1720	2.25	175	2250	1.57	200	0320	2.80	345
1730	2.25	155	2300	1.26	205	0330	2.53	345
1740	2.33	160	2315	1.03	205	0340	2.27	345
1750	2.62	155	2330	0.71	230	0350	1.60	345
1800	2.68	155	2345	0.53	255	0400	1.47	335
1810	2.80	155	(29 Nov 55)			0410	1.49	345
1930	3.32	160	0000	0.73	295	0420	1.27	345
1940	3.97	160	0011	0.47	355	0430	0.82	340
1950	3.00	155	0020	1.42	355	0440	1.20	335
2000	2.25	160	0030	0.98	355	0450	1.63	350
2010	2.12	165	0040	0.96	355	0500	1.65	335
2020	2.53	160	0050	1.68	355	0510	2.12	340
2030	2.75	170	0100	2.48	000	0520	2.32	335
2040	2.58	160	0110	2.65	350	0530	2.38	340
2050	2.40	165	0120	2.84	350	0540	2.14	335
2100	1.88	160	0130	2.77	000	0550	2.40	335
2110	2.50	170	0140	2.92	005	0600	2.32	335
2120	2.60	180	0150	3.10	015	0610	1.85	345
2130	2.40	170	0200	3.00	005	0620	2.00	340
2140	2.22	170	0210	3.05	350	0630	2.10	335
2150	2.17	170	0220	3.03	000	0640	0.70	020
2200	1.98	180	0230	3.12	350	0650	1.32	345

CURRENT STATION NO. 63 (Cont'd)

Disk meter 0.4 m off bottom (284 m)					
28 - 29 November 1955					
Time	Speed (Kts.)	Time	Speed (Kts.)	Time	Speed (Kts.)
	(28 Nov 55)		(28 Nov 55)		(29 Nov 55)
1655	0.58	2208	<0.25	0330	1.91
1713	0.77	2217	0.35	0339	<0.25
1732	0.80	2225	0.66	0349	<0.25
1740	1.01	2234	0.36	0359	1.2+
1750	0.75	2245	0.58	0411	1.63
1804	1.07		(29 Nov 55)	0420	1.37
1815	1.10	0014	1.2+	0428	1.13
1911	<0.25	0024	0.84	0438	<0.25
1925	<0.25	0033	<0.25	0447	<0.25
1936	0.65	0043	0.48	0500	0.23
1948	0.86	0055	1.87	0509	0.92
2000	0.65	0107	<0.25	0518	0.43
2015	0.75	0117	0.68	0528	0.51
2025	1.22	0130	2.29	0540	0.54
2037	1.24	0144	1.79	0548	0.59
2047	1.26	0157	2.02	0558	<0.25
2059	1.16	0209	2.12	0606	0.38
2112	1.15	0227	<0.25	0616	<0.25
2127	1.60	0240	2.00	0624	0.29
2137	0.57	0251	1.10	0632	0.37
2148	0.48	0305	<0.25	0642	<0.25
2158	0.96	0317	1.76		

CURRENT STATION NO. 64

Haro Strait
 LAT. 48° 34.5' N LONG. 123° 11.5' W
 29 November - 1 December 1955

Price meter at 5 meters								
Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)	Time	Speed (Kts.)	Set (°T)
(29 Nov 55)			(30 Nov 55)			(1 Dec 55)		
1639	1.37	165	1830	2.23	160	0110	1.11	315
1650	1.73	205	1840	2.58	165	0120	1.20	335
1700	1.73	155	1850	2.12	160	0130	1.12	330
1710	1.90	155	1900	1.97	150	0140	1.52	355
1720	1.75	155	1910	2.25	165	0150	1.29	345
1730	1.62	155	1920	1.77	160	0200	1.28	335
1740	2.12	165	1930	1.43	145	0210	1.50	335
1750	2.32	155	1940	1.94	145	0220	1.69	330
1800	2.10	155	1950	1.85	135	0230	1.55	325
1810	2.07	165	2000	2.30	135	0240	1.90	325
1820	1.62	160	2010	2.75	150	0250	1.95	330
1830	1.58	150	2020	2.17	135	0300	2.19	330
1840	1.67	150	2030	2.40	155	0310	2.15	330
1850	1.70	135	2040	2.12	135	0320	2.15	330
1903	1.96	135	2050	2.38	160	0330	2.05	320
1910	2.43	145	2100	1.62	140	0340	2.23	320
1920	2.88	140	2110	1.42	125	0350	2.34	330
1930	3.15	145	2120	0.42	070	0400	2.15	325
1940	2.93	135	2140	0.65	205	0410	2.23	325
1950	2.75	145	2150	2.12	153	0420	2.48	340
2000	2.62	150	2200	1.10	120	0430	2.22	325
2010	1.46	140	2210	2.35	175	0440	2.27	330
2020	1.93	135	2220	1.98	115	0450	1.65	325
2030	2.88	128	2230	1.58	120	0500	2.19	320
2040	2.64	160	2240	1.47	130	0510	2.05	310
2050	2.35	145	2250	1.28	125	0520	1.81	305
2100	2.00	145	2300	1.55	135	0530	1.79	325
2110	1.48	145	2310	1.40	175	0540	2.05	320
2120	1.16	145	2320	1.43	145	0550	1.96	305
2130	2.31	155	2330	1.49	145	0600	1.65	320
2140	1.73	145	2340	1.16	145	0610	0.95	320
2150	2.49	125	2350	0.85	125	0620	1.44	335
2200	2.53	160		(1 Dec 55)		0630	0.90	340
2210	3.00	155	0000	1.52	145	0640	0.50	315
2220	2.47	205	0010	0.76	175	0650	0.1	355
2230	1.00	165	0020	0.58	170			
2245	0.95	190	0030	0.33	190			
2300	0.45	185	0040	0.36	205			
2315	0.87	215	0050	0.39	305			
2330	1.03	190	0100	0.40	315			

CURRENT STATION NO. 64 (Cont'd)

Disk meter 0.4 m off bottom (211 m)					
Time	Speed (Kts.)	Time	Speed (Kts.)	Time	Speed (Kts.)
(29 Nov 55)		(30 Nov 55)		(1 Dec 55)	
1640	0.34	2020	<0.25	0207	2.05
1652	0.36	2026		0214	2.08
1708	0.72	2032		0222	1.70
1723	0.72	2039	∨	0229	1.82
1741	0.76	2045	0.48	0236	1.87
1800	0.77	2050	0.90	0244	1.70
1815	0.70	2057	0.79	0251	1.88
1832	<0.25	2105	1.20	0258	2.15
1848	0.95	2112	0.67	0306	1.60
1905	1.13	2117	0.61	0315	<0.25
1921	0.94	2123	0.48	0322	1.67
1938	<0.25	2152	<0.25	0330	1.37
1952	<0.25	2209	1.14	0337	1.68
2008	0.36	2218	1.02	0345	1.60
2020	0.44	2223	0.60	0352	1.74
2033	0.53	2229	0.70	0400	1.68
2046	<0.25	2233	0.74	0407	1.38
2111	<0.25	2240	0.65	0416	1.81
2127	1.29	2313	0.85	0423	0.55
2140	0.96	2318	1.06	0430	0.97
2155	<0.25	2324	0.94	0438	1.55
2210	0.81	2330	0.88	0448	0.43
2216	1.29	2335	0.97	0457	1.20
2224	1.30	2342	1.15	0506	1.30
2230	0.92	2351	0.46	0515	1.40
(30 Nov 55)		2357	1.30	0523	0.88
1837	0.57	(1 Dec 55)		0530	1.50
1844	0.72	0004	1.29	0537	0.66
1852	<0.25	0011	1.01	0545	0.92
1900	1.05	0017	1.08	0552	1.60
1908	<0.25	0024	1.35	0559	1.51
1915	1.02	0101	1.35	0605	<0.25
1923	1.07	0108	1.67	0612	1.05
1929	0.94	0115	1.21	0622	0.36
1937	0.84	0122	1.38	0627	0.57
1943	<0.25	0129	1.49	0633	0.43
1951	0.44	0137	1.31	0638	<0.25
2001	<0.25	0145	1.30	0646	<0.25
2006	0.86	0152	1.57		
2014	<0.25	0200	1.75		