9383

Diag. Cht. No. 8551-3.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. DA-10-2-73 *Office No.* H-9383

LOCALITY

State Alaska

General locality Prince William Sound

Locality Seal Rocks

19 73

CHIEF OF PARTY

M. H. Fleming

LIBRARY & ARCHIVES

DATE 1-23-74

USCOMM-DC 87022-P66

9383

(1)

FORM C&GS-537 (5-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-9383

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

DA-10-2-73

State ALASKA

General locality Prince William Sound

Locality Seal Rocks

Scale 1:10,000 Date of survey 17 June - 15 July 1973

Instructions dated 14 February 1973 Project No. OPR-999

Vessel NOAA Ship DAVIDSON, Launch DA-1, Launch DA-2

Chief of party Cdr. Michael H. Fleming

Surveyed by Ens. K.X.Gores, Ens. J.J.Kapler, Ens. R.H.West, Ens. J.L.Oswald

Soundings taken by echo sounder, ~~xxxxxxxxxx~~ Ross 544 S/N 1048
Raytheon DE-723 S/N 214

Graphic record scaled by DAVIDSON Personnel

Graphic record checked by DAVIDSON Personnel

Positions ~~xxxxxxxx~~ verified by Karol M. Hoops Automated plot by PMC -Gerber Digital Plotter

Soundings ~~xxxxxxxx~~ verified by Clarence R. Lehman

Soundings in fathoms ~~xxxxx~~ at ~~xxxx~~ MLLW

REMARKS: This is a Navigable AREA SURVEY

Area 6

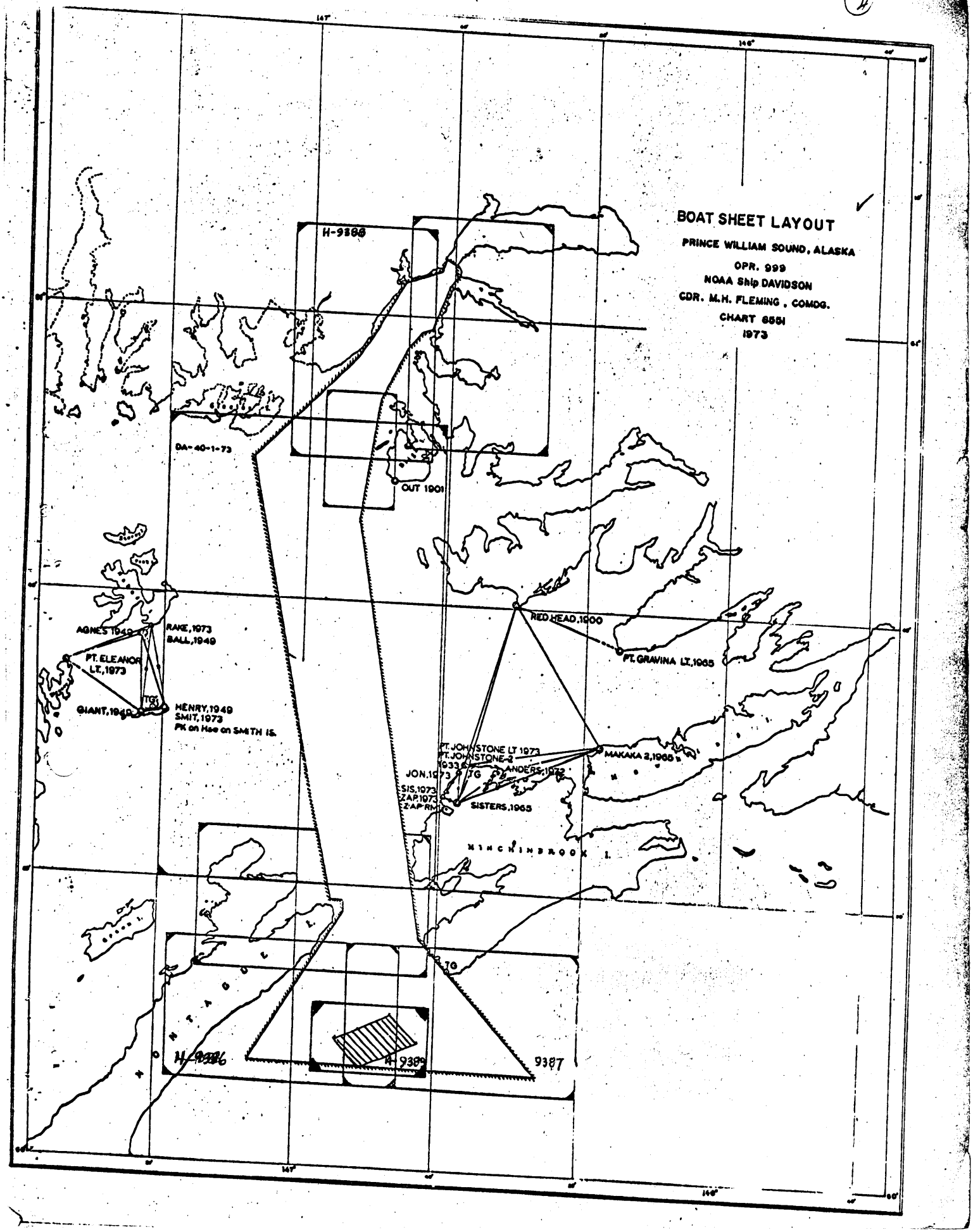
Applied to stds 1-28-74
CAB

Chart
8551
8520
8502
8500

KWW 3/7/94

ADP 4

USCOMM-DC 37009-P66


BOAT SHEET LAYOUT
PRINCE WILLIAM SOUND, ALASKA
OPR. 999
NOAA Ship DAVIDSON
CDR. M.H. FLEMING, COMDG.
CHART 8551
1973
H-9388
DA-40-1-73
OUT 1901
AGNES 1949
RAKE, 1973
BALL, 1949
PT. ELEANOR LT., 1973
TG1
GIANT, 1949
HENRY, 1949
SMIT, 1973
Pk on Hse on SMITH IS.
RED HEAD, 1900
PT. GRAVINA LT, 1965
PT. JOHNSTONE LT 1973
PT. JOHNSTONE-2
1933
TG
ANDERS, 1973
JON, 1973
SIS, 1973
ZAP, 1973
ZAP RM
SISTERS, 1965
MAKAKA 2, 1965
MINCHINBROOK I.
70
H-9386
H-9387
9387

(3)

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-9383 (1973) DA-10-2-73

OPR-999

PRINCE WILLIAM SOUND, ALASKA

SEAL ROCKS

NOAA Ship DAVIDSON

Michael H. Fleming
CDR, NOAA
Chief of Party
1973

(4)

DESCRIPTIVE REPORT

DA-10-2-73

(H-9383) (1973)

SEAL ROCKS, ALASKA

A. PROJECT - Navigable Area Survey

This survey was accomplished in accordance with project instructions OPR-999-DA-73 Prince William Sound, Alaska dated 14 February 1973 and Supplement to Instructions: Change No. 2 dated 11 May 1973, Change No. 3 dated 25 May 1973 and amendment to instructions: Change No. 1 dated 2 March 1973. ← Probably refers to unnumbered memo.

B. AREA SURVEYED

The area surveyed is the vicinity of Seal Rocks, at the southern end of Hinchinbrook Entrance. The limits of the survey area are bounded by oblique lines connecting Latitude, 60° 09.4 N, Longitude 146° 43.1 W, 60° 11.6 N, 146° 46.1 W, 60° 09.9 N, 146° 55.0 W, 60° 07.9 N, 146° 51.7 W, 60° 09.4 N, 146° 43.1 W. This survey was carried out between 17 June and 15 July 1973.

C. SOUNDING VESSELS

The following vessels were used to accomplish this survey:

VESSEL	POSITION COLOR
Launch DA-1	Red
Launch DA-2	Blue
Ship	Brown

See Appendix for Abstract of Positions.

D. SOUNDING EQUIPMENT

The following fathometers were used to obtain soundings for this survey.

VESSEL	FATHOMETER TYPE	SERIAL NUMBER
Launch DA-1	Raytheon DE-723	214
Launch DA-2	Ross 544	1048

D. SOUNDING EQUIPMENT Cont.

Echo sounder corrections were determined from bar checks, water conductivity measurements from a MARTEK metering system, and Nansen casts (See separate report "Corrections to Echo Sounders OPR-999 May - August 1973"). Fine arc was noticed to be out of adjustment on DA-1, Day 168. The error was not adjusted during the day. Arc Adjustment appeared fine for this day

All Field soundings are in fathoms referenced to MLLW using predicted tides for Port Etches. Time meridian 135° W was used for the entire survey (See Tide Note).

E. SMOOTH SHEET

The smooth sheet ~~will be~~ was constructed by the Processing Division, Pacific Marine Center.

F. CONTROL

Electronic phase comparison measurements (Raydist) were used for control on this survey. (See separate report "Raydist Report OPR-999"). Raydist stations were set up over existing triangulation marks. The stations were located at the following positions:

ARC COLOR	LOCATION	TRIANGULATION MARK	POSITION
Red	Box Point	BOFIX, 1972	Lat. 59°51 41.038 Long. 147°20 26.886
Green	Middleton Is.	SPIT, 2, 1972	Lat. 59°27 56.514 Long. 146°18 22.388

Raydist was calibrated twice daily using three-point sextant fixes. (See Appendix-Raydist Calibration Abstract). Calibration points were established on Hinchinbrook Island at the following locations:

OBJECT	TRIANGULATION STATION	POSITION
Left	Fur, 1972	Lat. 60°15 18.89 Long. 146°41 03.36
Center	Hinch, 1972	Lat. 60°14 17.47 Long. 146°38 42.83
Right	Pin, 1902-1972	Lat. 60°14 11.12 Long. 146°36 27.28

G. SHORELINE

No shoreline features, ledges or reef areas were traced on the boat sheet since there were no photographs or manuscripts available for Seal Rocks. See Review

H. CROSSLINES

The percentage of crosslines to sounding lines is 9.4 percent or 21.93 n.m. compared to 232.85 n.m.. Crosslines are in good agreement with sounding lines.

I. JUNCTIONS

Junctions were made with contemporary surveys DA-20-2-73 (1973) (H-9386) to the north, west and south and DA-20-3-73 (H-9387) (1973) to the north, east and south. See boat sheet DA-20-2-73 (H-9386) (1973) for junction to the west. Boat sheet DA-20-2-73 ~~was submitted~~ before junction soundings were transferred to this survey (H-9383) (1973). All junctions are in good agreement with soundings obtained during this survey.

J. COMPARISON WITH PRIOR SURVEYS

Two pre-survey review dashed circle items were investigated during this survey.

1. An 18 fathom sounding at Latitude 60°09.6~~5~~8, Longitude 146°46.90 W was investigated and a shoaler sounding of 12 fathoms was located 100 meters to the east. Also a 10.~~3~~0 fathom sounding was located ~~2~~00 meters to the southwest (Latitude 60°09.55N, Longitude 146°47.~~2~~ W).

2. The 50 fathom curve surrounding Seal Rocks in general conforms to the 50 fathom curve delineated previously (H-2612). (1902)

Discrepancies with prior survey H-2612 (1902)

1. Shoal soundings in the vicinity of the following locations were not previously located:

LATITUDE	LONGITUDE	SHOALEST DEPTH
60°09.33	146°51.~~X~~80	4.~~0~~4 fathom
60°09.35	146°50.~~2~~10	10~~7.6~~5 fathom
60°10.~~1~~17	146°50.~~5~~46	9~~8.8~~1 fathom
60°10.~~3~~29	146°50.~~4~~36	3.~~7~~7 fathom
60°10.51	146°49.34	7.~~0~~3 fathom
60°10.36	146°~~7.7~~47.69	10~~3.8~~3 fathom
60°09.8~~5~~7	146°47.10	~~0.7~~9.0 fathom

J. COMPARISON WITH PRIOR SURVEYS Cont.

LATITUDE	LONGITUDE	SHOALEST DEPTH
60°10.~~3~~ 28	146°~~45.95~~ 6.00	7.~~1~~ 2 fathom
60°09.~~8~~ 79	146°47.9~~5~~ 3	~~7.7~~ 8.0 fathom
60°09.~~44~~ 39	146°48.~~2~~ 18	2.~~4~~ 7 fathom
~~60°09.7~~	~~146°47.95~~	~~7.7 fathom~~
60°10.0	146°45.0	6.7 fathom

Prior Survey H-5454

Although there are few soundings in the area of Seal Rocks, there is generally good agreement between this survey (H-9383 and prior survey H-5454.(1933) 1973

K. COMPARISON WITH CHART

A comparison was made with the Coast & Geodetic Survey Chart 8520, 1:80,000, 15th edition. The ten fathom curve surrounding Seal Rocks adequately delineates the shoal. There are numerous rocks awash inside the main ten fathom curve (see boat sheet). The rocks presently shown on the chart adequately represent the navigation hazards within the ten fathom curve. Several shoal soundings not previously located are described in Section J. "Comparison with Prior Surveys" - Discrepancies with prior survey H-2612 (1902). These isolated shoals should be considered navigation hazards.

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede all prior surveys.

M. AIDS TO NAVIGATION

One fixed navigation aid appears on this boat sheet. A red and white checkered, diamond-shaped daybeacon is located on the largest of the exposed Seal Rocks. The center of the North daybeacon face is about six inches north of triangulation station Seal Rocks, 1902-1972. (See NOAA form 76-40 Non Floating Aids or Landmarks for Charts). There are no floating aids to navigation within the limits of this survey.

N. STATISTICS

VESSEL	NO. OF POSITIONS	N.M. OF SOUNDING LINES	B.S.	D.P.S.
Launch DA-1	558	68.6	0	8
Launch DA-2	1604	195.9	8	8
DAVIDSON	95	0	5	0

The total area surveyed was 10.78 square nautical miles. There are 8 sounding volumes (tapes), one D.P. volume, and one bottom sample volume for this survey. not filed with survey

O. MISCELLANEOUS

It was determined from MARTEK conductivity measurements and Nansen casts that velocity corrections do not have to be applied to the soundings obtained during this survey.

P. RECOMMENDATIONS

It is recommended that this survey be considered complete and adequate and that the hydrography obtained be applied to update the chart. Also a light on Seal Rocks daybeacon would serve as a helpful aid to navigation.

Q. REFERENCE TO REPORTS

Correction to Echo Sounders OPR-999

Raydist Report OPR-999

Respectfully submitted,

Kurt X. Gores

Kurt X. Gores
Ensign, NOAA

(9)

APPROVAL SHEET

HYDROGRAPHIC SURVEY

DA-10-2-73

H-9383

SEAL ROCKS

PRINCE WILLIAM SOUND, ALASKA

The field work on this survey was accomplished under my supervision. Frequent inspections were made of the boatsheet and other records.

Michael H. Fleming
Commander, NOAA
Commanding Officer
NOAA Ship DAVIDSON CSS-31

(10)

APPROVAL SHEET

The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report)

Examined and approved,

James S. Green
Supervisory Cartographic Technician

Approved and forwarded,

Walter F. Forster, Cdr., NOAA
Chief, Processing Division
Pacific Marine Center

ABSTRACT OF POSITIONS

DAY	LAUNCH DA-1	LAUNCH DA-2	DAVIDSON	D.P.	B.S.
168	1001-1180 (6)				
170		8001-8324 (7)*			
171	1181-1455 (6)				
172	1456-1554 (6)**			7001-7008 (5)	
177		8325-8358 (8)			
178		8359-8583 (8)***		5001-5002 (5)	
179		8584-8771 (9)****		5003-5005 (5)	
180		8772-8907 (10)		5006-5007 (5)	
191		8909-9247 (11)*****		5008 (5)	
192		9248-9434 (12)			
196		9435-9609 (13)			500-507 (4)
197			518-512 (4)+		

* Positions 8053, 8054, and 8147 rejected
** Position 1517 not used, ~~1492 used as D.P. number 7001~~
*** Positions 8516, and 8517 not used
**** Position 8610 not used
***** Position 8908 not used, position 9142 rejected
\+ Bottom Samples

Numbers is parenthesis indicate volume numbers.

RAYDIST CALIBRATION ABSTRACT

DAY	VESSEL	TIME	CORRECTOR RED	CORRECTOR GREEN	POSITION NUMBERS	
168	DA-1	0849	-0.10	-0.3	1001-1180	
			No afternoon calibration*			
171	DA-1	0912	-0.07	+0.01	1181-1455	
		1802	+0.05	-0.02		
172	DA-1	0852	-0.05	-0.06	1456-1554	includes 7000-7008
		1409	Lane check with ship good			
170	DA-2	0904	-0.04	-0.02	8001-8324	
		1811	Lane check with ship good			
177	DA-2	1032	+0.04	-0.08	8325-8358	
			No afternoon calibration*			
178	DA-2	0832	+0.06	+0.16	8359-8583	
		1602	-0.02	-0.18		
179	DA-2	0835	-0.04	-0.05	8584-8771	
		1603	-0.07	+0.62**		
180	DA-2	0917	-0.09	-0.08	8772-8907	
		1555	-0.18	+0.17		
191	DA-2	0833	-0.03	+0.03	8909-9247	
		1812	Lane check with ship good			
192	DA-2	0827	-0.09	+.02	9248-9434	
		1620	Lane check with ship good			
196	DA-2	0849	-0.05	+0.01	9435-9609	
		1607	Lane check with ship good			

* Raydist failure after termination of hydro- check of strip chart shows no lane loss- calibration maintained

** Large green corrector - cause unknown

Red and Green Correctors based on average of three (3) angle sets.

Raydist Transmitter Serial Numbers

Launch DA-1 96 - on 4 July 1973 S/N 90 replaced S/N 96
Launch DA-2 83
Ship 90

NOAA FORM 76-40
(2-71)
PRESCRIBED BY
PHOTOGRAMMETRY INSTRUCTION NO. 64.

U.S. DEPARTMENT OF COMMERCE-NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- ☐ FIELD INSPECTION
- ☐ FIELD EDIT
- ☐ COMPILATION
- ☐ FINAL REVIEW
- ☐ QUALITY CONTROL AND REVIEW

(See reverse for responsible personnel)

☐ TO BE CHARTED
☐ TO BE DELETED

ORIGINATING LOCATION: NOAA Ship DAVIDSON CSS-31

DATE: 7-30-73

The following objects have (have not) been inspected from seaward to determine their value as landmarks:

JOB NUMBER: PH-

SURVEY NUMBER: T -
TP-

STATE: Alaska

DATUM: North American, 1927

POSITION

CHARTING NAME	DESCRIPTION	LATITUDE ° ′	LATITUDE ″ D.M. METERS	LONGITUDE ° ′	LONGITUDE ″ D.P. METERS	METHOD AND DATE OF LOCATION (See instructions on reverse of this form) FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
Daybeacon	Diamond-shaped, red and white checkered daybeacon	60 09	49.10 1519.60	146 50	10.59 163.34	Center of North Daymark face is located about 6" north from triangulation station		Seal Rocks, 1902-1972	C&GS 8551 8520

(13)

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward		☐ FIELD INSPECTOR ☐ FIELD EDITOR
2. Positions determined and/or verified		FIELD INSPECTOR
		FIELD EDITOR
		COMPILER
3. Forms originated by Quality Control and Review Group and final review activities		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE — **TYPE OF ENTRIES**

COMPILATION

Applicable to office identified and located objects only. Enter the number and date of the photograph used to identify the object.

FIELD INSPECTION AND FIELD EDIT

1. New Position Determined–Enter the applicable data by symbols as indicated below:

F – Field	P – Photogrammetric	EXAMPLES:
1. Triangulation	1. Field identified	
2. Traverse	2. Theodolite	F, 3.c
3. Intersection	3. Planetable	
4. Resection	4. Sextant	P.2
a. Theodolite		
b. Planetable		
c. Sextant		

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location.

b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered – Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified – Enter 'Verif. mo/day/yr.'

SIGNAL LIST

H-9383 (1973)

BOFIX, 1972, Raydist Station off the sheet.

SPIT 2, 1972, Raydist Station off the sheet.

SEAL ROCKS 19Ø2, '72, used for calibration and day beacon at that location used as guide for hydro.

HYDRO-SIGNAL CARDS

```
EDP NO.  NO.          LATITUDE LONGITUDE  NAME
31083  001            60094910 146501059  001                              1
000000
```

SIGNAL PLOTTER CARDS

```
R-NO.                 LATITUDE LONGITUDE   X      Y      X
31083  001         73 60094910 146501059 07129 06080       001
000000
```

313168

```
000001 0 0003 0000 170 000000 000000
000001 0 0003 0000 177 000000 000000
000001 0 0003 0000 178 000000 000000
000001 0 0003 0000 179 000000 000000
000001 0 0003 0000 180 000000 000000
```

TRA | TC | TI

FOR DA-2

H-9383 (1973)

(17)

```
000001 0 0001 0000 168 000000 000000
115945 0 0000
120130 0 0001
125645 0 0000
125945 0 0001
131745 0 0000
141130 0 0001
153730 0 0000
000001 0 0001 0000 171 0Q0000 000000
120045 0 0000
120315 0 0001
122430 0 0000
133215 0 0001
134730 0 0000
141245 0 0001
153415 0 0003
153715 0 0001
000001 0 0001 0000 172 000000 000000
095000 0 0002
111900 0 0001
```

TRA/TC/TI

FOR DA-1

H-9383 (1973)

DATA IDENTIFICATION ==========

OPR 999 YR 1973 TIME MERIDIAN 135° W

REGISTRY NO(S) H-9383

FIELD NO(S) DA-10-2-73 TAPE # 9-1

TYPE OF DATA SIGNAL

SOUNDING VESSEL DAVIDSON, DA-1 & DA-2

JULIAN DAYS 168 to 196 FROM POS # 500 1001 8001 TO POS # 512 (DPs.) 1556 (DA-1) 9609 (DA-2)

31316873

001	60 09 4910	146 50 1059	AAA	REFERENCE STA.
010	60 14 1128	146 36 2750	AAA	CALIBRATION SIGNALS
012	60 15 2006	146 41 0358	AAA	
013	60 14 1764	146 38 4306	AAA	
028	59 27 5651	146 18 2239	AAA	GREEN RAYDIST STA.
029	59 57 4104	147 20 2684	AAA	RED RAYDIST STA.

(9)

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

(1) PROJECT No. OPR-999

(2) H No. H-9383

(3) FIELD No. HDA-10-2-73

(4) REQUESTED BY M.H. Fleming

(5) SHIP ~~XXXXXXXX~~ DAVIDSON

(6) DATE REQUIRED 1 May 1973

(7) VISUAL ☐ 31083 (8) ELECTRONIC ☐ (FILL OUT FORM #3)

(10) XKN (SP 5) DISTANCE FROM CMER TO EAST EDGE (NYX = 1) OR WEST EDGE (NYX = 0). 7,878.6 METERS

(11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE OF SHEET. 6,666,307.569 METERS

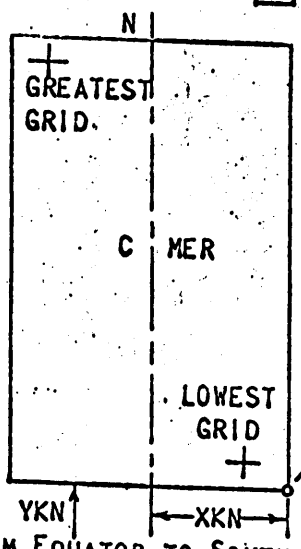
(12) CENTRAL MERIDIAN 146 ° 49 ' 00 "

(13) SURVEY SCALE 1: 10,000

(14) SIZE OF SHEET (CHECK ONE) 36x60 [X] 42x60 ☐ OTHER ____ ☐

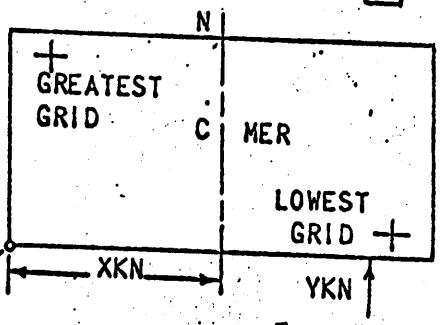
(15) NYX, ORIENTATION OF SHEET (CHECK ONE)

NYX = 1 ☐



FROM EQUATOR TO SOUTH EDGE OF SHEET

NYX = 0 [X]



FROM EQUATOR TO SOUTH EDGE OF SHEET

(9) PLOTTER ORIGIN (CORNER OF SHEET)

LATITUDE 60 ° 06 ' 42 "
LONGITUDE 146 ° 57 ' 30 "

LIST G.P. OF ALL STATIONS TO BE PLOTTED ON THIS PROJECTION ON THE BACK OF THIS FORM. (DEG., MIN., SEC.)

GRID LIMITS

(16) GREATEST LATITUDE 60 ° 11 ' 30 "
(17) LOWEST LATITUDE 60 ° 07 ' 00 "
(18) DIFFERENCE ° 04 ' 30 "

(PROJECTION LINE INTERVAL, PAGE 4 HYDRO MANUAL)

(19) 00 ' 30 "
(20) 9 YSN

(21) GREATEST LONGITUDE 146 ° 57 ' 00 "
(22) LOWEST LONGITUDE 146 ° 41 ' 00 "
(23) DIFFERENCE ° 16 ' 00 "

(24) 00 ' 30 "
(25) 32 XSN

EM

(2)

4c: "Q" reorder pre ister.

3108

FORM # 3 FIG. 7

COMPUTER PARAMETERS FOR ELECTRONICALLY CONTROLLED SURVEYS

(RANGE - RANGE)

(1) PROJECT NO. OPR 999 (2) H- NO. H-9383 (3) FIELD NO. DA-10-2-73 (Q)

(4) TYPE OF CONTROL: ____ SHORAN, ____ RAYDIST, x HI-FIX, ____ RADAR
FREQUENCY (FOR CONVERSION OF RAYDIST OR HI-FIX LANES TO METERS) 3300.4

(5) RANGE ONE (R1) Box Pt. 80 Fix 1972
STATION NAME Montague Is.
LATITUDE [illegible] ° [illegible] ' [illegible] "
LONGITUDE [illegible] ° [illegible] ' [illegible] "

(6) RANGE TWO (R2) SPIT 2
STATION NAME Middleton Is.
LATITUDE 59 ° 27 ' 56.51418
LONGITUDE 146 ° 18 ' 22.38815

(7) AZIMUTH FROM R1 TO R2 ____ ° ____ ' ____ "

(8) BASELINE LENGTH IN METERS ____ M.

(9) LOCATION OF SURVEY WITH RESPECT TO ELECTRONIC BASELINE: CHECK ONE
(TO DETERMINE: IMAGINE AN OBSERVER STANDING AT R1 AND LOOKING DIRECTLY AT R2 —— IF THE SURVEY AREA IS TO THE OBSERVER'S LEFT THEN A IS NEGATIVE; IF THE SURVEY AREA IS TO THE OBSERVER'S RIGHT THEN A IS POSITIVE.)

____ -A (MINUS) x +A (PLUS)

(10) IF SHORAN CORRECTIONS ARE APPLIED BY THE EQUATION, K(X) + C = D, WHERE X IS SHORAN DISTANCE AND D IS TRUE DISTANCE, ENTER THE CONSTANT COEFFICIENTS OF THE EQUATIONS HERE:

K(R1) ____, C(R1) ____, K(R2) ____, C(R2) ____

(11) NUMBER OF VELOCITY TABLES TO BE USED:
x NONE, ___ ONE, ___ MORE THAN ONE.

(12) x THIS FORM IS SUBMITTED ONLY AS AN AID IN PREPARING A BOAT SHEET PROJECTION.

____ THIS FORM APPLIES TO ALL DATA ON THIS SURVEY.

____ THIS FORM APPLIES TO PART OF THE DATA ON THIS SURVEY -
TIME AND DATE LIMITATIONS: FROM ____ TO ____
POSITION NUMBER LIMITATIONS: FROM ____ TO ____

THIS IS FORM #3 SHEET # 5 OF 7 SHEETS FOR THIS SURVEY.

(13) OTHER REMARKS: 1. Post 1964 earthquake data has been requested, but has not arrived onboard. Locations of the stations, azimuth and baseline length data should be available from Mr. Melby.

~~2. Grid intersection information only is required.~~

HYDRO II AND III PARAMETER CARDS

No. 31083

METER CARD II

			1	2	3	4	5	6	7	8	9	10
l major axis of the earth	6,378,206.4 meters	RDA	6	3	7	8	2	0	6	4	0	7
Constant- Distance from central meridian to origin of plotter SP 5	meters	XKN	7	8	7	8	7	0	0	0	0	4
Constant - Distance from equator to origin of plotter SP 2&3	meters	YKN	6	6	6	6	3	0	7	6	0	7
ntral Meridian of Projection	146 49 00.00	CMR	5	2	8	5	4	0	0	0	0	6
lotter Scale/Survey Scale	*20498.6876 1:10,000	SCA	1	0	4	9	8	6	8	8	0	1
rth/south axis of sheet - to correspond to (Y axis - 0) axis - 1) of plotter		NYX										0
eet/Fathom indicator	0 - feet 1 - fathom	FCF										1
Identification No.		JN									8	3
		YR										7 3

F - 1

AMETER CARD III

			1	2	3	4	5	6	7	8	9	10
owest Lat. Intersection	60 07 00.00	YST	2	1	6	4	2	0	0	0	0	6
owest Long. Intersection	146 41 00.00	XST	5	2	8	0	6	0	0	0	0	6
ifference between Grid	00 30.00	DXY	3	0	0	0	0	0	0	0	0	2
nterval (Long)		XSN									3	2
nterval (Lat)		YSN									0	9

Computed EHT ✓KH

Punched

Checkdd

Dato

(2)

SAME AS H-9385 & 9386

H-9383, AND H-9387

H-9383

H #
Field No.
Date

HYDRO I PAR. METER CARDS

Computes G.P.'s from Electronic Controlled Baseline

Parameter Card I		Deg.	Min.	Seconds	Prog. Code	Cols 1–10	Cols 11–20
Master R1 Hydro Name 80FIX	Lat.	59	57	41.0348	RPD	2 1 5 8 6 1 0 4 0 6	11 12 13 14 15 16 17 18 19 20
	Long.	147	20	26.8356	RBD	5 3 0 4 2 6 8 4 0 6	
Slave R2 Hydro Name	Lat.	59	27	56.1148		Not Used	
	Long.	146	18	22.3888		Not Used	
Azimuth R1 to R2		313	02	09.63	RAD	1 1 2 6 9 2 9 6 0 7	21 22 23 24 25 26 27 28 29 30
						Not Used	
Baseline Distance in Meters					SMP	8 0 2 ✓ 1 6 1 ✓ 0 ✓	31 32 33 34 35 36 37 38 39 40
Velocity Code 0 - No Vel. 1 - 1 Vel. Table 2 - 2 Vel.-(E - W) 3 - 2 Vel.-(N - S)					IVL		41 0
Conversion factor for electronic distance to meters. Stat. Mi = Lanes = or					CNV	4 ✓ 3 9 9 0 4 1 0 2	42 43 44 45 46 47 48 49 50 51
H-Identification Number					JN		52 53 54 55 56 0 9 3 8 7
Location of survey with respect to electronic baseline - <A = 1 + <A = 0					AAA		57 1
Velocity Boundary IVL = 2 IVL = 3 Long = o " " Lat =					VLE		58 59 60 61 62 63 64 65 66
					YR		67 68 69 0 7 3
If Shoran calibration correction is applied by equation (use Shoran card) punch 1 in column 80						70 71 72 73 74 75 76 77 78 79 80	

Shoran Card Format (when calibration correction is applied by a line K x + C)
(flag 5, 11, 17, or 23 if resp. constant is negative)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
			R1K						R1C						R2K					R2C		

Computed MNM Punched MNM Checked MNM Date 9/8/77

(SAME AS H-9385 & 9386) H-9383, AND H-9387

H-9383

H S
Field No.
Date

HYDRO I PARAMETER CARDS

Computes G.P.'s from Electronic Controlled Baseline

Parameter Card I		Deg. Min. Seconds	Prog. Code	Columns
Master M1 Hydro Name BOFIX	Lat.	59 57 41.048	RPD	1 2 3 4 5 6 7 8 9 10 = 2 1 5 8 6 1 0 4 0 6
	Long	147 20 26.835	RED	11 12 13 14 15 16 17 18 19 20 = 5 3 0 4 2 6 8 4 0 6
Skaye R2 Hydro Name	Lat.	57 27 56 14		Not Used
	Long	146 18 22 38		Not Used
Azimuth M1 to R2		313 02 09 63	RAD	21 22 23 24 25 26 27 28 29 30 = 1 1 2 6 9 2 9 6 0 7
				Not Used
Baseline Distance in Meters			SMP	31 32 33 34 35 36 37 38 39 40 = 8 0 2 ✓ 1 6 1 ✓ 0 ✓
Velocity Code 0 - No Vel. 1 - 1 Vel, Table 2 - 2 Vel.-(E - W) 3 - 2 Vel.-(N - S)			IVL	41 = 0
Conversion factor for electronic distance to meters.		Stat. Mi = Land = or	CNV	42 43 44 45 46 47 48 49 50 51 = 4 ✓ 3 9 9 0 4 1 0 2
H-Identification Number			JN	52 53 54 55 56 = 0 4 3 8 7
Location of survey with respect to electronic baseline		- <A = 1 + <A = 0	AAA	57 = 1
Velocity Boundary IVL = 2 IVL = 3		Long = ° " Lat =	VLB	58 59 60 61 62 63 64 65 66
			YR	67 68 69 = 0 7 3
If Shoran calibration correction is applied by equation (use Shoran card) punch 1 in column 80				70 71 72 73 74 75 76 77 78 79 80

Shoran Card Format (when calibration correction is applied by a line K x + C)
(flag 5, 11, 17, or 23 if resp. constant is negative)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

R1K R1C R2K R2C

Computed MMM Punched MMM Checked MMM Date 9/19/73

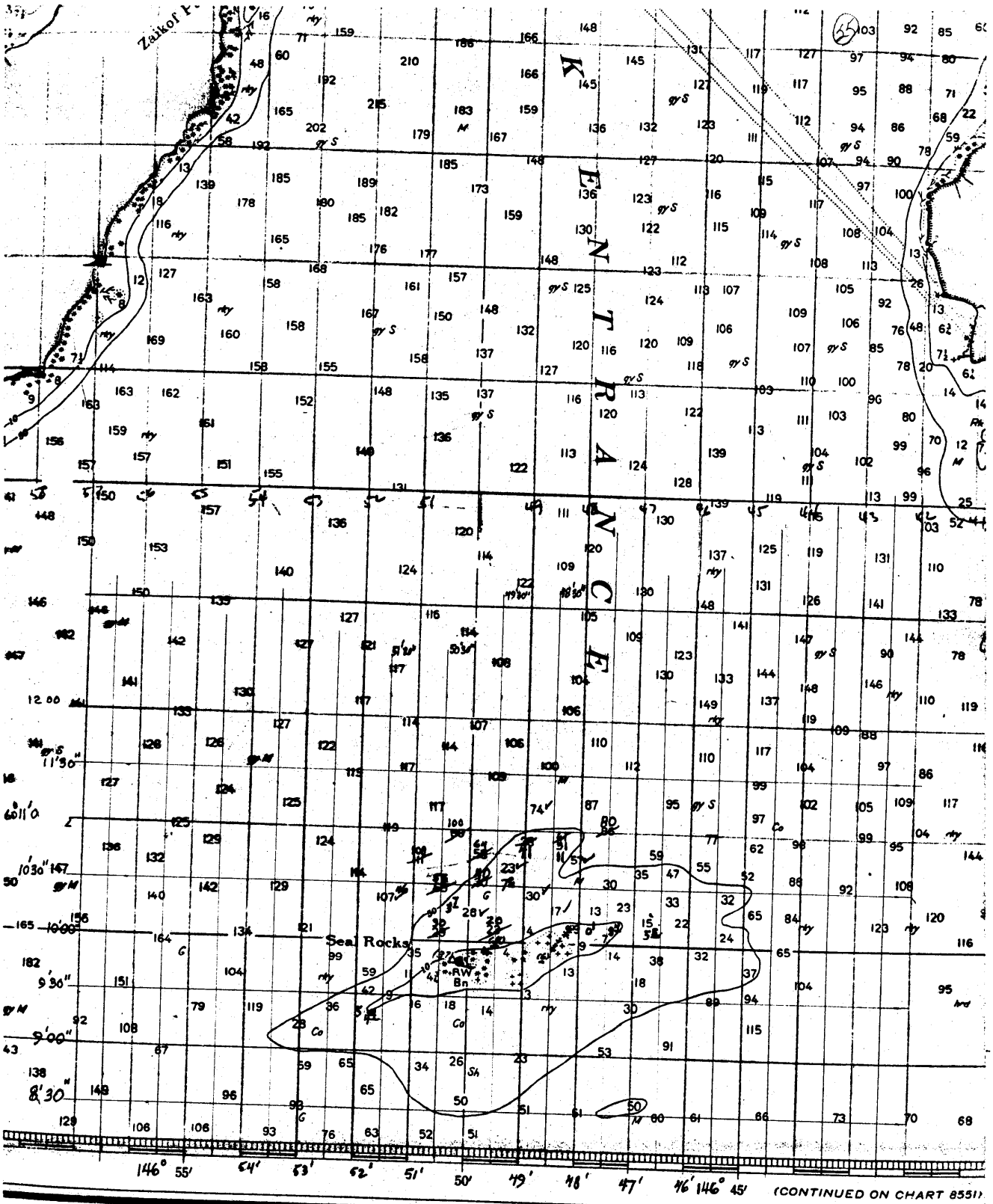
H-9383 CORRECTOR TAPE (DUAL INDICATOR)

LAUNCH DA-1

000000 00 0000 0000 168 1 100001 100003 0000 000 000
000000 00 0000 0000 171 1 100001 100001 0000 000 000
000000 00 0000 0000 172 1 100005 100006 0000 000 000
235959 00 0000 0000 172 1 100005 100006 0000 000 000

LAUNCH DA-2

000000 00 0000 0000 170 1 100004 100002 0000 000 000
000000 00 0000 0000 177 1 000004 100008 0000 000 000
000000 00 0000 0000 178 1 000002 100001 0000 000 000
000000 00 0000 0000 179 1 100006 000029 0000 000 000
000000 00 0000 0000 180 1 100013 000004 0000 000 000
000000 00 0000 0000 191 1 100003 000003 0000 000 000
000000 00 0000 0000 192 1 100009 000002 0000 000 000
000000 00 0000 0000 196 1 100005 000001 0000 000 000
235959 00 0000 0000 196 1 100005 000001 0000 000 000



UNDINGS IN FATHOMS (1-80,000) H-9383 (1-10,000)

(36)

TIDE NOTE

CORRIDOR SURVEY

OPR - 999

SHEETS L,N,Q,P

The reference tide gage for this project was the standard tide gage on the Cordova Municipal Dock in Cordova, Alaska. Field tide reductions of soundings was based on predicted tides for Port Etches, Hinchinbrook Island, Prince William Sound.

Three bristol bubbler tide gages have been installed in the project area. All gages operated on 135° W time for the duration of this project. Location and dates of installation were as follows:

Cape Hinchinbrook	N 60° 14'3 146° 38'9 W	24 May 1973
Johnstone Point	N 60° 29'0 146° 36'7 W	19 May 1973
Smith Island	N 60° 31'9 147° 20'5 W	17 May 1973

Marigrams were corrected for time and height variations wherever possible. A common problem to all marigram records was the heavy surge traces despite dampening the tide gage mechanism.

Cape Hinchinbrook

S/N 62A91; 0-30 ft. range five benchmarks connected on 24 May; gage replaced on 21 June by gage S/N 64A11028.

The orifice installation was very difficult and time consuming due to the very heavy surge (2-3 feet) in this area. Six different attempts were made before satisfactory arrangement was reached.

Johnstone Point

S/N 68A9338; 0-30 ft. range five benchmarks established and connected on 19 May 1973. Marigram reading 10.0' staff zero.

Orifice installation was hampered by thick beds of kelp.

Smith Island

S/N 64A11021; 0-30 ft. range. Five benchmarks established and connected on 17 May 1973. Marigram reading 5.0' above staff zero.

A heavy rock was used to anchor the orifice in water. This appears to be the least troublesome of all gages in project area.

(27)

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

H-9383

Date: November 6, 1973

Reply to Attn of: C3311-86-GTM

Subject: Tide corrections for Priority Survey 999

To: Chief Processing Division CPI3

The tide gage installed at Cape Hinchinbrook, Prince William Sound appears to have malfunctioned frequently during periods of hydrography.

During times of missing tide data we recommend trying to use Johnstone Point hourly heights, reduced to mean lower low water, and applying a range ratio of X .88 feet to refer heights to Hinchinbrook.

C. L. Thurlow

C. L. Thurlow
Chief, Tidal Datum Planes Section
Tides Branch
Oceanographic Division

RE: TIDE ZONING ON OPR-799 P.W. SOUND
H-9383, H-9385, H-9386, H-9387

TUESDAY
1100-1130

TEL CON JIM HUBBARD - MKL MAKI

ADVISED THAT MUCH OF THE HYDROGRAPHY ON THE SHEETS FOR WHICH CAPE HINCHINBROOK GAGE IS TO APPLY, HAS MISSING HOURLY HEIGHTS ON THAT GAGE — WE DO HOWEVER HAVE HOURLY HEIGHTS FOR ALL PERIODS OF HYDRO FOR THE JOHNSTONE POINT GAGE —

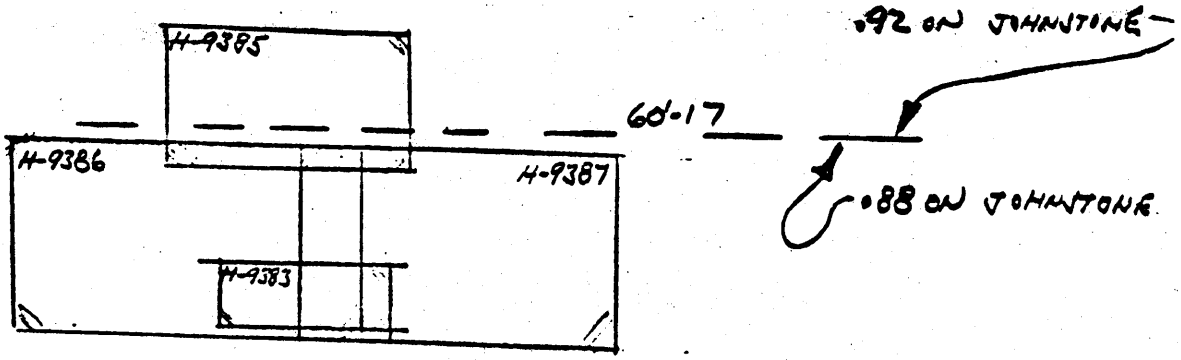
BASED ON: CAPE HINCHINBROOK MEAN RANGE OF 8.4
JOHNSTONE POINT " " OF 9.6

$$96 \overline{)8400} = 87.5$$

768
720
672
480
480

.88 RATIO CAN BE APPLIED TO JOHNSTONE PT. WITH NO TIME DIFFERENCE TO GET HINCHINBROOK —

OUTCOME OF CONVERSATION WAS TO APPLY .92 RATIO ON JOHNSTONE PT ON H-9385 NORTH OF 60°-17 AS INDICATED IN FORM 712 — FOR ALL OF H-9385 SOUTH OF 60-17 AND ALL OF H-9386, H-9387, AND H-9383 USE JOHNSTONE POINT WITH .88 RATIO & NO TIME DIFFERENCE — HE WILL SEND A MEMO CONFIRMING THIS —



(29)

10/24/73

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center

Hourly heights are approved for 362

Tide Station Used (NOAA form 77-12): Cape Hinchinbrook

Period: May - July 1973

HYDROGRAPHIC SHEET: H-9383, H-9385, H-9386, H-9387

OPR: 999

Locality: Prince William Sound

Plane of reference (mean lower low water): *

Height of Mean High Water above Plane of Reference is 9.8 ft.

Remarks:
Note change in MLLW datum for the following specified time periods:

MLLW Plane of Reference	Time Period
5.0 ft.	5/24(1300) - 6/3(1600)
6.5 ft.	6/3(1700) - 6/21(1800)
13.5 ft.	6/21(1800) - 6/26(1600)
10.6 ft.	6/27(0700) - 6/28(0800)
9.7 ft.	6/28(0900) - 7/13(1900)

LINK JUNCTION PT. W/ .88 RATIO
NO TWO VAR.

C. D. Thurlow
for Chief, Tides Branch

10/24/73

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center

Hourly heights are approved for 362

Tide Station Used (NOAA form 77-12): Cape Hinchinbrook

Period: May - July 1973

HYDROGRAPHIC SHEET: H-9383, H-9385, H-9386, H-9387

OPR: 999

Locality: Prince William Sound

Plane of reference (mean lower low water): *

Height of Mean High Water above Plane of Reference is 9.8 ft.

Remarks:

Change in MLLW datum for specified time periods.

Hourly heights have been verified and corrections made to the following times:

DAY	TIME
148	0700-2300
149	0000-1600, 1800-2200
150	0000-0500, 0700-2300
151	0000-0800, (0900-2300)
152	(0000-2300)
153	(0000-2300)
154	(0000-1600)
155	(1600-1800)
184	(0000-1500), 1600
194	1200

No + needed

( ) Inferred Values

Zoning:

Apply hourly heights directly to the above Hydro Sheets.

For Sheet H-9385, apply hourly heights below Lat. 60° 17'.

for R. L. Shurlow
Chief, Tides Branch

GEOGRAPHIC NAME LIST

No geographic names investigation was conducted for this survey. As this was a corridor survey, delineation of the shoreline was not required by the Project Instructions.

GEOGRAPHIC NAMES

Survey No. H-9383

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
HINCHINBROOK ENTRANCE										1
SEAL ROCKS										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
					Approved by					20
					Chas E. Harrington					21
					2-14-1974					22
					Staff Geographer					23
										24
										25
										26
										27

(33)

NOAA FORM 77-27 (9-72) (PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-9383

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & PNO	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	3

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES			1 + 2 folders rapid data			
CAHIERS	1					
VOLUMES		1				
BOXES			1 Sawtooth Rec.			

T-SHEET PRINTS *(List)*

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES

The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				21629
POSITIONS CHECKED		2161	16	
POSITIONS REVISED		175	2	
DEPTH SOUNDINGS REVISED		214	21	
DEPTH SOUNDINGS ERRONEOUSLY SPACED			—	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED			—	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		1 (Rough triangulation from chart)		
JUNCTIONS		32	8	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		36	8	
SPECIAL ADJUSTMENTS			—	
ALL OTHER WORK		30	32	
TOTALS		99	48	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY Clarence R. Lehman	BEGINNING DATE 21 Sept. 1973	ENDING DATE 10 Jan. 1974
REVIEW BY Dennis J. Romesburg	BEGINNING DATE 2-28-74	ENDING DATE 3-8-74

Insp. RH. Chestnut 12 hrs 4/26/74

* U.S. G.P.O. 1972-769-562/439 REG.#6

Reg. No. H-9383

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

(35)

H-9383

Information for Future Presurvey Reviews

This survey covers Seal Rocks in the Hinchinbrook Entrance of Prince William Sound. Adverse weather and sea conditions may hinder survey operations and earthquake activity may cause significant changes in this area. Several shoals around Seal Rocks may warrant extra development on future surveys of this area. Some of these have been listed in the survey review.

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle
600	1470	1	1	50 Years
601	1470	1	1	50 Years
600	1465	1	1	50 Years
601	1465	1	1	50 Years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9383 FIELD NO. DA-10-2-73

Alaska, Prince William Sound, Seal Rocks

SURVEYED: June 17 - July 15, 1973

SCALE: 1:10,000 PROJECT NO.: OPR-999

SOUNDINGS: Ross Digital Depth Recorder
Raytheon DE-723 Depth Recorder

CONTROL: Raydist (Range-Range)

Chief of Party ..... M. H. Fleming
Surveyed by ..... K. X. Gores
..... J. J. Kapler
..... R. H. West
..... J. L. Oswald
Protracted by ..... Gerber Digital Plotter-PMC
Soundings plotted by..... Gerber Digital Plotter-PMC
Verified by ..... C. R. Lehman
Reviewed by ..... D. J. Romesburg
Date: March 8, 1974
Inspected by ..... R. H. Carstens

1. Description of the Area

This survey covers the vicinity of a rocky reef known as Seal Rocks. Situated approximately in midchannel at the southern end of Hinchinbrook Entrance, Seal Rocks rises from depths over 100 fathoms on the north and from 50 to 70 fathoms on the south. Numerous rocks, submerged, awash and bare, are scattered throughout the reefs limits. A number of offlying shoals covered by about 3 to 7 fathoms fall in the area surrounding the reef.

2. Control and Shoreline

The origin of the control is adequately described in the Descriptive Report.

No shoreline manuscripts of Seal Rocks are available. A few rocks above MHW from hydrographic information are indicated on the smooth sheet in red ink. Because of discrepancies between present survey hydrography and topography from T-2611 (1902) only the two main islands on Seal Rocks

were transferred in pencil to the smooth sheet. Information in the Descriptive Report for T-2611 support the present survey delineation of open water due west of the islets.

3. Hydrography

A. Soundings at crossings are in very good agreement.

B. The usual depth curves were adequately delineated. However, east of Seal Rocks Daybeacon, curves were not completely developed. Some rocks awash are found in this area. Several dashed curves were added to help delineate isolated features.

C. The development of the bottom configuration is considered adequate except on several shoals which were not fully developed for least depths as for example:

(1) The 2.7 in lat. 60°09.4', long. 146°48.5'
(2) The 5.5 in lat. 60°10.15', long. 146°46.75'
(3) The 3.4 in lat. 60°09.08', long. 146°47.40'
(4) The 2.9 in lat. 60°10.02', long. 146°47.68'

4. Condition of the Survey

The survey records, automated plotting, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual and the Instruction Manual - Automated Hydrographic Surveys except as follows:

A. The Detached Position Volume noted in Section N of the Descriptive Report was not included in the survey records. Elevations and positions for the rocks were checked against the boat sheet and original raw data printouts. Detached Position Volume was subsequently found and has been filed with other volumes of this survey.

B. Least depths on shoals were determined by fathometer only on 45 meter line spacing. No attempt was made to verify least depths by hand lead, drift sounding or divers.

5. Junctions

An adequate junction was effected with H-9386 (1973) on the south, west and north and with H-9387 (1973) on the south, east and north.

6. Comparison with Prior Surveys

H-2612 (1902) 1:40,000
H-3024 (1909) 1:200,000
H-5454 (1933) 1:80,000

These three small scale surveys comprise the latest coverage of the present survey area. A comparison between these prior surveys and the present survey reveals sounding differences of 1-5 fathoms with

the lesser depths generally recorded on the present survey. A contributor to these differences is the earthquake of 1964. Results of a study published in the book, "The Prince William Sound, Alaska, Earthquake of 1964 and Aftershocks," indicated that this area of Alaska had experienced an uplift of eight feet or more. The larger sounding differences can probably be attributed to errors introduced by the less accurate surveying techniques of obtaining soundings and control on the earlier surveys, especially under the adverse weather and sea conditions that are prevalent in Hinchinbrook Entrance.

The present survey is adequate to supersede the prior survey within the common area.

7. Comparison with Chart 8520 (15th Ed. Jan. 20, 1973)
Chart 8551 (14th Ed. Jan. 25, 1971)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration.

Four submerged rocks charted in lat. 60°09.66; long. 146°49.10' originate with Chart Letter 243 of 1919. Because of the approximate positioning of these rocks and the dangers revealed by the delineation of this area on the present survey it is recommended that these submerged rocks be removed from the chart.

B. Topography

As no contemporary shoreline is available, the charted shoreline supplemented by present survey information should be retained.

C. Aids to Navigation

Seal Rocks Daybeacon positioned on Chart 8520 in lat. 146°50.25', long. 60°09.82' originates with LNM 45 of 1972. The charted position of this aid is approximately 90 meters west of its present survey position. It is recommended that the position of this aid be revised on Chart 8520 to coincide with the present survey position.

The present survey is adequate to supersede the charted hydrography within the common area.

8. Compliance with Project Instructions

The survey adequately complies with the project instructions except that adequate development of several shoals was not accomplished.

9. Additional Field Work

This survey is considered to be a good survey and is adequate for charting purposes. However, additional development and least depth determination on the following shoals would be desirable:

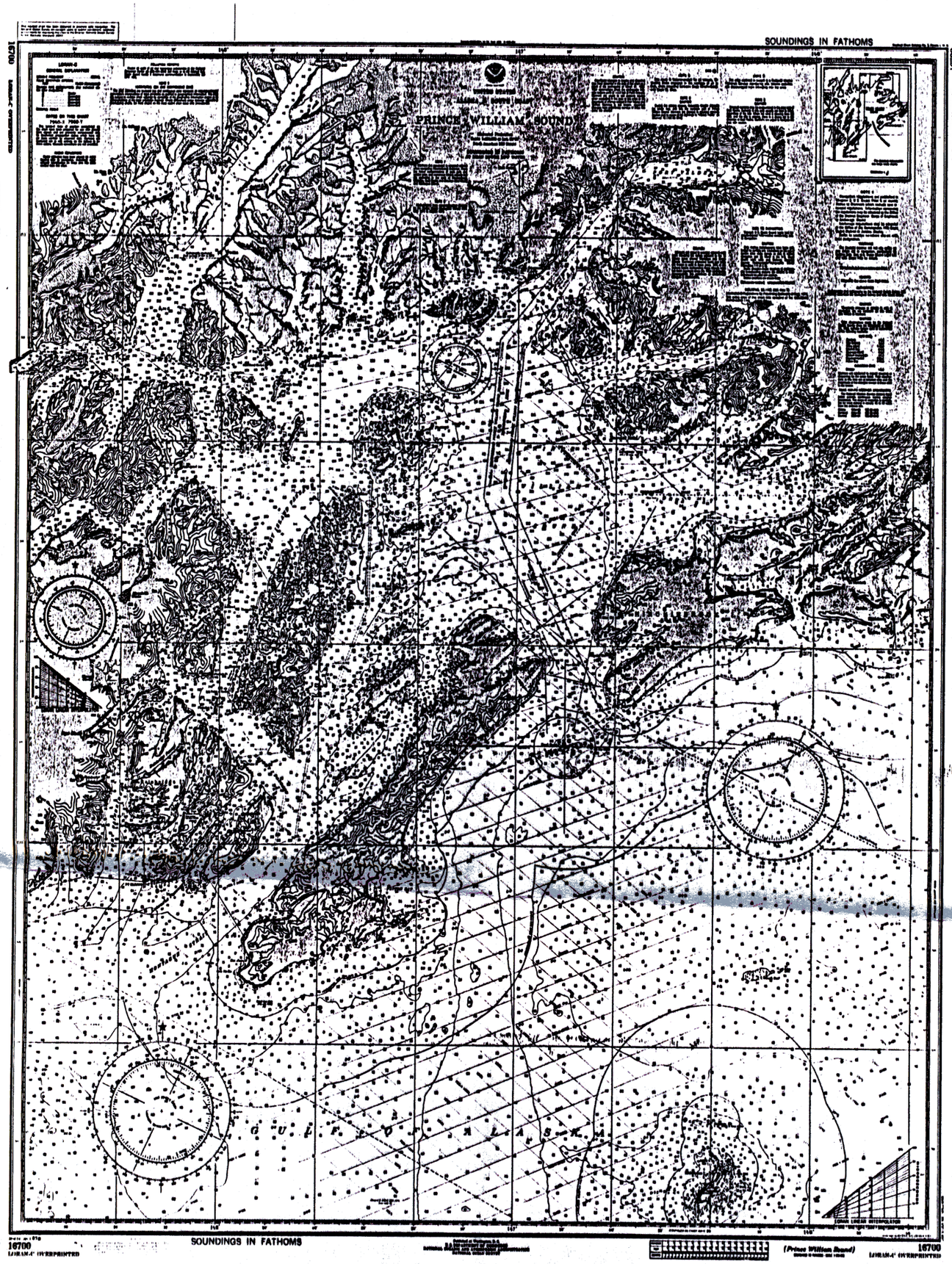
Sdg. (Fms.)	Lat.	Long.
2.~~9~~ 7	60°09.4'	146°48.5'
5.5	60°10.15'	146°46.75'
3.4	60°~~09~~ 10.08'	146°47.40'
2.9	60°10.02'	146°47.68'

Examined and Approved:

John C. Boyer
Chief
Marine Chart Division

for Donald R. Libbey
Associate Director
Office of Marine Surveys
and Maps

Note two corrections above. DRL



H-9383
from 16700
for 16013

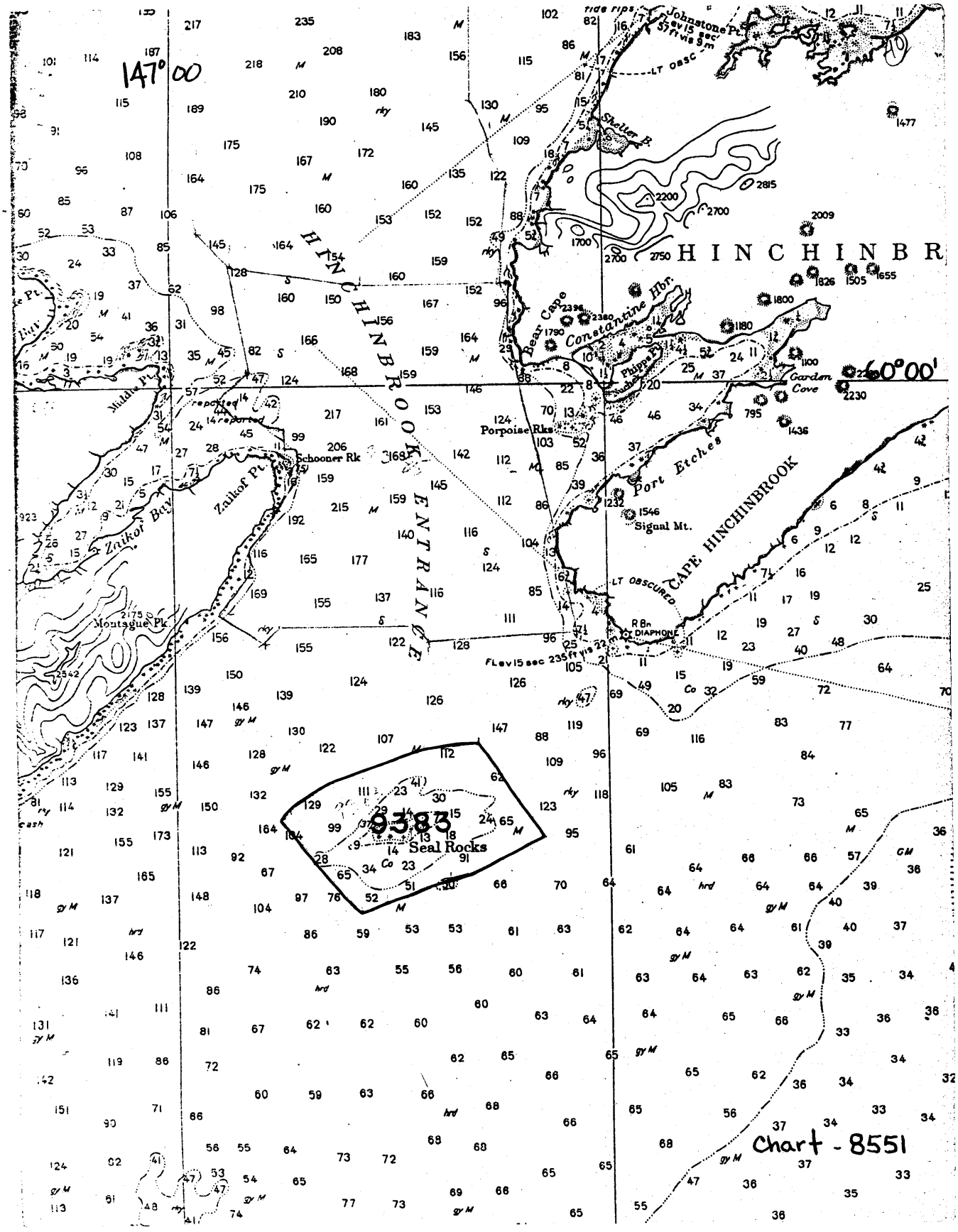
PRINCE WILLIAM SOUND

EASTERN ENTRANCE

UNITED STATES
ALASKA—SOUTH COAST

PRINCE WILLIAM SOUND
EASTERN ENTRANCE

(Prince William Sound, Eastern Entrance)


147° 00
60° 00'
HINCHINBROOK ENTRANCE
HINCHINBR
CAPE HINCHINBROOK
Johnstone Pt.
Shelter B.
Bear Cape
Constantine Hbr.
Philpps Pt.
Garden Cove
Porpoise Rks
Port Etches
Signal Mt.
LT OBSCURED
RBn
DIAPHONE
Schooner Rk
Zaikof Pt.
Zaikof Bay
Montague Pk
Middle Pt.
Seal Rocks
9383
Chart - 8551

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

(41)

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9383

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8520	11/22/74	Kennon	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Revised sdgs, curves, rocks
			islets in ank around seal Rocks
8551	11/15/74	M. Kania	~~Full~~ Part Before ~~After Verification~~ Review Inspection Signed Via
			Drawing No. Revised Sndings & Curves for
			Critical Corr. Thru Chl. 8520
8502	1/22/75	C.S. Forbes	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Revised Sndings & Curves from
			Chl. 8551
8500	2-28-75	V.J. Bowaski	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
(531)			Drawing No. Added Sounding and Revised 50 fm.
			Curve Thru Chl. 8502
8551	9/30/77	M.J. Friese	Full ~~Part Before~~ After Verification Review Inspection Signed Via
(16700)			Drawing No. Fully appd hydro throughout common
			area
8502	2/27/78	J. Bailey	Full ~~Part Before~~ After ~~Verification Review~~ Inspection Signed Via
(16013)			Drawing No. NA App'd. thru 8551
8520	5/18/79	J. Bailey	Full ~~Part Before~~ After ~~Verification Review~~ Inspection Signed Via
(16709)			Drawing No. ~~24 15~~ 14 Fully Applied Hydro
16700	9-28-83	Lori A. Simmons	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 25 Fully Re-app'd thru 16709 #~~25~~ 15 (exam thru #~~14~~ 14
16013			Revised soundings and rocks
~~531~~	9-28-83	L.A. Simmons	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. ~~#~~ 27 Fully reapp'd thru 16700 #25
			Revised sndg. and curve
531	9-28-83	L.A. Simmons	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 18 Fully app'd thru 16013 #27
500	9-28-83	L.A. Simmons	Fully. #5. Exam. No Corr.
530	9-28-83	L.A. Simmons	#32. Fully app'd thru 531 #18.
			Revised danger curve.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P68