

# 8606

8606

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
<b>DESCRIPTIVE REPORT</b>	
Type of Survey	Hydrographic
Field No. BO-10-4-61	Office No. H-8606
LOCALITY	
State	Alaska
General locality	Prince William Sound
Locality	Port Nellie Juan
1961	
CHIEF OF PARTY	
F. X. Popper	
LIBRARY & ARCHIVES	
DATE	MAR 20 1963

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER NO. H-8606

Field No. BO-10-4-61

State Alaska

General locality Prince William Sound

Locality Mink Island, Port Nellie Juan

Scale 1:10,000 Date of survey 7/12/61 - 8/12/61

Instructions dated 18 November 1958

Vessel USC&GSS BOWIE

Chief of party F. X. Popper

Surveyed by P. D. Montjoy, F. X. Popper

Soundings taken by ~~fathometer~~, graphic recorder, ~~hand level~~, ~~voice~~

Fathograms scaled by W. White

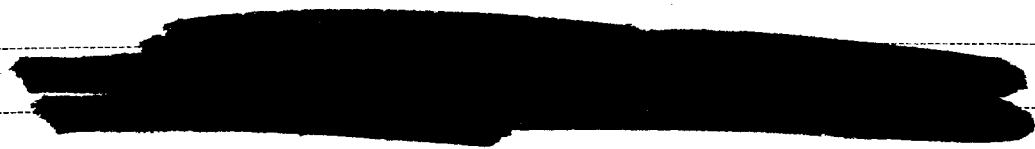
Fathograms checked by P. D. Montjoy, J. M. Doherty, M. E. Natto

Protracted by C. R. Lehman

Soundings penciled by C. R. Lehman

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW

REMARKS:



*F. W. W. 3/7/94*

*GM*

# DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-8606 FIELD NO. BO-10-4-61

SCALE: 1:10,000

DATE: 1961

USC&GS Ship BOWIE

F. X. Popper, Commanding

## A. PROJECT:

This survey was accomplished in accordance with revised instructions OPR-277 dated November 1958, supplemental instructions dated 14 January 1960.

## B. AREA SURVEYED:

This survey covers the main portion of Port Nellie Juan bounded on the north by Perry Passage and on the south by the west arm of Port Nellie Juan.

The limits of the sheet are  $60^{\circ}-37'-30''N$  to  $60^{\circ}-30'-30''N$ ,  $148^{\circ}-05'-30''W$  to  $148^{\circ}-18'-30''W$ . Hydrography commenced on 12 July 1961 and was completed on 12 August 1961.

The survey junctions on the north with the 1948 survey H-7678 (1:20,000) and on the south with 1948 survey H-7794 (1:40,000). Junctions are also made with contemporary surveys H-859~~8~~<sub>4</sub>, H-8607 and H-8595.

With the exception of McClure Bay, which is not included in this survey, this is a resurvey of the area covered on H-~~8973~~<sub>3</sub> (1:20,000 1917).

## C. SOUNDING EQUIPMENT:

EDO No. 185-2 was used for the ship work augmented with 808 No. 57-25. Launch #95 used 808 fathometers No. 57-30 and 57-28.

The phase comparisons were obtained for each fathometer by obtaining ten observations at each change of scale. The ten observations were then scanned from the fathogram and a mean correction determined. This correction was combined with the bar check correction to give the Echo Correction which is shown on page B.

At the time the phase comparisons were taken a series of tests were run on each fathometer and the results are as follows:

<u>Fathometer</u>	<u>Speed</u>	<u>Paper Advance</u>	<u>Radius Stylus Arm</u>
57-30	109 RPM	7.8 inch/4 min (foot scale)	O. K.
57-28	"	"	"
57-25	"	"	"

Paper advance and speed checks were made twice daily.

Bar checks were taken twice daily.

Velocity corrections determined from the temperature and salinity casts are shown on page C.

Due to the irregular and steep bottom, many side echos and scale changes were encountered. This caused some missed soundings.

Because of the irregular bottom a striker, type NJ-3, was used on each 808 fathometer to obtain a clearer record.

The Edo fathometer was used to determine depths beyond the range of the 808. The corrections for the Edo were obtained by scaling a number of simultaneous comparisons daily between the 808 and the Edo.

A paper slippage problem in the 808 arose due to worn out paper take-up spring belts. This was not a constant error but built up until the spring slipped and the speed was normal again.

#### E. SMOOTH SHEET:

The projection was ruled by hand in the Washington Office.

#### F. CONTROL:

Photo-Control, Tringulation, and hydrographic signals were used to control hydrography on this sheet.

Incomplete manuscripts T-9121, 9122 and 9123 were used for the photo control.

Three point sextant fixes were used exclusively on this survey.

A complete list of signals is given on page A.

#### G. SHORELINE:

The source of all shoreline is incomplete manuscripts T-9121, 9122, and 9123. Shoreline and topographic details are accurately shown on the manuscript.

The low water line was delineated where possible. In general the beach is very steep making it impossible to run a low water line.

#### H. CROSSLINES:

Approximately 9% crosslines were run and in general the agreement is good. The disagreement encountered is attributed to the irregular bottom. For a more complete statement see the smooth plotters report.

F. JUNCTIONS:

The junctions with prior and contemporary surveys are good and considered adequate in view of the rough and irregular bottom. For a more complete statement see the smooth plotters report.

J. COMPARISON WITH PRIOR SURVEYS:

Presurvey Review items:

(a) The islet, Lat  $60^{\circ}-35.01'N$  Long  $148^{\circ}-08.45'W$ , charted from T-3676 (1917) and plotted 100 meters to the Northwest on H-3973 should be deleted. *see processing notes*

(b) Soundings indicate that the 5 fms., Lat  $60^{\circ}-34.95'N$  Long  $148^{\circ}-07.25'W$ , is misplaced and should be deleted. *see processing notes.*

(c) The rock awash at Lat  $60^{\circ}-33.07'N$  Long  $148^{\circ}-11.82'W$  should be deleted and the rocks located by this survey charted. The area is foul due to the extensive reef development and it is recommended that the immediate area be indicated as such on the chart.

(d) The charted islet at Lat  $60^{\circ}-36.19'N$  Long  $148^{\circ}-11.55'W$  should be deleted. *About 6fms of water here.*

(e) The uncharted and unsupported 37 fms. sounding at Lat  $60^{\circ}-36.55'N$  Long  $148^{\circ}-10.50'W$  from H-3973 was verified along with a shoaler depth of 33 fms.

(f) The two rocks at  $60^{\circ}-37.88^{\frac{6}{5}}N$   $148^{\circ}-09.27^{\frac{0}{7}}W$  and  $60^{\circ}-37.88^{\frac{6}{5}}N$   $148^{\circ}-09.40^{\frac{0}{3}}W$  should be deleted. *Apparently an error in scaling*

The survey closely approximates the survey H-3973 (1917, 1:20,000) in that there is little difference between the depth curves. There are no additions or deletions except those already noted. The rocks shown on the manuscript were verified and should be charted.

In the opinion of the hydrographer operation of any vessel, except a skiff, within the five fathom curve between Lat  $60^{\circ}-31'N$  and  $60^{\circ}-36'N$  is hazardous. It would be far better to use the five fathom curve in this area as the outer limit of a foul area.

For a more complete statement see the smooth plotters report.

K. COMPARISON WITH THE CHART:

Chart 8517 (1:80,000) covers the area of this survey.

The two 429 fm. soundings at  $60^{\circ}-34.88'N$ ,  $148^{\circ}-11.70'W$  and at  $60^{\circ}-34.30'N$ ,  $148^{\circ}-13.20'W$  should be approximately  $280^{\frac{58}{6}}$  and  $335^{\frac{6}{6}}$  fms. respectively.

L. ADEQUACY OF SURVEY:

This survey is complete and adequate to supercede prior surveys for charting.

M. AIDS TO NAVIGATION:

The location of the light, Fl.W. 10 Sec., on the north end of the point between Port Nellie Juan and Knight Island was verified. The light is adequate for navigation.

N. STATISTICS:

434.6 Nautical miles of sounding lines  
2959 Positions  
61 Bottom samples  
18.9 Square miles of hydrography  
2 Tide stations  
0 Current stations

O. TABULATION OF APPLICABLE DATA:

A. Signal List  
B. Fathometer Corrections  
C. Velocity Corrections  
D. Tidal Nete

Respectfully submitted,



Andrew Tczap  
Ens., C&GS  
USC&GSS BOWIE

APPROVAL SHEET

BO-10-4-61

Field work on this hydrographic survey was inspected daily by the Chief of Party. This survey is considered complete and no additional work is necessary. All records are approved and forwarded.



F. X. Popper  
CDR., C&GS  
Commanding Ship BOWIE

LIST OF HYDROGRAPHIC SIGNALS H-8606 (BO-10-4-61)

Hydrographic Name	Source	Hydrographic Name	Source
Abe ✓	T-9121	Erg ✓	T-9121
Ace ✓	"	Eva ✓	"
Add ✓	"	Fat ✓	T-9123
Ado ✓	T-9123	Fed ✓	T-9121
Aim ✓	"	Fit	T-9122
Ake	Quake, 1948	Fop	T-11583
Amp ✓	"	For ✓	T-9121
And	1948 Tri Sta LAND ✓	Fox ✓	"
Ann ✓	T-9121	Gad ✓	"
Ant ✓	"	Gas	Vol 8, p 3
Arm ✓	"	Gat	1948 Tri Sta NEGAT ✓
Art ✓	T-9123	Got ✓	T-9123
Axe ✓	T-9121	Guy ✓	"
Azo ✓	"	Hag	Vol 8, p 3
Bat ✓	"	Hat ✓	T-9121
Bay	1948 Tri Sta MCCLURE BAY PORT NELLIE JUAN CANNERY ✓ WEST GABLE	Hop	Vol 8, p 3
Bed ✓	T-9121	Hug ✓	T-9121
Bib ✓	"	Ice ✓	"
Big ✓	T-9123	Ire	1917 Tri Sta WIRE
Boa ✓	T-9121	Irk ✓	T-9123
Bon ✓	"	Job ✓	T-9121
Box ✓	T-9123	Joe ✓	"
Cam ✓	T-9121	Juan	1917 Tri Sta JUAN
Caw ✓	"	Jug ✓	T-9123
Ced ✓	"	Ked ✓	T-9121
Con ✓	T-9122	Kid ✓	"
Cop	Vol 8, p 3	Lay	Vol 8, p 3
Cur ✓	T-11583	Lee ✓	T-9122
Cut	Vol 8, p 3	Lig	1948 Tri Sta PORT NELLIE JUAN
Day ✓ <i># Dog &amp; Car</i>	T-9121	Lip	Vol 9, p 3
Deb ✓	"	Liz	Vol 8, p 3
Dif ✓	"	Lop ✓	T-9123
Dip ✓	T-9123	Low ✓	T-9121
Dec ✓	T-9121	Lux	Vol 8, p 3
Dud ✓	"	Mag ✓	T-9121
<del>Err</del>	<del>xxxxxxx</del>	Man ✓	T-9137
Egg ✓	"	Mar ✓	T-9121
Elf ✓	"	Max ✓	"
Elm ✓	T-9123	Met	T-9122
End	1913 Tri Sta END ✓	Nat	T-9121
Era ✓	T-9121	Nell	1917 Tri Sta NELL ✓
Eak	T-9121	New ✓	T-9121
		Nip	Vol 8, p 3



Hydrographic  
Name

Source

---

Nit	1948 Tri Sta UNIT ✓
Oak ✓	T-9121
Obb ✓	"
Odd ✓	"
Off	Vol 8, p 3
Oli ✓	<del>T-9121</del> OLIVE, (1948 8)
Peg ✓	T-9121
Pix ✓	"
Port	1917 Tri Sta PORT ✓
Pup	Vol 8, p 3
Que	"
Rag ✓	T-9121
Ran ✓	"
Rip ✓	1948 Tri Sta RIPE ✓
Roc ✓	T-9121
Ross	1917 Tri Sta ROSS
Rot	Vol 8, p 4 ✓
Sam ✓	T-9121
Set ✓	T-11583
She ✓	T-9121
Sil	1948 Tri Sta SILT ✓
Tan	T-11583
Tart	<del>LIX</del> 1948 Tri Sta TART ✓
Val	1948 Tri Sta VALOR ✓
Wal	1948 Tri Sta WALTZ ✓
Wax ✓	T-11583
Yak ✓	T-9121

TOTAL FATHOMETER CORRECTION (ECHO)  
( Bar Check Corr. + Phase Corr. )

Fathometer #57-30

A Scale - - - - - +.2  
B Scale - - - - - +.3  
C Scale - - - - - +.2  
D Scale - - - - - +.4  
E Scale - - - - - +1.2

Fathometer #57-28

A Scale - - - - - +.3  
B Scale - - - - - +.3  
C Scale - - - - - .2  
D Scale - - - - - +.3  
E Scale - - - - - +.9

Fathometer #57-25

A Scale - - - - - 0  
B Scale - - - - - -.6  
C Scale - - - - - -1.2  
D Scale - - - - - -1.7  
E Scale - - - - - -2.2

EDO Corrections

<u>Day:</u>	<u>Correction:</u>
A	- 2.3 Fms.
B	- 1.3
C	- 1.4
D	- 1.4
E	- 2.1
F	- 2.4
G	- 2.0
M	- 1.8

VELOCITY CORRECTIONS

<u>From:</u>	<u>To:</u>	<u>Correction</u>
0 Fms.	5 Fms.	0 Fms.
5	10	+ .1
10	20	+ .2
20	35	+ .3
35	50	+ .4
50	65	+ .5
65	85	+ .6
85	100	+ .7
100	120	+ .8
120	140	+ .9
140	160	+ 1.0
160	180	+ 1.1
180	200	+ 1.3
200	220	+ 1.4
220	240	+ 1.5
240	260	+ 1.6
260	279	+ 1.7
280	300	+ 1.9
300	340	+ 2.0

-D-

TIDE NOTE

The Applegate Island portable tide gage, Lat  $60^{\circ}-37.4'N$   
Long  $148^{\circ}-09.8'W$ , was used for the reduction of soundings on  
this survey. The height of the MHW was 17.6 ft on the staff  
and MLLW was 6.6 ft on the staff. Hourly heights were furnished  
by the Washington Office. The  $150^{\circ}$  time meridian was used for  
all observations.

742.8 LAT  
729.8 Long

PROCESSING OFFICE NOTES - H-8606

E. SMOOTH SHEET

The smooth projection was hand ruled in the Washington Office. The shoreline and control were applied and verified by the Seattle Hydrographic Processing Unit.

F. CONTROL

Triangulation, Photo-Topo and Hydrographic stations were used for control on this survey.

Triangulation by E. E. Smith, 1917, and H. A. Karo, 1948.

Photo-Topo Stations from T-9121, T-9122, T-9123 and T-11583.

Hydrographic stations from sounding records and indexed in list of signals.

G. SHORELINE

The shoreline is from incomplete manuscripts T-9121, T-9122, T-9123 and T-11583.

H. CROSSLINES

The differences in crossings mentioned in the field report do not appear to be caused entirely by the irregular bottom. Fathometer corrections appear to be partly at fault. In computing the corrections for the EDO 185 fathometer, the initial was taken into account, though not accurately scaled, when comparing with the 808 but not used in the sounding record when reducing EDO soundings. All of the 808 fathograms have been checked for speed. The launch fathograms were found to be very good for time. The ship 808 fathometer appears to have a consistent error of about -1% on B, E, F, and G days. The speed on A day is variable. From position 1 through 5 no error, from 5-7 = +3%, 7-18 = +5%, 19-32 = 0%, 33-41 = -10%, 41-43 = -7%, and 43-49 = 0%. The fathogram between position 5 and 18 shows evidence of torn sprocket holes in the paper, also the soundings are in fair agreement with the EDO soundings. No torn holes are found near positions 33 through 43, and the depths do not agree with the EDO soundings by approximately the amount of the correction needed to correct the speed. Part of the trouble may be in the phasing heads on the 808 fathometers.

Scale changes were generally made on steep slopes and it is very difficult to scale the differences at the change points. Several places on the 808 fathograms, on "E" scale, the return of the sounding appeared

to weaken as the depth increased. One such place is between positions 156 and 157~~8~~, Lat.  $60^{\circ} 33'.8$ , Long.  $148^{\circ} 16'.3$ . The sounding on position 157~~8~~ is approximately 15 fathoms deeper than the crossline, 104 to 105G. The fathogram on "8" day reads 190 fathoms but the return appears to be getting weaker as the depth increases. Is it possible that the weaker return is taking more time than it should and thus a sounding that is too deep?

#### I. JUNCTIONS

Junctions have been compared with H-7678 (1948), scale 1:20,000, and H-7794 (1948), scale 1:40,000 and contemporary surveys H-8594, H-8595 and H-8607.

Soundings in the area near Lat.  $60^{\circ} 35'.5$ , Long.  $148^{\circ} 06'.0$  on H-7678 appear generally deeper than this survey by several fathoms except that the first sounding before position 80d (H-7678) apparently should be 159 fathoms instead of the 149 as shown.

The soundings on H-7794 are in agreement except for sounding at pos. 119c, which appears about 4 fathoms too deep; soundings between positions 111 and 112c also too deep by several fathoms and the first sounding before position 132c which appears to be about 20 fathoms too deep.

Junctions with contemporary surveys are in agreement.

#### J. COMPARISON WITH PRIOR SURVEYS

Presurvey Review Items:

(a) The smooth sheet shows a rock bare 11 feet at MLLW at Lat.  $60^{\circ} 34'.99$ , Long.  $148^{\circ} 08'.45$ , position 114~~8~~. The rock awash is about 100 meters SE of the islet shown on H-3973.

(b) The smooth sheet shows a 5.6 fathom sounding at Lat.  $60^{\circ} 34'.96$ , Long.  $148^{\circ} 07'.20$  near the  $5 \frac{1}{6}$  fathom sounding on H-3973. This sounding does not mark a shoal but is just part of the shoaling trend to the beach.

Items "c, d, e, and f" in field report are concurred in by smooth sheet. See pen and ink corrections and notes applied to those items.

Apparently no real effort was made to compare H-3973 (1917), scale 1:20,000, with the boat sheet of the present survey, probably because of the datum and scale differences.

In addition to the two charted 429 fathom soundings mentioned in the

field report, there were found many soundings on H-3973 which appear to be misplotted or in error in multiples of 10 fathoms.

The pile shown on H-3973 at Lat.  $60^{\circ}34'.53$ , Long.  $148^{\circ}06'.82$  (N.A.1927 Datum) doesn't show on smooth sheet and probably doesn't exist any longer.

K. COMPARISON WITH CHART

This survey has been compared with Chart 8515, 7th Ed. May 7/60. 8517

The charted soundings in the area covered by this survey appear to have come from H-3973 (1917) and many of them do not agree with the present survey. Charted soundings were checked if any part of the sounding was covered by the same depth on the smooth sheet. Some alongshore charted soundings appear a little too far offshore. Other soundings in the deep areas appear misplotted or just plain errors in depth.

See section of Chart 8515 attached to this report for comparison.

L. ADEQUACY OF SURVEY

Except for the trouble mentioned under paragraph "H", this survey appears complete and adequate for charting. 8517

Respectfully submitted

*William M. Martin*  
Milliam M. Martin  
Supervisory Cartographer

Approved and forwarded

*M. E. Wennermark*  
M. E. Wennermark  
Captain, C&GS  
Seattle District Officer

analyze note of duplication of MAG

(A)

AGE 002  
ACE 012  
ADD 011  
ADO 016  
AIM (QUAKE) 035  
AKE 042  
AMY 059  
AMP (LAND) 056  
AND 051  
ANN 055  
ANT 058  
ARM 075  
ART 078  
AXE 092  
AZO 096

(B)

BAT 008  
BAY 009  
BED 021  
BIB 030  
BIG 033  
BOA 060  
BON 065  
BOX 069

(C)

CAM 105  
CAR 107  
CAW 109  
COD 161  
CON 165

COP 166  
CUR 187  
CUT 188

(D)

~~(PROGRAM)~~  
DAY 108  
DEB 120  
DIF 132  
DIP 136  
DOC 162  
DOG 163  
DUD 181

(E)

E<sup>FBB</sup> 200  
EAR 207  
EGG 233  
ELF 242  
ELM 245  
END 251

(F)

FAT 208  
FED 221  
FIT 238  
FOP 266  
FOR 267  
FOX 269

(G)

GAD 301  
GAS 307  
(NEGAT)  
GAT 308  
GOT 368  
GUY 389

(H)

HAG 303  
HAT 309  
HOP 366  
HUG 383

(I)

ICE 312  
(WIRE)  
IRE 372  
IRK 374

(J)

JOB 460  
JOE 462  
JUAN 480  
JUG 483

(K)

KED 421  
KID 431

(L)

LAY 409  
LEO 426  
LIG 433  
LIP 436

LIZ 439  
LOP 466  
LOW 469  
LUX 489

(M)

MAG 503  
MAN 505  
MAR 507  
MAX 509  
MET 527

(N)

NAT 508  
NELL 524  
NEW 529  
NIP (UNIT) 536  
NIT 538

(O)

OAK 604  
OBI 603  
ODD 611  
OFF (COLIVE) 622  
OLI 643

(P)

PEG 623  
PIX 639  
PORT 667  
PUP 686



Q

QUO 686

R

RAG 703

RAM 705

(RIPPE)  
RIP 736

ROC 761

ROSS 767

ROT 768

S

SAM 706

SET 728

~~SE 722~~

SIL 734

T

TAN 805

TART 807

V

(VALORI)  
VAL 804

W

(WALTZ)  
WAL 904

WAX 909

Y

YAK 905

GEOGRAPHIC NAMES  
Survey No. H-8606

Name on Survey	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On Chart No. 8517</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On previous survey No.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On U. S. quadrangle Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">From local information</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On local Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">P. O. Guide or Map</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Rand McNally Atlas</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">U. S. Light List</div> </div>										
	A	B	C	D	E	F	G	H	K		
Applegate Island	✓									✓	1
Culross Island	✓									✓	2
Culross Passage	✓										3
Mc Clure Bay	✓									✓	4
Mink Island	✓										5
Port Nellie Juan	✓										6
											7
											8
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											26
											27

*George W. Bee*  
*Geographic Names Section*  
*3 April 1963*

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...8606...

Records accompanying survey: Smooth sheets ...<sup>1</sup>.;

boat sheets <sup>1</sup>...; sounding vols. ...<sup>17</sup>.; wire drag vols. ....;

Descriptive Reports ...<sup>1</sup>...; graphic recorder envelopes ...<sup>6</sup>...;

special reports, etc. <sup>1</sup>-Plastic overlay; Blackline manuscripts

T-9121 thru 9123; T-9137; T-11582 & T-11583:.....

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

Number of positions on sheet	.....
Number of positions checked	.....
Number of positions revised	.....
Number of soundings revised (refers to depth only)	.....
Number of soundings erroneously spaced	.....
Number of signals erroneously plotted or transferred	.....
Topographic details	Time .....
Junctions	Time .....
Verification of soundings from graphic record	Time .....
Special adjustments	Time .....

Verification by ..... Total time ..... Date .....

Reviewed by ..... Time ..... Date .....

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H-8606

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.
3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.
4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.
5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.
6. All positions verified instrumentally were check marked in the sounding records.
7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.
8. The metal protractor has been checked within the last three months.
9. The protracting and plotting of all bad crossings were verified.
10. All detached positions locating critical soundings, rocks or buoys were verified.
11. The boat sheet was compared with the smooth sheet.

12. The spacing of soundings as recorded in the records was closely followed.
13. The bottom characteristics were shown on outstanding shoals.
14. The reduction and plotting of doubtful soundings were checked.
15. The transfer of contemporary topographic information was carefully examined.
16. All junctions were transferred and overlapping curves made identical.
17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.
18. The depth curves have been inspected before inking.
19. All triangulation stations and transfer of topographic and hydrographic signals were checked.
20. Heights of rocks were checked against range of tide.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
22. Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
24. The low water line and delineation of shoal areas have been properly shown.
25. Degree and minutes values and symbols have been checked.
26. Questionable soundings have been checked on the fathograms.

27. Source of shoreline and signals (when not given in report).
28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.
29. All aids located, with those on contemporary topographic sheets, have been shown on survey.
30. Depth curves were satisfactory except as follows:
31. Sounding line crossings were satisfactory except as follows:
32. Junctions with contemporary surveys were satisfactory except as follows:
33. Condition of sounding records was satisfactory except as follows:
34. The protracting was satisfactory except as follows:
35. The field plotting of soundings was satisfactory except as follows:
36. Notes to reviewer:

Verified by

Date

RHC

FORM C&GS-712  
(4-62)

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 15, 1963

Nautical Chart Division: R. H. Carstens

Plane of reference approved in  
17 volumes of sounding records for

HYDROGRAPHIC SHEET 8606

Locality Prince William Sound, Alaska

Chief of Party: F. X. Popper (1961)

Plane of reference is mean lower low water, reading

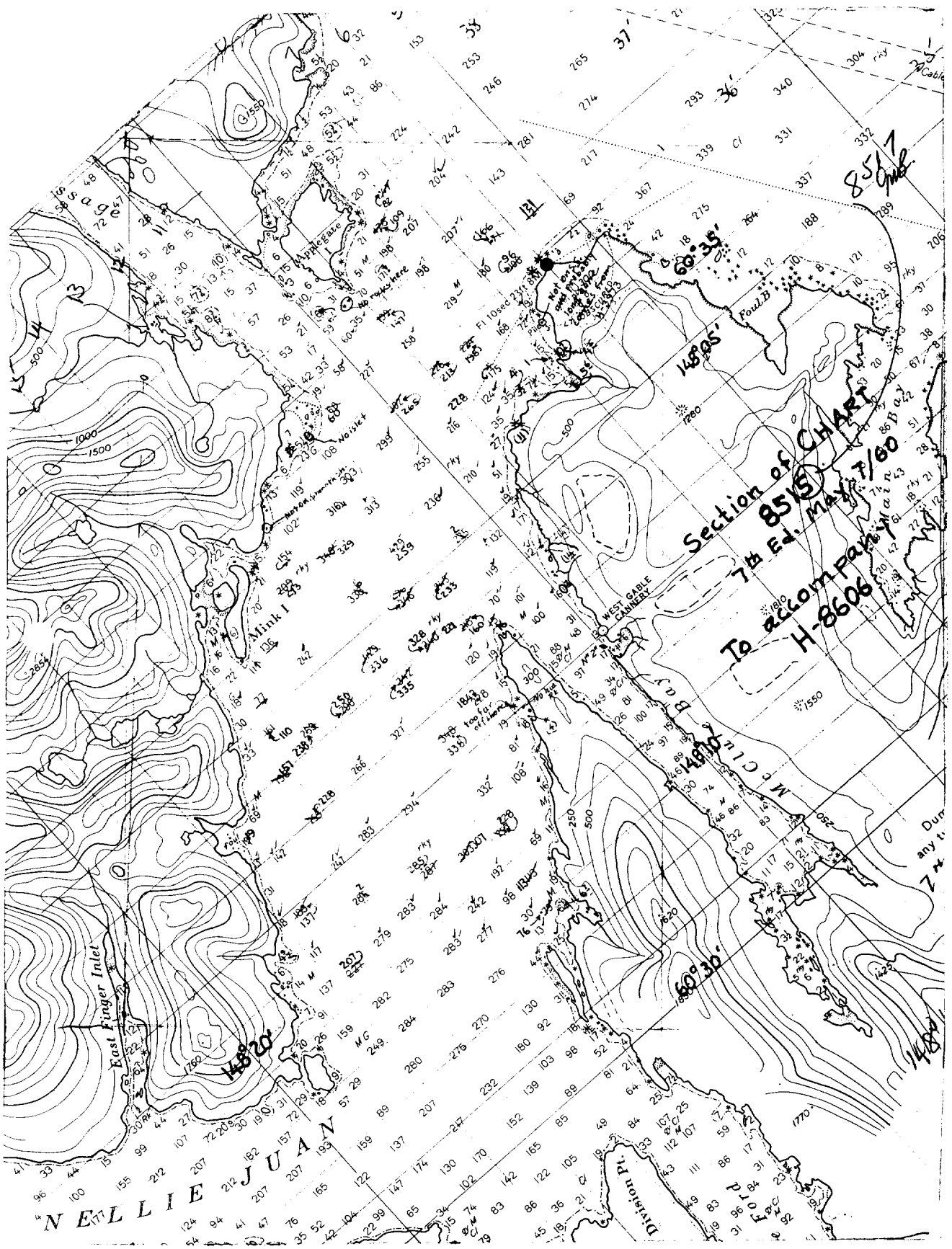
6.6 ft. on tide staff at Applegate Island, Alaska

12.9 ft. below B. M. 1 (1961)

Height of mean high water above plane of reference is 11.0 feet.

Condition of records satisfactory except as noted below:

  
\_\_\_\_\_  
Chief, Tides and Currents Branch



NELLIE JUAN

Section of CHART  
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To Accompany  
H-8606  
7th Ed. May 7/60

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East Finger Inlet

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