

8728

Diag. Cht. No. 8553.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. BO-20-1-63 Office No. H 8728

LOCALITY

State Alaska
General locality Cook Inlet
Locality Fire Island to Anchorage

1963

CHIEF OF PARTY

John O. Boyer

LIBRARY & ARCHIVES

DATE Sept. 16, 1966

USCOMM-DC 5087

8728

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. 8728

Field No. BO -20-1-63

State Alaska
General locality Cook Inlet
Locality Fire Island to Anchorage
Scale 1:20000 Date of survey 29 June to 24 July 1963
Instructions dated 11 December 1959, Revised 29 January 1963
Vessel USC&GSS BOWIE
Chief of party John O. Boyer
Surveyed by John O. Boyer
Soundings taken by fathometer, graphic recorder, hand lead, wire Fathometer
Fathograms scaled by Ship Personnel
Fathograms checked by Ship Officers
Protracted by A.W. Cecil
Soundings penciled by A.W. Cecil
Soundings in fathoms feet at MLW MLLW

REMARKS: _____

Hydrographic Survey H-8728, BO-20-1-63

Scale: 1:20,000

Date: 1963

USC&GSS BOWIE

John O. Boyer, Commanding

A. PROJECT: OPR 413

This survey was accomplished in compliance with instructions dated 11 December 1959 and revised 29 January 1963.

B. AREA SURVEYED:

The area includes the northern part of Cook Inlet from Fire Island to Anchorage (Longitudes 150 degrees 20 minutes east to 149 degrees 25 minutes). Field work was begun on 29 June 1963 and completed on 26 July 1963. This survey junctions with BO-40-2-63 to the southwest and BO-10-1-63 to the northeast. This survey was a repeat of H-8528 done in 1960.

C. SOUNDING VESSELS:

Both the Ship BOWIE and launch ^{No. 1} ~~number one~~ were used for hydrography. The ship's work is identified by purple day letters, while the launch work is identified by blue day letters.

D. SOUNDING EQUIPMENT:

Both ship and launch used Model DE 723 Fathometers. The ship used ^{No.} ~~number~~ 547 and the launch 552. In the launch bar checks were used to determine fathometer corrections. Leadline comparisons were used on the ship. The fathometers proved to be highly accurate and reliable.

E. SMOOTH SHEET:

The smooth sheet was made in the Seattle Regional Office by hand.

F. CONTROL:

Control used was both visual and Shoran. A list of Shoran stations follows: MOWK, CREEK, WEST, FIRE, RONZ. All stations were located by traverses from triangulation stations. WEST, FIRE and RONZ were temporary stations. Shoran was calibrated by comparison with visual sextant fixes.

Visual fixes were used in areas where Shoran fixes were weak, such as base-line zones. Visual signals were in most cases second or third order triangulation. The two hydro signals, NOP and HIGH, were located in 1960, NOP by traverse from "North Point 1960" and HIGH by coordinates furnished from the Washington office.

G. SHORELINE:

Shoreline was omitted for the present as recent shoreline surveys were not available.

H. CROSSLINE:

Crosslines comprised 6.4% of hydrography. Agreement was satisfactory in all cases.

I. JUNCTIONS:

Satisfactory junctions were made with surveys listed in item B and the depth curves can be adequately drawn.

J. COMPARISONS WITH PRIOR SURVEYS:

Prior surveys of this area are:	H-3199	1910	1:100,000
	H-6658	1941	Scale Not Known
	H-8213	1955	1:20,000
	H-8468	1959	1:20,000
	H-8528	1960	1:20,000

Comparisons made with H-8528 (1960) revealed extensive changes in shoal areas north of the channel to Anchorage.

There appear to be three separate shoals roughly in a straight line running from west to east. The westernmost is the largest, having one square nautical mile above the zero curve and centered at Latitude 61 degrees 12.5 minutes North, Longitude 150 degrees 10.9 minutes West in 1963. The shoalest sounding obtained was -4 feet.

In 1960 this shoal was centered at Latitude 61 degrees 13.0 minutes North and Longitude 150 degrees 12 minutes West. Thus in three years the shoal has moved Southeastward about one-half mile.

In 1955 the shoal was centered at Latitude 61 degrees 12 minutes North and Longitude 150 degrees 14 minutes West. In eight years this shoal has moved in a flat arc Northeastward, then southeastward for a distance of about 1.1 nautical miles.

The second shoal to be considered was located at Latitude 61 degrees 12.9 minutes North and Longitude 150 degrees 07.8 minutes West in 1963. The shoalest sounding found was one foot and the area above the one fathom curve is 0.13 square nautical miles. This shoal appears to have remained virtually stationary since 1955 but seems to have increased in size since 1960. The shoal is marked by black bell bouy ^{next} number one. This shoal was located at Latitude 61 degrees 12.2 minutes North and Longitude 150 degrees 05.3 minutes West in 1963. The shoalest sounding was seventeen feet. This

shoal appears to have remained stationary since 1955.

The main channel depths from Fire Island to Anchorage have changed little. The channel has narrowed about three-fourths of a mile directly north of North Point.

K. COMPARISON WITH CHART:

The latest chart of the area is 8557, Eighth Edition, July 3, 1961. The principal change noticed was the southeasterly movement of the large shoal mentioned in Section J north of Fire Island. The 1963 position of its center was approximately 1.1 nautical miles south-east of its position shown on the chart. There are no other new dangers to navigation.

There has been considerable change in the channel north of the largest shoal mentioned above. The project limits did not extend far enough north to determine precisely what changes have occurred, but it appears that the channel has moved northward. This channel is not used for navigation.

L. ADEQUACY OF SURVEY:

The survey is considered adequate to supersede prior surveys for charting.

M. AIDS TO NAVIGATION:

There are three fixed aids to navigation; Race Point, Point McKenzie, Fire Island lights.

The three bouys, ^{Nos.} numbers one, two and four, are in place from May 1 to November 1 only. In September 1963 the Ship BOWIE assisted the Coast Guard in establishing a range on Point McKenzie for wintertime navigation. The range markers had not been constructed.

N. STATISTICS:

<u>Vessel</u>	<u>Number of Positions</u>	<u>Nautical Miles Scunding Line</u>
BOWIE	834	208.5
Launch #1	<u>1020</u>	<u>228.9</u>
Totals	1854	437.4

Total square nautical miles hydrography: 36.0
Tide Stations: 2 (Fire Island, Anchorage)

O. MISCELLANEOUS:

The movement of shoals discussed under J and K is due to strong tidal currents of six to eight knots and the fact that much of the bottom is either silt or mud.

P. RECOMMENDATIONS:

The bottom is very changeable and reconnaissance lines should be run every three years over a considerable period until movements can be better predicted.

Q. REFERENCE TO REPORTS:

Descriptive report for survey H-8528, BO-20-1-60.

Shoran Report for OPR 13, Fathometer Report for OPR 13 both forwarded to the Washington office 27 November 1963.

Respectfully Submitted,



Alfred W. Cecil
ENS, USC&GS

Approved:



Wesley V. Hull
LT, USC&GS

APPENDIX A

H-8728
BO-20-1-63

TIDE NOTE:

The two tide stations were located on the north shore of Fire Island and the Army Dock in the port of Anchorage.

The Fire Island gage was located at 61 degrees 10.4 minutes North and 150 degrees 12.2 minutes West. The height of MLLW above staff zero is 8.6 feet. Tides from the Fire Island gage were used in Zone 5 without any corrections.

The Anchorage gage was positioned at 61 degrees 14.2 minutes North and 149 degrees 53.4 minutes West. The height of MLLW was 3.6 feet on the staff. Tides from the Anchorage gage were used in Zone 7 without any corrections.

The tide curve for tide zone 6 was a mean between the Anchorage and Fire Island gages.

The location of the three zones is shown on the boat sheet by green lines.

Both gages were on 150 degrees West Meridian Time.

Reference is made to Transmittal Letter 2100 B-PT dated 26 February 1963

APPENDIX B

LIST OF SIGNALS
H-8728, BO-20-1-63

<u>NAME</u>	<u>SOURCE</u>
ACS=017	ACS Microwave Relay Tower 1960
CITY=138	Anchorage, CITY Water Tank Apex 1947, 1960
FIRE=237	Shoran Tower FIRE, 1963
HIGH=333	BO-20-1-60, H-8528
KENI=425	Anchorage Radio Station, KENI, 1954, 1960
KFQD=426	Anchorage Radio Station, KFQD, 1954, 1963
KTVA=488	Anchorage Radio Station, KTVA, 1954
LIGHT-433	Point Mc Kenzie Light, 1960
NOP = 566	BO-20-1-60, H-8528
RIFE = 732	RIFE, 1960
RONZ = 765	Woronzof Point Shoran Tower, 1963
TANK = 805	Anchorage, Alaska Railroad Elevated Tank, 1947
TRIP = 873	Tripod, 1960
WEST = 927	Two meters south of West Point Light, Fire Island, 1963

STATION MOWK 1963

Tyonek 1909

Boulder 1909

STATION CREEK 1963

Birch Hill (USE) 1942

Tyonek (1909)

STATION WEST (1963) West Point
Light, Fire Is.

on light structure 2m soft.

STATION FIRE (1963) Race Pt ^{Fire} Light Is

STATION RONZ (1963)

Woronzof 4, 1960

APPENDIX C

FATHOMETER CORRECTIONS FOR H-8728, BO-20-1-63

PHASE CORRECTIONS

Fathometer 547 used by the BOWIE during 1963:
Scale Correction (feet)

All scales 0.0

Fathometer 552 used by Launch ^{ND.} Number ¹ One:
Scale Correction (feet)

A 0.0

B +0.3

C +0.6

D +0.9

E +1.1

VELOCITY CORRECTIONS

BOWIE All depths 0.0 feet Table 1

Launch #1 All depths -1.3 feet Table 2

Reference: Fathometer Report OPR 413

APPENDIX D

SHORAN CORRECTIONS
FOR H-8728, BO-20-1-63

SHIP BOWIE

STATION MOWK

Statute Miles	Correction
27.800-30.600	-0.065
33.400	-0.070
36.200	-0.075

STATION CREEK

Statute Miles	Correction
18.500-21.400	-0.020
24.100	-0.025
27.000	-0.030
29.700	-0.035

STATION FIRE

Statute Miles	Correction
0.000- 2.700	-0.020
5.500	-0.025
8.300	-0.030
11.000	-0.035
13.800	-0.040

STATION RONZ

Statute Miles	Correction
0.000- 1.200	-0.000
3.900	-0.005
6.700	-0.010
9.500	-0.015

LAUNCH NUMBER ONE

STATION FIRE

Statute Miles	Correction
0.100- 1.800	-0.010
3.500	-0.015
5.200	-0.020
6.800	-0.025
8.500	-0.030
10.200	-0.035

STATIONS RONZ AND WEST

Statute Miles	Correction
0.450- 2.100	+0.015
3.800	+0.010
5.450	+0.005
7.100	0.000
8.750	-0.005
10.400	-0.010

Reference: Shoran Report OPR 413

APPROVAL SHEET

Field work for these surveys was done under my direction and was inspected daily. This survey is considered adequate to supersede all prior surveys.

The smooth sheet was transferred to the Seattle Processing Office without shoreline and geographical names. They will be added when the information becomes available.

For *Wesley V. Hull*
John O. Boyer
CDR, USC&GS
Commanding
Ship BOWIE

TIDE NOTE FOR HYDROGRAPHIC SHEET

8/25/64

~~Northwest District~~ Seattle Regional Officer

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8728

Locality: Cook Inlet, Alaska

Chief of Party: J. O. Boyer

Plane of reference is mean lower low water

Tide Station Used (Form C&GS-681): Fire Island and Anchorage

Height of Mean High Water above Plane of Reference is as follows:

Fire Island	26.8
Anchorage	29.4

Remarks


Chief, Tides and Currents Branch

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. *H-8728*

Records accompanying survey:

Boat sheets *1*; sounding vols. *9*; wire drag vols. *0*;
 bomb vols. *0*; graphic recorder *rolls 2 envelope*
 special reports, etc.

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

Number of positions on sheet		<i>1854</i>
Number of positions checked		<i>1631 (88%)</i>
Number of positions revised		<i>127 (7%)</i>
Number of soundings revised (refers to depth only)		<i>164</i>
Number of soundings erroneously spaced		<i>702</i>
Number of signals erroneously plotted or transferred		<i>None</i>
Topographic details	Time
Junctions	Time	<i>None</i>
Verification of soundings from graphic record	Time
<i>Moving misplaced Position Numbers</i>	Time	<i>3 days 6 hrs.</i>
Verification by <i>Q. J. Rasmussen</i>	Total time	<i>123</i> Date <i>6-21-66</i>
Reviewed by.....	Time Date

Position Numbers for Dayletters
moved *46*

H-8728

The launch hydrography ~~was made for~~
An attempt was made to run on arcs. The current,
being strong, affects the progress made along the arc
so that there is a notable difference in position spacing,
and this spacing varies as the arc gradually crosses
the current. Nearly all positions therefore had to be
checked by actual plotting.

The simultaneous visual and Shoran fixes taken from the launch
were ignored by the ship's personnel in working out the Shoran
corrections. Shoran correction for launch was done while
launch ~~was~~ in the stocks aboard the ship at the time ship's
Shoran set was being calibrated.

The launch shoran correction appears to be in error by about
25 meter or nearly $2/100$ of one mile, when simultaneous fixes
taken on launch (in water) are analyzed.

A jump in the time & space relation between consecutive
positions on the ship lines is noted whenever a transition
occurs from visual to shoran or vice versa ~~shoran to~~
visual.

100 90

1964

MIX C

MCM LXIV

BO-20-1-63 H-8728

	# Positions	Pos. Corrected	Pos. Checked	% checked	% error
A	158	32	154	98%	20%
B	127	2	55	42%	2%
C	177	6	124	70%	3%
D	114	3	70	61%	2%
E	156	19	151	97%	12%
F	71	3	41	58%	4%
G	22	1	22	100%	5%
H	9	0	9	100%	—
a	82	11	81	99%	13%
b	45	5	45	100%	11%
c	118	7	118	100%	6%
d	44	2	30	} of positions 100% x Calibration	7%
e	63	7	63		100%
f	126	6	126	100%	5%
g	59	1	59	100%	1%
h	69	2	69	100%	3%
i	52	3	52	100%	6%
j	88	8	88	100%	9%
k	45	2	45	100%	4%
l	128	2	128	100%	2%
m	101	5	101	100%	5%
n	101	5	101	100%	5%
	1854	127	1631	88%	7% error

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY

SEP 6 1966
 C32 RHC

Director, Pacific Marine Center
 Marine Chart Division
 Office of Hydrography
 and Oceanography

Refs.: CF-22-4060/02

Director

JUL 29 1966

In reply refer to:
 CF 22 4060/02

Survey H-8728 (1963), Upper Cook Inlet, Alaska

You are authorized to suspend verification and inking subject survey and submit the records and the smooth sheet in penciled form. Discrepancies on pancelled smooth sheet.

The area covered is subject to seasonal change and the resolution of existing survey discrepancies is not warranted. An addendum should be included in the Descriptive Report describing the problems encountered and the nature of the discrepancies. Loran, visual, and some simultaneous shoran and visual fixes were used.

It appears corrections used for shoran readings were in error. The sheet used for calibration is not the record for error is not apparent.

ORIGINAL SIGNED BY

James C. Tison, Jr.

Proper correctors could be determined by replottting all comparison fixes. The smooth sheet could then be replotted and verified. Approximately 200 man hours is estimated for this task.

It is recommended H-8728 (1963) Upper Cook Inlet be cancelled:

- (a) The survey is pre-earthquake and probably of no value other than as historical record.
- (b) The area is subject to continual change.
- (c) The area is scheduled for resurvey by the Ship SURVEYOR in 1967.

Discrepancies on pancelled smooth sheet do not appear. RHC 9/19/66
 Harold J. Seaborg

Enclosure:
 Memo from CF231 to CF2 dtd 6/24/66.

DISPATCHED SEP 6 1966

C324 Carstens:ljd 8/30/66

FILE COPY

CODE	SURNAME	DATE	CODE	SURNAME	DATE
C32	Taylor	8/31			
C3	Down	9/1			
C5	Harlow	9/2			

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Received in
Marine Chart Division
Office of Hydrography
and Oceanography

C320
34-RHC

TO : The Director, C&GS

DATE: 22 July 1966 *C320*

Attn: C 32

JUL 28 1966

Date

In reply refer to:

CF22 4060/02

FROM : Director, Pacific Marine Center

SUBJECT: *80 20-1-63*
Survey Discrepancies, H-8728 (1963), Upper Cook Inlet, Alaska

Smooth sheet H-8728 (1963) in Upper Cook Inlet, Alaska has been smooth plotted and the positions verified. Disagreement in soundings and erratic time spacing between positions indicates error in control. Shoran, visual, and some simultaneous shoran and visual fixes were used.

It appears corrections used for shoran readings were in error. The sheet used for calibration is not available at PMC so the reason for error is not apparent.

Perhaps proper correctors could be determined by replotting all comparison fixes. The smooth sheet could then be replotted and verified. Approximately 300 man hours is estimated for this task.

It is recommended H-8728 (1963) Upper Cook Inlet be cancelled.

- (a) The survey is pre-earthquake and probably of no value other than an historical record.
- (b) The area is subject to continual change.
- (c) The area is scheduled for resurvey by the Ship SURVEYOR in 1967.

Harold J. Seaborg
Harold J. Seaborg

Enclosure:

Memo from CF231 to CF2 dtd 6/24/66.

Memorandum

TO : Director, Pacific Marine Center. *98J*

THRU : Chief, Operations Division *JS*

FROM : Chief, Hydrographic Processing Branch

DATE: 24 June 1966

In reply refer to: CF22
4060/02

SUBJECT: Survey Discrepancies, Upper Cook Inlet

We have a smooth sheet, H-8728 (1963), in Upper Cook Inlet, Alaska, which has been smooth plotted and the positions verified. Now it has been discovered that many of the soundings are not in agreement and that the time spacing between positions is more erratic than would normally be expected even for that area.

The control for the survey was a combination of shoran and visual with some simultaneous shoran and visual fixes. By comparison of the simultaneous fixes there is a discrepancy of about 0.02 mile in the corrections used for the shoran readings. It appears that the shoran calibration is in error to some degree and it is certain that the curves on the boat sheet are in error. The boat sheet is a blue-line copy of the 1960 survey of the area and when the shoran arcs were put on it they were scaled directly in meter distances with no allowance made for distortion of the projection. This is the case for the three stations which are on the sheet. Two other stations are off the sheet. For them, points on the arc have been computed and the boat sheet arcs are out by about 4 or 5 ~~cm~~ ^{mm?} or about 0.06 mile.

It looks like it would be necessary to recompute the shoran corrections and replot the whole sheet if we are to correct the trouble. Much of the data for recomputing the corrections is not available now and it is doubtful if it is still aboard the ship.

If the SURVEYOR is to be assigned in this area in 1967 to resurvey the approaches to Anchorage it would seem that the expense of replotting this pre-earthquake survey is not warranted. Therefore, it is recommended that no more work be done on this sheet.

Cornelius A. J. Pauw
for: William Martin

1st Endorsement:

27 June 1966

It is believed the calibration was done on the old style green paper mounted on foil, and the sheet is no longer available. Some fixes used for calibration have been plotted on both smooth and boat sheets by Mr. Martin and compared. The differences in the corrections thus determined

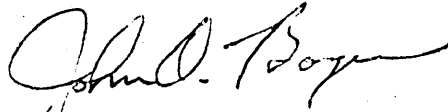
are appreciable. The corrections used for smooth plotting seem to fall about midway between the two.

It is recommended the sheet not be completed.

(a) The survey is pre-earthquake and probably of no value other than an historical record.

(b) The area is subject to continual change.

(c) The area is scheduled for resurvey in 1967.

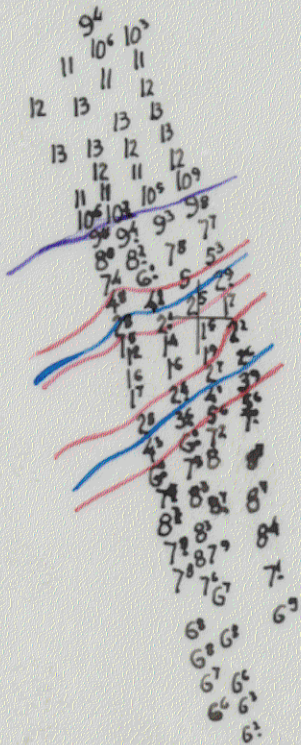


John O. Boyer

150° 20'

16'

12'



61° 10'

08'

from: H-8727
Scale 1:40,000

to H-8728 (PO2-1-63)

GEOGRAPHIC NAMES

Survey No. H-8728

Name on Survey	Source of Name											
	A	B	C	D	E	F	G	H	K			
Anchorage												1
Cairn Point												2
Cook Inlet												3
Fire Island												4
North Point												5
Point Campbell												6
Point Mackenzie												7
Point Woronzof												8
Race Point												9
Shelter Bay												10
West Point												11
												12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25
												26
												27

Names approved
May 4, 1967
Frank W. Fickett

SURVEY #08626
POSITION NUMBERS

<u>VOLUME #</u>	<u>VESSEL</u>	<u>BLOCK OF #'s</u>
1-13 (Electronic) 14 (Visual)	Hydrographer Launch 0185	0001-3818 4001-4042

ABSTRACT FOR SURVEY #08626

<u>DAY</u>	<u>MANUAL</u> <u>POSITION #'s</u>	<u>JULIAN DAY</u>	<u>AUTOMATED</u> <u>POSITION #'s</u>
	<u>HYDROGRAPHER</u>		
"A" Day 5/27/61	1-065 (1M)	147	0001-0064
"B" Day 6/27/61	1-051	178	0065-0115
"C" Day 6/28/61	1-012	179	0116-0127
"D" Day 6/29/61	1-012	180	0128-0139
"E" Day 6/30/61	1-060	181	0140-0199
"F" Day 7/11/61	1-087A	192	0200-0286A
"G" Day 7/12/61	1-357A	193	0287-0643A
"H" Day 7/13/61	1-301A	194	0644-0944A
"J" Day 7/14/61	1-284	195	0945-1228
"K" Day 7/15/61	1-240A (1M)	196	1229-1467A
"L" Day 7/16/61	1-341A	197	1468-1808A
"M" Day 7/17/61	1-278A	198	1809-2086A
"N" Day 7/18/61	1-089	199	2087-2175
"P" Day 7/26/61	1-050A	207	2176-2225A
"Q" Day 7/27/61	1-246A (5R)	208	2226-2466A
"R" Day 7/28/61	1-255A	209	2467-2721A
"S" Day 7/29/61	1-339A	210	2722-3060A
"T" Day 7/30/61	1-150A	211	3061-3210A
"U" Day 7/31/61	1-361A	212	3211-3571A
"V" Day 8/01/61	1-247	213	3572-3818

LAUNCH #0185

"A" Day 7/27/61	1-045 (3M) (Visual)	208	4001-4042
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CROSS REFERENCE FOR SURVEY #08626

<u>VOLUME #</u>	<u>VESSEL</u>	<u>POSITION #'s</u>
1	Hydrographer	0001-0228
2	Hydrographer	0229-0519

<u>VOLUME #</u>	<u>VESSEL</u>	<u>POSITION #'s</u>
3	Hydrographer	0520-0806
4	Hydrographer	0807-1088
5	Hydrographer	1089-1392
6	Hydrographer	1393-1710
7	Hydrographer	1711-2021
8	Hydrographer	2022-2294
9	Hydrographer	2295-2574
10	Hydrographer	2575-2895
11	Hydrographer	2896-3210A
12	Hydrographer	3211-3532
13	Hydrographer	3533-3818
14 (Visual)	Launch 0185	4001-4042

CROSS REFERENCE FOR SIGNAL NAMES
AND THEIR ASSIGNED NUMBERS

SURVEY #08626

<u>SIGNAL NAME</u>	<u>NUMBER</u>
SHO	736
BOY	069
HIP	336

CODE TABLE FOR CHANGING
ALPHABETIC SIGNAL NAMES
TO THEIR NUMERICAL EQUIVALENTS

<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
A	C	E	G	J	M	O	R	T	W
B	D	F	H	K	N	P	S	U	X
	I	L	Q	V	Y	Z			

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. 8728

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS		1	
DESCRIPTIVE REPORT		1	OVERLAYS			
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS						
VOLUMES						
BOXES						

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				
POSITIONS CHECKED				
POSITIONS REVISED				
DEPTH SOUNDINGS REVISED				
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS				
SPECIAL ADJUSTMENTS				
ALL OTHER WORK				
TOTALS				
PRE-VERIFICATION BY		BEGINNING DATE		ENDING DATE
VERIFICATION BY		BEGINNING DATE		ENDING DATE
REVIEW BY		BEGINNING DATE		ENDING DATE

VERIFIER'S REPORT
HYDROGRAPHIC SURVEY, H-8728

INSTRUCTIONS - This form serves to identify items of a checklist in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

CL - Check List Items: should be checked as having been completed during the verification processes.

R - Report Item: This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R	Part III - JUNCTIONS (Continued)	CL	R		
<p>Note: The verifier should first read the Descriptive Report for general information and problems.</p> <p>1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None</p>			<p>10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are SUPERSEDED.</p>				
<p>2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None</p>			<p>Part IV - VOLUMES</p> <p>11. 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 and exceptions noted in the volumes. Remarks Required: -- None</p>				
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>				<p>12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following: (a) rocks (b) line turns (c) position values of beginning and ending of lines (d) bar check or velocity correctors (e) time recording (f) notes or markings on fathograms (g) was reduction of soundings accurately done? (h) was scanning accurate? (i) were peaks at uneven intervals missed? (j) were stamps completed? (k) references to adjacent features</p>			
<p>Part II - SHORELINE AND SIGNALS</p> <p>4. Source of shoreline signals Remarks Required: -- List all surveys a. Give earliest and latest dates of photographs b. Field inspection date c. Field Edit date d. Reviewed-Unreviewed</p>			<p>Part V - PROTRACTING</p> <p>13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>				
<p>5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>					<p>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>		
<p>6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None</p>						<p>15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None</p>	
<p>7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.</p>							
<p>Part III - JUNCTIONS</p> <p>Note: Make a cursory comparison preliminary to inking soundings in area of overlap.</p> <p>8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None</p>							
<p>9. The notation in slanted lettering "JOINS H--- (19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None</p>							

Part V - PROTRACTING (Continued) 16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.	CL	R	Part VIII - AIDS TO NAVIGATION 26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.	CL	R
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.			27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification. Remarks Required: -- None		
Part VI - SOUNDINGS 18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None			Part IX - BOAT SHEET 28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None		
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.			29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.		
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None			Part X - GENERAL 30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None		
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None			31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None		
22. The smooth plotting of soundings was satisfactory except as follows: Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.			32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None		
Part VII - CURVES 23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected.			33. The bottom characteristics are adequately shown. Remarks Required: -- None		
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: a. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None			Part XI - NOTES TO THE REVIEWER 34. Unresolved discrepancies and questionable soundings.		
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.			35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.		
26. Supplemental information.					
Verified by				Date	

