

8905

Diag. Cht. No. 1210-3.

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. WH-20-2-66 Office No. H-8905

LOCALITY

State Massachusetts

General locality Vineyard Sound

Locality Offshore Elizabeth Islands
to Gay Head

1966

CHIEF OF PARTY

S. C. Miller

LIBRARY & ARCHIVES

DATE November 29, 1967

USCOMM-DC 37022-P66

8905

HYDROGRAPHIC TITLE SHEET

H-8905

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.

Wh 20-2-66

State MASSACHUSETTS

General locality VINEYARD SOUND

Locality GAY HEAD *offshore Elizabeth Islands to Gay Head*

Scale 1:20,000 Date of survey Aug. 9 to Sept. 4, 1966

Instructions dated June 17, 1966 Project No. OPR-369

Vessel WHITING

Chief of party LCDR S.C. MILLER

Surveyed by S.C. MILLER, R.A. TRAUSCHKE, K.W. KIENINGER, D.R. RICH, P.F. DEAN & J.R. AVAMPATO

Soundings taken by echo sounder, ~~hand lead, pole~~ XXXXXXXXXX

Graphic record scaled by SHIPS PERSONNEL

Graphic record checked by SHIPS PERSONNEL

Protracted by HARRY R. SMITH (NORFOLK HYDROGRAPHIC BRANCH)

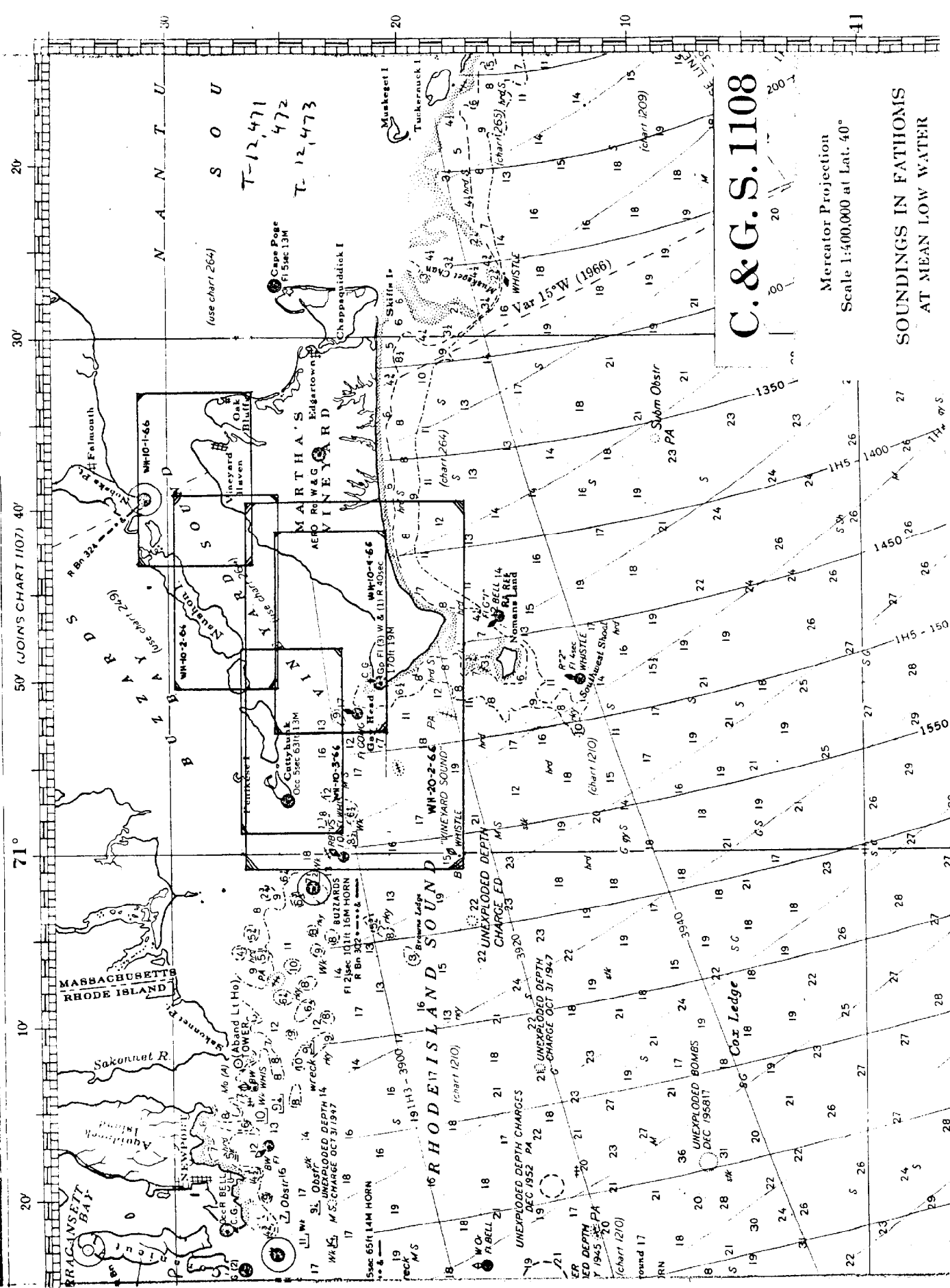
Soundings penciled by HARRY R. SMITH " " "

Soundings in ~~XXXXXX~~ feet at MLW ~~MLW~~

REMARKS:

R.W.W. 10/23/91

J.J.G.



C. & G. S. 1108

Mercator Projection
Scale 1:400,000 at Lat. 40°

SOUNDINGS IN FATHOMS
AT MEAN LOW WATER

S O U
T
T
U
T
U
T
U

T-12,471
472
T-12,473

(use chart 264)

Cape Page
Fl 15M 13M

Chappaquiddick I

Muskeget I

Tankernuck I

Whistle

15° W (1966)

Stom Obstr

23 PA

1450

1450 26

1550

145 - 150

1400 26

145 27

27

28

29

29

29

27

28

28

27

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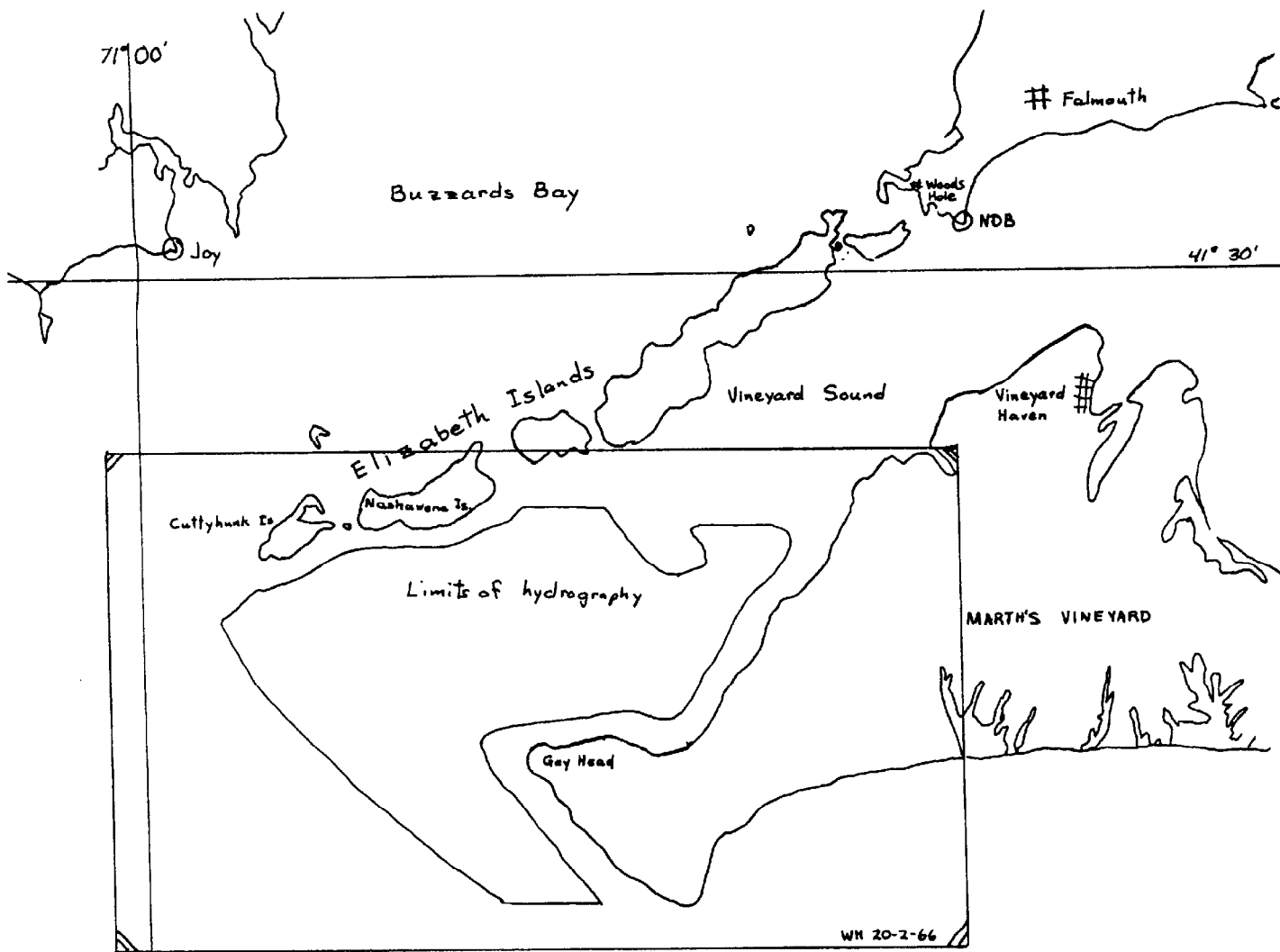
4

3

2

1

0



Location of Hi-Fix stations
 Limits of hydrography on WH 20-2-66

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY
FIELD NO. WH 20-2-66

Scale: 1:20,000
Ship: USC&GSS WHITING CSS-29

S. C. MILLER, LCDR
Commanding 1966

Surveyed by: LCDR S. C. Miller
LCDR R. A. Trauschke
LTJG K. W. Kieninger
LTJG D. R. Rich
ENS P. F. Dean
ENS J. R. Avampato

A. PROJECT

Authorization for this project is given in:

Basic Project Instructions, OPR 369, 2100 B-pt, 5-2-WH
dated 11 March 1963
Supplemental Instructions, OPR 369, Vineyard Sound, Mass.,
dated 13 June 1966 ✓
Supplemental Instructions, OPR 369, dated 17 June 1966

B. AREA SURVEYED

The survey covers the south end of Vineyard Sound off Gay Head,
Martha's Vineyard, Massachusetts. The area is bounded by Cutty-
hunk and Nashawena Islands on the north and Martha's Vineyard on
the east. The northern limit of the survey is $\phi: 41^{\circ} 26' 00''$. ✓
The southwestern limit is a line between $\phi: 41^{\circ} 23' 20''$
 $: \lambda 70^{\circ} 58' 30''$ and $\phi: 41^{\circ} 17' 00'' : \lambda 70^{\circ} 51' 30''$.

Hydrography was begun on 9 August 1966 and ended on 4 September
1966. ✓

The survey joins contemporary surveys H-8903, WH 10-2-66 (plus
junctions with H-64₄⁵) and H-8904, WH 10-3-66. Prior surveys
are:

<u>Registry No.</u>	<u>Date</u>	<u>Scale</u>
H-1802	1887	1:20,000
H-1832	1887	1:20,000
H-2540	1901	1:10,000 ✓
H-2852	1906	1:20,000
H-64 ₄ ⁵	1939	1:40,000 ← Inked junction See Review

C. SOUNDING VESSEL

All hydrography on this sheet was done by the Ship WHITING. ✓

D. SOUNDING EQUIPMENT

Soundings were obtained by Raytheon D. E. 723 Fathometers, Units #249 and #262. The range of depths encountered was from 20 to 111 feet. ✓

A Nansen cast was made on 6 September 1966 and from this the corrections for the velocity of sound in sea water were obtained. These corrections were tied to those found by simultaneous comparisons between fathometer and leadline. See the separate report to echo sounding. ✓

Squat and settlement values were obtained in November 1964 by rod and level as prescribed in the Hydrographic Manual. ✓

E. SMOOTH SHEET

The smooth sheet will be plotted by the processing office at Atlantic Marine Center, Norfolk, Virginia. ✓

F. CONTROL

The control for the survey was Hi-Fix. The stations were Nob and Joy. Nob was located on Nobska Point at $\phi: 41^{\circ} 30' 43.66''$ $\lambda 70^{\circ} 59' 07.02''$ and Joy was established on Barney's Joy Point at $\phi 41^{\circ} 30' 56.92''$ $\lambda 70^{\circ} 39' 22.86''$. Joy was built over Joy 1943 RM #4, and Nob was established by third order triangulation. *Hi-Fix equipment operating on 1799.6 KC frequency* ✓

Hi-Fix calibrations aboard the ship were accomplished by comparing simultaneous electronic and visual positions on a 1:10,000 calibration sheet. Visual positions were determined with a three point sextant fix using triangulation stations as signals. The positions were plotted on the calibration sheet and the corresponding Hi-Fix values were read from the sheet. The differences between these values and the Hi-Fix values, read simultaneously with the visual fix, were measured and entered as corrections to the Hi-Fix. ✓

When the area southwest of Gay Head was surveyed, three-point visual fixes, with triangulation stations as signals, were taken on every fix. These were later plotted on the boat sheet in the same manner as outlined above to determine what error is introduced when the Hi-Fix signal passes over land. See the Hi-Fix report for more details. *L-M-N days on S.S. plotted by visual control* ✓

A calibration buoy was planted in Menemsha Bight. Lane checks could then be made by circling the buoy and taking fixes when the buoy was on a bearing which was tangent to the known Hi-Fix arc through the buoy. ✓

G. SHORELINE

The shoreline ^{on the S.S.} was transferred from prior surveys H-1802 and H-1832. This was done strictly for navigational purposes. ✓
Shotlines on S.S. from T-11,213-11,214-11,218 and T-12,471-12,472-12,473

H. CROSSLINES

Eight percent of the sounding lines were run as crosslines. The agreement was good, generally within 2 feet. It is assumed that for smooth sheet plotting, the differences will be resolved when corrections for actual tide are applied. ✓

I. JUNCTIONS

Agreement with contemporary surveys WH 10-2-66 and WH 10-3-66 was good, within 1 - 2 feet. These discrepancies should be corrected with the application of the smooth tides to the soundings. *Adequate junction with H-8903 (1966) on SW. Survey on the east not yet available.* ✓

J. COMPARISON WITH PRIOR SURVEYS

H-1802 (1887) 1:20,000

The 60 foot depth curve from H-1802 was traced onto the boat sheet before the survey was begun. The agreement is good throughout the sheet with slight deviations SW of Gay Head, Martha's Vineyard, in the vicinity of $\phi: 41^{\circ} 20' 30''$
 $\lambda: 70^{\circ} 51' 30''$. ✓

At $\phi: 41^{\circ} 19' 25''$ $\lambda: 70^{\circ} 49' 58''$ the survey has a depth of ²⁸~~31~~ feet while on H-1802 there is 39 feet. The ²⁸~~31~~ feet was at the inshore end of the line, but it appears that the bulge in the 30 foot depth curve on H-1802 has moved more SW at this point. *The 39 ft. sounding on H-1802 is 60 Meters southward of the 28 ft on the present survey.* ✓

H-1832 (1887) 1:20,000

The 60 foot depth curve from H-1832 was transferred to the boat sheet before hydro was begun. The agreement is very good between this curve and the soundings obtained during the period of the survey. ✓

H-2540 (1901) 1:10,000

H-2540 has development of 1:10,000 south of Pasque Island in the vicinity of $\phi: 41^{\circ} 25' 40''$ $\lambda: 70^{\circ} 49' 15''$. The work done on WH 20-2-66 shows good agreement with this, including the north-south ridge of depth ²⁷~~29~~-30 feet. (Also note H-3556 [1914-15] WD) ✓

H-2852 (1906) 1:20,000

H-2852 is a development of Middle Ground and Lucas Shoal. The work done on WH 20-2-66 shows shoaling of 7-9 feet in the vicinity of $\phi: 41^{\circ} 26' 10''$ $\lambda: 70^{\circ} 45' 20''$. ✓

Small overlap insufficient for good comparison.

H-6445(1939) 1:40,000

Agreement was good except where noted below:

H-6445	<u>H-8905</u> WH 20-2-66			
63-65	49 52	41° 23' 00"	70° 58' 10"	✓
60	56 2	28' 05"	58' 00 57"	
49	51 55 "holiday"	22' 33"	57' 30"	

WH 20-2-66 has depths 2-4 feet shoaler in the vicinity of from
 $\phi: 41^{\circ} 19' 30''$ $\lambda: 70^{\circ} 53' 10''$ to $\phi: 41^{\circ} 19' 00''$ $70^{\circ} 52' 00''$.
 Note junction

J. COMPARISON WITH PRIOR SURVEYS

The only pre-survey review within the area surveyed was item J.

Item J: The depth from wire drag survey H-3556 (1914-15) of 26 feet was at $\phi: 41^{\circ} 25' 75''$, $\lambda 70^{\circ} 49' 20''$. The shoalest depth found was 33 feet at this position, with two 29 foot depths 0.1 mile south. No investigation or development was made.

"Rough" bottom; narrow South-North ridge; see also H-2540 (1901)

K. COMPARISON WITH CHART

CHART 264 1:40,000 printed 19 July 1965.

Depth curves show good agreement, except for the following discrepancies: A shoal 27 feet on Chart #264 seems to have shifted 0.2 miles west to $\phi: 41^{\circ} 24' 57''$ $\lambda: 70^{\circ} 47' 30''$ on the boat sheet. The 30 foot depth curve showing the westerly point of Lucas Shoal in this vicinity has shifted north about 0.2 miles. Chart #264 shows 37 feet at $\phi: 41^{\circ} 18' 20''$ $\lambda: 70^{\circ} 49' 00''$; at this position, the survey shows 48 feet westward of it. *This survey shows 30 feet (changeable area)*

CHART 249 1:40,000 printed 12 April 1965.

The depth curve agreement is good except for the following instances: Chart 249 shows 48 feet at $\phi: 41^{\circ} 23' 54''$ $\lambda: 70^{\circ} 55' 58''$, while the boat sheet has 57 feet at this position.

CHART 263 1:12,000 printed 27 July 1964.

Present survey 3-4 feet deeper than chart 263. See Review.

Agreement is good with Chart 263. A 53 feet sounding was found at $\phi: 41^{\circ} 24' 25''$ $\lambda: 70^{\circ} 50' 30''$ during the survey. On chart 263, this lies outside the 60 foot depth curve. The survey shows the western point of the depth curve at this location has been cut off by this shoaling.

Note also Chart No. 1210 and see Reviewer's Report

L. ADEQUACY OF SURVEY

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

M. AIDS TO NAVIGATION

<u>BUOYS</u>	<u>DEPTH</u> (Light List)	<u>LATITUDE</u>	<u>LONGITUDE</u>	
Devils Bridge Buoy "1"	30 feet	41°21.82'	70°51.20'	15 "K"
Lucas Shoal Buoy	48	41°21.70'	70°46.00'	19 "K"
Gay Head Lt. Gong "29"	66	41°21.83'	70°51.80'	16 "K"
No Man's Land Buoy AA	54	41°19.9'	70°51.0'	47 "L"
No Man's Land Buoy CC	67	41°18.3'	70°15.3'	5 "M"
Nashawena Lt. Whistle Buoy BW MO (A)	43	41°24.36'	70°51.18'	17 "K"
Canapitsit Channel Bell Buoy	43	41°25.05'	70°54.41'	18 "K"

Longitude wrong in Lite List, year 1926 (with arrow pointing to 70°15.3')

All the above buoys adequately serve their purpose. However, Devils Bridge Buoy "1" is now in 58 feet of water. ✓

N. STATISTICS

Total No. of positions	1,570.0
Total No. of nautical miles	539.3
Total area in square nautical miles	42.6
No. of tide stations (2 tide gages)	1 (1) CEDAR TREE NECK
No. of current stations	0 (2) GAY HEAD
No. of oceanographic stations	1
No. of magnetic stations	2
No. of bottom samples	32

O. MISCELLANEOUS

To be completed by smooth plotter

P. RECOMMENDATIONS

To be completed by smooth plotter

Q. REFERENCE TO REPORTS


Aids to Navigation
Coast Pilot Report
Correction to Echo Sounding
Electronic Control
Photogrammetry Report

Respectfully submitted:

Phillip F. Dean
Ensign, USESSA

TIDE NOTE

Two portable tide gages were used to record the tides during this survey. One tide gage was located at Cedar Tree Neck : $41^{\circ}26.1'$ $\lambda: 70^{\circ}41.8'$, and the second was at Gay Head : $41^{\circ}21'12''$ $\lambda: 70^{\circ}49'46''$. Tides at the gages were recorded at 60th meridian time, ~~was the ship's data.~~ The plane of reference was located at 3.7 feet on the tide staff at Cedar Tree Neck and 1.7 feet on that of Gay Head. No corrections for differences in time or height were applied.



LIST OF SIGNALS

BAP	GAYHEAD BAPTIST CHURCH, CUP., 1887
BUZ	BUZZARD BAY LIGHT (3rd order intersection), 1966
CAT*	Electrotape traverse
CHIL	CHILMARK METHODIST EPISCOPAL CHURCH
GAY	GAYHEAD LIGHTHOUSE 1875
PRO- Radar Tower- T-11215	PROSPECT-CHILMARK-1835 RM 3
RED*	Electrotape traverse
SNO	GOSNOLD MONUMENT 1904
TOW	NASHAWENA ISLAND TOWER 1913
YAR	BRICKYARD CHIMNEY 1887

Not used - plotted ^{one mile} out of position on boat sheet
HLP

** G.P.s from ship whiting by plans -*

APPROVAL SHEET

This report is complete and adequate for the area surveyed.
The report is forwarded for inclusion in the Coast Pilot.

S. C. MILLER
LCDR, USC&GS
Commanding
USC&GSS WHITING

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 16, 1967

~~Nautical Chart Division~~ Atlantic Marine Center

Plane of reference approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET 8905

Locality: Vineyard Sound, Massachusetts

Chief of Party: S. C. Miller, 1966

Plane of reference is mean low water

Tide Station Used (Form C&GS-681):

Cedar Tree Neck, Massachusetts

Gayhead, Massachusetts

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

Cedar Tree Neck 2.2 feet

Gayhead 2.8 feet

Remarks


Chief, Tides and Currents Branch

NORFOLK HYDROGRAPHIC PROCESSING BRANCH
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8905 (Wh 20-2-66)

GENERAL

This appears to be an excellent basic survey. Soundings are in good agreement at crossings and no unusual problems were encountered during the smooth plot. ✓

CONTROL

In compliance with Project Instructions, simultaneous visual fixes were observed with Hi-Fix positions on L, M & N days in the area Southwest of Gay Head. This was done to determine distortion effects on Hi-Fix transmissions from station NOB as they passed over the land mass of Gay Head. ✓

The visual fixes were recorded in supplementary sounding volume number 9, and they were used for positioning purposes on the smooth sheet. Hi-Fix were plotted on a Mylar overlay which is being submitted with the survey. A comparison of the overlay with the smooth sheet will show the varying amounts of disagreement. See Ship Whiting Hi-Fix report for field comments. See *reviewer's report*. ✓

It will be noted that Radar Tower (station PRO) was labeled incorrectly on the boat sheet. ✓

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Chief, Hydrographic Branch, AMC

Norfolk, Va.
Nov. 17, 1967

GEOGRAPHIC NAMES
Survey No. H-8905

Name on Survey	Source of Name											
	A	B	C	D	E	F	G	H	K			
Canapitsit Channel												1
Cape Higgin												2
Cedar Tree Neck												3
Cuttuhunk Island												4
Fox Point												5
Gay Head												6
Lucas Shoal												7
Martha's Vineyard												8
Menemsha Bight												9
Menemsha Creek												10
Nashawena Island												11
Quicks Hole												12
Squibnocket Point												13
Vineyard Sound												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25
												26
												27

Names approved
March 27, 1968
Frank W. Packard

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. *H-8905*

Records accompanying survey: *H-8905* Smooth sheets *1*;
 boat sheets *1*; sounding vols. *9*; wire drag vols. ~~*10*~~;
 Descriptive Reports *1*; graphic recorder envelopes ~~*10*~~;
 special reports, etc. *Fathometer and Hi-Fix Report*
1-Cahier, Fathograms
1-Sounding volume, Hi-Fix Calibrations

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

	VERIFY	REVIEW
Number of positions on sheet	<i>1,570.</i>	
Number of positions checked	<i>50</i>	19
Number of positions revised	<i>2</i>	0
Number of positions revised (refers to depth only)	<i>15</i>	0
Number of soundings/erroneously spaced	<i>5</i>	0
Number of signals erroneously plotted or transferred	<i>0</i>	0
Topographic details	Time <i>0</i>	1 hr.
Junctions	Time	25 hrs.
Verification of soundings from graphic record	Time <i>15</i>	8 hrs.
Special adjustments <i>Revised jct. with H-8904</i> <i>Entered jct. with H-6445</i>	Time <i>0</i>	(see junction)

Verification by *G.F. Trickett*... Total time *95*... Date *10/4/67*

Reviewed by *S. Rose*... Time *248 hrs* Date *3/27/68*

OFFICE OF HYDROGRAPHY AND OCEANOGRAPHY
MARINE CHART DIVISION
HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8905

FIELD NO. WH-20-2-66

Vineyard Sound, Massachusetts -- Offshore from Gay Head
toward Elizabeth Islands

SURVEYED: August 9, 1966, to September 4, 1966

SCALE: 1:20,000

PROJECT NO.: OPR-369

SOUNDINGS: Raytheon DE-723
Depth Recorders

CONTROL: HI-FIX and
Sextant Fixes

Chief of Party.....	Sidney C. Miller
Surveyed by.....	S. C. Miller
.....	R. A. Trauschke
.....	K. W. Kieninger
.....	D. R. Rich
.....	P. F. Dean
.....	J. R. Avampato
Protracted by.....	Harry R. Smith (AMC-Norfolk)
Soundings Plotted by.....	Harry R. Smith
Verified and Inked by.....	G. F. Trefethen
Reviewed by.....	S. Rose
.....	Date: March 13, 1968
Inspected by.....	R. H. Carstens

1. Description of the Area

This is an offshore survey of that portion of Vineyard Sound, Massachusetts, which extends from west of Gay Head, northward and northeastward to the western point of Lucas Shoal.

The bottom is hard, sandy, and uneven. Shifts in the position of some ridges have taken place throughout the years.

2. Control and Shoreline

A. The source of the control is adequately described in the Descriptive Report

In order to determine the error of Hi-Fix electronic impulses when passing over land, the area southwest of Gay Head was simultaneously controlled by visual fixes and by Hi-Fix. The results indicate that when the ship was headed northeastward (toward the Gay Head land mass) invariably the Hi-Fix positions fell as much as 100 meters southwest of the visual fixes. When the ship was headed southwestward (away from the Gay Head land mass) the Hi-Fix positions in each case fell quite close to the visual fix or a little southwestwardly. When the ship was headed southeastward (paralleling the Gay Head land mass) the Hi-Fix position in each case fell as much as 40 to 60 meters westward of the visual fix. It is apparent that land mass and heading both affected the positional accuracy. HI-FIX investigation overlay in fathogram carrier.

B. The inked shoreline is merely for purposes of orientation and originates with T-11213, T-11214 and T-11218 of 1955-61 and T-12471, T-12472 and T-12473 of 1961-63. The hydrography does not adjoin the shoreline.

3. Hydrography

A. Depths at crossings are in good agreement.

B. Depth curves are adequately delineated. The 36-ft. curve was added to emphasize peaks. The 90-ft. curve was added to emphasize general features.

C. In the development of bottom configuration and least depths, additional split lines and development would have been desirable particularly where prior surveys revealed features of lesser depth than the present survey.

4. Condition of the Survey

The field plotting, sounding records, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual.

5. Junctions

Adequate junctions were effected with H-8904 (1966) on the north, H-8903 (1966) on the northeast, and H-6445 (1939) at the west limit of this survey. The survey of the inshore area on the east has not yet been completed.

6. Comparison with Prior Surveys

A.	H-163	(1:20,000)	1845
	H-204	(1:20,000)	1847
	H-344	(1:20,000)	1852
	H-596	(1:40,000)	1857
	H-1788	(1:40,000)	1887
	H-1802	(1:20,000)	1887
	H-1832	(1:20,000)	1887
	H-2132	(1:10,000)	1892
	H-2540	(1:10,000)	1901
	<u>H-2852</u>	<u>(1:20,000)</u>	<u>1906</u>

Portions of these surveys comprise the prior coverage of the area of the present survey.

Comparison with H-163 (1845) was effected by bearings and distances from South Rock and Triangulation Station "PASQUE."

H-204 (1847) has no dependable geographic projection grid nor any shoreline. Soundings are sparse. This sheet was not used for a detailed comparison, although casual comparison indicates general agreement with the present survey.

H-1802 (1887) and H-1832 (1887) cover the entire area of the present survey. In general present depths are 3 to 5 feet deeper than prior depths. Scouring has occurred in some areas and shifting in the position of some of the features is noted. In lat. $41^{\circ}25.3'$, long. $70^{\circ}48.25'$ a prior feature (charted) with depths of 36 to 44 ft. from H-1832 has scoured to present depths of 53 to 70 feet. Crossing discrepancies of 2 to 6 feet on some of the lines on the prior surveys provide indications of errors in some of the prior sounding values or in their positions as for example in lat. $41^{\circ}23.0'$, long. $70^{\circ}56.55'$ where soundings of 55-59 feet on a crossline on H-1802 conflict with other depths of 65-71 feet. The present survey fathograms indicate sharp ridges in some of the areas. Where present development is sparse in these areas a judicious selection of prior soundings has been retained to supplement present depths in delineating these features.

The 24 charted from H-1802 in lat. $41^{\circ}21.3'$, long. $70^{\circ}51.3'$ falls in present depths of 32 to 40 feet. As the position

of the 24 is at the edge of the present survey, the 24 should be retained on the chart pending junctional soundings of the survey of the area inshore.

Together with the soundings carried forward the present survey is adequate to supersede the prior surveys in the common area.

B. Wire Drag Surveys

H-3556 (1913-15) WD

This wire drag survey covers a small portion of the present survey in the area of lat. $41^{\circ}25.75'$, long. $70^{\circ}49.20'$. The hydrography of the present survey does not conflict with the effective depths of this wire drag survey in the common area. One sounding from this wire drag survey was carried forward to supplement depths on the present survey.

FE 3 (1967)

The present depths are in harmony with the effective depths obtained in investigating the wreck in lat. $41^{\circ}19.03'$, long. $70^{\circ}50.17'$. Appropriate information from this field examination has been transferred to the present survey.

7. Comparison with Charts Nos. 249, 263, 264, and 1210

Chart No. 249, 19th Edition, June 19, 1967

Chart No. 263, 3rd Edition, July 27, 1964

Chart No. 264, 3rd Edition, February 6, 1967

Chart No. 1210, 10th Edition, June 5, 1967

A. Hydrography

The charted hydrography of the area of the present survey is from the previously discussed prior surveys which require no further consideration, and from the boat sheet of the present survey.

(1) A 36-ft. depth on Charts Nos. 249, 263, and 264 at lat. $41^{\circ}25.15'$, long. $70^{\circ}50.66'$ originates with H-1802 (1887) on which survey it is shown as a 56-ft. depth. The 36 foot should be disregarded.

(2) An 86-ft. depth on Chart No. 263 at lat. $41^{\circ}24.31'$, long. $70^{\circ}52.25'$ originates with H-1802 (1887) on which

survey it is inked in error. The records indicate a depth of 96 feet for that sounding.

(3) A 61-ft. depth on Chart 264 at lat. $41^{\circ}22.30'$, long. $70^{\circ}48.69'$ originates with H-1802 (1887) on which survey it is inked in error. The records indicate a depth of 68 feet for that sounding.

(4) The 43 feet charted in lat. $41^{\circ}24.29'$, long. $70^{\circ}46.55'$ from the present survey boat sheet is shown in the records to be 49 feet and should be disregarded.

The present survey supersedes the charted hydrography in the common area.

B. Aids to Navigation

The survey positions of the buoys are in adequate agreement with the charted positions, and adequately mark the features intended. The U.S. Coast Guard "List of Lights" for the year 1966 has a printing error in the longitude for No Man's Land Buoy "CC."


8. Compliance with Instructions

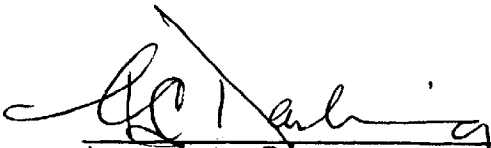
The present survey adequately complies with project instructions.

9. Additional Field Work

This survey is considered to be a good basic survey requiring no additional field work. Soundings carried forward from prior surveys are considered to adequately supplement present depths particularly in the critical areas.

Examined and Approved:


 Chief
 Marine Chart Division


 Associate Director
 Office of Hydrography
 and Oceanography

H-8905

Information for Future Pre-Survey Reviews

The prior surveys H-1802 (1887) and H-1832 (1887) revealed many small, sharp features in the area of the present survey. Present fathograms also show sharp sand ridges and peaks. Although a comparison of the present and prior surveys reveals a scouring of 3-5 feet in many areas, the sparse soundings in some areas of the present survey may not have detected these sharp topographic features and a number of prior depths on these features have been carried forward.

When resurveys are made in this area, special investigations should be made in the vicinity of these transferred soundings in order to definitely prove or disprove the features.

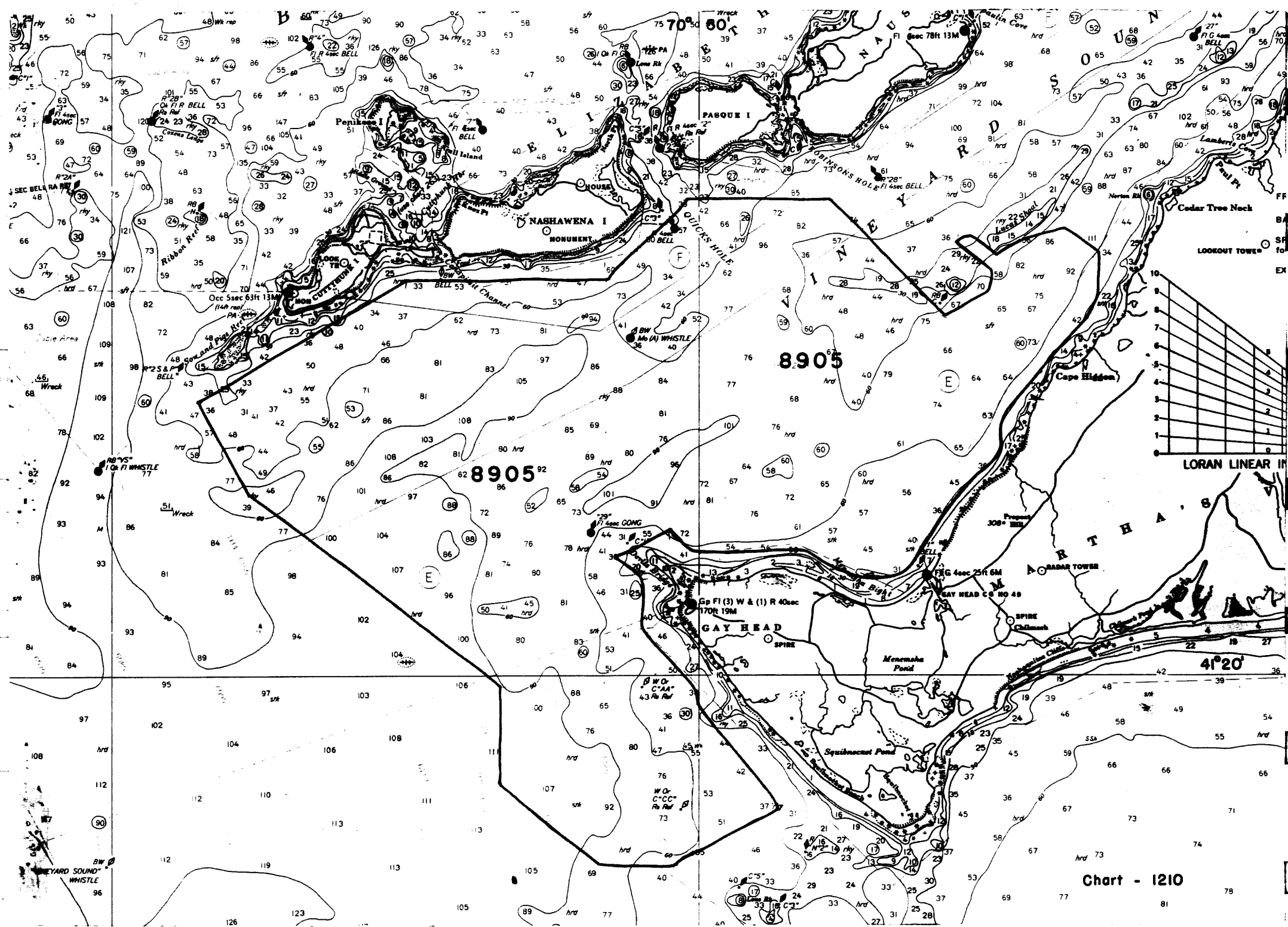


Chart - 1210

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8905

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
114-50	8-20-70	James Graham	Full Part Before After Verification Review Inspection Signed Via Drawing No. 33 Revised ends & curves thru chrt. 249 Dwg # 3
249	27 Jan 71	R. D. Sanodi	Full Part Before After Verification Review Inspection Signed Via Drawing No. 33 Applied corrections made to smooth sheet during Review & Inspection from reduction of smooth sheet.
264	1/71	R. D. Sanodi	Full Part Before After Verification Review Inspection Signed Via Drawing No. 7 Applied corrections made to smooth sheet during Review & Insp from reduction of smooth sheet.
1210	3/71	R. D. Sanodi	Full Part Before After Verification Review Inspection Signed Via Drawing No. 52 Applied thru chrt. 249 dwg 33 & chrt. 264 dwg # 7. ^{partial}
1107	3/71	S. McKellar	Full Part Before After Verification Review Inspection Signed Via Drawing No. 24 Applied thru chart 1210
263	8-3-72	J. Bailey	Full Part Before After Verification Review Inspection Signed Via Drawing No. 8 FULLY APPLIED
264	4-20-73	Joe Esteruacher	Full Part Before After Verification Review Inspection Signed Via Drawing No. 8 Applied in part thru chart 263 and in part direct.
1145C "E"	5-25-73	Al Pollilar	Full Part Before After Verification Review Inspection Signed Via Drawing No. FULLY APPLIED
249	7-3-73	J. Bailey	Full Part Before After Verification Review Inspection Signed Via Drawing No. 35 Fully Applied in part thru Dwg 114-50 #10 (Page E) and in part ^{from smooth sheet} directly.
1210	9-27-73	J. Bailey	Full Part Before After Verification Review Inspection Signed Via Drawing No. 55 Revised depth curves and snags thru Dwg. 264 # 8 and 249 # 35 in part and in part directly from reduction of smooth sheet.
1107	9-19-75	W. C. Green	FULLY APPLIED AFTER VER. REVIEW & INSP - CHANGED THE 10 FM CURVE LINE & ADDED SOME SOUNDINGS APPLIED THRU CHART 1210.

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. 8905

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
1107	1-9-68	W. A. Hall	Part Before After Verification Review Inspection Signed Via Drawing No. <i>did not use range with chart. added 1 sounding (4 1/2 41°19.5' 70°50')</i>
264	6/3/68	J. McMillan	Part Before After Verification Review Inspection Signed Via Drawing No. <i>5 curves & soundings revised before inspection</i>
1210	6/4/68	J. McMillan	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>48 critical correction only at this time</i>
263	6/6/68	O. Svendsen	Part Before After Verification Review Inspection Signed Via Drawing No. <i>7 Applied sdgs. & depth curves</i>
70	8/68	Clarence Misfeldt	Full Part Before After Verification Review Inspection Signed Via Drawing No.
71	8/68	Clarence Misfeldt	Full Part Before After Verification Review Inspection Signed Via Drawing No.
114-SC	10/18/68	R. Vanzant	Full Part Before After Verification Review Inspection Signed Via Drawing No.
263	4-22-70	Irene Beeler	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>No Corr; previously fully appd</i>
249	4-23-70	Jeffrey Stuart	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Applied thru 263 (in part)</i>
264	4-23-70	Irene Beeler	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Prey fully Appd. Minor revisions to sdgs + curves - partly Thru 263</i>
1107	6/25/70	O. Svendsen	<i>- use chart 1210 - no corr at this scale</i>
70	6/30/70	Jeffrey Stuart	<i>- use charts 1210 and 249 no corr at this scale (fully applied)</i>
263	8-14-70	Irene Beeler	Full After Verification Review Inspection
	9-16-70	Beverly Dugan	
264	8-14-70	Irene Beeler	" " " " "
1108	1-5-71	B. Ferruders	<i>Thru cht 263 and thru 249 except changes made by inspection</i>