

8339
WIRE DRAG

ORIGINAL

Diag. Cht. No: 1202-2.

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	WIRE DRAG
Field No.	WAHI-1356-WD
Office No.	H-8339 W.D.
LOCALITY	
State	MAINE
General locality	Coast of Maine
Locality	Mount Desert Island
19 56	
CHIEF OF PARTY	
John C. Ellerbe	
LIBRARY & ARCHIVES	
AUG 14 1963	
DATE	

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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-8339

Field No. Wa-Hi-1356WD

State MAINE

General locality COAST OF MAINE

Locality MOUNT DESERT ISLAND

Scale 1:10,000 Date of survey 31 May - 10 Sept. 1956

Instructions dated 9 Oct. 1956

Vessel WAINWRIGHT & HILGARD

Chief of party JOHN C. ELLERBE

Surveyed by D. JONES & J. E. GUTH

Soundings taken by ~~fathometer, graphic recorder, hand lead~~, wire DRAG

Fathograms scaled by R. M. BEAL

Fathograms checked by J. E. GUTH

Protracted by W. W. FEAZEL (NORFOLK PROCESSING OFFICE)

DRAG STRIPS INKED BY

~~XXXXXXXXXXXX~~ W. W. FEAZEL " " "

Soundings in ~~XXXX~~ feet at MLW ~~MLLW~~

REMARKS:

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DESCRIPTIVE REPORT

WIRE DRAG FIELD SHEET NO. WA-HI 1356-WD

PROJECT 15010

COAST OF MAINE

SCALE: 1:10,000

John C. Ellerbe - Chief of Party

1956

A. PROJECT

Supplemental Instructions dated 9 October 1956.

NOTE: A Descriptive Report was written for the Additional Investigation of Shoals on Hydro Sheet H-8029 which was plotted on WD-1356. Pertinent Data for that Special Investigation is not included in this report.

B. SURVEY LIMITS AND DATES

Sheet covers Latitude $44^{\circ} 11.2'$ to $44^{\circ} 16.2'$ and Longitude $68^{\circ} 14.6'$ to $68^{\circ} 25.9'$. Field work was begun on 31 May 1956 and was completed on 10 September 1956.

C. VESSELS AND EQUIPMENT

The Ships WAINWRIGHT and HILGARD acted as Guide Launch and End Launch respectively, and a hired Maine lobster boat was used as a tender through 31 August 1956, and Launch C&GS-181 was used as tender on 10 September 1956. The Ship WAINWRIGHT was equiped with fathometer No. 58S, the HILGARD with an unnumbered fathometer, the hired launch with 139SF, and Launch CS-181 with an unnumbered fathometer.

D. TIDE STATIONS

Hourly heights for the reduction of soundings and drag depths were obtained from portable automatic tide gages at Southwest Harbor and Bass Harbor, Maine.

Reducers entered on the Boat Sheet were taken from the predicted tide table.

See Attachment No. 2.

E. SMOOTH SHEET

To be prepared by the Norfolk Processing Office.

F. CONTROL STATIONS

All control stations were located by conventional methods.

See Attachment No. 3.

G. SOUNDINGS AND DRAG TESTS

Soundings were obtained using the 808 fathometer. Test of the drag followed the method outlined in the manual.

H. CONTROL OF WIRE DRAG

Standard dual control methods were used. Cuts to the end buoy and then to the opposite vessel were taken immediately after the fix. The cuts were called plus (+) if object was to the right of the signal and minus (-) if to the left. Length of tow line was the distance from the center of the wheelhouse to the end buoy in each case.

J. ADEQUACY OF THE SURVEY

This survey is considered adequate and no further field work is considered necessary.

K. COMPARISON WITH CHART

In general the wire drag was in agreement with Chart 308. (13313)
See Attachment No. 4 for a tabulation of hangs.

L. AIDS TO NAVIGATION

Aids to Navigation are included on Attachment No. 5. See N.P.O. LIST

M. FATHOMETER CORRECTION

Fathometer No. 139 SP was used on the hired launch throughout this sheet. Three bar checks affects the work on this sheet. Curves were plotted from these bar checks and the corrections scaled off. See Attachment No. 6.

N. TIME

Standard 60th Meridian time was used throughout the season.

P. LIST OF ATTACHMENTS

1. Statistics
2. Tide Note
3. List of Signals
4. Hang Data
5. Aids to Navigation
6. Fathometer Corrections

Submitted:

Jack E. Guth
Jack E. Guth
Lieutenant, C&GS

Approved and Forwarded:

John C. Ellerbe
John C. Ellerbe, Commander, C&GS
Chief of Party
per Don A. Jones

STATISTICS

<u>Volume number</u>	<u>Day Letter</u>	<u>Date 1956</u>	<u>Number of Positions</u>	<u>Statute Miles</u>	<u>Sq. Naut. Miles</u>
1	A	5-31	37	1.3	0.3
1	B	6-6	66	2.5	0.8
1	C	6-7	43	2.6	0.7
1	D	6-12	14	1.2	0.3
1	E	6-14	43	2.3	1.6
2	F	6-15	87	5.2	2.3
2	G	6-19	71	5.0	2.0
2	H	6-20	73	4.4	3.7
3	J	6-26	62	4.6	3.4
3	K	6-27	56	4.2	2.4
3	L	6-29	32	2.3	0.9
3	M	7-2	15	1.3	1.1
3	N	9-10	12	1.0	0.2
TOTAL			611	37.9	19.7

TIDE NOTE

Portable automatic tide gages were installed and maintained by this party at Southwest Harbor, Maine (Latitude $44^{\circ} 16.5'$ Longitude $68^{\circ} 18.8'$) and Bass Harbor, Maine (Latitude $44^{\circ} 14.5'$ Longitude $68^{\circ} 21.1'$). *off sheet limits*

The height of Mean Low Water above the zero of the tide staff at Southwest Harbor was 3.9 feet, and at Bass Harbor 3.6 feet.

Hourly heights were scaled from marigrams by party personnel.

All times noted are 60th Meridian Eastern Standard Time.

LIST OF SIGNALS

<u>Name</u>	<u>Source</u>	<u>Name</u>	<u>Source</u>
BASS	Triangulation	IRK	Photo-Hydro
DUCKY	do	IVY	do
PLA	do	JON	do
		JOY	do
BUNK	Topographic	KAY	do
BUS	do	KEN	do
CUP	do	LAG	do
HAT	do	LAW	do
WAD	do	MAL	do
ABE	Photo-Hydro	MAY	do
ACE	do	MIT	do
AMY	do	NIP	do
AND	do	NOB	do
ANY	do	NUT	do
BAD	do	OAK	do
BAN	do	ONE	do
BET	do	PED	do
CAM	do	PIN	do
CAR	do	PLY	do
CHI	do	POL	do
CHU	do	QUO	do
COW	do	RAW	do
DAW DAN	do	RAY	do
DAY	do	ROC	do
DIM	do	SAG	do
EAR	do	SAX	do
EAT	do	SIG	do
END	do	TAN	do
EON	do	TED	do
EYE	do	TOW	do
FLO	do	URP	do
FOG	do	USE	do
FUN	do	VOO	do
GAG	do	WAS	do
GUN	do	WEE	do
HAM	do	WIP	do
HEN	do	YAK	do
ICE	do	ZIG	do

*See N.P.O.
Signal list.*

HANG DATA

<u>No.</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Hang Depth Feet</u>	<u>Position Number</u>	<u>Clear Depth Feet</u>	<u>Position Number</u>	<u>Least Sodg. Feet</u>
* 1	44° 14.3'	68° 17.4'	29 ⁶	15D	22	10C	--
2	44° 13.8'	68° 17.8'	49.5	22F	32.5	3D	46 - not in Oct 2006
3	44° 12.7'	68° 24.2'	54.0 ³	55H	38.5	28J	42.3
4	44° 13.6'	68° 23.1'	40.5 ^{11.0}	(15K)	21.5	50K	--
5	See note on Boat Sheet Latitude 44° 12.9'; Longitude 68° 18.2'						

14

See flagged data
in smoot h sheet

AIDS TO NAVIGATION

See N.P.O. List.

<u>Object</u>	<u>Vol.</u>	<u>Page</u>	<u>Ship</u>
✓ Flin's Ledge buoy C"3"	1	24	WAINWRIGHT
✓ Cranberry Island Ledge buoy N"2"	1	24	WAINWRIGHT
✓ Western Way buoy B&W "WW"	1	25	WAINWRIGHT
✓ Weaver Ledge buoy C"1"	3	31	WAINWRIGHT
✓ Bass Harbor buoy S"5"	3	44	WAINWRIGHT
<i>Weaver Ledge Buoy S"2"</i> ✓ Bass Harbor buoy (Entrance) "S2"	3	11	HILGARD
✓ Bass Harbor buoy C"3"	3	15	HILGARD
- <i>Long Ledge L'th. Gong Buoy "1"</i>	2	17	WAINWRIGHT

FATHOMETER CORRECTIONS

Hired Launch - Fathometer No. 139 SP - Initial Set at 0.0'

<u>Dates</u>	<u>Depth</u>	<u>Correction</u>
31 May thru 17 June	A-scale (ft.) (all) B-scale (ft.) (all)	-1.0 (ft.) /2.0 (ft.)
18 June thru 26 June	A-scale (ft.) 10.0-15.0 15.1-22.0 22.1-30.0 30.1-40.0 40.1- on B-scale (ft.) (all)	-0.4 (ft.) -0.6 -0.8 -1.0 -1.2 /1.8
27 June thru 5 July	A-scale (ft.) 0-15.0 15.1-25.0 25.1-32.0 32.1-40.0 40.1 - on B-scale (ft.) (all)	-0.2 (ft.) -0.4 -0.6 -0.8 -1.0 /2.0
Entire Sheet	0-2.3 (fms.) 2.4-4.0 4.1-5.6 5.7-7.5 7.6- on	-1.2 (ft.) -1.4 -1.6 -1.8 -2.0

NORFOLK PROCESSING OFFICE
 LIST OF SIGNALS
 H-8339

TRIANGULATION STATIONS

BASS BASS HARBOR HEAD L.H., 1861-1934
 DUKY DUKY, 1944
 OUT SOUTHWEST HARBOR CH. SPIRE, 1863-1934
 PLA PLA, 1944
 SHIP SHIP AND BARGE BEACON, 1908-34

PHOTO*HYDRO STATIONS

SOURCE T-11345

BUNK	BUS	CUP	HAT	WAD	ABE	AND	ANY	BAD	BAN	CAM
CAR	CHI	DAW	DAY	DIM	EAR	END	FUN	GAG	HAM	ICE
IVY	MAL	OAK	POL	RAY	SAX	TAN	URP	VOO	WAS	WIP

SOURCE T-11346

AGE	BET	COW	DAN	EAT	HEN	IRK	JON	LAW	MIT	NIP
ONE	PIN	ROC	SAG	TED	TOW					

SOURCE T-11351

AMY	EON	EYE	FLO	FOG	GUN	LAG	MAY	PED	RAW	SIC
WEE										

SOURCE T-11339

JOY	KAY	KEN	NOB	NUT	PLY	QUO	USE	YAK	ZIG	CHU
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NORFOLK PROCESSING OFFICE
 FLOATING AIDS TO NAVIGATION
 H-8339 (Wa-Hi-1356WD)

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
✓ Flynn's Ledge Buoy 3	44-14.41'	68-17.07'	-	1b	6/ 6/56
✓ Cranberry I. Ledge Buoy 2	14.26	17.09	-	2b	"
✓ L'td. Bell Buoy WW	14.17	17.19	-	3b	"
✓ Weaver Ledge Buoy 1	13.55	21.18	-	1j	6/26/56
✓ Weaver Ledge Buoy 2	13.62	21.33	-	2j	"
✓ Bass Harbor Buoy 5	14.25	21.03	-	3j	"
✓ Bass Harbor Buoy 3	14.10	21.27	-	4j	"
✓ Long Ledge L'td. Cong Buoy 1	13.28	17.87	-	10f	6/15/56

NORFOLK RECORDS PROCESSING UNIT
ADDENDUM
To Accompany

WIRE DRAG SURVEY H-8339 (Wa#H1-1356WD)

GENERAL

All drag lines were plotted on rough overlays before being transferred to the smooth sheet. These overlays are being submitted with the smooth sheet as they contain notes by the smooth plotter explaining the problems encountered and the methods used to resolve them. In addition, there are flagged notes on the smooth sheet giving available data at each hang.

Prior hydrographic surveys were used, along with available cuts, to determine the positions of hangs. All drag strips were checked against these surveys to see that there were no conflicts between wire drag and hydrographic depths. Numerous revisions were made to drag diagrams so they would accurately reflect the recorded data.

The source of the hydrographic development lines shown on the Guide Launch boat sheet is unknown. Field records for this work were not forwarded by the field party. See paragraph "A"
H.L.P.

DISCREPANCIES

A small split exists at Lat. 44-12.26' Long. 68-20.87' /
" " " " " " 44-14.53 " 68-17.25' /
" " " " " " 44-14.62 " 68-22.83' /
Areas of insufficient "overlap" exist at Lat. 44-12.80' Long. 68-18.90' /
and Lat. 44-14.50' Long. 68-17.20' ✓

Lines 22-36B and 1-4G were not plotted on the smooth sheet as they were not considered effective dragging. See explanatory notes on the rough overlays.

✓ Lat. 44-14.25 Long. 68-17.39 Line 53-59F, with an effective depth of 32 feet, cleared a hang of 28 feet obtained on line 7-15D. This condition is believed to have been caused by strain on the drag.

See Correction supplements of these lines. Using H-8029, Line 7 to 15D was adjusted to hydro. and two definite points of hang. Line 53 to 59F was also adjusted to conform to hydro and now 32ft does not clear the hangs at 28ft.

Respectfully submitted,


Hugh L. Preffitt
Cartographer

Norfolk, Va.
6 August 1963

GEOGRAPHIC NAMES

Survey No. H-8339 W. d.

Name on Survey	Sources										K BRN
	A	B	C	D	E	F	G	H	K		
	On Chart No. 1202	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List			
BASS HARBOR	✓										1
BLUE HILL BAY	✓								✓		2
GREAT CRANBERRY I.	✓										3
GREAT GOTT ISLAND	✓								✓		4
MOUNT DESER I.	✓										5
PLACENTIA I.	✓										6
WESTERN WAY	✓								✓		7
											8
											9
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											26
											27

George W. Ball
26 names section
19 November 1963

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8339W.D.

Records accompanying survey: Smooth sheets .1...;
 boat sheets .2...; sounding vols. .2...; wire drag vols. 7...;
 Descriptive Reports .1...; graphic recorder envelopes .1...;
 special reports, etc. 1-A & D Sheet and 1-Roll, Drag strip
 overlays. ?

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

Number of positions on sheet	.....	611
Number of positions checked	.....	208
Number of positions revised	.....	01
Number of ^{groundings & hangs} soundings revised (refers to depth only)	.....
Number of soundings erroneously spaced	.....	NA
Number of signals erroneously plotted or transferred	.....
Topographic details	Time	.....
Junctions	Time	03
Verification of soundings from graphic record	Time	02
Special adjustments	Time	.....

Verification by W. W. FEAZEL..... Total time 156 Date 2-4-72

Reviewed by Time Date

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H-8339 W.D.

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.
N.A.
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.
N.A.
8. The metal protractor has been checked within the last three months.
Used Courts protractor
9. The protracting and plotting of all bad crossings were verified.
N.A.
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.
N.A.
13. The bottom characteristics were shown on outstanding shoals.
None
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.
N.A.
19. ✓ All triangulation stations and transfer of topographic and hydrographic signals were checked.
20. Heights of rocks were checked against range of tide.
N.A.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
N.A. Superseded
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.
N.A.
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. 82483
N.A.
29. ✓ All aids located, with those on contemporary topographic sheets, have been shown on survey.
30. Depth curves were satisfactory except as follows:
N.A.
31. Sounding line crossings were satisfactory except as follows:
N.A.
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:
N.A.
36. Notes to reviewer:
All general hangs as shown on the smooth sheet have been revised to show definite points of hang. Prior Hydrographic Surveys were used extensively to fix these hangs. See envelope of Correction Supplements.

Verified by *W. W. Feazel*Date *4 Jan 1972*

VERIFICATION NOTE
SURVEY H-8339WD

GENERAL

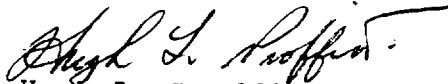
The smooth plotter's drag strip plotting overlays were lost so it was necessary for the verifier to check individually detached positions, and all wire drag positions affecting groundings or hangs. This was done on tracing paper overlays which are being forwarded.

This replot work by the verifier resulted in many minor revisions to the final positions of the points of grounding around charted shoals. Symbolization at these points of grounding was changed to comply with the latest plotting directives. Soundings from prior hydrographic surveys were used extensively as an aid to fix hang locations on final bights.

Conflicts between sounding data and wire drag effective depths on lines 53 to 59F and 7 to 15D, as mentioned in the smooth plotter's Addendum, were resolved by redetermining hang positions.

DISCREPANCIES

As listed in the Addendum, three splits and one area of insufficient overlap remain on this survey.



Hugh L. Proffitt
Chief, Verification Branch, AMC

Norfolk, Va.
March 13, 1972

TIDE NOTE FOR HYDROGRAPHIC SHEET

December 4, 1963

Nautical Chart Division: R. H. Carstens

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8339

Locality Mount Desert Island, Maine

Chief of Party: J. C. Ellerbe (1956)

Plane of reference is mean low water, reading

3.9 ft. on tide staff at Southwest Harbor

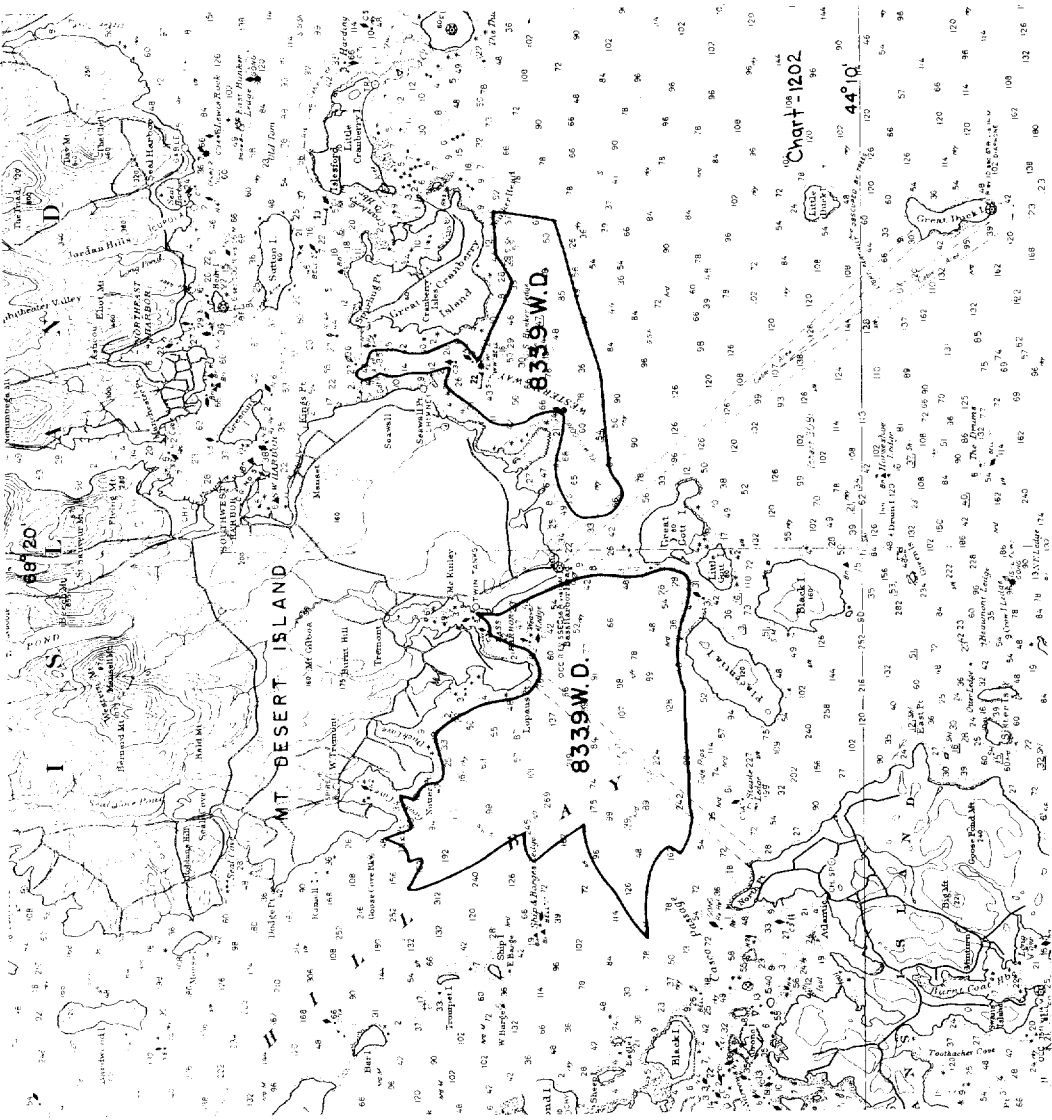
18.30 ft. below B. M. No. 6 (1953)

3.6 ft. on tide staff at Bass Harbor,
25.99 ft. below B. M. No. 6 (1946)

Height of mean high water above plane of reference is:
Southwest Harbor 10.2 ft. Bass Harbor 9.9 ft.

Condition of records satisfactory except as noted below:


Chief, Tides and Currents Branch



8339 W.D.

8339 W.D.

Chart - 1202

4.0

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8339 WD

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
1202 #19	9-9-63	M. Rogers	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>larger scale chart 307 through</i>
1106	10-15-63	G.R. McCann	Full Part Before After Verification Review Inspection Signed Via 1202 Drawing No. #19, one edg revised. <i>Revised several soundings</i>
307 Recm	12-13-63	M. Rogers	Full Part Before After Verification Review Inspection Signed Via Drawing No.
306 Rec	12/18/63	Helmke	Full Part Before After Verification Review Inspection Signed Via Drawing No. 13 <i>Added critical s/dgs, partly thru 307. In Agreement with 1202 Dwg 19</i>
206	5/25/64	J. T. Gallahar	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>added 2 s/dgs of 122 ft</i>
308	10-15-64	J. P. McEnroy	Full Part Before After Verification Review Inspection Signed Via Drawing No. 12c #307 one edg revised
206	11-19-73	Lynne R. Eckhart	Full Part Before After Verification Review Inspection Signed Via Drawing No. #7 - <i>RESTORED 2 S/DGS OF 122.</i>
306	11-20-73	Lynne R. Eckhart	Full Part Before After Verification Review Inspection Signed Via Drawing No. #18 - <i>APP'D THRU CHDET 206 DWG. #7 -</i>
308	5-5-75	Stephen Hill	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>SEB ITEM ABOVE. before</i>
307	6-6-75	Stephen Hill	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>P. Applied no corrections.</i>
1202	6-7-75	Stephen Hill	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>no corrections</i>
306 (13318)	7-14-75	Walter J. Gray	Full Part Before After Verification Review Inspection Signed Via Drawing No. 19. <i>APPD 54FT MANG</i>
13321	4-3-85	Walter J. Gray	Full Part Before After Verification Review Inspection Signed Via Drawing #10 <i>Adequately applied after verification and before</i>
13318	4-22-85	Walter J. Gray	Full Part Before After Verification Review Inspection Signed Via Dwg #22. <i>Adequately applied after verification and before</i>

