

ORIGINAL

7075

Diag. on Diag. Ch. No. 77-3

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. 1513 Office No. H-7075

LOCALITY

State MARYLAND

General locality Chesapeake Bay

Locality South of Sharps Island

1945

CHIEF OF PARTY

Thos. B. Reed

LIBRARY & ARCHIVES

DATE

7075

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H7075

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-7075

Field No. 1513

State MARYLAND

General locality Chesapeake Bay

Locality South of Sharps Island

Scale 1/10,000 Date of survey September-November 1945

Instructions dated April 17, 1940 - September 12, 1944

Vessel Ship COWIE

Chief of party Thos. B. Reed

Surveyed by Thos. B. Reed, W.H. Painbridge, C.R. Reed

Soundings taken by ~~photogram~~ graphic recorder, ~~hand lead~~ graph

Protracted by A.G. Atwill and W.W. Feazel

Soundings penciled by A.G. Atwill and W.W. Feazel

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

REMARKS:
.....
.....
.....
.....
.....
.....

DESCRIPTIVE REPORT TO ACCOMPANY

Hydrographic Sheet H - 7075 (Field No. 1513)

South of Sharps Island, Chesapeake Bay, Maryland

Project CS 250 - 1945 - Scale 1/10,000

Thos. B. Reed, Commanding Ship COWIE

Surveyed by Thos. B. Reed, W.H. Bainbridge and C.R. Reed

A. PROJECT: The authority for this survey is contained in the original instructions for Project CS-250 dated April 17, 1940, additional instructions dated September 18, 1942 and supplemental instructions dated September 23, 1943 and September 12, 1944.

B. SURVEY LIMITS AND DATES: The survey includes an area south of Sharps Island between Latitude $38^{\circ} 32.6'$ and $38^{\circ} 37.0'$ and between Longitude $76^{\circ} 19.0'$ and $76^{\circ} 24.5'$.

Field work began on September 5 and ended on November 2, 1945.

The survey joins contemporary surveys H 6952 on the west, H 6958 on the northwest, Field No. 513B on the northeast, Field No. 1413 on the east and Field No. 1613 on the south. ^{* H-7043}
_{H-7064} ^{A H-7065}

C. VESSELS AND EQUIPMENT: The Ship COWIE and Launch No. 72 were used with 808A Type Portable Depth Recorder No. 67. The launch party operated from the ship at anchor on the working grounds.

D. TIDE AND CURRENT STATIONS: A portable automatic tide gage was maintained at Taylors Island, Maryland. A time difference of minus 30 minutes was applied to these tides.

On October 29, 30 and November 2 the Taylors Island gage was not in operation and tides from the Cambridge, Maryland standard gage are to be used. A time difference of minus one hour and a range ratio of 0.8 is to be applied. Mean low water on the staff at Cambridge is 6.3 feet.

E. SMOOTH SHEET: The smooth sheet is to be plotted by the Norfolk Processing Office.

F. CONTROL STATIONS: Triangulation positions are from the 1934 Triangulation of John Bowie, Jr.

Topographic Stations were transferred from copies of air photo topographic sheets T 5715 and T 5718.

Signals POI and REX were located by a measured distance and a sextant angle from triangulation station DOLAN 1934.

Signal WOOD was located by a measured distance and a sextant angle from triangulation station DUPOINT 1934. The data for this location were submitted with Sheet Field No. 513B (H-7043)

Hydrographic stations are indexed in Volume 1 or are located on contemporary surveys as indicated in the list of signals.

G. SHORELINE AND TOPOGRAPHY: The only shoreline on the sheet, at Sharps Island, was transferred to the boat sheet from the boat sheet for hydrographic survey H 6958.

The low water line at Sharps Island is too near the high water line to permit its delineation by soundings.

H. SOUNDINGS: Soundings were made with an 808A Type Depth Recorder from the Ship COWIE and from hydrographic launch No. 72. Bar checks were made twice daily to obtain necessary corrections to be applied to soundings. Settlement corrections were applied to soundings by the COWIE in accordance with tests made in the fall of 1944 and spring of 1945 and recorded in Volume 5 of hydrographic survey Field No. 513A. No settlement corrections were required for the launch work.

A revision of the shore line of Sharps Island by plane table would have been desirable but this area was being used almost daily as a bombing and machine gun target while the survey was in progress.

I. CONTROL OF HYDROGRAPHY: All sounding lines were controlled with three point sextant fixes.

J. ADEQUACY OF SURVEY: It is believed that the survey is complete and adequate to supersede prior surveys for charting. Junctions with adjoining contemporary sheets are considered satisfactory. The junctions will likely be improved by application of final corrections to soundings.

K. CROSSLINES: About 6 per cent of crosslines were run. The boat sheet agreement for crossings is good.

L. COMPARISON WITH PRIOR SURVEYS: See next paragraph.

M. COMPARISON WITH CHART: A detailed comparison with the chart has been left until the smooth sheet is completed. The boat sheet was compared with chart 1225, print date 7/17/44 and the area of the survey shows little change.

The 10 foot sounding charted at Latitude $38^{\circ} 34.4'$, Longitude $76^{\circ} 21.4'$ was verified.

Eight feet was the shoalest sounding obtained in the vicinity of the charted 6 foot sounding at Latitude $38^{\circ} 36.6'$, Longitude $76^{\circ} 24.3'$. (9 ft on boat and smooth sheets. No investigation is indicated.)

N. DANGERS AND SHOALS: No new shoals were found in this survey.

O. COAST PILOT INFORMATION: Coast Pilot notes will be covered by a special report for the entire area.

P. AIDS TO NAVIGATION: The only fixed navigational aid in the area of the survey is Sharps Island Light, which has been located by triangulation. (see "F" above) The positions of the floating aids (indexed in Volume 1) should be taken from the smooth sheet.

Q. LANDMARKS FOR CHARTS: Landmarks will be covered on an area basis.

R. GEOGRAPHIC NAMES: All geographic names appear on adjoining sheets and are mentioned in reports for these sheets. 214

U. OFFSHORE SIGNALS: The description of signals situated outside the low water line is given in the "List of Stations".

V. VELOCITY CORRECTIONS: Velocity corrections were obtained from the bar check curves which are made a part of this report.

Respectfully submitted:

Clarence R. Reed

Clarence R. Reed,
Lt. Comdr., USC&GS

Approved and forwarded:

Thos. B. Reed

Thos. B. Reed, Lt. Comdr.,
Comdg. USC&GSS COWIE

H7075

STATISTICS FOR HYDROGRAPHIC SURVEY H - 7075 (Field No. 1513)

<u>VOLUME</u>	<u>DAY LETTER</u>	<u>DATE</u>	<u>VESSEL</u>	<u>POSITIONS</u>	<u>STATUTE MILES</u>
1	a	9/ 5/45	Launch 72	106	19.9
1	b	9/11/45	"	80	14.7
1 & 2	c	9/12/45	"	177	32.3
2	d	9/13/45	"	165	26.5
3	A	9/14/45	COWIE	221	59.8
3	B	9/20/45	"	31	8.6
3 & 4	C	9/21/45	"	96	26.3
4	D	9/25/45	"	100	23.7
4	E	9/26/45	"	164	44.5
5	F	10/ 5/45	"	135	34.5
5	G	10/ 8/45	"	123	30.6
5 & 6	H	10/10/45	"	138	38.0
6	J	10/11/45	"	116	30.7
6	K	10/16/45	"	23	5.8
7	e	10/18/45	Launch 72	176	26.6
7 & 8	f	10/19/45	"	160	22.6
8	g	10/29/45	"	133	20.9
8	h	10/30/45	"	170	24.0
9	L	11/ 2/45	COWIE	69	16.7
Totals				2383	506.7

Total area of hydrography: 22.5 square statute miles

TIDE NOTE FOR HYDROGRAPHIC SURVEY H - 7075 (Field No. 1513)

<u>TIDE STATION</u>	<u>LATITUDE & LONGITUDE</u>	<u>HEIGHT OF MLW ON STAFF</u>
TAYLORS ISLAND	38° 28.20' 76° 17.49'	3.0 feet
CAMBRIDGE	38° 34.5' 76° 04.3'	6.3 feet

For Taylors Island a time difference of minus 30 minutes was applied.

For Cambridge (used on October 29 and 30 and November 2 when Taylors Island gage was not in operation) a time difference of minus one hour and a range ratio of 0.8 was applied.

List of Stations on Sheet No. 1513 (Field)

Triangulation Stations

DOLAN 1934 (used for location of other signals)
 DUPOINT 1934 (" " " " " ")
 SHARPS ISLAND LIGHT 1898 (ARP)

Topographic Stations from Sheet T 5715

DAG

Topographic Stations from Sheet T 5718

HAG

Hydrographic Stations indexed in Volume 1

GET
 OUT (banner on fish trap)
 TAR

Hydrographic Stations from Sheet Field No. 1413

DOT (duck blind)

Hydrographic Stations from Sheet Field No. 1613

FISH (fish trap stake)
 JAM
 JOE Hop
 JUG
 MES
 TAX (fish trap stake)
 TRAP (fish trap stake)

Stations by sextant angle and measured distance
from triangulation station

From DOLAN 1934

POI
 REX

From DUPOINT 1934

WOOD

A D D E M D U M


to accompany

HYDROGRAPHIC SURVEY H-7075 (Field No. Co-1513)

This sheet was processed in the Hydrographic Section of the Southeastern District, Norfolk, Virginia.


? The corrections shown in red ink in the preceding part of
this report were made ~~in this office.~~
by the reviewer

Respectfully submitted


Isadore M. Zeskind
Cartographic Engineer

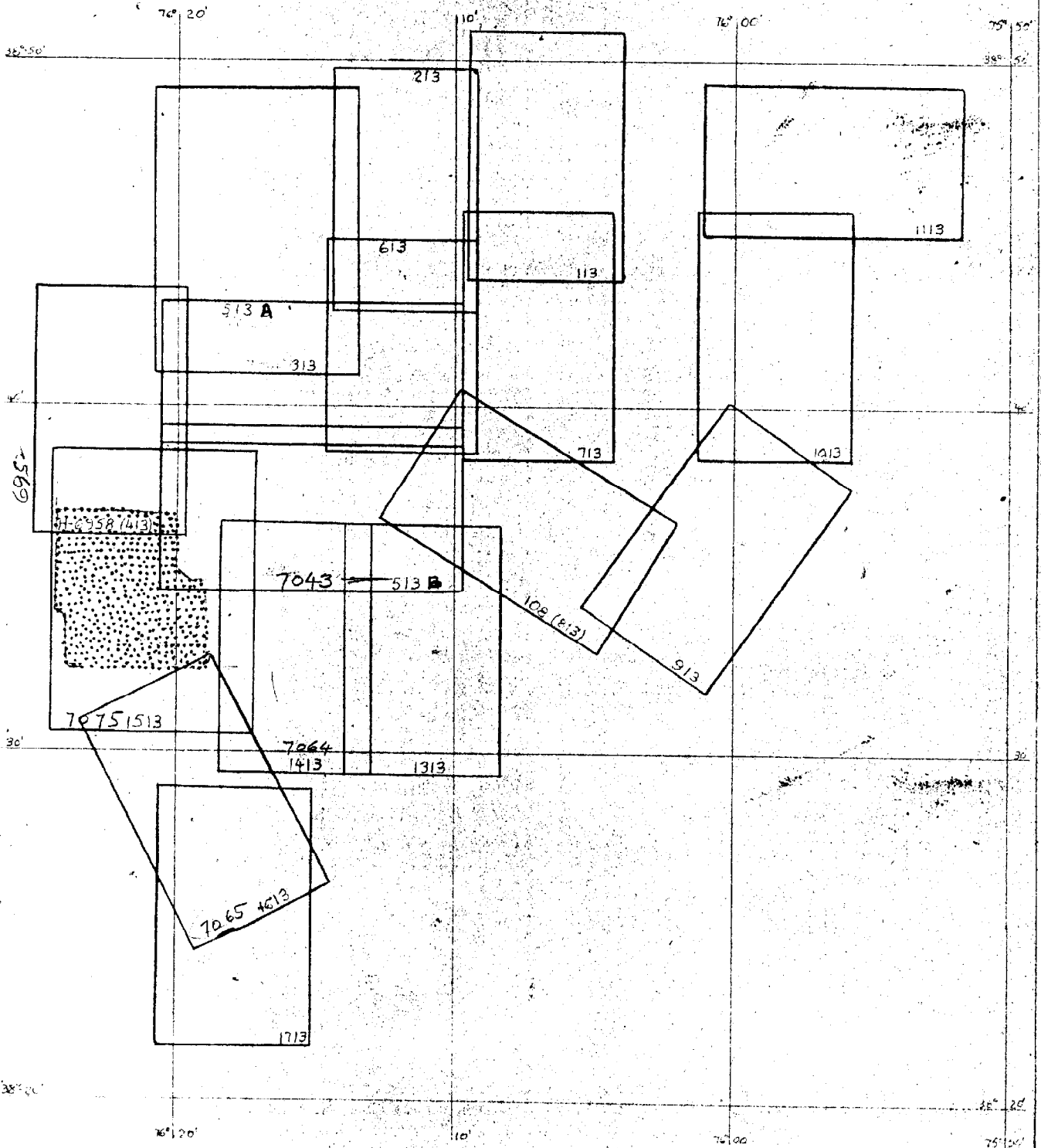
Norfolk, Va.
July 23, 1946

Approved & Forwarded


George L. Anderson
Supervisor SE District

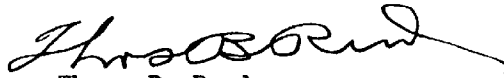
H7075

SHEET LAYOUT
Project CS-250
Scale 1:10,000



APPROVAL SHEET FOR HYDROGRAPHIC SURVEY H - 7075 (Field No. 1513)

The boat sheet and accompanying records for hydrographic survey Field No. 1513 have been inspected by me and are approved.



Thos. B. Reed,
Lt. Comdr., USC&GS
Chief of Party

GEOGRAPHIC NAMES

Survey No. **H7075**

Name on Survey	On Chart No.		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	
	A	B	C	D	E	F	G	H	K							
<u>Chesapeake Bay</u>		(for title)											U.S.G.B.		1	
<u>Sharps Island</u>													U.S.G.B.		2	
<u>James Island</u>													U.S.G.B.		3	
<u>Hills ^{Point} Neck</u>		^{2 words} (2 words)													4	
<u>Maryland</u>		(for title)											U.S.G.B.		5	
															6	
															7	
															8	
															9	
															10	
															11	
<u>Taylor's Island</u>		(location of tide staff)											U.S.G.B.		12	
<u>Cambridge</u>														13	
															14	
															15	
															16	
															17	
															18	
															19	
															20	
															21	
															22	
															23	
															24	
															25	
															26	
															27	

Names underlined in red approved
 by L. Heck on 10/9/46

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. **R7075.**

Records accompanying survey:

Boat sheets 1.....; sounding vols. 9.....; wire drag vols.;
 bomb vols.; graphic recorder rolls 19 (in 5 envelopes)
 special reports, etc.

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

Number of positions on sheet	.....	2383
Number of positions checked	.....	25
Number of positions revised	.....	3
Number of soundings revised (refers to depth only)	.....	10
Number of soundings erroneously spaced	.....	16
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	0
Junctions	Time	12
Verification of soundings from graphic record	Time	12

Verification by..... *Henry J. Bozzo* Total time / *2.05* Date *10/11/46*

Reviewed by..... *J. F. Jordan* Time *.18* Date *10/8/46*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7075

FIELD NO. 1513

Maryland, Chesapeake Bay, South of Sharps Island
Surveyed in Sept. - Nov., 1945 Scale 1:10,000
Project No. CS-250

Soundings:

Fathometer, 808A

Control:

Three-point fixes on shore
signals

Chief of Party - T. B. Reed
Surveyed by - T. B. Reed, W. H. Bainbridge and C. R. Reed
Protracted by - A. G. Atwill and W. W. Feazel
Soundings plotted by - A. G. Atwill and W. W. Feazel
Verified and inked by - H. J. Bozzo
Reviewed by - G. F. Jordan, October 8, 1946
Inspected by - H. W. Murray

1. Shoreline and Control

Sources of shoreline and control are given in the descriptive report. The shoreline agrees with T-8241 except for the correction made on H-7064 (1945) and transferred to the present survey in lat. $38^{\circ} 33.9'$, long. $76^{\circ} 18.5'$.

2. Sounding Line Crossings

Satisfactory.

3. Bottom Configuration

The survey covers the deep water approaches to Choptank and Little Choptank Rivers and includes irregular shoal areas projecting from Sharps Island, James Island and Hillspoint Neck. Irregularity of the shoal areas is caused by sand shoals.

2 words

4. Adjoining Surveys

A satisfactory junction on the south is effected with H-7065 (1945). Junctions on the northeast, east, west and north will be considered when H-7043 (1943-45), H-7064 (1945), H-6952 (1944) and H-6958 (1943-44) respective, are reviewed.

5. Comparison with Prior Surveysa. H-199 (1848) scale 1:20,000; H-201 (1848) scale 1:20,000

These prior surveys show fair agreement with the present survey except in the vicinity of Sharps Island. The southern end of the island has receded nearly one and one-quarter miles since the 1848 survey and is superseded by present 8-ft. depths. Conversely, prior 14 to 18-ft. soundings south-southeast of the island are superseded by present 6 and 7-ft. soundings.

b. H-2427 (1899) scale 1:40,000

This small scale reconnaissance survey shows two parallel lines of soundings in the area of the present survey. Prior depths agree within 2 feet with present depths.

c. H-2630 (1902); H-2631 (1902); H-2681 (1903-08); scales 1:20,000

These prior surveys disagree generally with the present survey. Present depths are 1 to 6-ft. shoaler in 12 to 50-ft. depths. Recession of the shoreline on Sharps Island previously mentioned and deepening of adjacent waters leaves prior 5-ft. soundings falling in present 8-ft. depths.

An uncharted 11-ft. sounding at lat. $38^{\circ} 32.7'$, long. $76^{\circ} 19.7'$, should be disregarded. The sounding was on line between 16 and 18-ft. soundings and falls between 16 and 18-ft. depths on the present survey. The 11 is considered to be in error by 1 fathom.

These prior surveys are superseded by the present survey except for bottom characteristics and a 6-ft. sounding at lat. $38^{\circ} 36.57'$, long. $76^{\circ} 24.22'$, which have been carried forward.

6. Comparison with Chart 553 (Print date of May 25, 1946)a. Hydrography

Charted hydrography originates with the aforementioned surveys of 1899 to 1908 and is superseded by the present survey.

b. Aids to Navigation

Aids located on the present survey agree satisfactorily with charted aids except for Hills Point Flats Lighted Bell Buoy 1A which is charted at lat. $38^{\circ} 33.28'$, long. $76^{\circ} 20.25'$ in 6-ft. depths. The present survey located the buoy 150 meters southward in 24-ft. depths, which agrees with depths in the Light List.

7. Condition of Survey

- a. Sounding records and the Descriptive Report are complete in all detail.
- b. Smooth-plotting was very good.

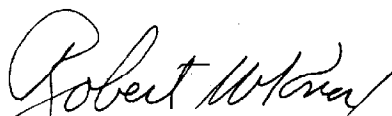
8. Compliance with Project Instructions


The survey complies with instructions except for complete investigation of charted shoals. The charted 6-ft. sounding at lat. $38^{\circ} 36.57'$, long. $76^{\circ} 24.22'$, was not investigated.

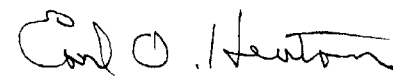
9. Additional Field Work

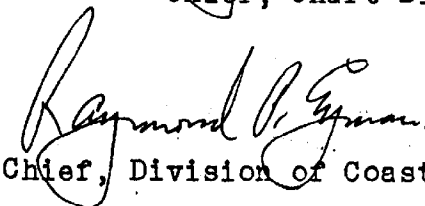
This is an excellent basic survey and no additional field work is required.

Examined and approved:


Chief, Nautical Chart Branch


Chief, Chart Division


Chief, Section of Hydrography


Chief, Division of Coastal Surveys

320m

TIDE NOTE FOR HYDROGRAPHIC SHEET

August 16, 1946

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. MURRAY

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 7075

Locality South of Sharps Island, Chesapeake Bay, Maryland

Chief of Party: T. B. Reed in 1945
Plane of reference is mean low water, reading
3.0 ft. on tide staff at Taylors Island
3.5 ft. below B. M. 1
6.3 ft. on tide staff at Cambridge
4.7 ft. below B. M. 1

Height of mean high water above plane of reference is 1.3 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, Division of Tides and Currents

Depth
in Feet

+10 0 105

Corrections in Feet
0 -0.5 -1.0

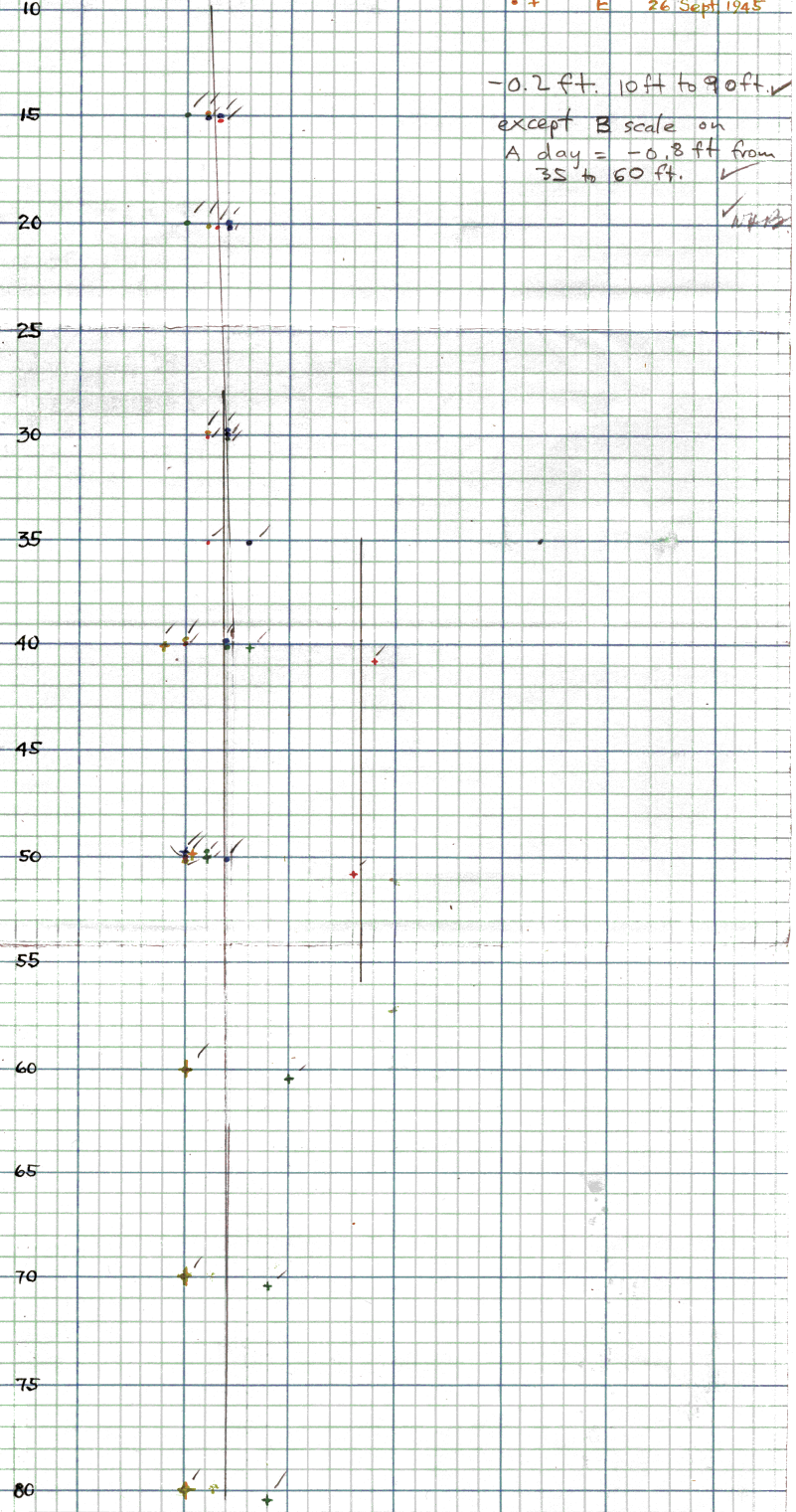
Sheet 1513
Project C.S-250
Bar Check Corrections
808 type recorder No. 67
SKIP COWIE
Thos. B. Reed, Comdg.

Scale	Day	Date
A B C		
• +	A	19 Sept 1945
• +	B	20 Sept 1945
• +	C	21 Sept 1945
• +	D	24 Sept 1945
• +	E	26 Sept 1945

5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80

-0.2 ft. 10 ft to 9 ft ✓
except B scale on
A day = -0.8 ft from
35 to 60 ft. ✓

Bund. on this



H 7075

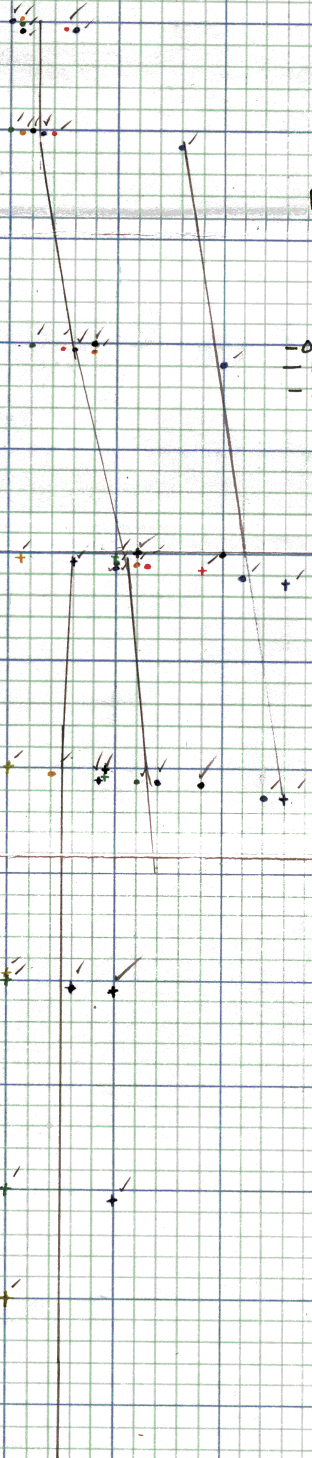
Sheet 1513
Project C.S. - 250
Bar Check Corrections
808 type recorder No. 67
Ship COWIE
Thos. B. Reed, Comdg.

Depth in Feet

↓ +1.0 +0.5 Correction in Feet 0 -0.5 -1.0

Scale	Day	Date
A B C		
• +	F	5 Oct. 1945
• +	G	8 Oct. 1945
• +	H	10 Oct. 1945
• +	J	11 Oct. 1945
• +	K	16 Oct. 1945
• +	L	2 Nov. 1945

5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80



F, G, H, J + L days days
 -0.2 ft. to 30 ft. ✓
 -0.4 ft. 30.5 to 38.5 ✓
 -0.6 ft. 39 to 55 ft. ✓
 B scale - 0.2 ft. all depths. ✓

K day only
 A + B scales
 -0.8 ft. to 26 ft. -0.8 ft. to 26 ft.
 -1.0 ft. 26.5 ft. to 39.5 ft. 0 ft. 26.5 to 39.5 ✓
 -1.2 ft. 40.0 to 52 ft. 2 ft. 40.0 to 52 ✓

✓ WHP2

↓ Depth
Feet

+1.0

CORRECTIONS - FEET
+0.5 0 -0.5 -1.0

Sheet 1513

Bar Check Corrections

808 type recorder #67

Project CS 250

Ship Cowie (Launch 72)

Thos. B. Reed, Comdg.

- a day - Sept. 5, 1945
- b day - Sept. 11
- c day - Sept. 12
- d day - Sept. 13

0 from 0 to 36 ft.

Depth in feet

5

10

15

20

25

30

35

40

45

50

H09015

021

Corrections in Feet

0 +1.0 +0.5 0 -0.5 -1.0

Sheet 1513

Bar Check Corrections
 808 type recorder No. 67
 Project C.S. 250
 Ship COWIE
 (Launch 72)

Thos B. Reed Comdg.

- A-scale e-day Oct. 18, 1945
- A-scale f-day Oct. 19, 1945
- + B-scale f-day Oct. 19, 1945
- A-scale g-day Oct. 29, 1945
- + B " " " " " "
- A-scale h-day Oct 30, 1945
- + B " " " " " "

A scale on e, f, g, & h days
 B scale on c & d days

- 0 ft. from 0 to 12 ft. ✓
- 0.2 ft. from 12.5 to 16 ft. ✓
- 0.4 ft. from 16.5 to 26 ft. ✓
- 0.6 ft. from 26.5 to 37 ft. ✓
- 0.8 ft. from 37.5 to 48 ft. ✓
- 1.0 ft. from 48.5 to 70 ft. ✓

~~except B scale on g & h days~~

~~B scale on g & h days~~

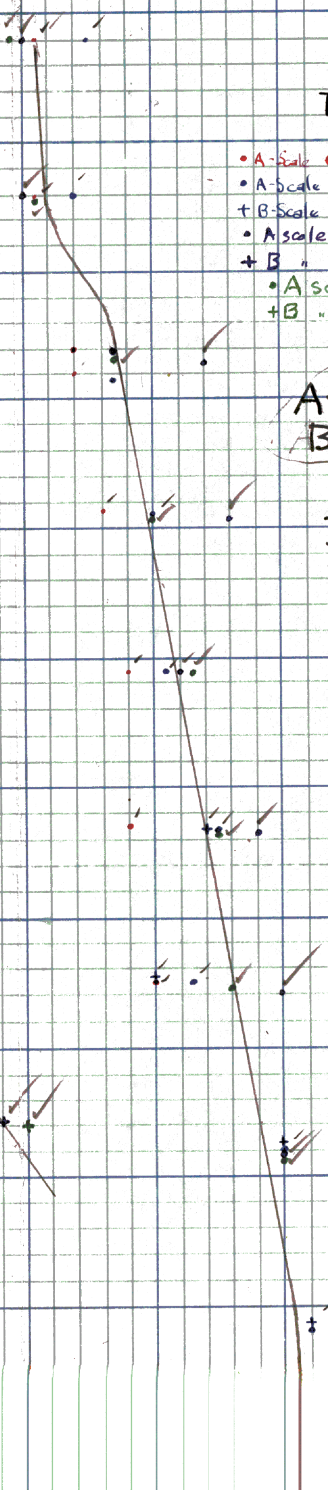
- +1.0 ft. 34 to 36.5 ft. ✓
- +0.8 ft. 37 to 39.5 ft. ✓
- +0.6 ft. 40 to 42 ft. ✓
- +0.4 ft. 42.5 to 45 ft. ✓
- +0.2 ft. 45.5 to 48 ft. ✓
- 0 feet 48.5 to 50.5 ft. ✓

WTR

Depths in Feet.

0
5
10
15
20
25
30
35
40
45
50
55

~~Project No. 1~~
~~B scale used on g & h days~~



NAUTICAL CHARTS BRANCH

SURVEY NO. H7075

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2/26/47	553	L.A. McGinn	Before After Verification and Review <i>Very Partially applied.</i>
			Before After Verification and Review
6/27/47	1225	L.A. McGinn	Before After Verification and Review <i>Partially applied.</i>
1-23-48	77	G.H.E.	Before After Verification and Review <i>Partial</i>
8/18/48	551	R. A. Strawn W.E. MacSwain	Before After Verification and Review
11/7/51	553	H.F. Stegman	Before After Verification and Review <i>thru ch 551 to reconstruction drawing.</i>
2/27/64	77	O. Svendsen	Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.