

6982

ORIGINAL

Diag. Chart No. 77-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. H Office No. T-6982

LOCALITY

State MARYLAND

General locality Chesapeake Bay-Eastern Shore

Locality South of Taylors Island
Mocking Neck

194 5

CHIEF OF PARTY

L.P. Raynor, Comdg. Ship LYDONIA

LIBRARY & ARCHIVES

DATE APR 27 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 16982

TOPOGRAPHIC TITLE SHEET

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

Field No. H

REGISTER NO.

State MARYLAND

General locality Chesapeake Bay- Eastern Shore

Locality Meekins Neck South of Taylors Island

Scale 1/10,000 Date of survey March- April, 19 45

Vessel Ship LYDONIA

Chief of party L. P. Raynor

Surveyed by C. R. Reed

Inked by C. R. Reed

Heights in feet above - to ground to tops of trees

Contour, Approximate contour, Form line interval - feet

Instructions dated September 12, 19 44

Remarks: _____

DESCRIPTIVE REPORT TO ACCOMPANY
Topographic Sheet T-6982
Field Sheet Letter H, 1944-45
Project CS 250- Chesapeake Bay, MD.
L.P. Raynor, Ch. of Party, Comdg. Ship LYDONIA

INSTRUCTIONS: Original project instructions were dated April 17, 1940. Supplemental instructions for the present season are dated Sept. 12, 1944.

AREA: The sheet covers the location of signals and high water line on the east shore of Chesapeake Bay on Meekins Neck to the southern limit of Chart 1225.

GENERAL DESCRIPTION OF COAST: The shoreline from Lat. $38^{\circ} 23.6'$ to Lat. $38^{\circ} 24.9'$ is wooded and is more or less strewn with trees which have fallen offshore due to erosion of the low bank. The remainder of the shoreline on the sheet is a low bank backed by marsh.

CONTROL: Control points were used as follows:

Triangulation station Mills 1934
Topographic station JIM 1942 from the air photographic compilation (Sheet 8110)
Station TEAL (yet to be located, see Director's letter 18 April 1945, File 836-RCR) replacing topographic station ATE 1942 which has been lost. *Recov. Form 524 is not on file*

Signal MUM, the center of a house the position of which was furnished by Washington Office, was used for a preliminary orientation when traversing from MILLS to JIM. The azimuth from MILLS 1934 to COVE POINT LIGHTHOUSE 1848 was computed and an orientation line drawn on the sheet.

Topographic station CORN 1942 was plotted on the sheet but was not used.

TRAVERSES: A traverse was run from MILLS to JIM using a preliminary orientation on MUM as stated above. A line was drawn as a cut to COVE POINT LIGHTHOUSE and when the computed azimuth from MILLS to COVE POINT LIGHTHOUSE was drawn on the sheet the error was found to be $6^{\circ} 12'$. When the traverse was swung clockwise by this amount the closure at JIM was 16 meters in 2.1 statute miles.

A traverse from MILLS to TEAL using COVE POINT LIGHTHOUSE for starting orientation and checking on MILLS AZIMUTH MK. was run. This traverse (1.8 stat. mi.) is to be adjusted when the location of station TEAL is completed. *(See Review)*

CHANGES IN SHORELINE: A comparison with topographic sheet T8110 shows some recession of shoreline to have taken place as follows:

At Lat. $38^{\circ} 24.3'$	17 meters
Lat. $38^{\circ} 25'$	negligible
Lat. $38^{\circ} 23.7'$	10 meters
Lat. $38^{\circ} 23.2'$	15 meters
Lat. $38^{\circ} 23.1'$	8 meters

A comparison (preliminary) with topographic sheet T 8117 shows the southern tip of the marshy island south of TEAL to have receded. The amount of recession depends on the traverse

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adjustment after location of station TEAL.

MAGNETICS: No magnetic meridian has been drawn on the sheet.

STATISTICS: The sheet covers 4.5 statute miles of high water line.

Respectfully submitted;

Clarence R. Reed

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

Approved and forwarded:

L. P. Raynor

L. P. Raynor
Comdr., USC&GS,
Comdg. Ship LYDONIA

836-RGR

18 April 1945

To: The Commanding Officer
U.S.C. & G.S. Ship LYDONIA
601-613 Gorsuch Avenue
Baltimore 18, Maryland

Subject: Location of topographic station TEAL, 1945

With reference to your letter of April 11, 1945, topographic station TEAL cannot be identified on the photographs. The creek just north of station TEAL appears as only a faint line on the photograph and none of the reference points can be identified.

Due to lack of readily identifiable details in the vicinity of the station and to the fact that the marsh has changed since the photographs were taken, it is doubtful that an accurate identification of the station can be made. Therefore, it is suggested that the station be located by theodolite or planetable, three-point fix or resection.

(Signed) G. I. BUDS

Acting Director

*No description is on file for station
Teal and recovery of station is
problematical*

R.H. Carstens

$$\begin{array}{r} 3.951990 \\ 2.768489 \\ \hline 1.183501 \end{array}$$

$$\begin{array}{r} 86^{\circ} 15' 01'' \quad \sin \quad 3.951990 \\ 9.999069 \\ \hline 3.152921 \end{array}$$

$$\begin{array}{r} 2.768489 \\ 8.815566 \\ \hline 3.952923 \end{array}$$

$$\begin{array}{r} 70^{\circ} 10' - 12.0 \\ 86 - 15 - 0.10 \\ \hline 3.44.59.0 \end{array}$$

$$\begin{array}{r} \text{Log tan. } 8.9164971 \\ \text{Tan.} = 0655.386 \\ \times 10,000 = 655.386 \end{array}$$

GEOGRAPHIC NAMES

Survey No. **T6982**

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	I	J	K	L	M	N	O	P
<u>Chesapeake Bay</u>			(for title)												USGB	1
<u>Taylor's Island</u>			" "													2
<u>Barren I. Gap</u>																3
																4
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																6
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Names underlined in
red are approved
2/3/49 L. HECK

NAUTICAL CHART BRANCH

REVIEW SECTION

T-6982 (1945)

The control for this survey is described in detail in the Descriptive Report. The traverse on the southern half of the survey was not adequately closed. Only two bearings (cuts) were taken near signal RAM, one to Cove Point L.H. and one to Hooper Island L.H. A position computed from these bearings is 85 meters from the plotted position. The orientation of the planetable was probably in error and closure of the traverse is, therefore, indeterminate. Sextant angles taken at signals LAR and WEE during the hydrographic surveys do not provide accurate positions to which the traverse could be adjusted. The topographic signals were used, however, on the hydrographic surveys and have been retained. Further adjustment of these signals would serve no useful purpose. No description is on file for station TEAL which is referred to in the Descriptive Report.

The pencilled shoreline on the southern half of the survey has been erased. Air photographic surveys T-8110 and T-8117 of 1942 provide adequate topography in the adjoining area, and the completion of the shoreline on the present survey is, therefore, unnecessary.

A comparison of shorelines on prior surveys and the present survey was made in the review of H-6956 (1945) and requires no further consideration.

No observations of the magnetic meridian were made.

March 8, 1949

G. F. Jordan

Approved by: R. H. Carstens

NAUTICAL CHARTS BRANCH

SURVEY NO. T 6982

Record of Application to Charts

[illegible]

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.