**U.S. COAST AND GEODETIC SURVEY**  
DEPARTMENT OF COMMERCE

**DESCRIPTIVE REPORT**

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**LOCALITY**

| State          | Virginia    |
| General locality | James River |
| Locality       | Vicinity of Fort Eustis |

**1946**

**CHIEF OF PARTY**

| E.B. Lathem |

**LIBRARY & ARCHIVES**

**DATE**  
October 4, 1948
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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.

CO-A-48
Field No. CO-B-12

REGISTER NO. T-7070 a & b
State Virginia t-7070

General locality James River
Locality Vicinity of Fort Eustis
Scale 1:10,000 Date of survey 29 April to 25 May, 1948

Vessel COWIE
Chief of party E. B. Latham
Surveyed by E.B.L.
Inked by E.B.L.

Heights in feet above to ground to tops of trees
Contour, Approximate contour, Form line interval feet
Instructions dated 12 March 1948
Remarks:


DESCRIPTIVE REPORT

Graphic Control
Sheets T-7070 and T-7071
James River, Va.

Ship CCJIE
Ector B. Latham, Comdg.

AUTHORITY.
Amended Instructions, Project OS-255, 12 March 1949.

CHRONOLOGY.
Work was done on 29 April, 6 May, 24 May and 25 May.

GENERAL.
The presence of the moth ball fleet made it very difficult to properly identify the signal locations on air photo compilations, or to locate signals by cuts from triangulation stations. Subject fleet also made it necessary to locate additional signals by obstructing visibility of signals across the river.

DESCRIPTION OF COAST
7070, West side, High Water line was generally along the foot of a wooded bluff averaging 25 feet high - 7071 low marshy ground with offlying low marshy islands.

CHARACTER OF CONTROL
Controlled by triangulation stations established at various times and coordinated by the party of H. E. Fiegan in 1938.

LANDMARKS
Only landmark within limit of sheet is tower South of Marshy Point, already located and charted.
CLOSING ERRORS AND HOW ADJUSTED.

Traverse, Triangulation Station EXTRA to Triangulation Station GHOST -
Closed flat. Triangulation Station GHOST to Triangulation Station DEMON.
A closure of 16 meters, all in azimuth, was experienced. Error was due
to mistake in orienting table at GHOST, signal NOW being mistaken for
flag at Triangulation Station DEMON. NOW was partly obstructed by trees
and apparently the flag at Triangulation Station DEMON was completely
obstructed. A cut taken from set up at Triangulation Station GHOST to
signal NOW was laid on sheet and the orientation of table checked by this
line when set up at NOW. Closure was adjusted graphically, and it is
believed that final positions are accurate within plotting accuracy.

Closure of traverse Triangulation Station SNELL to set up near signal BOG
was checked by orienting by traverse and resection on Triangulation Station
ULBER Reference Mark and Triangulation Station Point of SHOALS. Closure
was approximately three (3) meters which was not adjusted. A jump in
sounding line was noted on "P" day, 11 May 1948 in connection fix using
Ask, and the topography was re-run on 24 and 25 May. A comparison was made
and conclusion reached that an error had been made either in holding or
reading the rod when locating signal Ask. Signal was relocated on direction
line to Ask, with distance from plane table set up altered to conform to the
new position. Additional check angles observed by the Hydro. party are
not considered of sufficient consequence to warrant further comparisons.

(Subject angles are recorded on page 30 Vol. 1 Sounding Record)

AUXILIARY METHODS ETC.

No application.

FORM LINES ETC., OTHER PARAGRAPHS IN MANUAL

No application.

LIST OF PLANE TABLE POSITIONS.

None, only landmark has been located by triangulation.

Respectfully Submitted,

Ector B. Latham,
Chief of Party.
DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7070a & b
FIELD NO. CO-A & B-48

Virginia, James River, Vicinity of Fort Eustis
Surveyed in April - May, 1948
Instructions dated 12 March 1948

Scale 1:10,000

Plane Table Survey
Aluminum Mounted

Chief of Party - E. B. Latham
Surveyed by - E. B. Latham
Inked by - E. B. Latham
Reviewed by - I. M. Zeskind, June 15, 1949
Inspected by - R. H. Carstens

1. The control for this survey is based on triangulation
   of 1938. The closing error (16 m.) of the traverse
   from GHOST to DEMON (2 miles), exceeding 4 meters per
   mile, was adjusted graphically on the sheet. No
   plottable inaccuracies have been found to result from
   this adjustment.

2. The following surveys overlap the present survey and
   make satisfactory junctions with it:

   a. West Shore
      T-8070 (1943) and T-8069 (1943) join the present
      survey on the north and south respectively.

   b. East Shore
      T-8060 (1943) joins the present survey on the
      north and south.

3. A comparison of the present survey with H-7174 (1948)
   reveals no discrepancies in shoreline or low-water
   detail.
4. Only minor differences in the shoreline were revealed in the comparison between the present survey and the prior surveys mentioned in paragraph 2 above. The shoreline on the present survey is adequate to supersede that shown on the prior surveys.

5. The shoreline on Chart 529 (Latest print date 5/29/49) is in substantial agreement with the present shoreline.