

5675

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

1934

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~XXXXXXXXXX~~ } Sheet No. 13 5675
Hydrographic }

State VIRGINIA

LOCALITY
Chincoteague Bay
ASSATEAGUE BAY AND

BIG BAY

~~Part of CHINCOTEAGUE BAY~~

1934

CHIEF OF PARTY

H. A. Seran

5675

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
MAR 9 1935
Acc. No. _____

REG. NO.

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.

Field No. 13

REGISTER NO. 5675

State VIRGINIA

General locality CHINCOTEAGUE ^{Bay} INLET AND VICINITY

Locality ASSATEAGUE BAY, ^{and} BIG BAY, and part of CHINCOTEAGUE BAY

Scale 1:10,000 Date of survey Oct. 27-Nov. 30, 1934

Vessel Sub-party Ship OCEANOGRAPHER

Chief of Party H. A. Seran

Surveyed by J. E. Waugh

Protracted by H. D. Glover

Soundings penciled by J. E. Waugh

Soundings in ~~feet~~ fathoms

Plane of reference M.L.W.

Subdivision of wire dragged areas by None

Inked by ~~W. H. Smith~~ E. A. KNAPP

Verified by " " " ✓

Instructions dated April 27, 1933; June 19 & Aug. 31, 1934

Remarks:

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET (field letter 13)

CHINCOTEAGUE INLET AND VICINITY

Sub-party Ship OCEANOGRAPHER

H. A. Seran, Comdg.

PROJECT NO. H.T. 142

The descriptive report for Hydrographic Sheet (field letter 13) which covers Assateague Bay, Big Bay and part of Chincoteague Bay is herewith submitted.

INSTRUCTIONS:

The hydrography on this sheet is part of Project No. 142, the instructions for which were dated April 27, 1933. Supplemental instructions to cover this part of the project were dated June 19, 1934 and August 31, 1934.

LIMITS AND SCALE:

This sheet was surveyed on a scale of 1:10,000. It extends from Lat. 37°-56.2' on East Side Channel to a line between the north west end of Wild Cat Point and Ox Pen Point and includes Assateague Bay, Big Bay and part of Chincoteague Bay. The part in Chincoteague Bay is north of the southeast end of Blake Point and northeast of Black Beacon No. Five. This hydrography was carried to the northward and westward only far enough to develop the north end of Killick Shoal. This sheet is joined on the south by sheet No. 12.

CONTROL AND SURVEY METHODS:

The control on this sheet consists of third order triangulation stations, both main scheme and intersection. The triangulation stations have been supplemented by topographic signals. These signals were located on aluminum sheets.

Standard hydrographic methods were followed in developing these areas. The lines were run on ranges and were controlled by three point fixes on signals on the shore. It was necessary to locate the inshore end of some of the lines by an estimated distance and direction from topographic signals. The soundings were obtained by the lead line in East Side Channel and Assateague Bay. A sounding pole was used to obtain the soundings in Big Bay and Chincoteague Bay.

The Oyster and Clam beds that are bare at low water (except those in Big Bay) are labeled as such on the sheet. Oyster beds are scattered over the whole area even to the extent that in several places beds are planted in the channel. The oyster beds that are covered by water at all times are indicated by the bottom characteristic of shells.

Big Bay is a large oyster bed. For this reason, especially on the southern end, the lines are irregularly spaced and far apart; as care was taken not to ground on the beds.

The six and twelve foot depth curves were drawn in most places. It was necessary to omit parts of these curves, as it would have been confusing had they been drawn.

all curves now shown on smooth sheet. num.

DISCREPANCIES:

The sounding lines crossed satisfactorily. The crossings were within one foot in most cases.

Apparent discrepancies are noted in the following cases:

1. 4' (11-12c) on 6' (112-113d) — (CROSSING IMPROVED) ✓
2. 12' (22-23d) on 14' (10-11b) — (IN CHANNEL W.N.R.) ✓
3. 8' (28-29d) on 5' (26-27b) — (CROSSING IMPROVED) ✓
4. 10' (33-34c) on 6' (16-17d) — (" ") ✓
5. 6' (16-17d) on 10' (106-107d) — (" ") ✓
6. 11' (30-31d) on 6'-8' (13-14b) — (" ") ✓
7. 12' (30-31d) on 3'-10' (71-72c) — (" ") ✓
8. 5' (61-62d) on 10' (128-129c) — (PLOTTED AS 5') ✓
9. 5' (63-64d) between 8'-10' (128-129c) (PLOTTED AS 5') ✓
10. 4'-3' (66-67d) on 10' (128-129c) — (PLOTTED AS 5') ✓
11. 13' (93-94d) between 11' (34-35d) — (PLOTTED AS 11') ✓
and 8'-2' (78-79c) — (" " " 8') ✓
12. 7' (95-96d) on 3' (93-94d) — (CROSSING IMPROVED) ✓
13. 13' (95-96d) on 11' (34-35d) — (PLOTTED AS 11') ✓
and 8' (78-79c) — (" " " 8') ✓
14. 6' (97-98d) on 1'-4' (77-78c) — (CROSSING IMPROVED) ✓
15. 6' (103-104d) on 8' (26-27b) — (" ") ✓
16. 11' (117d) on 0' (2-3c) — (" ") ✓
17. 8' (115d) near 10' (118d) — (" ") ✓
18. 12' (28e) between 10'-2' (33-34c) — (" ") ✓
19. 10' (35-36e) on 8' (36c) — (PLOTTED AS 8') ✓
and 7'-4' (28-29c) — (" ") ✓

Vertical and field measurements accepted - Wagon

In case one, a slight shifting of the lines would make the crossings agree. This is on a steep slope so a small change in the lines would make a big change in the soundings.

In case 2,4,5,6,7,11,18, and 19 the lines are either in or crossing a narrow channel with steep slopes, so that a small change in position would make a large change in the soundings.

In case 3,12,13,14 and 15 the lines are on the edge of a narrow channel with steep slopes, so that a small change in position would make a large change in the soundings.

In case 8,9, and 10 the 10½ foot sounding is apparently in error by one fathom. Several lines were run over or near this spot and no indication of this hole was found.

SHALDEST SOUNDINGS WERE PLOTTED

In the case of 16 and 17 the line 116d-118d was run in close to the oyster bed. This discrepancy in soundings was noted at the time and on investigation it was found that a 4 foot difference in position made a 12 foot difference in sounding.

It is recommended that the shoal soundings be charted in all cases.

The low water line that was transferred from the airphotos is shown by a dashed line. The low water line, as determined by the hydrography, is shown by a dotted line. The two low water lines check satisfactorily where they overlap. Attention is directed to the following differences;

1. On the south west side of Live Shoal the hydrographic low water line is a little to the southwest of the topographic low water line.

2. At position 32b off Smith Hummock and at positions 99c and 107c, the low water line should be moved inshore.

3. Off Bowe Beach and at positions 10c, 14e, 20e, 37e, and 25c the shore line apparently should be displaced slightly further off shore.

4. At positions 19c and 26c off Bowe Beach, the low water line should be moved inshore. A small displacement can easily be made here as the beach is very steep at this point.

5. Between positions 157-158c the sounding line passes over the edge of the shoal.

Shore line references are shown at four recoverable topographic stations and one triangulation station. Reference points for air-photo control is shown at two recoverable topographic stations. All points check satisfactorily except the shore line reference at topographic signal Goof. The reference for air-photo control at this point checks very well. The difference in the shore line at this point is probably due to the nature of the topography which makes it difficult to determine the true high water line.

CHANNELS AND DANGERS:

East Side Channel and the channel leading through Assateague Bay are narrow and winding. The Shoals are high on each side of the channel.

The controlling depth in East Side Channel is found 290° in azimuth, distance 220 meters from topographic signal Girl. The deeper water on the west of this spot heads up on the high oyster bed off Morris Island. The greatest depth over this shoal is four feet. The sounding is found on the line 113-114d. There is a high shoal to the southward of this spot. In general, only one line was run in the channel to the north of this point. The above mentioned shoal blocks this channel on the south. The limiting depth on the north end of Assateague Bay is four feet. This channel is only used by one or two men who have oyster beds planted in Assateague Bay. Therefore; no additional development was considered necessary.

Vertical and field measurements omitted

ERRONEOUSLY
RETRACTED

OK

There is a large middle ground in the channel just off East Gut Creek. ✓ ✓

Stud Horse Channel is the deep water leading between the shoals off Blake Point in Chincoteague Bay. The least depth through here is four feet. The only boats using all of these channels are the local oyster men going to and from work. ✓ ✓

GEOGRAPHIC NAMES:

All of the following names shown on this sheet are well established local names. For this reason it is recommended that they be accepted for use: ✓

1. Ox Pen Point ✓
2. Mud Inlet Creek ✓
3. Smith Bay ✓
4. Smith Bay Island ✓
5. Smith Hummock ✓
6. Bowe Beach
7. Wildcat Point ✓
8. Wildcat Gut ✓
9. Boatin Gut ✓
10. East Gut Creek ✓
11. East Gut Point ✓
12. Birtcherds Pasture ✓
13. Wimbow Wharf Creek ✓
14. Hole-in-Wall ✓
15. Selby Gut ✓
16. Morris Island Creek ✓
17. Blades Point ✓
18. Upper Thief Marsh ✓
19. Lower Thief Marsh ✓
20. George Bent Island ✓
21. Hell Gate ✓
22. Green Marsh ✓
23. Harmons Cove ✓
24. Henry Island Point ✓
25. Little Bose Bay ✓
26. Bose Bay Island ✓
27. Old Float Point ✓
28. The Vineyard ✓
29. Blake Point ✓
30. Stud Horse Channel ✓
31. Tonys Shoal ✓
32. East Side Channel. ✓

East Side Channel is the only name which differs from the ones that are shown on the existing chart of this area. It is used locally to designate the channel along the east side of Chincoteague Island. Assateague Inlet, the name shown on the chart, is used locally to designate the inlet to East Side Channel. ✓

LANDMARKS AND AIDS TO NAVIGATION:

All landmarks to charts and aids to navigation on this sheet have been previously reported in a separate report and in the descriptive reports for Graphic Control Sheets Nos. G, H, and J.

Respectfully submitted,

J. E. Waugh, Jr.
J. E. Waugh, Jr., Ensign,
Ship OCEANOGRAPHER.

Approved and forwarded:

H. A. Seran

H. A. Seran, Comdr., C&GS.,
Commanding Ship OCEANOGRAPHER.

*shore line on this sheet was
transferred from air photo compilation
T 5700.*

*transfer checked
and inked - 7/2/50*

H.A.S.

STATISTICS FOR SHEET, FIELD NO. 13

Date 1934	Day Letter	Statute miles of sdg. lines.	No. of soundings.	No. of positions.
Oct. 27	a	10.7	430	78
Nov. 3	b	4.1	215	47
Nov. 5	c	19.6	899	195
Nov. 7	d	12.0	525	120
Nov. 8	e	3.0	144	47
Nov. 30	f	13.4	509	100
Totals		62.8	2722	587

Total area surveyed: 2 1/8 sq. miles.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. .5675

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

Number of positions on sheet	587..
Number of positions checked	195..
Number of positions revised	3..
Number of soundings recorded	2722..
Number of soundings revised	55..
Number of signals erroneously plotted or transferred	0..

Date: MAY 18 1955

Verification by F.A. KNAPP

Time: 39 HRS.

Review by H.W. Murray

Time: 51 "

Verifier Report

May 18 1935

H-5675

The records conform to the requirements of the General instructions with the exception of the day letters, large and small letters being used. ^{omitted in this report}

The usual depth curves have been drawn. The field plotting was complete to the extent prescribed in the Hydrographic Manual.

It was necessary for the verifier to ink all shore lines and islands.

All soundings had to be replotted for time.

~~For positions 61A and 62C figures in the records are evidently in the wrong column and are doubtful soundings.~~

~~Doubtful soundings are also recorded for positions 128C, 117D, and 3C to 7C.~~

Air photo sheet was used for comparison.

The contemporary adjacent sheets have not as yet been verified.

J. A. Knapp

GEOGRAPHIC NAMES
VIRGINIA

Date. Mar. 12, 1935

Survey No. H 5675

Chart No. 1220

Diagram No. 1220-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Birtchard Pasture</u>		<u>Birtcherds Pasture</u>		
	<u>Lower Thief Marsh</u>		Same		✓
	<u>Lower Thief Marsh</u>		"		
	<u>East Gut Pt.</u>		"		
	<u>Assateague Bay</u>	Same		ink later	✓
	<u>East Gut Creek</u>		Same		
	<u>Upper Thief Marsh</u>		"		✓
	<u>Upper Thief Marsh</u>		<u>Boatin Gut</u>		
	<u>Boat-in Gut</u>		"		
	<u>Little Rose Bay</u>		Same		
	<u>Wildcat Gut</u>		"		
	<u>Wildcat Point</u>		"		
	<u>Henry Island Pt.</u>		"		
	<u>Harmons Cove</u>		"		
	<u>Cords Marshes</u>	Same			
	<u>OxPen Pt.</u>		Same		✓
	<u>Mud Inlet Creek</u>		m "		
	<u>Smith Bay I.</u>		"		✓
	<u>Smith Bay</u>		"		✓
	<u>Smith Hummock</u>		"		
	<u>Assateague Island</u>	Same			✓
	<u>Bowe Beach</u>		Same		
	<u>Atlantic Ocean</u>				✓

GEOGRAPHIC NAMES

Date. Mar. 12, 1935 VIRGINIA

Survey No. H 5675

Chart No. 1820

Diagram No. 1220-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Tony's Shoal</u>		Same		✓
	<u>Chincoteague Bay</u>	Same			✓
	<u>Killick Shoal</u>				✓
	<u>Blake Point</u>		Same		
	<u>Stud Horse Channel</u>		"		✓
	<u>Rose Bay Island</u>		"		✓
	<u>Old Float Pt.</u>		"The Vineyard		
	<u>The Vineyard</u>		"		✓
	<u>Chincoteague Island</u>	Same			✓
	<u>Big Bay</u>				✓
	<u>East Side Channel</u>		Same		✓
	<u>Morris Island</u>	Same			200
	<u>Blades Point</u>		Same		
	<u>Morris Island Creek</u>		"		✓
	<u>Live Shoal</u>				✓
	<u>Green Marsh</u>		Same		
	<u>Salby Gut</u>		"		
	<u>Hell Gate</u>		"		✓
	<u>Hole in Wall</u>		"		✓
	<u>Hole in Wall</u>		"		
	<u>George Brent Ids.</u>		"		100
	<u>Wharf</u>		"		
	<u>Wimbow Wurf Creek</u>		"		

APPROVED NAMES UNDERLINED IN RED
H. L. F. Jones

fac

April 29, 1935

F.P

Division of Hydrography and Topography:

Division of Charts: Attention: Mr. E. P. Ellis

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 5675

Locality Chincoteague Bay, Assateague Bay, Va.

Chief of Party: H. A. Seran in 1934
Plane of reference is mean low water, reading
4.6 ft. on tide staff at Assateague Anchorage
8.8 ft. below B.M. 15

3.9 ft. on tide staff North End Piney Island (with allowances)
4.2 ft. below B. M. 1

Height of mean high water above plane of reference is 4.0 feet at
Assateague Anchorage; 2.1 feet at North End Piney Island.

Condition of records satisfactory except as noted below:

Ham
Acting Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5675 (1934)

Assateague and Big Bays, Chincoteague Bay, Virginia
Surveyed in 1934

Instructions dated April 27, 1933, and June 19, 1934 (OCEANOGRAPHER)

Hand Lead and Pole Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - H. A. Seran.

Surveyed by - J. E. Waugh.

Protracted by - H. D. Glover.

Soundings penciled by - J. E. Waugh.

Verified and Inked by - F. A. Knapp.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. No copy of Landmarks for Charts on Form 567 accompanied this particular sheet. (Par. 168).
- b. The shoreline as shown on the smooth sheet was in pencil. This was inked in the office. (Par. 26).
- c. The character of topographic signal "Ned", falling in depths of 2 feet on the present survey, in lat. $37^{\circ}56.9'$, long. $75^{\circ}19.1'$, and 15 m. outside the low water line, is not known. However, in view of the proximity of the signal to the low water line, it is probably of a temporary nature.

The "Descriptive Report" is clear and comprehensive and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Sounding Line Crossings.

General agreement of sounding line crossings is within 1 foot or less, however larger apparent differences occur along the edges of channels where the bottom is subject to rapid changes in depth. Wherever possible, such discrepancies were improved in the office.

4. Depth Curves.

Within the limits of the survey, and considering the importance of the area covered, the usual depth curves may be satisfactorily drawn, including portions of the low water curve.

5. Junctions with Contemporary Surveys.

- a. The junction on the south with H-5769 (1934) will be considered in the review of that sheet.
- b. There are no contemporary surveys at the present time to the north and west of the present survey.

6. Comparison with Prior Surveys.

H-1455a (1880).

Soundings on this survey are very sparse but generally agree within $\frac{1}{2}$ to 1 foot with those of the present survey. However, a few areas of the latter survey vary $\frac{1}{2}$ to 3 feet shoaler with the larger differences being confined to the greater depths. In addition, marked changes in shoreline of islands have taken place; a number of islands having increased in size, ~~others~~ others having eroded away.

7. Comparison with Chart No. 1220.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual, with the exception that soundings were not consistently spaced with respect to time interval. Those so plotted were corrected in the office. (Par. 147).

9. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

10. Superseding Old Surveys.

Within the area covered, H-5675 (1934) supersedes the following survey for charting purposes:

H-1455a (1880) in part.

11. Reviewed by - Harold W. Murray, May 23, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

L. O. Polbat
Chief, Division of Charts.

Paul A. Smith
acting
Chief, Section of Field Work.

G. W. Hude
Chief, Division of H. & T.

Applied to drawing of chart 1220 - June 4, 1936 - J.F.W.