

5369

U. S. COAST AND GEODETIC SURVEY
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Form 504
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton Director

State: New York

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 2-A 5369
Hydrographic }

LOCALITY

Great South Bay L. I.
Outer Coast of ~~Fire Island~~ ^{Great South} Beach

1933

CHIEF OF PARTY

Raymond P. Eyma

U.S.G.S

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5369

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. 2-A

REGISTER NO. 5369

State New York

General locality Great South Bay, L. I.

Locality Outer Coast of ~~Pine Island~~ Beach ^{Great South}

Scale 1:20,000 Date of survey August & Sept., 1933

Vessel "Four Winds" and "Capt. Bill" Chartered Launches.

Chief of Party Raymond P. Eyma

Surveyed by J.C. Tison, Jr., Aid.

Protracted by D. B. Bennett

Soundings penciled by H. L. Hawkins

Soundings in ~~FAIRWAYS~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by A. M. Uzefovich

Verified by A. M. Uzefovich & W. H. BAMEFORD

Instructions dated February 25 and June 17, 1933

Remarks:

OK SRE

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SHEET NUMBER 2-A
SOUTH SHORE, LONG ISLAND, N.Y., OUTSIDE
COAST.
RAYMOND P. EYMAN - CHIEF OF PARTY
SEASON - 1933..

AUTHORITY:

Letter from Lieut-Commander F.S. Borden,
dated June 17, 1933. Definite instructions for the
work were never received.

SURVEY METHODS:

Second and third order triangulation
stations, topographic signals, and hydrographic
signals located along the ocean beach furnished
control for the survey. The hydrography was
executed according to standard practices; sextant
angles taken from the launch being used to locate
sounding lines. All soundings were obtained with
a standard 12-fathom leadline fitted with a 10-lb
lead.

DISCREPANCIES:

An inspection of the boat sheet revealed
no discrepancies in the plotted soundings on cross
lines, and none were noted in the field. Satisfactory
junctions were made with the eastern and western limits
of Hydrographic Sheet #3 in the vicinity of Fire
Island Inlet.

DANGERS:

The stretch of coast line from Cherry Grove
westward to Fire Island Inlet, is comparatively straight,
and is unbroken. No dangers to navigation exist outside
the line of breakers in the shoal water close to shore.
With a moderate swell running, the seas break some distance
offshore in those places where the water shoals to less
than 2-fathoms in depth; the distance varying from about
200 to 250 meters in such cases. Between this first break
and the surf on the beach there is usually a strip of smooth
water several feet deeper than that found in the area of
the first break.

Just to the east of Fire Island Lighthouse, and
opposite Lonelyville, the ruins of an old pier stick out into
the surf, but due to its short distance offshore cannot be
considered a menace to navigation. In the summer, bathing
areas are marked off in places along the beach by planting
small buoys about 200 feet offshore and connecting them with
lines; such areas now in existence are shown on the boat sheet.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NUMBER 2-A,
SOUTH SHORE, LONG ISLAND, N.Y., OUTSIDE COAST, (Continued)

DANGERS (Continued):

Off Democrat Point the currents are usually strong as one approaches the beach, and the water rough, with sharp seas in the nature of tide rips, only not so pronounced. Very shoal sand bars lie in close to the beach, which are never bare, but always cause a heavy surf to break. A wreck lies a considerable distance off the beach directly south of Democrat Point, and projects above water for about three to six feet, depending on the stage of tide. This wreck was located by topography, and is plotted on the boat sheet. It consists of a large iron spar sticking vertically out of the water with horizontal bars projecting out from it near the water's surface. ✓

Large fish traps are located in the vicinity of Fire Island Inlet for a distance of more than a mile offshore. They consist of many large piles projecting about 15-feet out of the water, and are lighted by red lanterns at their north and south ends. All of the traps run in a north and south direction, and those located in the area where hydrography was done are shown on the Boat Sheet. ✓

From Fire Island Inlet, westward to the end of the sheet the coast is straight and unbroken. Shoal water, less than two fathoms in depth with deeper water behind it, is also apparent in this section. No dangers to navigation exist other than controlling depths. ✓

It was impossible to develop the 6-foot depth curve on Sheet 2-A, due to its proximity to the Low-Water-Line and the breakers so close to shore. ✓

COMPARISON WITH PREVIOUS SURVEYS:

The soundings outside the 3-fathom depth curve do not check with those shown on existing charts of the area. Considerable deepening in the water appears to have occurred between the distances $\frac{1}{2}$ and 1-mile offshore.

Respectfully submitted.

J. C. Tison, Jr.
J. C. Tison Jr.,
Aid, U.S.C. & G.S.,
Hydrographer.

Forwarded:

Raymond P. Eyman
Raymond P. Eyman,
Chief of Party.

<u>HYDRO NAME</u>	<u>DESCRIPTION</u>	<u>METHOD OF LOCATION</u>
AZZ		Topography Sheet D
BARE		" " D
BARN		3 Point Fix
BEE	Oak Beach Coast Guard Tower	Triangulation
BIG		Topography Sheet D
BIL	Windmill (Ocean Beach)	Triangulation
CAN		Topography Sheet D
EVE		" " D
FIRE	Fire Island Light House	Triangulation 1933
GOOSE		Topography Sheet B
GRO	Flag Pole (Cherry Grove)	Triangulation
HILL	Flag Pole (Lone Hill)	"
LIFE		" 1933
LOOK	Lookout Tower	" 1933
MIL	Windmill (Since Destroyed)	" 1933
NAT		Topography Sheet D
OAK		Triangulation 1933
PED		Topography Sheet D
POINT	Flag Pole (Coast Guard)	Triangulation
QUIT		3 Point Fix
SALT	Tank (Saltaire)	Triangulation 1933
SEV		Topography Sheet B
SIGN		" " B
SKWET		3 Point Fix
TOW	Tower (Oak Island)	Triangulation 1933
VEN		Topography Sheet B
WAVE		" " D

LIST OF HYDROGRAPHIC SIGNALS

SHEET #2 A

HYDRO NAME

DESCRIPTION

METHOD OF LOCATION

WOOD

Tank (Point O'Woods)

Triangulation

STATISTICS FOR FIELD SHEET NO. 2 A
 PROJECT HT - 132 LONG ISLAND, N. Y.

<u>Date</u>	<u>Boat</u>	<u>Day Letter</u>	<u>Vol.</u>	<u>Stat. Mi.</u>	<u>No. Soundings</u>	<u>No. Positions</u>
Aug. 28, 33	4 Winds	A	1	13.5	443	64
" 29 "	4 Winds	B	1	8.7	266	38
" 31 "	4 Winds	C	1-2	46.0	1191	253
Sept 1 "	4 Winds	D	2	13.0	315	68
Total				<u>81.2</u>	<u>2,215</u>	<u>423</u>

The smooth sheet was examined by G. D. Cowie, in charge of a temporary drafting unit which completed the smooth sheets. A few minor additions were found necessary and have been added.

George D. Cowie

George D. Cowie, Inspector,
New York Field Station.

LAC

February 5, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for


HYDROGRAPHIC SHEET 5369

Locality Outer Coast of ^{Great South} ~~Fire Island~~ Beach, Long Island, N.Y.

Chief of Party: R. P. Eyman in 1933
Plane of reference is mean low water, reading
1.5 ft. on tide staff at Democrat Pt.
6.3 ft. below B. M. 6

Height of mean high water above plane of reference is 2.6 feet.

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. ~~5368~~ 5369.

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

Number of positions on sheet	... 478	
Number of positions checked	} <i>Protracting checked by W.H. Bamford</i>
Number of positions revised	
Number of soundings recorded	.. 2527	
Number of soundings revised 26	
Number of signals erroneously plotted or transferred	

Date: ~~.. March 12, 1934~~

Cartographer: ~~.. A.M. Uzefovich~~

SECTION OF FIELD RECORDS

Report on H. 5369

Chief of Party - Raymond P. Eymen	Surveyed in 1933.
Protracted by - D. B. Bennett	Surveyed by - J. C. Tison, Jr.
Verified and inked by - A. M. Uzefovich.	Protracting verified by - W. H. Bamford.
	Soundings plotted by - H. L. Hawkins.

1. The sounding records conform to the requirements of the Hydrographic Manual.

2. The protracting was found to have been very well done. However the position day letters were not placed at the ends of lines or at every fifth position etc. thereby making it more difficult than necessary to follow sounding lines. - (ref. Par. 145 H.M.).

3. The field plotting was completed to the extent prescribed in the Hydrographic Manual. ✓

4. The usual depth curves ~~can~~^{could} be drawn. ✓

5. The junctions with adjacent sheets H. 5370, H. 5371, and H. 5367b ✓ were made, and they are in perfect agreement.

6. Coast line on H. 5369 was drawn too roughly. The office cartographer (AMU) transferred the southern coast line between longitudes 73°21' - 73°06', from topographic sheets 6011, 6012 and 6013. ✓

7. The regulation stamp for showing projection and signal data was not used on this sheet and a portion of the information required is lacking. The datum the sheet is referred to was omitted from the smooth sheet by the field party.

8. The wreck shown on this sheet at Lat. 41°-37' ~~at~~⁺ 205 m and Long. 73°-17' + 460 m (approx.) was located on topographic sheet T. 6012 and also by the hydrographic party surveying (by pos. 19g (blue)) Hydrographic sheet No. 5370. The topographic position was accepted as the most accurate location. This wreck appeared on Blue Print 12733 as the wreck of the Steamer DRUMELIZIER, in 1905. ✓

9. The hydrographic signals "Barn", "Skeet", and "Quit" - shown on this Smooth Sheet do not agree with the positions shown on the Boat Sheet. In volume two - theodolite and sextant cuts taken at these signals are listed with the notation "three point fix computed" The computed positions of these signals were found in the Descriptive Report for H. 5367b and the positions checked and found in their correct location on the smooth sheet. As there are no shoal soundings affected by the apparent discrepancy in the plotting of these signals and as the hydrography affected, shifts only slightly to the westward, it was deemed advisable to accept the Field location of these signals. ✓

Submitted by - W. H. Bamford.

March 14 1934 *W. H. Bamford*


SECTION OF FIELD RECORDS
Review of Hydrographic Sheet No. 5369.
Outer Coast of Fire Island Beach, Great South Bay, L. I.,
New York.
Surveyed April 1933.
Instructions dated June 17, 1933 (Eyman)


Chief of Party - R. P. Eyman.
Surveyed by - J. C. Tison, Jr.
Protracted by - D. B. Bennett.
Soundings penciled by - H. L. Hawkins.
Verified by - W. H. Bamford.
Inked by - A. M. Uzefovich.

1. Records generally conform to the requirements of the Hydrographic Manual except that too few bottom characteristics were shown and in some cases notes were used instead of abbreviations. Par. 71 of Regulations.
2. The plan and extent of development conform to the regulations and satisfy the specific instructions.
3. Soundings are consistent. Moderate swell breaks in about 12 feet, and area inshore of this depth is not fully developed.
4. Depth curves can be drawn satisfactorily.
5. Junctions with H. 5367b, H. 5370 and H. 5371 are satisfactory.
6. Comparison. This is the basic survey of this area, filling in between hydrography shown on H. 203 (1848) and the shore. The depths in the overlapping area seems to be somewhat deeper at the present time. Chart 578 does not show details in the area covered by this sheet. Charts 1214 and 1215 are in substantial agreement with this survey though the 30 foot curve runs closer inshore than shown on the charts.
7. Field plotting was very well done. Datum note and part of the shoreline were added in the office.
8. Recommendation. This sheet (H. 5369) should supersede all previous information for charting the area covered by it.

No further surveys are deemed necessary at this time.


9. Reviewed by - R. J. Christman, March 20, 1934.


L. O. Colbert,
Chief, Section of Field Records.


Chief, Section of Field Work.

Examined and approved:


Chief, Division of Charts.


Chief, Division of H. & T.

POST-OFFICE ADDRESS: Chincoteague, Va.

*File with D. R.
H. 5369*

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:



DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

March 23, 1934.

To: The Director,
U. S. Coast and Geodetic Survey,
Washington, D. C.

From: Ensign James C. Tison, Jr.
U. S. Coast and Geodetic Survey,
Chincoteague, Va.

Subject: Hydrographic Sheet 5369, Field No. 2A.

Reference: No. 80-LE, dated March 21, 1934.

Since several Hydrographic Sheets were executed under my direction off the south shore of Long Island, it is impossible at this date to make exact statements as to bottom characteristics on any particular sheet. Considering the work as a whole, the following is recalled in this matter:

One instance of green mud as a bottom characteristic is recalled distinctly and as far as remembered was the only such one to come to my attention during the season. The locality was certainly off Fire Island, and probably in the general vicinity of Point of Woods or slightly West of there. As I remember, we were sounding in an area where depth curves were closer to shore than usual, forming a hole or bight of slightly deeper water than existed on either side. John Anderson, an excellent leadsman with many years of Coast Survey experience, was sounding at the time. He called my attention to the specimen of a soft, sticky mud which came up on the lead. It was dark and of a distinct green hue. This specimen was obtained on a single sounding only, but may have actually applied to several more in the locality.

The "hard mud" characteristics are indefinite in my memory as to number or approximate location. Several such characteristics called by John Anderson as leadsman on various occasions are remembered. At least twice during the season he called my attention to particles of dark gray mud sticking to the lead. He declared that he could tell hard mud from sand by the feel of the lead as he "bounced" it on the bottom in taking a sounding. The other leadsman was not as reliable as John Anderson, but I usually had John Anderson to stand by and watch him in order to prevent blunders. In view of the above I feel sure that hard mud characteristics are generally correct as noted in the record books. They are not representative, however, for the area as a whole, and should have been listed for only one or two soundings at a time.

When P. W. Sparks was recording, he always asked the leadsman for a check on anything unusual, and called it to my attention. It is regretted that adequate notes were not entered to clear up instances which appear doubtful. Such omissions are due to a failure on my part to check up on the recorder, probably on account of preoccupation with other details of the survey.

James C. Tison, Jr.
James C. Tison, Jr.,
Ensign, C. & G. Survey,

80-LE

March 26, 1934.

To: Ensign James C. Tison, Jr.,
U. S. Coast and Geodetic Survey,
Chincoteague, Virginia.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Hydrographic Sheet 5369, Field No. 2A.

Receipt is acknowledged of your letter of March 23, 1934, in reply to my letter of March 21. The statements made in your letter in regard to bottom characteristics found during the survey on the south shore of Long Island will probably be sufficient to cover the particular question raised in the review of hydrographic sheet 5369. The fact that an experienced leadsman with many years of Coast Survey experience took most of the soundings, will furnish an idea on the accuracy of bottom characteristics beyond that possible where the experience of the leadsman was in any doubt.

(Signed) J. H. HAWLEY

Acting Director.

80-LE

March 21, 1934.

To: Inspector, Coast and Geodetic Survey,
741 Customhouse,
New York, New York.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Review of H 5369.

Referring to a review of hydrographic sheet 2A, Fire Island Inlet to the eastward, executed by a party under Lieutenant Commander R. P. Eyman, it is noted that the figures for the positions were made so large in some instances that they might be mistaken for soundings whenever the sheet is photographed. It is desired to call this to your attention in order that you may instruct the draftsmen at the office when future protracting of hydrographic sheets is performed. In this particular instance, Mr. D. B. Bennett, is noted on the title sheet as having protracted the survey.

The datum on the survey was omitted from the sheet. The words "North American 1927 Datum" were added in this office below the name and geographic position of the triangulation station referred to.

(Signed) J. H. HAWLEY

Acting Director.

80-LE

March 21, 1934.

To: Ensign James C. Tison, Jr.,
U. S. Coast and Geodetic Survey,
c/o Postmaster,
Chincoteague, Virginia.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Review of H 5369.

From a review of hydrographic sheet 2A, which covers the area on the outside of Fire Island from the Inlet to the eastward, it is noted that the survey was very satisfactory. However, the statements and abbreviations for the bottom characteristics could have been improved upon.

In one day's work in three different places, characteristic is given as "hard mud", and also "green mud". This occurs in depths from 42 to 52 feet, located from 1/2 to 3/4 mile off the beach. As almost the entire area along this stretch of the shore has been noted in various surveys as "hard sand", it would be of interest to learn whether you recall a particular instance in which mud was brought up by the lead. For a matter of future reference it is desired that you advise whether you can recall for certainty these instances, and that they were checked by you.

As it may be difficult for you to recall these specific instances, a statement from you that these bottom characteristics can not now be identified, will be satisfactory. It is understood that you may have considerable difficulty in recalling this at this date, considering the difficulties in connection with the survey on the outside coast.

(Signed) J. H. HAWLEY

Acting Director.

cc to R. P. Eyman

Applied to drawing of chart No. 1215
of 9/27/34 H.E.M.

Applied to drawing of chart No. 1214
of Aug. 1934 H.E.M.