8012



Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, *Director*

*State:* New York

# DESCRIPTIVE REPORT

*Topographic* ~~Hydrographic~~ | *Sheet No.* 6012

LOCALITY

Great South Bay L.I.

Fire Island Inlet.

*19* 33

CHIEF OF PARTY

Raymond P. Eyman.

U. S. GOVERNMENT PRINTING OFFICE: 1929

8012

Descriptive Report
to
Accompany Topographic Sheet "C"

(a) General Description

This sheet covers the area around Fire Island Inlet and was done on the aluminum mounted sheet on the scale of 1-10,000. Instructions for this work were dated Feb. 25, 1933.

The outside shore line is low sand beach back of which are low sand dunes to the eastward of the Inlet, to the westward of the inlet the beach is generally flat with a number of summer cottages located just back of the highwater line.

The Bay side of the area is composed mostly of low marshy meadow land islands covered with marsh grass.

The area around Democrat Pt. is low and sandy and the shore line is very irregular and changes rapidly due to the strong currents and wave action.

Captree Island is mostly marshy and covered with meadow grass. A few shacks are scattered over the meadows. The northern section is very irregular and cut up with a number of small creeks and sloughs.

Oak Island is practically all meadow or marsh, part of which(on the north side) is covered with water at the higher tides. A number of summer cottages are located along the south side which are connected with a boardwalk.

Oak Beach consists of built up sections of summer homes, sand dunes and hydraulic fill from the various channels.

Just east of the windmill (1933)(which has been torn down) the outer beach is quite wide, being over 200 meters from the mean high water line back to the edge of the dunes; nearer the inlet the beach has been washing away in recent years and a number of cottages have been undermined and destroyed, others have been moved back farther from the beach. On the north side of Oak Beach are tidal mud flats.

The channel markers in the State Boat Channel are all alike and consist of creosoted telephone poles with a white top resembling an acorn, are about 10 to 12 feet high, and have a metal arrow about 4 feet from the top.

(b) Landmarks

The most conspicuous landmarks in this area are the watch towers at Fire Island and Oak Beach Coast Guard Stations, and the observation tower on Oak Island. The windmill at the western end of the sheet and the Sanitarium about $\frac{3}{4}$ of a mile to the E.N.Eastward have been destroyed during the season.

(c) Control

The control for this work consisted of a number of points furnished by the present seasons triangulation.

(d) Closures

Practically all the beach shore line was run by means of a heavy 100 meter length wire tape supplemented in a few cases by rod readings so that the closures were all kept very small. The closure on the 5 mile traverse from the Fire Island Lookout Tower west to the Inlet and return checked 2 mters short; on the 3 mile traverse from the same point to the east end of the sheet and return was 4 meters out for alignment and 0 for distance; from $Oak_2$ to the two flagpoles at Wa Wa Yanda Yacht Club about 5 meters out for alignment; from $Oak_2$ to Windmill 1933, 4 meters too long; other traverses were checked by 3 point fixes wherever possible and adjustments made when necessary.

All channel markers were located by intersection cuts from three triangulation stations. The buoys in Fire Island Inlet were located by a number of cuts from traverse stations along both sides, their positions however are subject to some variation due to the strong currents and scope of the mooring cables. The various shacks were located by cuts and rod readings.

The dune line was located by pacing the distance to the dunes from each 100 meter tape mark along the beach.

(e) Incomplete work

The entire shore line of Captree Island and the northern part of the other islands was not completely run in as it was thought this section could be best gotten from the air photos; traversing through the marshes in this area would be very slow and unsatisfactory.

(f) Junctions

This sheet joins sheet "D"(on 1-20,000) to the eastward and sheet "B"(also on 1-20,000) on the westward.

(g) Plane Table Positions

A list of plane table positions accompanies this report.

Respectfully submitted,

Wm.D. Ayers, Topographer
R.P.Eyman, Chief of Party

Raymond R Eyman.

PLANE TABLE POSITIONS Topographic Sheet "C"

| Object and description. | | Latitude | | Meters D.P. | Longitude | | Meters D.P. |
|---|---|---|---|---|---|---|---|
| BELL BUOY | Large rocker buoy with bell | 40° | 36' | (89) 1761.7 | 73° | 18' | (499.1) 911.3 |
| "A" BUOY | Black & white can | 40 | 37 | (1376.5) 474.2 | 73 | 18 | (536.3) 874 |
| "B" BUOY | ditto | 40 | 37 | (1010.7) 840 | 73 | 18 | (675.9) 734.3 |
| "C" BUOY | ditto | 40 | 37 | (578.8) 1272 | 73 | 18 | (824.4) 585.7 |
| "D" BUOY | ditto | 40 | 37 | (110.8) 1740 | 73 | 18 | (852.7) 557.4 |
| "E" BUOY | ditto | 40 | 38 | (1656.4) 194.4 | 73 | 18 | (931.1) 478.9 |
| "F" BUOY | ditto | 40 | 38 | (1466.0) 384.8 | 73 | 18 | (1383) 27 |
| "G" BUOY | ditto | 40 | 38 | (1477) 373.8 | 73 | 17 | (568.4) 841.6 |
| "I" BUOY | Black can | 40 | 38 | (1744.3) 56.5 | 73 | 17 | (867.3) 542.7 |
| "H" BUOY | Black & white can | 40 | 37 | (224.5) 1626.3 | 73 | 17 | (1089.3) 320.8 |
| "I" BUOY | ditto | 40 | 37 | (561.0) 1289.8 | 73 | 16 | (628.3) 781.8 |
| "1-B" BUOY | Black can | 40 | 37 | (580.6) 1270.2 | 73 | 16 | (83.5) 1326.5 |
| "3-B BUOY | ditto | 40 | 37 | (386.8) 1464 | 73 | 15 | (433.4) 976.8 |
| "No.4" BUOY | Red Nun | 40 | 48 | (1659) 191.8 | 73 | 15 | (1151.6) 258.8 |
| "MUD" | Black banner | 40 | 38 | (1663) 187.8 | 73 | 19- | -- 112.5 |
| FLAG | Black banner | 40 | 38 | (1440.3) 406.5 | 73 | 18 | (660) 750 |
| TOWER | Watch Tower | 40 | 38 | (1293.8) 557.6 | 73 | 17 | (114.6) 1295.3 |

| Object and description. | | Latitude | | Meters D.M. | Longitude | | Meters D.P. |
|---|---|---|---|---|---|---|---|
| | Red Circular Tower - private | | | (1225.5) | | | (910.2) |
| RED | house. | 40° | 38' | 625.3 | 73 | 17 | 499.6 |
| | Chimney-green | 40 | 38 | (1245.5) | | | (109.3) |
| GREEN | roofed house | | | 605.3 | 73 | 16 | 1300.5 |
| | Old marble Babylon- | | | (1526.8) | | | (179.9) |
| MON | Town monument. | 40 | 38 | 324.0 | 73 | 15 | 1230.0 |
| | Black | | | (1483.1) | | | (326.8) |
| AX | banner | 40 | 38 | 367.7 | 73 | 15 | 1081.2 |
| | Black | | | (1444.0) | | | (921.5) |
| BAT | banner | 40 | 38 | 406.8 | 73 | 15 | 488.4 |
| | Black banner on | | | (1134.0) | | | (1342.9) |
| CAB | telephone pole | 40 | 38 | 716.8 | 73 | 15 | 67.0 |
| | Black and white | | | (1546.8) | | | (4.47) |
| DOG | banner on point | 40 | 38 | 1304.0 | 73 | -15- 14 | -- |
| | Black & white band | | | (262.8) | | | (1014) |
| POLE | telephone pole | 40 | 37 | 1588.0 | 73 | 14 | -- |
| | Blk & Wh.ban on sign | | | (386.3) | | | (440) |
| SIGN | "Fire Is.State Park" | 40 | 37 | 1469.5 | 73 | 14 | -- |
| | Wh.Diamond Ban. on | | | (842.6) | | | (1157.6) |
| TRY | telephone pole | 40 | 37 | 1008.2 | 73 | 15 | 252.5 |
| | Wh.Ban.on inlet side | | | (700.2) | | | (272) |
| ELK | of beach | 40 | 37 | 1150.6 | 73 | 16 | 1138 |
| | Black signal | | | (406.3) | | | (893.4) |
| FLAG | flag | 40 | 37 | 1444.5 | 73 | 17 | 516.6 |
| | Tide gage and | | | (381.3) | | | (195.4) |
| GAGE | staff | 40 | 37 | 1469.5 | 73 | 17 | 1214.6 |
| | Old Wreck | | | (1639.0) | | | (951.2) |
| in Ocean east of inlet. | | 40 | 37 | 211.8 | 73 | 17 | 459.2 |
| | Old Building | | | (1309.6) | | | (662.9) |
| MIDDLE | near DRAKE | 40 | 38 | 541.2 | 73 | 19 | 747 |
| | USCG Half-way | | | (1294.2) | | | (745.6) |
| | House | 40 | 38 | 556.6 | 73 | 19 | 664.3 |

| Object and description. | Latitude | Meters D.M. | Longitude | Meters D.P. |
|---|---|---|---|---|
| Flagpole east (2000') of Chy NOT Sanitarium. | 40° 38' | (850.8) 1000 | 73° 18' | (988.3) 421.5 |
| Flagpole on observation tower RAT | 40 38 | ~~(938.8)~~ 861.0 | 73 17 | (151.2) 1258.7 |
| Flagpole near last named | 40 38 | (962) 888.8 | 73 17 | (189.7) 1220.2 |
| Flagpole west obs.tower PAN | 40 38 | (889.4) 961.4 | 73 17 | (410.7) 999.2 |
| Shack,east end Oak Island | 40 38 | (315.8) 1535 | 73 17 | (612.4) 797.3 |
| ditto | 40 38 | (281.3) 1569.5 | 73 17 | (597.5) 812.2 |
| ditto | 40 38 | (144.5) 1706.3 | 73 17 | (542.2) 867.5 |
| Flagpole on Captree Is. | 40 38 | (611.3) 1239.5 | 73 16 | (951.4) 458.4 |
| ditto | 40 38 | (564.3) 1286.5 | 73 16 | (836.1) 573.7 |
| ditto | 40 38 | (455.6) 1395.2 | 73 16 | (568.8) 840.1 |
| ditto on dock | 40 38 | (482.2) 1368.6 | 73 16 | (508.1) 901.7 |
| ditto on point | 40 38 | (447.6) 1403.2 | 73 16 | (301.8) 1108.0 |
| Shack (Middle) | 40 38 | (100.8) 1750.0 | 73 16 | (92.0) 1317.7 |
| Boat House, N.E. Corner | 40 38 | (65.0) 1785.8 | 73 17 | (1001.9) 407.8 |
| ditto SE corner. Large boathouse | 40 38 | (87.0) 1763.8 | 73 17 | (992) 417.7 |
| ditto SW corner. w.end Captree Island & SE of state boat channel. | 40 38 | (72) 1778.8 | 73 17 | (965.5) 444.2 |

(last three, all same building)
with first on succeeding page)

PLANE TABLE POSITIONS Topographic Sheet "C"

| Object and description. | Latitude | Meters D.M. | Longitude | Meters D.P. |
|---|---|---|---|---|
| Boat house NW corner. | 40° 38' | (51.9) 1798.9 | 73° 17' | (974.4) 435.3 |
| House near boathouse. | 40 38 | (107.4) 1743.4 | 73 17 | (951.6) 458.1 |
| Shack near boathouse | 40 38 | (95) 1755.8 | 73 17 | (977.4) 432.3 |
| Shack (Middle) | 40 39 | (1579.8) 271 | 73 16 | (35) 1374.7 |
| Shack,N'ly side side Captree | 40 39 | (1571.7) 279.1 | 73 16 | (34) 1375.7 |
| Shack NW of WaWaYanda | 40 39 | (1401.2) 449.6 | 73 15 | (1111.8) 297.8 |
| Boathouse (US C.G.) | 40 37 | (860.3) 990.5 | 73 15 | 566 (844.1) |
| Building N of WaWa Yanda | 40 39 | (1700.3) 150.5 | 73 14 | (521) -- |
| Small building S WaWa Yanda | 40 39 | (1825.3) 25.5 | 73 14 | (464.5) - |
| Building (middle) SW WaWa Yanda | 40 39 | (1845.9) 4.9- | 73 14 | (382.5) -- |
| Channel Marker | 40 38 | (220.8) 1630.0 | 73 19 | -- 413 |
| Channel Marker | 40 38 | (167.8) 1683.0 | 73 19 | -- 256 |
| ditto | 40 38 | (96) 1754.8 | 73 18 | (8) 1401.7 |
| ditto | 40 38 | (55) 1795.8 | 73 18 | (220.9) 1188.8 |
| nditto | 40 38 | (41) 1809.8 | 73 18 | (521.9) 887.8 |
| nditto | 40 38 | (48) 1802.7 | 73 18 | (873.8) 535.9 |
| ditto | 40 38 | (60.9) 1781.9 | 73 18 | (1193.9) 215.8 |
| ditto | 40 38 | (70.8) 1780.0 | 73 17 | (117.9) 1291.8 |

PLANE TABLE POSITIONS Topographic Sheet "C"

| Object and description. | Latitude | Meters D.M. | Longitude | Meters D.P. |
|---|---|---|---|---|
| Channel Marker | 40° 38' | (93.0) 1751.8 | 73° 17' | (506.2) 903.5 |
| ditto | 40 38 | (95) 1755.8 | 73 17 | (598.7) 811.0 |
| ditto (with signboard) | 40 39 | (1834.8) 16 | 73 17 | (573.1) 836.6 |
| ditto | 40 39 | (1719.8) 131 | 73 17 | (605.5) 804.2 |
| ditto | 40 39 | (1483.9) 366.9 | 73 17 | (455.5) 954.2 |
| ditto | 40 39 | (1324.8) 526 | 73 17 | (435.5) 974.2 |
| ditto | 40 39 | (1197.8) 653 | 73 17 | (344.2) 1065.5 |
| ditto | 40 39 | (1090.8) 760 | 73 17 | (323.7) 1086 |
| ditto | 40 39 | (970.8) 880 | 73 17 | (218.7) 1191.0 |
| ditto | 40 39 | 814.5 1036.3 | 73 17 | (189.7) 1219.8 |
| ditto | 40 39 | (577.0) 1273.8 | 73 17 | (72.0) 1337.5 |
| ditto | 40 39 | (213.8) 1637.0 | 73 18 | (1304.5) 105 |
| ditto | 40 40 | (1710.8) 140 | 73 18 | (1124.6) 284.9 |

(All the above channel markeds consist of a section of telephone pole painted black with white acord shaped on top - metal arrow.)

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

# 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. C

REGISTER NO.

State New York

General locality Great South Bay, Long Island, L. I.

Locality Fire Island Inlet

Scale 1:10000 Date of survey May, 19 33

Vessel Shore Party #2 Project HT-132

Chief of party Raymond P. Eyman

Surveyed by Wm. D. Ayers

Inked by Wm. D. Ayers

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated Feb. 25, 19 33

Remarks: For location of hydrographic signals and control points for air photos

GPO

REVIEW OF TOPOGRAPHIC SURVEY No. 6012

Title (Par. 56) Great South Bay, L.I. Fire Island Inlet, New York

Chief of Party R.P. Eymen Surveyed by W.D. Ayers Inked by W.D. Ayers

Ship Shore party Instructions dated Feb. 25, 1933 Surveyed in May 1933

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓

2. The character and scope of the survey satisfy the instructions. ✓

3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓

4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.) None

5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) None

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None submitted

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) —

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓

10. The span, draw and clearance of bridges are shown. (Par. 16c.) None on sheet.

11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~

12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

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13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. ~~The~~ No descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) A list of planetable positions is attached to Desc. Rep. general

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) filed as Letter 707/1933. A few Landmarks are listed in Desc. Rep. but no coordinates are given.

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.) seconds in meters only. Datum name was added in the office

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report. ~~after review by~~

24. Remarks: Aluminum topo sheets have a tendency to curl in the excessive dryness of steam heated rooms. The paper is beginning to split from the mounting of T 6012.

Reviewed in office by R.J. Christman, Feb. 27, 1934

Examined and approved:

L.O. Colbert
Chief, Section of Field Records

Hawks Borden
Chief, Section of Field Work

Chief, Division of Charts

G Rude
Chief, Division of Hyd. and Top.

R-317

Form 567
Rev. Jan. 1933

DIVISION OF CHARTS, FILE NO._____

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

# LANDMARKS FOR CHARTS

Washington Office,

May 15, 1935, 193

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

From data obtained by Comdr. G. D. Cowie April 24-26, 1935.

Plotted on this topo sheet and scaled by J.A.McCormick. *Chief of Party.*

| DESCRIPTION | POSITION | | | | DATUM | METHOD OF DETERMINATION | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|
| | LATITUDE | | LONGITUDE | | | | |
| | ° ′ | D.M. METERS | ° ′ | D.P. METERS | | | |
| New location of Channel Markers on T-6012. | | | | | | | |
| Channel Marker | 40 39 | 366 | 73 17 | 956 | NA 1927 | Topo | 578 |
| " " | 40 38 | 1719 | 73 17 | 507 | " | Sextant | " |
| " " | 40 38 | 1655 | 73 17 | 627 | " | " | " |
| " " | 40 38 | 1509 | 73 17 | 272 | " | " | " |
| " " | 40 38 | 1390 | 73 17 | 8 | " | " | " |
| " " | 40 38 | 1432 | 73 16 | 1291 | " | " | " |
| " " | 40 38 | 1259 | 73 16 | 1140 | " | " | " |
| " " | 40 38 | 1120 | 73 15 | 1374 | " | " | " |
| " " | 40 38 | 1015 | 73 15 | 1038 | " | " | " |
| " " | 40 38 | 1021 | 73 15 | 445 | " | " | " |
| " " 40 38 | 40 38 | 1014 | 73 15 | 309 | " | " | " |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive indentification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) Offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

U.S. GOVERNMENT PRINTING OFFICE: 1934 25379

Form 567
Rev. Jan. 1933

DIVISION OF CHARTS, FILE NO._____

**DEPARTMENT OF COMMERCE**

**U.S. COAST AND GEODETIC SURVEY**

# LANDMARKS FOR CHARTS

Washington Office,

May 15, 1935. , 193

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

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From data obtained by Comdr. G. D. Cowie April 24-26, 1935.

Plotted on this topo sheet and scaled by J.A.McCormick *Chief of Party.*

| DESCRIPTION | POSITION | | | | DATUM | METHOD OF DETERMINATION | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|
| | LATITUDE | | LONGITUDE | | | | |
| | ° ′ | D.M. METERS | ° ′ | D.P. METERS | | | |
| Channel Markers to be deleted on T-6012 | | | | | | | |
| Channel Marker | 40 36 | 1633 | 73 19 | 413 | NA 1927 | | 578 |
| " " | 40 38 | 1022 | 73 14 | 990 | " | | " |
| " " | 40 38 | 1130 | 73 14 | 1280 | " | | " |
| " " | 40 38 | 1123 | 73 15 | 262 | " | | " |
| " " | 40 38 | 1290 | 73 16 | 1220 | " | | " |
| " " | 40 38 | 1771 | 73 17 | 588 | " | | " |
| " " | 40 38 | 1662 | 73 17 | 757 | " | | " |
| | | | | | | | |
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| | | | | | | | |

A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

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The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) Offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

U.S. GOVERNMENT PRINTING OFFICE: 1934 25379