

9300

Diag. Cht. No. 1215-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PHOTOGRAMMETRIC - SHORELINE

Field No. Ph-54(49) C Office No. T- 9300

LOCALITY

State NEW YORK

General locality GREAT SMITH BAY

Locality CHICO STATE PARK TO CAPTAIN ISLAND

1947 50

CHIEF OF PARTY

E. R. McCarthy, Chief of Field Party
H. A. Paton, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE Aug- 22 - 1951

9300

DATA RECORD

T - 9300

Project No. (II): Ph-54(49)C

Quadrangle Name (IV):

Field Office (II): Babylon, N. Y.

Chief of Party: E. R. McCarthy

Photogrammetric Office (III):

Baltimore, Md.

Officer-in-Charge:

Hubert A. Paton

Instructions dated (II) (III):

Field: 20 October 1949

Office: 3 February 1950

Copy filed in Division of
Photogrammetry (IV)

Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 4-19-50

Date reported to Nautical Chart Branch (IV):

Applied to Chart No. 578

Date: 7-11-51

Date registered (IV): 19 July 1951

Publication Scale (IV): 1:10000

Publication date (IV):

Geographic Datum (III): N. A. 1927

Vertical Datum (III):

MHW

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): CAP, 1933

Lat.: 40° 39' 24.146" (744.8m)

Long.: 73° 16' 15.349" (360.6m)

Adjusted

~~Unadjusted~~

Plane Coordinates (IV): Lambert

State: N.Y.

Zone: N.Y., L.I.

Y= 157,933.25

X= 2,202,291.40

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

Areas contoured by various personnel
(Show name within area)
(II) (III)
Shoreline

DATA RECORD

Field Inspection by (II): W. H. Shearouse
J. A. Clear
J. T. Beecher
H.R. Spies H.R. Moore

Date: Jan. 1950

Planetable contouring by (II):

Date:

Completion Surveys by (II): *None*

Date: *—*

Mean High Water Location (III) (State date and method of location): 9-23-47, 10-20-47
Identified on field photographs

Projection and Grids ruled by (IV): T.L.J.

Date: 2/9/50

Projection and Grids checked by (IV): H.D.W.

Date: 2/9/50

Control plotted by (III): B. Wilson

Date: 2/14/50

Control checked by (III): A.K. Heywood

Date: 2/15/50

Radial Plot ~~on Stereoscopic~~
~~Instrument checked by (III):~~ A.C. Rauck
D.M. Brant

Date: 2/24/50

Planimetry
Stereoscopic Instrument compilation (III):

Date:

Contours

Date:

Manuscript delineated by (III): Jack Honick

Date: 4/6/50

Photogrammetric Office Review by (III): J.W. Vonasek

Date: 4/17/50

Elevations on Manuscript
checked by (II) (III): *—*

Date: *—*

U.S. Department of Agriculture, Single lens

Camera (kind or source) (III):

Number	Date	Time	Scale	Stage of Tide
ASA-7D-115 to 7D-118	10-20-47	1256	1:10,000	3.3'
ASA-3D-118 to 3D-121	9-23-47	1039	1:10,000	2.6'
ASA-3D-123, 3D-124	9-23-47	1042	"	1.6'
44-C-2943	8-14-44	1345	"	2.2'
ASA-7D-51	10-11-47	1325	"	1.1'

Tide (III)

From Predicted Tide Tables

Reference Station: Sandy Hook
 Subordinate Station: Fire Island Breakwater
 Subordinate Station: Democrat Pt Fire Island Inlet

Ratio of Ranges	Mean Range	Spring Range
1	4.6	5.6
0.9	4.1	5.0
0.6	2.6	3.1

Washington Office Review by (IV): *Everett H. Ramey*Date: *13 June 1950*Final Drafting by (IV): *Lucas, Day*Date: *Sept. 18, 1950*Drafting verified for reproduction by (IV): *C. Kupiec*Date: *Dec. 27, 1950*Proof Edit by (IV): *Everett H. Ramey*Date: *5 Feb 1951*Land Area (Sq. Statute Miles) (III): *7*Shoreline (More than 200 meters to opposite shore) (III): *29*Shoreline (Less than 200 meters to opposite shore) (III): *24*Control Leveling - Miles (II): *None*Number of Triangulation Stations searched for (II): *7*Recovered: *4*Identified: *4**Number of BMs searched for (II): *1 Tidal BM*Recovered: *1*Identified: *1*Number of Recoverable Photo Stations established (III): *8 (2 Lts. are 3rd order stations)*Number of Temporary Photo Hydro Stations established (III): *4*

Remarks:

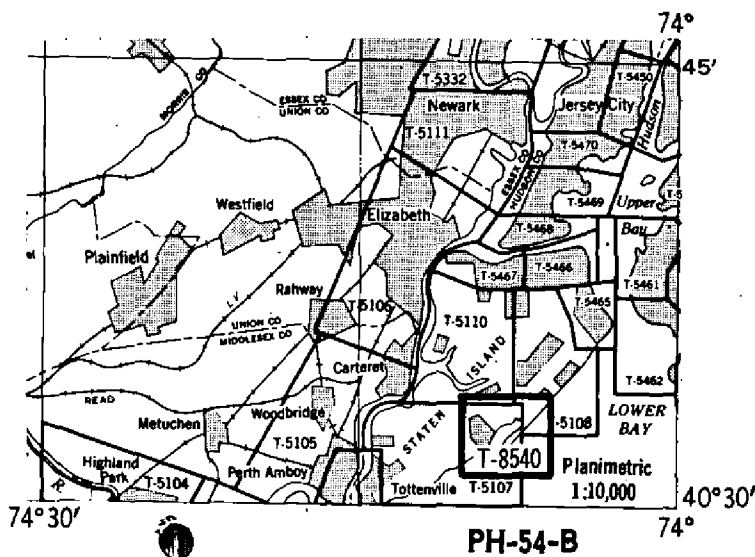
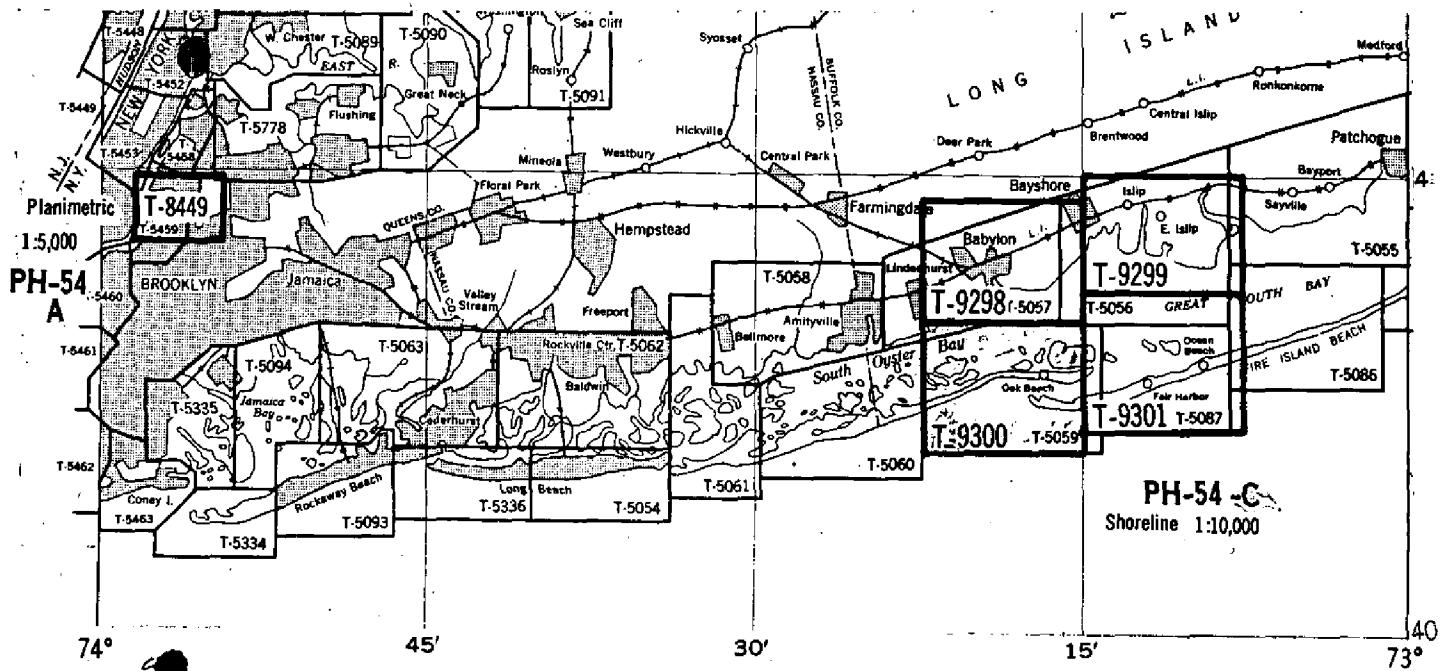
* Includes one new established station

PLANIMETRIC AND SHORELINE MAPPING PROJECT

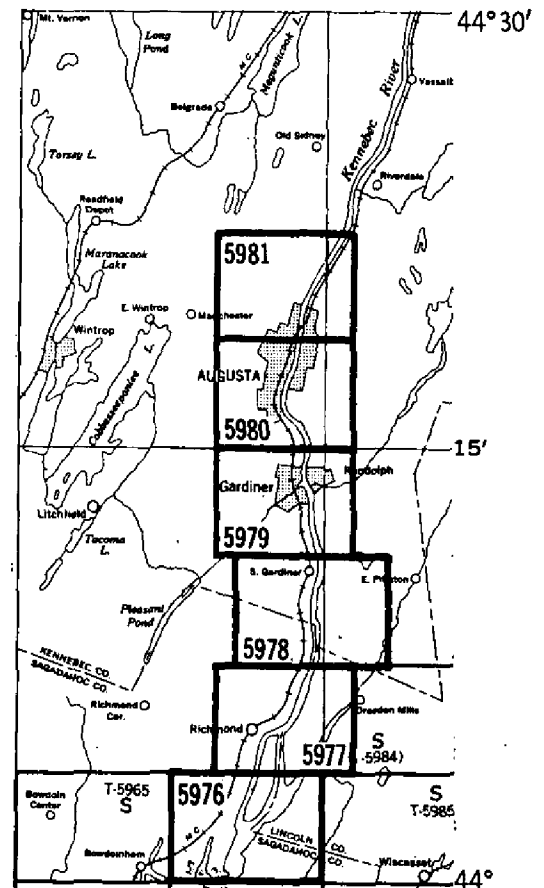
PH-54 (49)

PH-51 (49)

NEW YORK, Long Island, and Staten Island



PH-51 (49)
MAINE, Kennebec River
SHORELINE
1:10,000



Summary to Accompany T-9300

Shoreline map T-9300 is one of four similar maps in project Ph-54(49)C and is the southwesterly map of this project. It covers an area of Great South Bay and Fire Island Inlet and land area adjacent.

This is a graphic compilation project, in advance of hydrographic surveys to be done in this area at an early date. The field operations preceding compilation included inspection of shoreline and along-shore areas and the establishment of some additional horizontal control.

The manuscript is at a scale of 1:10,000 and shows shoreline, alongshore features and photo-hydro stations. It covers 4' in latitude by $7\frac{1}{2}$ ' in longitude.

Field Inspection Report

2. Areal field inspection.--The south shore of Long Island is generally flat and does not rise to more than an average of 15 feet above sea level. There are many small boat harbors and yacht basins, most of them being cut channels. Within these channels there are numerous slips to accommodate small, pleasure boats.

The vegetation along shore is ordinary marsh with many areas of "cattail" marsh which appears on the photographs as a thick, slate coloring, being mottled in some instances. This reedy, plumed growth is very thick--almost impenetrable--and reaches a height of ten feet or more. The shoreline in front of it is almost invariably characterized by a low sand ridge, which is 15 or 20 feet wide and about 2-3 feet above mean high-water. This shoreline is fast land but subject to rapid change in storm tides. Native information has it that once the sand ridge is washed away it soon builds again, due probably to the density of the root formation of the "cattail" marsh. Immediately back of the ridge the ground is wet and spongy. The ordinary low marsh is lighter gray in color. This condition also exists on some of the islands in Great South Bay.

Vegetation on the higher ground consists of brush and mixed deciduous trees and pine, some areas being heavily wooded, and are quite distinct on the photographs.

The off-~~lying~~^{lying} islands are flat, not rising to more than a maximum of 10 feet above mean high-water. The exceptions to this are the island on which the village of Oak Beach is located and Great South Beach Island--commonly known as Fire Island. There are numerous sand dunes here, breaking the flatness of the terrain.

Vegetation is marsh, grass and brush on these islands. Trees are practically non-existent. A few are to be found in the villages of Saltaire, Ocean Beach and Point-O-Woods, on Great South Beach.

There are no roads on Great South Beach; nor are there any streets. The several villages are laid off by sidewalks of cement or boards. Mostly summer residents

live here. A few of these walks will accommodate light Jeep traffic or other small motorized vehicles. Indeed, automobiles are not permitted and the few found there are strictly for business purposes. A meandering sand trail connects the villages but is used mostly by Coast Guard personnel.

(Worthy of noting is that the island of Great South Beach is constantly building westward. Local historians say Fire Island Lighthouse was built on its western tip about 1850. The western end is now approximately 5 miles away.)

Photographic coverage of Great South Beach, in the vicinity of the village of Point-O-Woods, is inadequate, no photograph actually reaching the eastern project limit. In other areas the photographs are fuzzy.

Shoreline, and along shore inspection is complete but not as thorough as it would be under better working conditions. The weather has been bad throughout the time of inspection.

3. Horizontal control.--The following supplemental control stations were established by theodolite method:

Map No. T-9298

None.

Map No. T-9299

OAKDALE, 1950. (A monumented triangulation station and 2 reference marks, from which a substitute station was established by traverse in the area indicated on the project diagram at approximate Lat. $40^{\circ}44.5'$, Long $73^{\circ}08.5'$.) *See Item 67*

BUMS, 1950. (A monumented topographic station established in accordance with the Acting Director's letter of 8 December 1949, reference 731-rb. This station is near lost station BER, 1933.) *See Item 67*

Map No. T-9300

DEMOCRAT, 1949. (A triangulation station disk and 2 reference marks, set in drill holes in east end of rock seawall on Democrat Point, in the area designated on the project diagram.)

DIPP, 1950. (A monumented topographic station

established near lost station CHANNEL MARKER FLAG, 1933, in accordance with the Acting Director's letter.)

BUSS, 1950. (A monumented topographic station established near lost station DRAKE, 1933, in accordance with the Acting Director's letter.)

Map No. T-9301

SIDEWALK, 1949. (A triangulation station disk and 2 reference marks, set in drill holes in concrete sidewalk near Clam Pond, in area designated on project diagram.)

WIND, 1949. (Chiseled cross in foundation pier. Station established to strengthen plot in the event the doubtful identification of destroyed station WEST FIRE ISLAND, FLAGPOLE, 1933, proves valueless.)

FILL, 1949. (A topographic station marked by an 8 foot cedar post, projecting 3 feet. Established in lieu of lost station ISLAND 2, 1933. It was not deemed practical to establish a monumented station here as the small island is subject to wind and tide erosion.

Following is a list of "lost" Coast and Geodetic Survey stations which have been reported on Form 526:

Map No. T-9298

AMITY, 1933	CONKLIN PT. 3, 1933
BABYLON, BAPTIST CH. SP., 1875	OUTERMOST MARKER,
BABYLON SCHOOL, 1909	1933

Of these the following were identified for use in the plot:

AMITY, 1933.--R. M. No. 1 was recovered and occupied, from which a substitute station was established.

BABYLON SCHOOL, 1909.--The pyramidal roof has been removed, destroying the station, but the tower remains and was pricked.

CONKLIN POINT 3, 1933.--Station and R. M. No. 3 were washed out. R. M. No. 1 and No. 2 recovered. No. 1 occupied, from which a sub. station was established.

Map No. T-9299

BER, 1933
GREE, 1933
GREEN PT. 3, 1930
NORTH RANGE, 1933

RADIO, 1932
LA SALLE, TANK, 1933
W. SAYVILLE, TALL
WATER TANK, 1932

Of these the following was identified for use in the plot:

GREE, 1933.--R. Ms. No. 2 and 3 recovered. R. M. No. 3 was occupied, from which a substitute station was established.

Map No. T-9300

CHANNEL MARKER FLAG, 1933
DRAKE, 1933
FIRE ISLAND, LOOKOUT TOWER, 1933

OAK 2, 1933
STRONG 2, 1933

STRONG 2, 1933, was found broken off, but in approximate position. It was occupied to establish a substitute station. In addition, R. M. No. 2 was occupied to establish a second substitute station.*

* Same sub. sta. established from the two points. ENR

Map No. T-9301

ISLAND 2, 1933
POINT-O-WOODS, FLAGPOLE,
1933

W. FIRE ID., FLAGPOLE, 1933
WHIG, W. FLAGPOLE, 1933

WEST FIRE ISLAND, FLAGPOLE, 1933, was found broken off. The base, projecting about 10 feet, was recovered and pricked direct. The accuracy is extremely doubtful.

4. Vertical control.--Inapplicable.
5. Contours and drainage.--Inapplicable.
6. Woodland cover.--Discussed under item 2.
7. Shoreline and alongshore features.--Refer to item 2 for a discussion of mean high-water line along the narrow sand ridge bordering marsh land.

Small stretches of mean high-water line were located

or checked, by planetable method directly on the photographs.

See Item 66

The foreshore is composed of sand throughout the project.

Piers and other shoreline structures built since photography have been added to the photographs by planetable method or by taping and plotting.

The shore ends of submerging cables have been indicated on the photographs. Underwater, they are reported to follow the channels.

8. Offshore features.--The low-water line was located by chaining or pacing from identifiable topographic features, or symbolized as approximate.

Shoals are numerous in Great South Bay, hydrography being required to develop their limits.

9. Landmarks and aids.--Form 557 is being submitted for landmarks and aids.

See Items 37 & 68

The location of lights 17 and 31, at Fire Island Inlet, has been determined by theodolite method.

See Item 67

One light exists for which no location by theodolite was attempted. The work to do so was overlooked while the party and equipment were on Fire Island and it was not deemed practical to return to the island for that work, as the island is rather inaccessible at this time of year. The light has been identified on photograph

3D-121 - FIRE ISLAND BREAKWATER LT. Form 524 filed. *See Item 68*

The Long Island State Park Commission maintains a large number of semi-permanent aids in the State Boat Channel just north of Oak Beach, and westward to Jones Beach. A letter was written to the Supervisor, Eastern District, Coast and Geodetic Survey, at New York City, requesting his opinion as to whether these aids should be located by this party in view of the proposed hydrographic survey to be undertaken in the Spring of 1950. His answer, in part, is as follows:

"No attempt has ever been made by Coast and Geodetic Survey personnel to locate the fixed aids maintained by the Long Island

State Park Commission in Hempstead, South Oyster, and Great South Bays. They are privately established and maintained without permit or supervision from Federal authorities, and have been charted by the Coast and Geodetic Survey as a courtesy to the local inhabitants. The Long Island State Park Commission furnishes this office with a list of positions with characteristics for each of the lighted aids each spring. The unlighted day marks have never been charted. The number of lighted aids varies from year to year as do their positions. This is due to relocation to reflect seasonal changes in channel locations and depths.

"The location of these items by your party would be a waste of time in my opinion. While it is desirable that existing aids be charted, in this instance, the location should be deferred for accomplishment by the hydrographic party after the new spring locations will have been established."

10. Boundaries, monuments and lines.--Inapplicable.

11. Other control.--STACK, 1949, was identified to Landmark be located as a topographic station by radial plot. *falls on T-9298. ENR*

Photo-hydro stations were established in accordance with project instructions. It is believed the hydrographic party will not have to establish extensive additional control, as the many natural objects located throughout the area are visible from almost any location.

12. Other interior features.--Roads along the shoreline only, have been classified.

There are only a few small bridges. These are over non-navigable water, having skiff clearance only.

13. Geographic names.--A special report is submitted with the data for this sub-project.

List for T-9300 attached to this report. ENR

14. Special reports and supplemental data.--No supplemental data is submitted.

The geographic names report is the only special report.

All data have been submitted to the Washington Office on one transmitting letter, of which this report is a part.

Respectfully submitted,
26 January 1950

William H. Shearouse
William H. Shearouse,
Cartographer

WHS

PROJECT PH-54(49)C

PHOTOGRAMMETRIC PLOT REPORT

21. AREA COVERED

The area covered is part of the Great South Bay area of Long Island in the vicinity of Babylon, Bay Shore, and Fire Island. Four shoreline surveys are to be compiled, T-9298, T-9299, T-9300, and T-9301.

22. METHOD

The radial plot was run directly on the 1:10,000 acetate manuscript sheets using vinylite templates. The manuscripts were furnished with a polyconic projection for each half-minute of latitude and longitude and the N.Y.L.I. grid. Control points were plotted using 1/4 meter bar and beam compass. Most substitute points were plotted graphically. A few were computed and then plotted.

The following single lens photographs of the Department of Agriculture, taken in 1947, were used:

7D-51 to 57	3D-159 to 162
7D-73 to 78	3D-165 to 167
7D-113 to 117	3D-199 to 202
3D-115 to 121	3D-206 to 208
3D-123 to 129	

One flight of Coast and Geodetic Survey photographs 44-C-2943 to 48 taken in 1944 were also used in the radial plot.

Horizontal control was identified and pricked on the office photographs from the field identification. Pass points were selected and pricked so that most photographs would have at least six control points.

Photograph centers and/or ^{azimuth}~~flight~~ lines were transferred along the line of flight but generally not across flights. Insufficient side lap made this impractical. An exception to this was between the east-west flights of the southern portion of the project (7D-51 to 56 and 44-C-2943 to 2948). Here cross flights were transferred where possible.

The master template was used to check paper distortion in the photographs. Since they appeared to be relatively free of distortion, no adjustment was made when making the templates for the radial plot.

22. METHOD (continued)

The four sheets were matched and taped together. The plot was begun on T-9298 and progressed westward and then southward. Templets having the best fixes were, of course, put down first. Forty-nine (49) horizontal points were used in the plot. Of these only two could not be held (See layout sketch attached)*. Many templets were fixed by holding intersections already established. Flight lines were used advantageously. The intersections for pass points thus obtained were pricked through to the acetate sheets. The photograph centers pricked through were from the lay of the individual templets. ** discussed in Item 23, below.*

23. ADEQUACY OF CONTROL

Horizontal control complied with project instructions except that geographic positions for BUMS, 1950, OAKDALE, 1950, and SUB. PT. OAKDALE were not available to the compilation office. Field data for the computation of these positions did not check. Refer to letter No. 7312-aal, dated 15 Feb. 1950 from the Director to Commander H. A. Paton, regarding geographic positions, Project Ph-54(49). As these stations were in areas of sparse control the lack of them was unfortunate. Nevertheless, scaled geographic positions from intersections obtained in the radial plot were furnished the Washington Office at their request. It is believed that they may aid in computing satisfactory positions for these stations from the field measurements and at the same time be used as a check on the accuracy of the radial plot in their vicinity. *See Item 67.*

Regarding the two control points not held in the plot, OCEAN BEACH COAST GUARD TOWER, 1933, was reported by the field inspection party as probably rebuilt and moved.* The point would not hold within about 2 mm. A scaled position from the radial plot will be submitted on form 524.

** Information reported on Form M-2226-12. See also Item 67.*

SUB POINT HOLE could not be held within approximately 1.5mm. Its radially plotted position is south of the plotted geographic position. All available data were thoroughly investigated. No clue to any error was evident. As other control and flight lines in the area held well, the point was disregarded. *See Item 67*

24. SUPPLEMENTAL DATA

Inapplicable.

25. PHOTOGRAPHY

Photographic coverage was adequate although side lap was generally less than thirty percent. It was inadequate for establishing points along lines of flight.

26. ACCURACY

It is believed that the established positions of all pass points are within 0.5mm of their true geographic positions.

Respectfully submitted
2 March 1950



Henry P. Eichert
Cartographer (Photo.)



LEGEND FOR LAYOUT SKETCH OF HORIZONTAL CONTROL

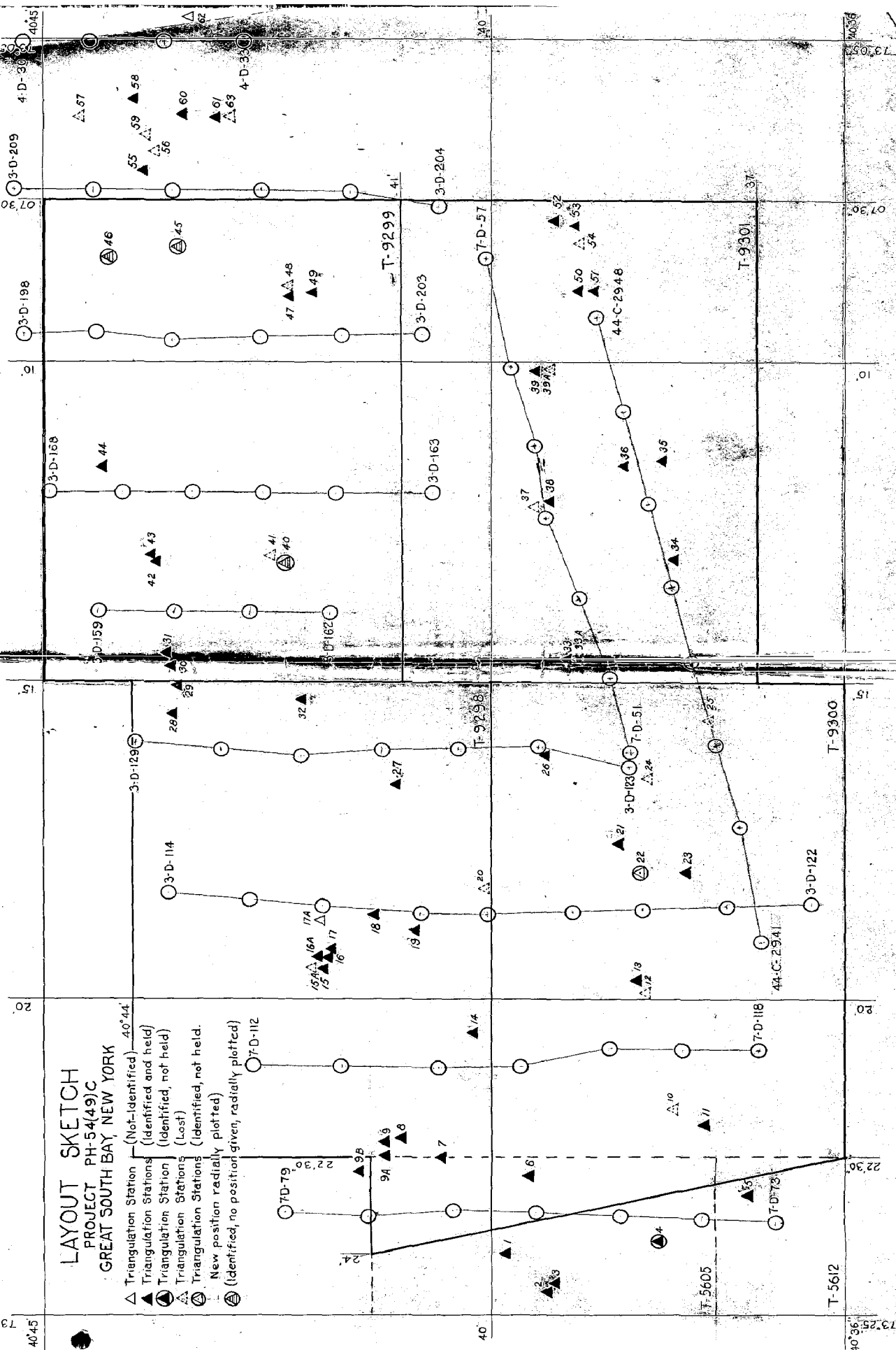
PROJECT Ph-54(49)C

1. OBSERVATION TOWER, 1933
2. NEW, 1909
3. AMITY, R.M. No. 1, 1933
4. HOLE, 1909
5. LIFE, 1933
6. STRONG 2, R.M. No. 2, 1933
7. CUPOLA, (S.W. LINDENHURST), 1875
8. CUPOLA, (LINDENHURST H.S.), 1933
9. TANK (LINDENHURST), 1933
- 9A. LINDENHURST CATHOLIC CHURCH, 1909
- 9B. BRESLAU BLACK SPIRE, 1875
10. CHANNEL MARKER, FLAG, 1933
11. DIPP, 1950
12. DRAKE, 1933
13. BUSS, 1950
14. FLEET, 1933
15. BABYLON SCHOOL, 1909
- 15A. BABYLON BAPTIST CHURCH SPIRE, 1875
16. SPIRE (BABYLON PRESEY.) 1875
- 16A. BABYLON METHODIST CH. SPIRE, 1875
17. TANK (BABYLON), 1933
- 17A. BABYLON EPISCOPAL CHURCH SPIRE, 1875
18. FLAGPOLE (BABYLON COVE), 1933
19. SAM, 1933
20. OUTERMOST MARKER, 1933
21. OAK ISLAND, SQUARE TOWER, 1933
22. OCEAN BEACH, COAST GUARD TOWER, 1933
23. DEMOCRAT, 1949
24. OAK 2, 1933
25. FIRE ISLAND, LOOKOUT TOWER, 1933
26. CAP, 1933
27. CONKLIN PT. 3, R.M. No. 1, 1933
28. BAYSHORE GAS TANK, 1933
29. SPIRE (BAYSHORE CATHOLIC) 1933
30. BAYSHORE METHODIST CHURCH SPIRE, 1909
31. BAYSHORE STANDPIPE, 1909
32. BRIGHT, 1933
33. WHIG, EAST FLAGPOLE, 1933
- 33A. WHIG, WEST FLAGPOLE, 1933
34. FIRE ISLAND LIGHTHOUSE, 1865
35. SALTAIRE TANK, 1933
36. SIDEWALK, 1949
37. WEST FIRE ISLAND, FLAGPOLE, 1933
38. WIND, 1949 *Topo. Sta.*
39. FILL, 1949 *Topo. Sta.*

- 39A. ISLAND 2, 1933
- 40. BUMS, 1950
- 41. BER, 1933
- 42. ISLIP, PRESBYTERIAN CHURCH, 1909
- 43. ISLIP, METHODIST CHURCH, 1909
- 44. EAST ISLIP, TANK, 1933
- 45. OAKDALE, 1950
- 46. SUB. PT. OAKDALE, 1950
- 47. HECKSCHER, 1932
- 48. NORTH RANGE, 1933
- 49. NICHOLS 1909
- 50. SOUTH RANGE, 1933
- 51. OCEAN BEACH, WINDMILL, 1933
- 52. POI, 1933
- 53. POINT-O-WOODS, TANK, 1933
- 54. POINT-O-WOODS, FLAGPOLE, 1933
- 55. LA SALLE, FLAGPOLE, 1933
- 56. LA SALLE, TANK, 1933
- 57. RADIO, 1930
- 58. W. SAYVILLE, TANK, 1914.
- 59. W. SAYVILLE, TALL WATER TANK, 1932
- 60. LA SALLE, TOWER, 1914
- 61. GREE, R.M. No. 3, 1933
- 62. BROWN POINT FLAGPOLE, 1933
- 63. GREEN POINT 3, 1930.

PROJECT PH-54(49)C
GREAT SOUTH BAY, NEW YORK

	40° 44'
△ Triangulation Station	(Not-identified)
▲ Triangulation Stations	(identified and held)
▴ Triangulation Station	(identified, not held)
△ Triangulation Stations	(Lost)
▴ Triangulation Stations	(identified, not held)
⋯ New position radially plotted	
⊗ (identified, no position given, radially plotted)	



MAP T. 9300

PROJECT NO. Ph-54(49)C.

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION		N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
CAP, 1933	G-4084 P.57	N.A. 1927	40 39	24.146					744.8	1106.0		
			73 16	15.349					360.6	1048.9		
OAK ISLAND SQUARE TOWER, 1933	G-4084 P.65	"	40 38	35.854					1106.0	744.8		
			73 17	28.859					678.1	731.7		
DEMOCRAT, 1949	G-8444	"	40 37	44.625					1376.5	474.3		
			73 17	50.434					1185.3	224.8		
BUSS, 1950	Form 524	"	40 38	21.577					665.6	1185.2		
	G-8444		73 19	39.202					921.2	488.7		
DIPP, 1950	Form 524	"	40 37	38.588					1190.3	660.5		
	G-8444		73 22	00.592					13.9	1396.2		
SUB.PT. CAP	Office	"	40 39						789.0	1061.8		
	Comp.		73 16						231.6	1177.9		
SUB.PT. DEMOCRAT	"	"	40 37						1342.0	508.8		
			73 17						1189.8	220.3		
SUB.PT. BUSS	"	"	40 38						630.6	1220.2		
			73 19						884.6	525.3		
SUB.PT. DIPP	"	"	40 37						1166.2	684.6		
			73 21						1394.5	15.6		
FIRE ISLAND INLET LT., 17, 1949	G-8444	"	40 38	20.110					620.3	1230.5		
			73 18	15.970					375.3	1034.6		
FIRE ISLAND INLET LT. 31, 1949	G-8444	"	40 38	21.219					654.5	1196.3		
			73 15	06.788					159.5	1250.4		

1 FT. = 3048006 METER

COMPUTED BY: H. R. Rudolph

DATE 3-15-50

CHECKED BY: J. Honick

DATE 4-3-50

M-2388-12

31. DELINEATION

Graphic methods were used to delineate this survey.

The shoreline on the south side of Fire Island and the area between Democrat Pt. and longitude 73°16' of Fire Island has not been delineated in accordance with instructions.

Refer to radial plot report regarding adequacy of photographs.

32. CONTROL

OCEAN BEACH COAST GUARD TOWER, 1933, was reported by the field inspection party as probably rebuilt and moved. It did not hold within about 2mm. The radial plot position is being submitted on form 524. *See Item 67*

33. SUPPLEMENTAL DATA

Geographic Names Sheet No. 2 dated 7 February 1950 on Bay Shore West, N.Y. A.M.S. quadrangle. *Geographic names list attached. EHR*

34. CONTOURS AND DRAINAGE

Contours - Inapplicable
Drainage - No comment.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate.

See Item 66

Shoal lines were delineated from office interpretation of the photographs.

Low water line were based on data furnished by the field party.

36. OFFSHORE DETAILS

No comment.

See Item 8.

37. LANDMARKS AND AIDS

Forms 567 for 2 landmarks and 3 non-floating aids to be charted are being submitted with this report.

See Item 68

38. CONTROL FOR FUTURE SURVEYS

8 forms 524 are being submitted with this report. One of these showing the radially plotted position of "Ocean Beach Coast Guard Tower", at Oak Beach was prepared in the compilation office. A list of these stations is included in item 49 of this report. Four photo-hydro stations with descriptions are also listed in item 49 of this report.

39. JUNCTIONS

Junctions were made with Surveys T-5605 and T-5612 to the west, T-9201 to the east and T-9298 to the north and are in agreement. There is no contemporary survey to the south.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment

See Item 66

41 through 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with Army Map Service Bay Shore West, quadrangle, scale 1:25,000, published 1947.

Comparison was also made with Air Photo Compilation No. T-5059 (1933) of this bureau, scale 1:10,000.

47. COMPARISON WITH NAUTICAL CHARTS

This survey has been compared with U.S.C. & G.S. Chart No. 578, scale 1:40,000, published April 26, 1948, corrected to 27 February 1950.

Items to be applied to nautical charts immediately

None.

Items to be carried forward

None.

Respectfully submitted
7 April 1950

Jack Honick
Jack Honick
Cartographic Photo. Aid

Approved and forwarded
19 April 1950

Joseph Stenberg
For
Hubert A. Paton
Comdr., USC&GS
Officer in Charge

3m

49. NOTES TO the HYDROGRAPHER

The following is a tabulation of recoverable topographic stations shown on the manuscript:

· BREAKWATER LIGHT, 1950 *position determined by two cuts ENR*
 · BUSS, 1950
 · DIPP, 1950
 · FIRE ISLAND INLET LT. 17, 1950 *3rd order station*
 · FIRE ISLAND INLET LT. 31, 1950 *3rd order station*
 · TOWER, 1949
 · TOWER, 1949
 · TOWER, 1949

The following is a list of photo-hydro stations and their descriptions:

<u>Photo-hydro No.</u>	<u>Photograph No.</u>	<u>Description</u>
051	3-D-119	NE corner of pier
052	"	SE corner of pier
053	"	SW gable of house
034	7-D-77	Corner of bulkhead

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9300

1. Projection and grids JWV 2. Title JWV 3. Manuscript numbers JWV 4. Manuscript size JWV

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy JWV 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) JWV 7. Photo hydro stations JWV 8. Bench marks JWV 9. Plotting of sextant fixes None 10. Photogrammetric plot report JWV 11. Detail points JWV

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline JWV 13. Low-water line JWV 14. Rocks, shoals, etc. JWV 15. Bridges None 16. Aids to navigation JWV 17. Landmarks JWV 18. Other alongshore physical features JWV 19. Other along-shore cultural features JWV

PHYSICAL FEATURES

20. Water features JWV 21. Natural ground cover JWV 22. Planetable contours _____ 23. Stereoscopic instrument contours _____ 24. Contours in general _____ 25. Spot elevations _____ 26. Other physical features JWV

CULTURAL FEATURES

27. Roads JWV 28. Buildings JWV 29. Railroads None 30. Other cultural features JWV

BOUNDARIES

31. Boundary lines _____ 32. Public land lines _____

MISCELLANEOUS

33. Geographic names JWV 34. Junctions JWV 35. Legibility of the manuscript JWV 36. Discrepancy overlay _____ 37. Descriptive Report JWV 38. Field inspection photographs JWV 39. Forms JWV40. Joseph W. Connerick Reviewer Joseph Steinberg Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler_____
Supervisor

43. Remarks:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED

STRIKE OUT ONE

Baltimore, Md.

April 13

1950

NONTECHNICAL AIDS OR LANDMARKS FOR CHARTS

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by

Joseph W. Vonasek

Hubert A. Paton	Chief of Party.
-----------------	-----------------

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

LANDMARKS FOR CHARTS

TO BE CHARTED } **STRIKE OUT ONE**

Washington, D. C. 8 June, 1969

I recommend that the following objects which ~~have~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(attached from)~~ the charts indicated.

The positions given have been checked after listing.

**S.V. Griffith, Chief, Review Sect.,
Div. of Photogrammetry Chief of Party.**

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

48. GEOGRAPHIC NAMES

- • Atlantic Ocean *
- • Captree Island .
- • Captree State Park .
- • Cedar Island .
- • Cedar Island Beach .
- • Democrat Pt .
- • East Fox Creek .
- • Fire Island Inlet .
- • Fire Island State Park .
- • Gilgo State Park .
- • Grass Island .
- • Great South Bay .
- • ~~Great South Beach~~ * .
- • Oak Beach .
- • Oak Island .
- • Ocean Parkway .
- • Seganus Thatch .
- • State Boat Channel .
- • Strong's Pt * .
- • ~~Strong's Cp~~ * .
- • West Fox Creek .

* = DRES. BGN

• = Approved names

6-7-50

a.f.w.

Review Report T-9300
Shoreline Map
12 June 1950

62. Comparison with Registered Topographic Surveys:

T-3	1:20,000	1835
T-479	1:10,000	1834
T-1314	1:10,000	1873
T-1474	1:10,000	1875
T-1849	1:50,000X	1877
T-1539	1:10,000	1880
T-1851	1:10,000	1887
T-2948	1:10,000	1909
T-2949	1:10,000	1909
T-3483	1:20,000	1914
T-4063	1:10,000	1924
T-5057	1:10,000	1934
T-5059	1:10,000	1933
T-5060	1:10,000	1934
T-5087	1:10,000	1934
T-6011	1:20,000	1933
T-6012	1:10,000	1933

The shoreline in the vicinity of Fire Island Inlet is subject to great change. Since the surveys of 1933-34, portions of shoreline adjacent to Oak Beach have eroded as much as 300 meters. This survey has a different interpretation of some shoreline and alongshore areas. This survey supersedes the above surveys for nautical charting purposes for the area of this map.

63. Comparison with Maps of Other Agencies:

Bay Shore West (AMS Quadrangle) 1:25,000 1943, rev. 1947

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

578	1:40,000	1941, revised 50-2/6
1215	1:80,000	1947, revised 49-1/10

These charts show a pier in ruins at Lat. 40°^{38'} and Long. 73°16' which was not field inspected and could be interpreted on the photographs.

Not (per E.H. Ramey)
1/14/53

66. Adequacy of Results and Future Surveys:

It is possible that the field inspection party mis-identified the mean high-water line along the Atlantic Ocean west of Fire Island Inlet -- locating the storm

Page 2
Review Report T-9300

high-water line instead. This item is being referred to the hydrographic survey party for verification or revision. Features below the plane of mean-high-water are subject to revision and completion by hydrographic surveys. Otherwise, this survey complies with project instructions and meets the National Standards of Map Accuracy.

67. Control:

The radial plotted positions for Oakdale, 1950 and Burns, 1950 were checked against the field observations for these stations and were found in each case, to be consistent with three out of four observed directions. In each case, the direction to triangulation station "Point-of-Woods, Tank, 1933" was inconsistent with the other directions by approximately 4' in angle and in the same direction. An error in the position of "Point-of-Woods, Tank" of 12 to 15 meters eastward would be required to fulfill this condition. The radial plot was checked and by holding to another control point in the area, it was found that the identified position of "Point-of-Woods-Tank" plots eastward by approximately this amount. However, this is not conclusive since the station could be identified on only one photograph.

This investigation indicates that triangulation station, "Point-of-Woods, Tank" must be destroyed, ^{or that its position is in error} and that the radial plot is accurate in the area of "Oakdale" and "Burns". (Refer: Item 23) Another Form 526 is being submitted to the Division Geodesy for station, "Point-of-Woods, Tank."

Stations "Ocean Beach Coast Guard Tower, 1933" and Substitute Point "Hole, 1909" were also investigated. In the case of "Ocean Beach Coast Guard Tower", it was found that Survey T-6012, 1933 shows an observation tower and a flag tower at the same longitude. Survey T-9300 positions an observation tower at the same position as that shown on T-6012, while the flag tower is positioned on T-9300 approximately 20 meters westward of the position shown on T-6012. This seems to confirm the field party's report that the station has been moved. Another Form 526 has been submitted to the Division of Geodesy.

In the case of Sub. Pt. "Hole, 1909", it was found that another sub. pt. for this station was used in controlling the radial plot for Ph-16(47) Sheets T-5605, T-5606, T-5612 and T-5613.

This sub. pt. was added to the photography of Ph-54(49)C and it was found to hold satisfactorily in relation to other control that was used in the radial plot for Ph-54(49)C. Therefore, it is concluded that the Station Identification card of Ph-54(49)C is in error and that it was correct to disregard this point during the radial plot (refer: Item 23). It appears, from this examination, that the Station Identification card for Ph-54(49)C has an error in measured distance.

Stations "Fire Island Inlet Lt. No. 17, 1950" and "Fire Island Inlet Lt. No. 31, 1950" are to be published by the Division of Geodesy as third-order triangulation stations.

68. Landmarks and Aids:

During the review of this survey, a Form 567 was submitted to the Division of Charts for two additional landmarks, copy of which is attached.

Fire Island Breakwater Lt. was positioned during the compilation by two radial cuts. This position is shown on Form 567.

Reviewed by:

Everett H. Ramey
Everett H. Ramey

Approved by:

L. V. Griffith
Chief, Review Section R. H. M.
Division of Photogrammetry

H. C. Edmonson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Div. Coastal Surveys

Bgg

L.S.H.

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9300

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.

examined for Ch 578 for critical contents (partly applied) 7-11-51
JBE