

12394

Original

12394

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline(Photogrammetric)
Field No.	Office No. T-12394
LOCALITY	
State	New York
General locality	Long Island Sound
Locality	Nissequogue River
19 65 - 1967	
CHIEF OF PARTY	
Allen L. Powell Director, Atlantic Marine Center	
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

## DESCRIPTIVE REPORT - DATA RECORD

T- 12394

PROJECT NO. (II):

Job PH-6603

FIELD OFFICE (III):

Riverhead, Long Island, New York

CHIEF OF PARTY

Joseph K. Wilson

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center

OFFICER-IN-CHARGE

J. Bull, RADM, USESSA, Director

INSTRUCTIONS DATED (II) (III):

FIELD January 24, 1966  
FIELD March 1966/6314  
OFFICE May 27, 1966  
OFFICE September 15, 1966

Supplement I

Aerotriangulation  
Compilation

METHOD OF COMPILATION (III):

B-8 and graphic

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:5,000 Pantographed to 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

N.A. 1927

VERTICAL DATUM (III): MHW

~~MEAN LOW WATER~~ 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 ~~MEAN LOW WATER~~

REFERENCE STATION (III):

ST. JOHNSLAND, 1939 ✓

LAT.:

LONG.:

40° 54' 20.959" (646.5m) ✓

73° 14' 38.025" (890.0m) ✓

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y =

248,753.01

X =

2,209,008.94

New York

Long Island

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.

## DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):  Matthew A. Stewart		DATE: 4/18/66 6/17/66
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  Air photo compilation. Date of photography: October 2, 1965		
PROJECTION AND GRIDS RULED BY (IV):  A. E. Roundtree		DATE 10/21/66
PROJECTION AND GRIDS CHECKED BY (IV):  L. F. Van Scoy		DATE 10/24/66
CONTROL PLOTTED BY (III):  L. L. Graves A. Santillan		DATE 10/28/66 11/14/66
CONTROL CHECKED BY (III):  R. J. Pate K. Boyle		DATE 10/31/66 11/14/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  P. Hawkins		DATE 9/30/66
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY  A. L. Shands	DATE 5/5/67
	CONTOURS  Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III):  B. Wilson		DATE 5/19/67
SCRIBING BY (III):  F. P. Margiotta		DATE 5/20/68
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):  C. H. Bishop		DATE 5/24/67
REMARKS:  FIELD EDIT BY: R.S. TIBBETTS OCT. 1967		



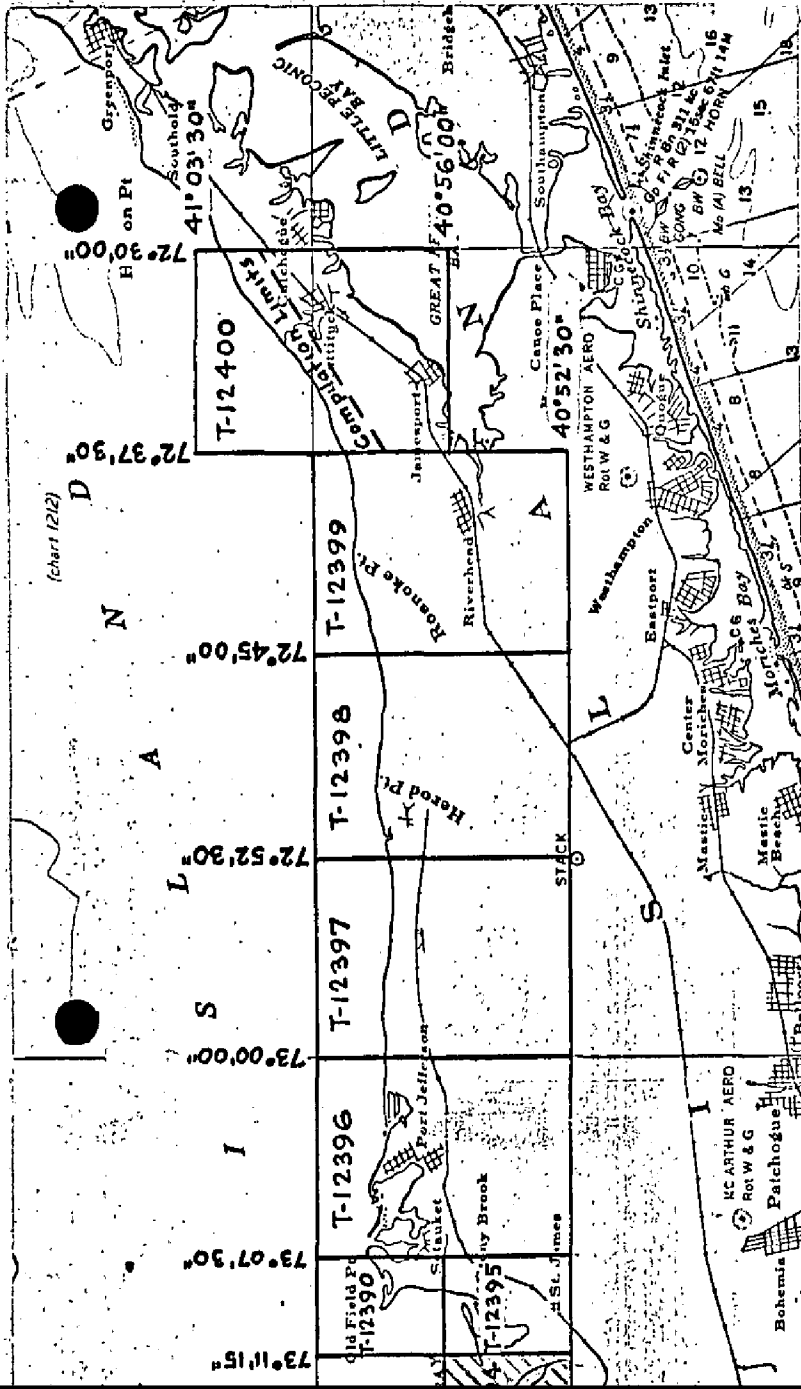
T-12394

COMPILATION RECORD

COMPLETION DATE

REMARKS

Compilation complete pending field edit	May 1967	Superseded
Field Edit applied Compilation complete	February 1968	
<i>Final Review</i>	<i>Oct. 1969</i>	



# JOB PH - 6603 SHORELINE MAPPING

NORTH SHORE, LONG ISLAND N.Y.  
 Eatons Neck to Mattituck Inlet

SCALE 1:10,000 & 1:20,000

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12394

Shoreline survey T-12394 is one of seven 1:10,000 scale surveys in job PH-6603. The job is comprised of seven 1:10,000 and five 1:20,000 scale surveys along the north shore of Long Island from Eatons Neck to Mattituck Inlet. See page 5 of this report for the area of the survey within the project.

Field work preceding compilation consisted of identification of horizontal control, shoreline and field inspection, location of landmarks for charts and Geographic Names Investigation.

Compilation was at 1:10,000 scale by B-8 Plotter and graphic methods using the photography of October 1965. A copy of the map manuscript (classified incomplete) along with specially prepared photographs was subsequently provided for transfer of the shoreline to the boat sheet, location of photo-hydro signals and field edit use.

The manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 3 minutes 45 seconds in longitude. Field edit was accomplished in October 1967. After application of field edit the survey was scribed, stuck-up and reproduced on cronaflex. Final review was done in the Atlantic Marine Center in October 1969. One cronaflex positive and a negative of the final manuscript are forwarded for record and registry.

FIELD INSPECTION REPORT  
 Project PH-6603  
 Maps T-12389 thru T-12395

This report is submitted for seven maps since there is no great differences in terrain, natural or cultured features which would require special treatment.

2. AREAL FIELD INSPECTION

This area lies along the north shore of Long Island between Lloyd Neck and Old Field Point.

Field Inspection was completed on all seven maps generally to the limits of photography, during May and June 1966.

One area at the east end of Asharoken Beach is under construction by Long Island Light Company and will be changed considerably.

The terrain along this area covered by these maps consists of sand beaches, bluffs and wooded hills with very little marsh and no swamps. Most of the shoreline is accessible by truck.

Photographs of this area is of average quality being taken in October 1965.

Photographs used for field inspection are listed below by maps:

<u>T-12389</u>	<u>T-12391</u>	<u>T-12392</u>	<u>T-12393</u>	<u>T-12394</u>
65-L-6567	65-L-6573	65-L-6574	65-L-6564	65-L-6543
6568		6575	6577	6544
6571				
6572				

T-12395

T-12390

4. VERTICAL CONTROL

All tidal bench marks in the area of the seven maps were searched for and reported on form 685A.

The bench marks were identified on the photograph in accordance with the topographic manual.

5. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage is composed mostly of a few tidal streams and normal drainage

6. WOODLAND COVER

Woodland cover was classified in accordance with the topographic manual.

7. SHORELINE AND ALONG SHORE FEATURES

The high-water line has been indicated on the photographs by symbol in accordance with instructions. No attempt was made to delineate the low-water line.

The field inspection of the high-water line was accomplished by several methods, measurements from photo points and by visual inspection by truck and by walking the shoreline.

In a few areas the high-water line adjacent to inlets is subject to change due to storms.

Special attention is invited to grass in water just below the high water line. A large percentage of this grass is a narrow strip or small patches and has the appearance of mud on the photograph.

Inspection of bluffs were made and their location indicated on the photographs.

All areas of wrecks were inspected at low water and appropriate notes made on the photographs.

A wreck on the west side of Huntington Bay was located by photo points. This wreck is marked by a lighted bouy which is about 300 feet to the east.

One wreck in Northport Harbor (Chart 224) was verified at high water. There is no photography covering this area.

9. LANDMARKS AND AIDS

Nonfloating aids to navigation were verified as to existance and number. They were located by direct photo identification or other field methods.

Landmarks for charts were identified, classified and heights obtained.

Form 567 has been submitted for both features.

The nautical landmarks north and east of Huntington were verified and are shown on a letter-size chart. This area has no photo coverage.

10. BOUNDARIES, MONUMENTS AND LINES

In accordance with project instructions.

11. OTHER CONTROL

None established.

12. OTHER INTERIOR FEATURES

Classified according to current instructions.

13. GEOGRAPHIC NAMES

A complete investigation of geographic names will be submitted to Rockville at a latter date.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Horizontal Control Indentification Data to Rockville, Transmittal letter dated 5/12/66, reference #33.

Nonfloating Aids or Landmarks for Charts, Transmittal letter dated 6/23/66, reference #41.

Field Inspection Data, Transmittal letter dated 6/23/66, reference #40.

Approved and forwarded:

*Joseph K. Wilson*  
Joseph K. Wilson  
Chief, Photo Party 759

Submitted:

June 27, 1966

*Ernest W. Hartford*  
Ernest W. Hartford  
Surveying Technician

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PHOTOGRAMMETRIC PLOT REPORT  
Job PH-6603  
North Shore Long Island, New York

August 30, 1966

21. Area Covered

The area covered in this report extends from Eatons Neck to Mattituck Inlet, along the North Shore of Long Island, New York. Included in this area are T-sheets 12390 thru 12400..

22. Method

Five strips of photography (A thru E) were bridged on the stereo-planigraph and adjusted by IBM 1620 methods. Strip "A" was adjusted on six control stations, with three control stations as checks. Strip "B" was adjusted on five control stations. Strip "C" was adjusted on four stations with two stations as checks. Strip "D" was adjusted on seven stations with three stations as checks. Strip "E" was adjusted on two stations with three stations as checks. All points were drilled by PUG methods. Tie points between strips were averaged.

23. Adequacy of Control

Horizontal control was adequate and complied with project instructions. All control held within National Map Accuracy Standards with the following exceptions:

- (1) OLD FIELD PT. LT. (new) 1939, held in Strip "C" but could not be seen clearly in Strip "D" and as a result could not be held in Strip "D".
- (2) INDIANA 1933, SS "A" and SS "B" could not be held in either Strips "D" or "E" due to poor images and deep shadows which resulted in the inability of the stereoplanigraph operator to identify the substations with any degree of accuracy.

24. Supplemental Data

Local USGS quads were used for vertical control during bridging adjustment. Vertical elevations obtained by the bridge should not be used to obtain exact vertical datum.

25. Photography

Photography was adequate as to coverage and overlap. Definition and quality of diapositives were not up to usual standards in that they were very dark. However, all photography was usable.

11  
Submitted by:

Paul Hawkins  
Paul Hawkins *by JDP*

Approved by:

*John D. Perrow Jr.*  
John D. Perrow, Jr.

# DESCRIPTIVE REPORT CONTROL RECORD

MAP T-12394

PROJECT NO.

PH-6603

SCALE OF MAP 1:10,000

SCALE FACTOR

None

[illegible]

**COMPUTED BY**

A. C. Rauck, Jr.

DATE \_\_\_\_\_

9/29/66

CHECKED BY

L. O. Neter, Jr.

DATE \_\_\_\_\_

10/6/66

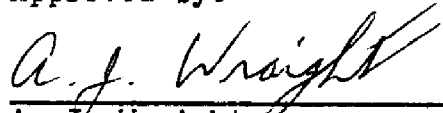
12

GEOGRAPHIC NAMES  
FINAL NAME SHEET  
(Long Island, N. Y.)  
PH-6602  
PH-6603

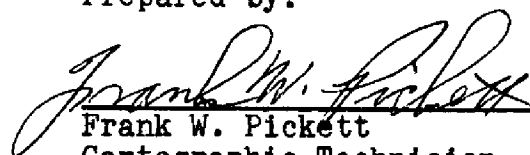
T-12394

Long Beach Road  
Long Island Sound  
Nissequogue River  
Nissequogue Road  
Old Dock Road  
Riviera Drive  
St. Johnland Road  
San Remo  
Short Beach  
Short Beach Road  
Smithtown Bay  
Sunken Meadow Creek  
Sunken Meadow State Park

Approved by:

  
A. J. Wraight  
Chief Geographer

Prepared by:

  
Frank W. Pickett  
Cartographic Technician

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COMPILATION REPORT  
T-12394

31. DELINEATION:

The B-8 Plotter was used. Field inspection was adequate, photography satisfactory.

32. CONTROL:

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours - inapplicable.

Drainage - no statement.

35. SHORELINE AND ALONGSHORE DATA:

The shoreline inspection was adequate. Low water lines were delineated from office interpretation of the photos.

36. OFFSHORE DETAILS:

Sand bars extend northward on each side of the channel into the Nissequoge River.

There are numerous rocks eastward from Short Beach. Some of them were field inspected; others were mapped from office inspection of the photographs.

37. LANDMARKS AND AIDS:

Appropriate copies of Form 567 for Landmarks were forwarded to the Washington Office under date June 1967.

~~Appropriate copies of Form 567 for Aids were forwarded to the Washington Office under date February 1968.~~

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions have been made with T-12193 on the west and T-12195 on the east. There are no contemporary surveys to the north and south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS quadrangle SAINT JAMES, N. Y., scale 1:24,000, dated 1955.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 117-SC, scale 1:40,000, 6th edition, dated November 1966.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None

Submitted:

*B. Wilson*

B. Wilson  
Cartographic Technician

Approved and forwarded:


*Allen L. Powell*

Allen L. Powell, RADM, USESSA  
Director, Atlantic Marine Center

T-12394

49. NOTES FOR THE HYDROGRAPHER:

Refer to those notes found on the Field Edit Ozalid.

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
T- 12394			
1. PROJECTION AND GRIDS CHB	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE X
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY CHB	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) CHB		7. PHOTO HYDRO STATIONS X
8. BENCH MARKS X	9. PLOTTING OF SEXTANT FIXES RES	10. PHOTOGRAMMETRIC PLOT REPORT Bridge, W.O.	11. DETAIL POINTS X
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE CHB	13. LOW-WATER LINE CHB	14. ROCKS, SHOALS, ETC. CHB	15. BRIDGES X
16. AIDS TO NAVIGATION 	17. LANDMARKS CHB	18. OTHER ALONGSHORE PHYSICAL FEATURES CHB	19. OTHER ALONGSHORE CULTURAL FEATURES CHB
PHYSICAL FEATURES			
20. WATER FEATURES CHB		21. NATURAL GROUND COVER X	22. PLANETABLE CONTOURS X
23. STEREOSCOPIC INSTRUMENT CONTOURS X	24. CONTOURS IN GENERAL X	25. SPOT ELEVATIONS X	26. OTHER PHYSICAL FEATURES X
CULTURAL FEATURES			
27. ROADS CHB	28. BUILDINGS CHB	29. RAILROADS X	30. OTHER CULTURAL FEATURES CHB
BOUNDARIES			
31. BOUNDARY LINES X		32. PUBLIC LAND LINES X	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES CHB		34. JUNCTIONS CHB	35. LEGIBILITY OF THE MANUSCRIPT CHB
36. DISCREPANCY OVERLAY X	37. DESCRIPTIVE REPORT CHB	38. FIELD INSPECTION PHOTOGRAPHS CHB	39. FORMS CHB
40. REVIEWER Charles H. Bishop CHB		SUPERVISOR, REVIEW SECTION OR UNIT Albert C. Rauck, Jr. ACR	
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 F. P. Maggiotta		SUPERVISOR Albert C. Rauck, Jr.	
43. REMARKS Field Edit was applied from Field Edit Ozalid, Hydro Party D&P Book, Field edit and/or Hydro cronaflex print, Boat sheet, & Field photograph No. 65-L-6579.			

PROJECT OPR 474

LONG ISLAND SOUND

PHOTO-HYDRO SUPPORT TO USC&GS SHIP WHITING

REPORT OF

PHOTOGRAMMETRIC SUB UNIT PARTY 62

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A. PURPOSE AND SCOPE OF SUPPORT:

Photogrammetric support for Hydrography operations by the SHIP WHITING was performed by a sub-unit of Photogrammetric party 62 under instruction for Project OPR 474 dated 18 May 1967. The ship was supplied with all necessary Control, Signal building, and Field edit.

B. CONTROL

Hydrographic control consisted of triangulation, and photo-hydro stations. The photo-hydro station were located in accordance with Photo gammetry Instructions No. 45. Natural objects were utilized as hydro signals whenever possible. This saved a great deal of time, as it eliminated the trouble and time spent obtaining premission to erect a banner or tripod type signal on private property.

C. PHOTOGRAPHY

The photographs for the project consisted of 1965 L 1:10,000 scale ratio photographs for the area between Eatons Neck and Old Field Point. The area to the East of Old Field Point is covered by 1966 1:20,000 ratio photographs. These photographs were of good quality and only usual amount of difficulty was encountered in idintifying signal sites.

D. DISPOSITION OF DATA:

Cronaflex copy of sheets T 12389 through 12396 were turned over to the Commanding Officer of the Ship Whiting. All photographs and unused Cronaflex copies of manuscripts and Field Edit Data were returned to the Atlantic Marine Center.

E. SPECIAL REPORT:

A field Edit report will be submitted for the entire project at a later date.

Respectfully submitted:

*Robert S. Tibbetts*  
Robert S. Tibbetts

RST/ckj

Approved and Forwarded:

*Wayne L. Mobley*

for  
Sidney C. Miller, LCDR, USESSA  
Commanding USC&GS Ship WHITING

FIELD EDIT REPORT

PROJECT PH 6603

LONG ISLAND, NEW YORK

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51. This report is submitted for sheets T-12389 thru T-12396. The edit was accomplished by visually inspecting the shoreline from a small boat and via road by truck.

All questions were answered as completely as possible on the discrepancy ozalids. In several cases the field editor was asked to locate and or verify depths and numerous rocks.

The Ship Whiting had already completed Hydrography, before field Edit of sheets T-12389 thru T-12396 was started. They obtained depths and positions on all rocks during the course of hydrography. The field editor obtained a copy of this data and it was transmitted with the field edit data.

No comparison was made with the Whittings Boat Sheets where there was a overlap of work, because the Whiting left the area before edit was completed.

52. Adequacy of Compilation.

These maps are adequate for the transfer of shoreline and location of signals on hydrographic survey sheets.

54. Recommendations.

None.

Respectfully submitted:

*Robert S. Tibbetts*  
Robert S. Tibbetts

REVIEW REPORT T-12394  
SHORELINE  
October 3, 1969

61. GENERAL STATEMENT

See Summary which is page 6 of the descriptive report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with a copy of registered survey No. 1723, 1:10,000 scale, made in 1886. This copy was heavily spotted and it was impossible to differentiate between rocks and just plain black spots. For this reason no attempt was made to transfer the rocks to the comparison print for comparison purposes.

The changes in the mean high water line between the two surveys is indicated on the comparison print in blue.

The passage of time has made survey No. 1723 obsolete. It is superseded by T-12394 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with USGS SAINT JAMES, N. Y. 7 1/2 minute quadrangle, 1:24,000 scale, edition of 1955.

The most significant difference between the two surveys is at the mouth of Nissequogue River. Here the two features East Bar and West Bar are no longer discernible; West Bar having eroded away while East Bar now appears as part of Short Beach.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with boat sheets WH-10-2A-67 (H-8950) and WH-10-2B-67 (H-8950). The source of part of the shoreline for the surveys was T-12394, therefore, there are no discrepancies between the shoreline of these surveys and T-12394.

All of the rocks within the limits of T-12394 are located relatively close inshore along the shore of Long Island Sound between longitudes 73° 11' 24" and 73° 13' 10". The water

conditions at the time of photography, waves with breakers along shore with white caps just off shore, obscured many of the rocks. All rocks shown on the hydrographic surveys were searched for on the photographs. Those that were not visible have been indicated on the comparison print in purple.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 117SC, 8th edition, corrected thru NM 43, October 26, 1968. The shoreline of the two surveys are in only fair agreement. The difference has been indicated on the comparison print in red.

As stated in item 64 the water conditions at the time of photography obscured some of the rocks along the coast. Rocks shown on the chart which are not visible on the photographs have been indicated on the comparison print in red.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.

Reviewed by:

*Leo F. Beugnot*  
Leo F. Beugnot

Approved by:

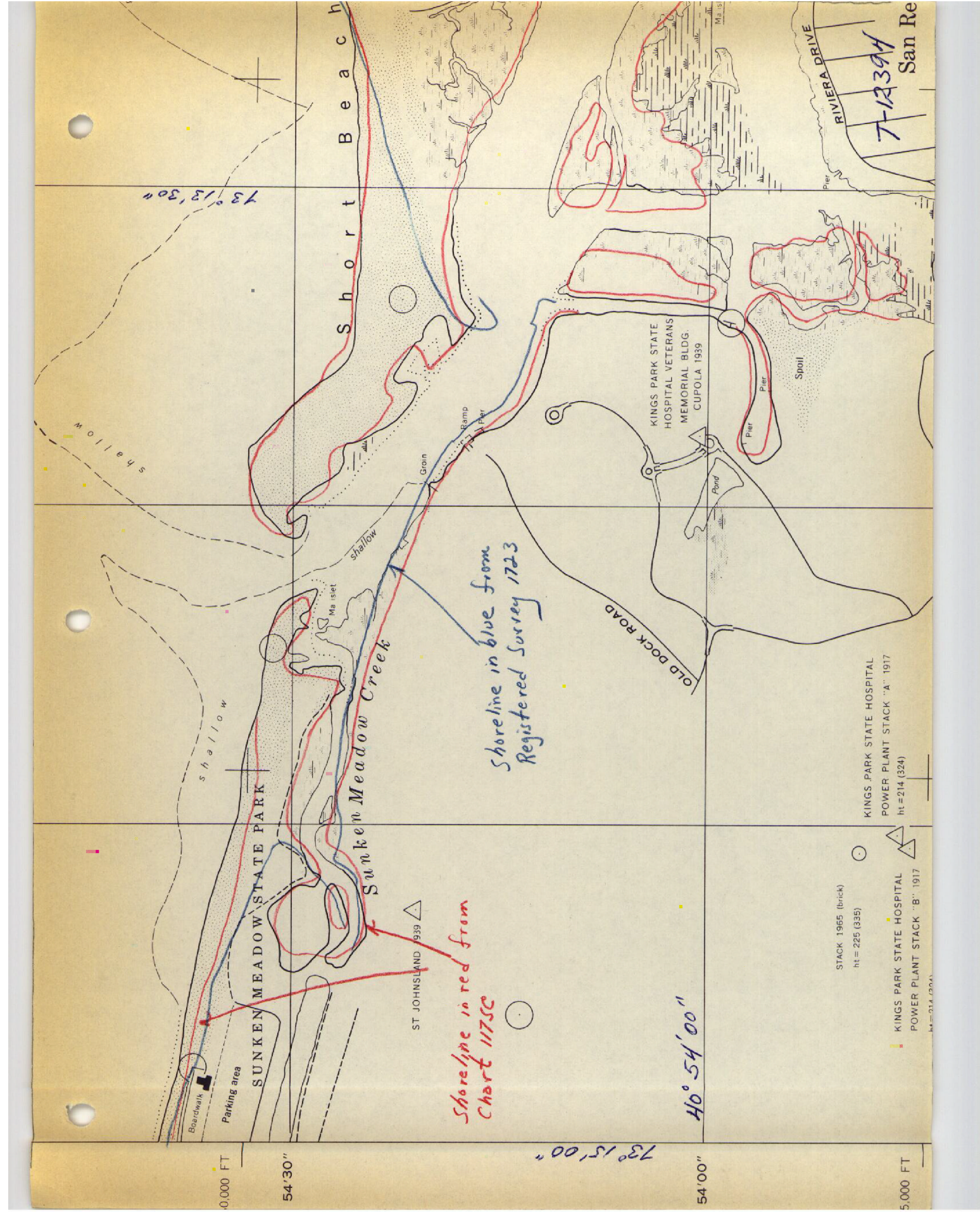
*Allen L. Powell*  
Allen L. Powell, RADM, USESSA  
Director, Atlantic Marine Center

Approved by:

*Charles L. Hauer*  
Chief, Photogrammetric Branch

*Jack E. Guth*  
Chief, Photogrammetry Division





May 5, 1967

Chief of Party.

\* TABULATE SECONDS AND METERS