

12390

Form 804
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline(Photogrammetric)

Field No. *Office No.* T-12390

LOCALITY

State New York

General locality Long Island Sound

Locality Crane Neck

19 65 -67

CHIEF OF PARTY
Joseph K. Wilson, Chief of Field Party
Allen L. Powell, USESSA Director,
Atlantic Marine Center

LIBRARY & ARCHIVES

DATE

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T- 12390

PROJECT NO. (II):

Job PH-6603

FIELD OFFICE (II): 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, Atlantic Marine Ctr

INSTRUCTIONS DATED (II) (III):

Field January 24, 1966 Supplement I
Field March 1966/6314
Office May 27, 1966, Aerotriangulation
Office September 15, 1966, Compilation

METHOD OF COMPILED (III):

Kelsh Plotter 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 HIGH 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 ~~30061420514001200~~

REFERENCE STATION (II):

None

LAT.:	LONG.:	<input type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED	
PLANE COORDINATES (IV):		STATE	ZONE
Y =	X =		

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (I) 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):		DATE:
Matthew A. Stewart		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):		DATE
A. E. Roundtree		20 Oct. 1966
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
L. F. Van Scoy		24 Oct. 1966
CONTROL PLOTTED BY (III):		DATE
K. G. Boyle		14 Nov. 1966
CONTROL CHECKED BY (III):		DATE
A. Santillan		14 Nov. 1966
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
P. Hawkins		30 Aug. 1966
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	A. L. Shands	12 June 1967
	CONTOURS	DATE
Inapplicable		
MANUSCRIPT DELINEATED BY (III):		DATE
B. Wilson		19 June 1967
SCRIBING BY (III):		DATE
R. R. White		24 April 1968
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
L. L. Graves		21 June 1967
REMARKS:		
FIELD EDIT BY: R.S. TIBBETTS OCT 1967		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

RC-8 "L" Camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-L-6550 thru 6553 65-L-6753 and 6754*	10-2-65 10-2-65	0801 1632	1:30,000 1:30,000	2 1/4' above MLW 1/2' below MHW
*				

PREDICTED TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Bridgeport		6.8	8.0
SUBORDINATE STATION: Nissequogue River Entrance		7.0	8.3
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

Lee F. Beugnot, Atlantic Marine Center

DATE:

August 1969

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

None

RECOVERED:

None

IDENTIFIED:

None

NUMBER OF BM(S) SEARCHED FOR (II):

None

RECOVERED:

None

IDENTIFIED

None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

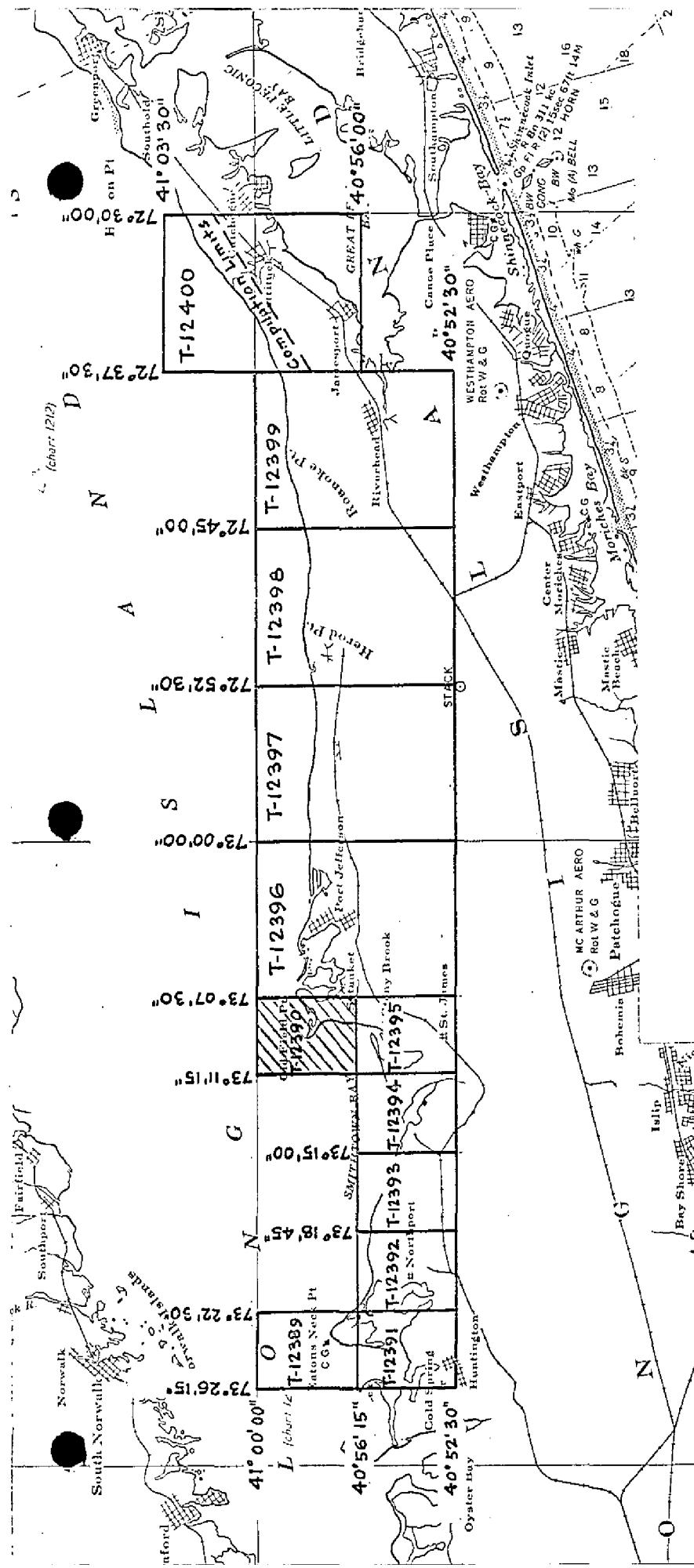
4
T-12390

COMPILED RECORD

COMPLETION DATE

REMARKS

Compilation complete, pending Field Edit	June 1967	Superseded
Field Edit applied Compilation complete	February 1968	
Final Review	August 1969	



JOB PH - 6603
SHORELINE MAPPING

NORTH SHORE, LONG ISLAND N.Y.
Eaton's Neck to Mattituck Inlet

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

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12390

Shoreline survey T-12390 is one of seven 1:10,000 scale sheets in job PH-6603. The job is comprised of seven 1:10,000 scale sheets and five 1:20,000 scale sheets, located along the north shore of Long Islands from Eatons Neck to Mattituck Inlet. See page 5 for the area of this survey within the job.

Field work preceding compilation consisted of identification of horizontal control, shoreline and field inspection, location of fixed aids to navigation and Geographic Names Investigation.

Compilation was at 1:10,000 scale by Kelsh Plotter and graphic methods using the photography of October 1965 and April 1966. A copy of the 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 for field edit use.

The manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 3 minutes 45 seconds in longitude. After application of field edit the manuscript was scribed and reproduced on cronaflex. Final review was accomplished in the Atlantic Marine Center during August 1969. One cronaflex positive and a negative of the final manuscript are forwarded for record and registry.

FIELD INSPECTION REPORT
Project PH16603
Maps T-12389 thru T-12395

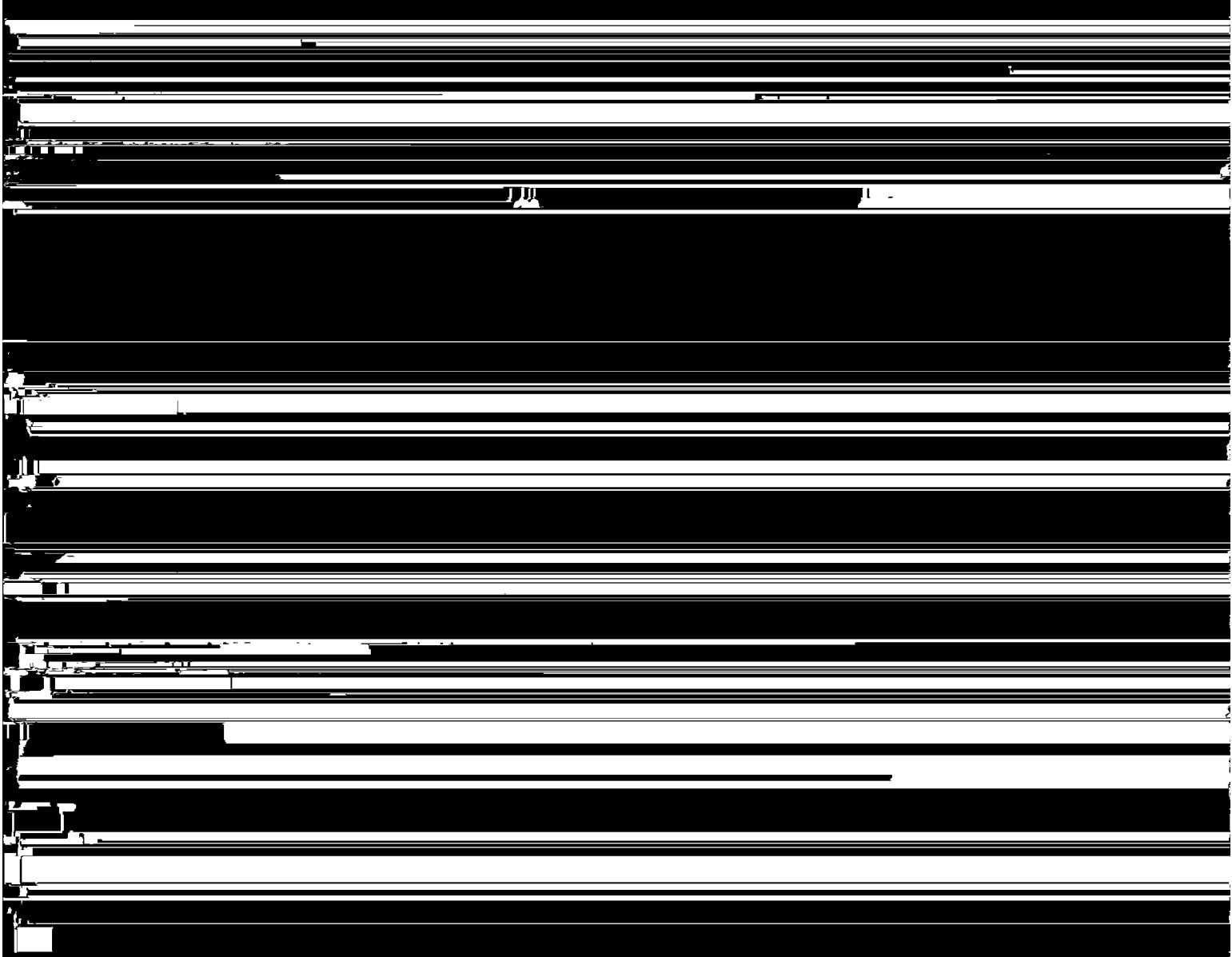
This report is submitted for seven maps since there is no great differences in terrain, natural or cultured features which would require special treatment.

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.



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 is by direct run-off into these streams and low lands.

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 other shoreline features are covered by field inspection notes on the photographs.

There has been no great changes in this area.

8. OFFSHORE FEATURES

Offshore features were checked by boat.

Rock areas were inspected at low water and a few of the outer rocks were located by sextant fixes or noted on the photographs.

The general area of these rocks was outlined to aid compilation of rocks on color photography to be taken at low water in the fall of 1966.

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.

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 stereoplaniograph 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 stereoplaniograph 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.

Submitted by:

Paul Hawkins
Paul Hawkins by J.P.Y.

Approved by:

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

COMPILED REPORT
T-1239031. DELINEATION:

The Kelsh 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. No low water lines were delineated.

The high water line was largely determined by visual comparison of and measurements (proportioned) from the 1:20,000 scale photos at high water.

36. OFFSHORE DETAILS:

There were numerous rocks offshore, mostly from Crane Neck Point, shown on the chart and referred to field search, which could not be compiled from the photos due to wave action at the time of photography.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS

Satisfactory junctions have been made with T-12395 to the south and T-12396 (1:20,000) to the east. The north and west limits are water areas.

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

Rocks awash and submerged, offshore from Crane Neck Point and easterly about 1/2 mile from Flax Pond jetties.

Submitted:

B. Wilson

B. Wilson
Cartographic Technician

Approved and Forwarded:

Allen L. Powell

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

GEOGRAPHIC NAMES

FINAL NAME SHEET

(Long Island, N. Y.)

PH-6602

PH-6603

T-12390

Conscience Bay

Crane Neck

Crane Neck Point

Flax Pond

Long Island Sound

Mount Grey Road

Old Field

Old Field Road

Smithtown Bay

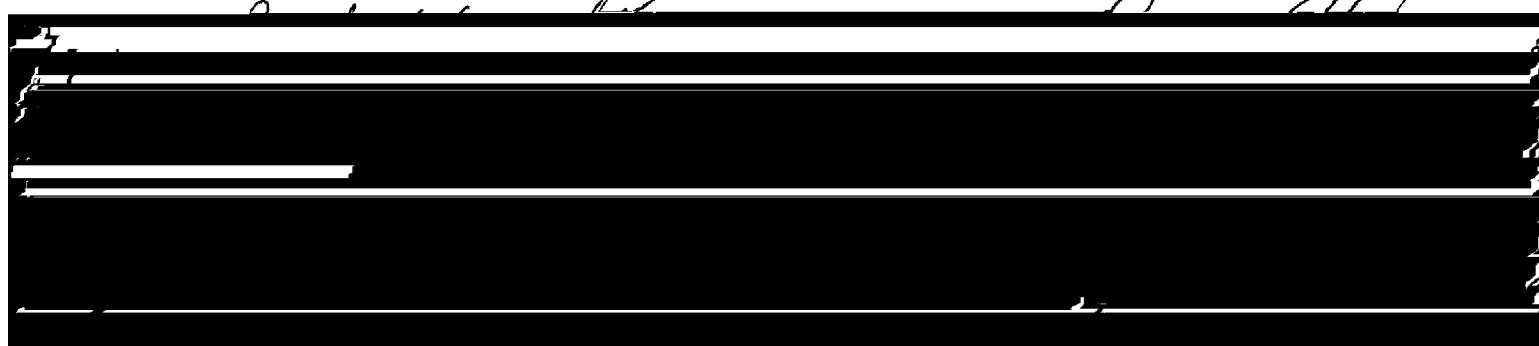
West Meadow Beach

West Meadow Creek

West Meadow Road

Approved by:

Prepared by:



T-12390

49. NOTES FOR THE HYDROGRAPHER:

Refer to those notes found on the Field Edit Ozalid.

PHOTOGRAMMETRIC OFFICE REVIEW

T-10863 12390

1. PROJECTION AND GRIDS LLG	2. TITLE LLG	3. MANUSCRIPT NUMBERS LLG	4. MANUSCRIPT SIZE LLG
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY NONE	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (<i>Topographic stations</i>) None	7. PHOTO HYDRO STATIONS None	
8. BENCH MARKS None	9. PLOTTING OF SEXTANT FIXES RES	10. PHOTOGRAMMETRIC PLOT REPORT Bridge (W.O.)	11. DETAIL POINTS KELSH
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE LLG	13. LOW-WATER LINE X	14. ROCKS, SHOALS, ETC. LLG	15. BRIDGES X
16. AIDS TO NAVIGATION X	17. LANDMARKS X	18. OTHER ALONGSHORE PHYSICAL FEATURES LLG	19. OTHER ALONGSHORE CULTURAL FEATURES LLG
PHYSICAL FEATURES			
20. WATER FEATURES LLG	21. NATURAL GROUND COVER LLG	22. PLANETABLE CONTOURS X	
23. STEREOGRAPHIC INSTRUMENT CONTOURS N.A.	24. CONTOURS IN GENERAL N.A.	25. SPOT ELEVATIONS N.A.	26. OTHER PHYSICAL FEATURES LLG
CULTURAL FEATURES			
27. ROADS LLG	28. BUILDINGS LLG	29. RAILROADS X	30. OTHER CULTURAL FEATURES LLG
BOUNDARIES			
31. BOUNDARY LINES X	32. PUBLIC LAND LINES X		
MISCELLANEOUS			
33. GEOGRAPHIC NAMES LLG	34. JUNCTIONS LLG	35. LEGIBILITY OF THE MANUSCRIPT LLG	
36. DISCREPANCY OVERLAY LLG	37. DESCRIPTIVE REPORT LLG	38. FIELD INSPECTION PHOTOGRAPHS LLG	39. FORMS
40. REVIEWER LLG <i>L. L. Graves</i>	SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> 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 <i>G. E. Smith</i> R. E. Smith	SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.		
43. REMARKS Field Edit applied from Field Edit Ozalid, Field Edit Cronaflex print — — of Ship WHITING'S Rock DE's.			

FIELD EDIT REPORT

PROJECT PH 6603

LONG ISLAND, NEW YORK

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 Whiting's Boat Sheets where there was a overlap of work, because the Whiting left the area before edit was completed.

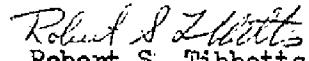
52. Adequacy of Compilation.

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

54. Recommendations.

None.

Respectfully submitted:


Robert S. Tibbets

PROJECT OPR 474

LONG ISLAND SOUND

PHOTO-HYDRO SUPPORT TO USC&GS SHIP WHITING

REPORT OF

PHOTOGRAMMETRIC SUB UNIT PARTY 62

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 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 dificulty 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.

19

E. SPECIAL REPORT:

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

Respectfully submitted:

Robert S. Tibbetta
Robert S. Tibbetta

RST/ckj

Approved and Forwarded:

Wayne L. Mollay
X^{on} Sidney C. Miller, LCDR, USESSA
Commanding USC&GS Ship WHITING

REVIEW REPORT T-12390
SHORELINE
AUGUST 29, 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. 1724, 1:10,000 scale, made in 1885 and 1886. Rocks appearing on that survey that are not visible on the photographs have been noted on the comparison print in blue as has a major change in the shoreline at the entrance to Flax Pond.

Survey No. 1724 has become obsolete due to the passage of time. It is superseded by T-12390 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 two surveys are in good agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with boat sheet WH-10-3-67 (H-8951). The shoreline was obtained from a copy of survey T-12390 and there are no discrepancies between the shoreline of the two surveys.

A submerged rock on the boat sheet at latitude $40^{\circ} 58' 11''$ longitude $73^{\circ} 07' 50''$ is not visible on the photographs.

Only three of the rocks in the vicinity of Crane Necks Point were visible on the photographs. The rocks located by the hydrographer that are not visible on the photographs have been indicated on the comparison print in purple.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with nautical chart 117-SC, 1:40,000 scale, 6th edition, corrected thru NM 43, October 22, 1966.

Some difference was noted in the position of the MHWL along the outer coast and in Flax Pond; the position of the jetties at the entrance to Flax Pond and some of the roads. These differences have been noted on the comparison print in red.

The chart shows numerous rocks surrounding Crane Neck Point. Only three rocks in this area are visible on the photographs. All rocks shown on the chart have been noted on the comparison print also 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. Beugnet
Leo F. Beugnet

Approved by:

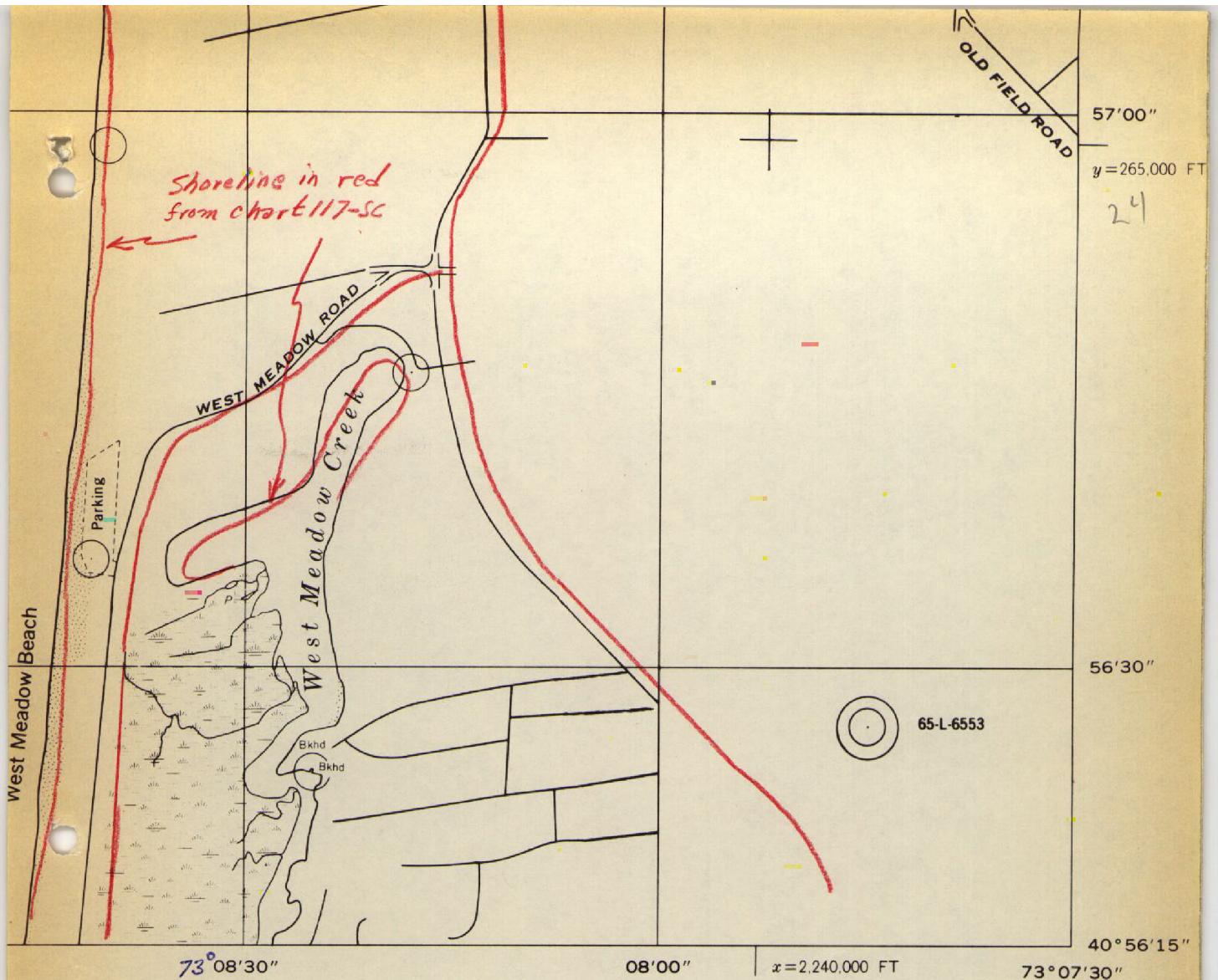
Allen L. Powell

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

Approved by:

Charles D. Dunn

Chief, Photogrammetric Branch ^{NP} *Jack E. Guth*
Chief, Photogrammetry Division



Recoverable horizontal control station of third-order or higher accuracy
 The light shoreline defines the outer limits of vegetation visible above
 approximate mean high water.

The heavy shoreline defines the approximate mean high water.

Compiled by photogrammetric methods, from aerial photographs

Date of Photography Oct. 1965 and April 1966

Date of Field Inspection June 1966

Date of Field Edit Oct. 1967

Date of Final Compilation Feb. 1968

Date of Final Review Aug. 1969

U. S. COAST AND GEODETIC SURVEY
 SHORELINE MANUSCRIPT

T-12390

NEW YORK

LONG ISLAND SOUND

CRANE NECK

SCALE 1:10,000

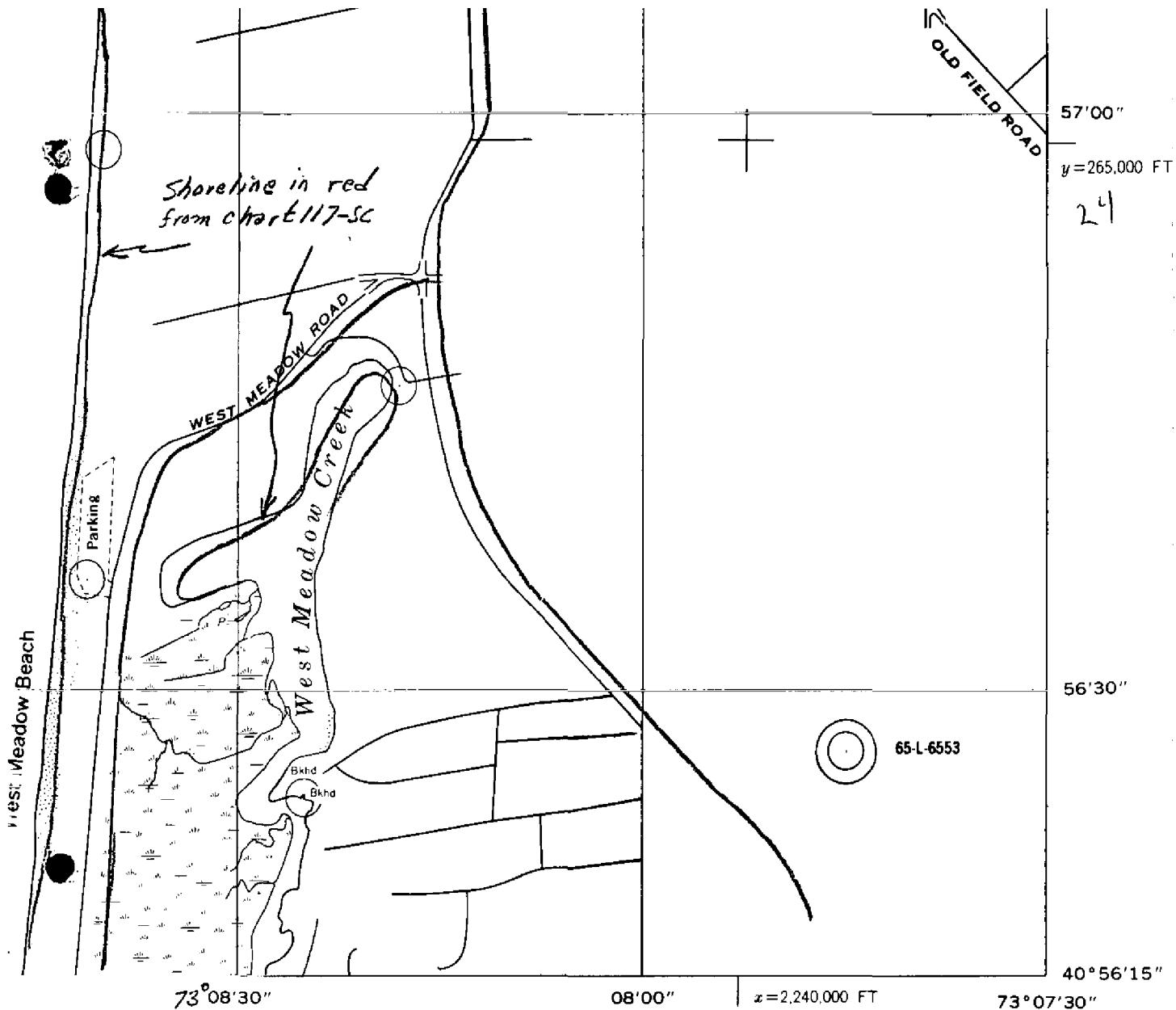
(1 inch = 833.33 ft.)

CONTROL DATA

Polyconic projection: 1927 North American Datum

5,000 foot grid based on New York plane coordinate system (Long Island Zone)

Datum plane: Mean High Water



Recoverable horizontal control station of third-order or higher accuracy
 The light shoreline defines the outer limits of vegetation visible above
 approximate mean high water.

The heavy shoreline defines the approximate mean high water.

Compiled by photogrammetric methods, from aerial photographs

Date of Photography Oct. 1965 and April 1966

Date of Field Inspection June 1966

Date of Field Edit Oct. 1967

Date of Final Compilation Feb. 1968

Date of Final Review Aug. 1969

U. S. COAST AND GEODETIC SURVEY
 SHORELINE MANUSCRIPT

T-12390

NEW YORK

LONG ISLAND SOUND

CRANE NECK

SCALE 1:10,000

(1 inch = 833.33 ft.)

CONTROL DATA

Polyconic projection: 1927 North American Datum

5,000 foot grid based on New York plane coordinate system (Long Island Zone)

Datum plane: Mean High Water

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT, OF SURVEY NO.

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.

2. In "Remarks" column cross out words that do not apply.
 3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.