

5081

5081

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic Sheet No. T-5081
~~*Hydrographic*~~

State Connecticut

LOCALITY
~~North Shore of~~
Long Island Sound

Westbrook and Vicinity

1936

CHIEF OF PARTY

Thos. B. Reed

Applied to Chart Correction 216. Sept. 27, 1937, H.E. MacEwen
Applied to Chart Correction 215 October 22, 1937, H.E.M.

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.

T5081

REGISTER NO. T-5081

State.....Connecticut.....

General locality.....~~North Shore of~~
Long Island Sound.....

Locality.....Westbrook and Vicinity.....

Scale.....1:10,000..... Date of survey..... Photos November 4, 1933

Compilation November and December, 1936.

Vessel.....Field Party No. 16, New London, Conn.....

Chief of party.....Thos. B. Reed.....

Surveyed by.....See data in Descriptive Report.....

Inked by.....Thos. B. Reed.....

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated.....August 24....., 1936

Remarks: Compiled on scale of 1:10,000.....

PHOTO TOPOGRAPHIC SHEET NO. T-5081

Photos Nos.	Date	Time
V85 and V86 (880 K-8)	Nov. 4, 1933	12:50 P.M.
M244 to M265	Nov. 4, 1933	11:35 A.M.
Projection by	L. E. Marsh	May, 1935
" verified by	L. B. Walker	May, 1935
Triangulation stations plotted by	L. E. Marsh	May, 1935
Triangulation stations verified by	Charles More	May, 1935
Smooth Radial Plot by	L. E. Marsh	June, 1935
Field Inspection by	Party of G. C. Mattison	Sept., 1934
Detail inked by	Thos. B. Reed	Nov. and Dec., 1936

STATISTICS

Area of detail inked (land area)	11.5 sq. stat. mi.
Length of shore line (more than 200 meters from nearest shore)	8.5 stat. mi.
Length of shore line (streams less than 200 meters wide)	15.0 stat. mi.

DATUM: North American, 1927.

REFERENCE STATION: HEARN, 1932

Lat. $41^{\circ} 15' 47.137''$	1454.1 meters
Long. $72^{\circ} 23' 05.121''$	119.2 meters

(adjusted)

adjusted

DESCRIPTIVE REPORT

to accompany
Photo-topographic Sheet No. T-5081.

Vicinity of Westbrook, Connecticut.

Thos. B. Reed, Chief of Party.

DATE OF INSTRUCTIONS: Aug. 24, 1936, also previous instructions
to G. C. Mattison.

DATE OF SURVEY: November, 1933, with revision by Field Party
to November 1936.

GENERAL INFORMATION:

Photographs: This sheet was compiled from part of one flight of 1:10,000 scale five lens aerial photographs taken by the Army Air Corps on November 4, 1933 with Model T-3A camera No. AC 31-78. The flight was designated 880-14 and the photographs were numbered M-244 to M-265. The camera had a focal length of 6 inches and the photographs were taken from a height of approximately 5,000 feet.

Two single lens photographs, Nos. V-85 and V-86 (880 K-8) taken in the vicinity of Cornfield Point by the Army Air Corps on November 4, 1933 were also used in compiling the sheet.

The stage of the tide at 11:35 A.M. on November 4, 1933 when the five lens photos were taken was 4.6 feet. (Computed from the Tide Tables).

The stage of the tide at 12:50 P.M. on November 4, 1933 when the single lens photos were taken was 4.1 ft. (Computed from the Tide Tables).

General Description: This sheet comprises the coastal area in the vicinity of the town of Westbrook and eastward to the vicinity of Cornfield Point.

This region is mostly rural except in the immediate vicinity of the business section of Westbrook and along the beaches where there are a large number of summer homes and beach resorts.

The land in the immediate vicinity of the coast is low, and broken by a considerable number of marshes. Inland from the coast the land is rolling and wooded except where the woods have been cleared for small farms and residential sections. Most beaches are sand with some boulder strewn areas as shown.

Grove Beach, Westport Beach, Stannard Beach, Chapman Beach, Chalker Beach, Saybrook Manor and Cornfield Point are all small beach towns and consist mostly of summer homes and bathing

resorts. There are no harbors or docks of any commercial importance in the area covered by this sheet.

One steam railroad crosses the sheet. This is the Shoreline Division of the New York, New Haven and Hartford R. R. and is double tracked from the western limit of the sheet to Westbrook and has four tracks from Westbrook to the eastern limit of the sheet, with two side tracks near the Westbrook station as shown.

The principal highway on the sheet is the Boston Post Road (U. S. Highway No. 1). This is the main highway between New York and Boston and carries a very large amount of traffic.

There is a small boat harbor at Chapman Point, enclosed by a stone breakwater as shown.

CONTROL:

Sources:

1st Order Triangulation by C. D. Meany, 1932.
2nd and 3rd Order Triangulation by G. C. Mattison, 1934.

(Several triangulation stations dated 1882 on the sheet were relocated in 1934 by G. C. Mattison).

Errors: No errors were found in control stations.

Other Sources of Control: No control, other than that mentioned above was used in the compilation of this sheet.

COMPILATION:

Method: The usual five lens radial line method of plotting was used in the compilation of this sheet. The radial plot was completed by personnel of the party of G. C. Mattison in 1935 and appears to have been accurately accomplished, although it was found necessary to add a considerable number of additional points due to the photos being considerably off scale in places.

Adjustments of Plot: No unusual adjustments of plot were found necessary.

INTERPRETATION:

In general, no difficulty was experienced in interpreting the detail from the photographs except in a few places where buildings and other minor details were obscured by trees. The area was inspected by me during the progress of the compilation and it is believed that no detail of any importance has been omitted from the sheet.

The high water line, as sketched on the field prints by the Field Inspection Party was drawn on the sheet. No attempt was made to delineate the low water line as the photos were all

Westbrun
Beach

T-Side

#60/60/60

taken at high tide and the low water line on a considerable part of the sheet falls too far offshore to be correctly estimated at low water. Only such offlying rocks as could be seen on the photographs were plotted on the sheet.

The stereoscope was used, where necessary, for defining buildings. However the shape and size of some buildings on the sheet may be slightly in error due to being partly obscured by trees or hard to pick on the wing prints. All buildings that could be seen on the photographs were shown on the sheet.

The large number of small drainage ditches in all the marshy areas were dug to drain the marshes for mosquito control.

CONVENTIONAL TOPOGRAPHIC SYMBOLS:

Only graphic symbols, approved by the Board of Surveys and Maps were used, except as follows:

The symbol (525) was used to designate brush. An attempt was made, by using this symbol in conjunction with the tree symbol to show the density of woods and brush in the various areas. Deciduous trees predominate in this area. There are a few scattered pines in some sections of the deciduous woods but they are not of sufficient numbers to use the symbol for evergreen trees.

Cultivated fields were left blank, otherwise all areas were filled in with symbols. Paved roads are shown by a full double line and private or dirt roads by a broken double line. Very poor roads or trails are indicated by a single broken line. Fences, which could be seen on the photos, were indicated by lines of short dashes. In several places on the sheet the roadbed of an abandoned trolley line from which the rails have been removed is indicated by a line of long dashes and notes on the overlay sheet.

INFORMATION FROM OTHER SOURCES:

Data on bridges shown on the overlay sheet was obtained from the U. S. Engineers.

Names of roads and streets were obtained from local town maps in Westbrook and Old Saybrook. No extra prints of these maps were available for forwarding with the sheet.

GEOGRAPHIC NAMES:

Names of geographic features were obtained from Charts Nos. 215 and 216 and from local sources.

New Names: "Westbrook Beach", name obtained from local maps and verified by local residents.

"Stannard Beach", name obtained from local maps and verified by local residents.

"Chapman Beach", name obtained from local maps and verified by local residents.

"Chalker Beach", name obtained from local maps and verified by local residents.

"Saybrook Manor", name obtained from local maps and verified by local residents.

"Back River", name obtained from local maps and verified by local residents; also shown by this name on U. S. G. S. Quadrangle.

Conflicting Names:

"Grove Beach", shown by this name on all local maps and on U. S. G. S. Quadrangle, also verified by local residents. The name "Pine Orchard Beach" is no longer in use.

COMPARISON WITH OTHER SURVEYS:

Junctions: This sheet makes a satisfactory junction on the west with sheet No. T-5276. The sheet to the eastward has not yet been compiled.

Comparison with Plane Table Sheets Nos. T-1551a and T-1568 (1883).

Near the western limit of the compilation the high water line has receded about 40 meters. Numerous changes in the high water line exist in the vicinity of the mouths of the Menunketesunk and Patchogue Rivers. The high water line has built out to the westward of Chapman Point. To the southward of the mouth of the Oyster River the high water line has receded about 50 meters. Except for the above, there has been little change in the high water line in the 50 years between the two surveys.

While a number of improvements, roads, etc. have been built since the old survey, a considerable amount of the interior topographic detail remains about the same as at the time of the old survey. In general the position of such roads, fences, etc. as are common to both sheets agree quite well and it is believed that a detailed discussion of differences between the two sheets would serve no useful purpose.

Comparison with Charts No. 215 and 216:

This subject is covered by a comparison with the above plane table sheets, from which the charts were compiled.

Numerous small jetties and piers along the beach, and a small boat harbor at Chapman Point are not shown on the charts.

LANDMARKS:

The following objects in the area covered by this sheet are being reported on Form No. 567:

CHIMNEY, house --- This is triangulation station LIBBYS CHY., 1934 on Duck Island, and is a stone chimney on the west side of the largest house on the island. Visable only in the immediate vicinity.

TANK, (ELEVATED) ---This is triangulation station WESTBROOK TANK, 1934. Tank stands on a hill about 40 feet high and is elevated about 130 feet above the ground and is the most prominent landmark in the locality.

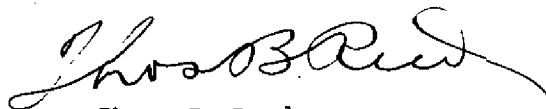
CUPULO, (Castle Inn) --- This is triangulation station YE CASTLE INN TOWER, 1934. The cupulo, in conjunction with the prominent building of the Castle Inn makes a prominent inshore landmark. Cupulo is about 50 feet high.

RECOMMENDATION FOR FURTHER SURVEYS:

This compilation is believed to have a probable error of not more than 5 meters in position of well defined detail of importance for charting purposes and of 8 meters for other detail.

To the best of my knowledge this compilation is complete in all detail of importance for charting purposes within the accuracy stated above and as mentioned in the foregoing report, and no further surveys are required.

Respectfully submitted,



Thos. B. Reed,
Lieut., C. & G. Survey,
Chief of Party.

GEOGRAPHIC NAMES

Survey No. **T-5081**

Name on Survey

	A	B	C	D	E	F	G	H	K	
<u>Hammock River</u>										1
<u>Westbrook Beach</u> ✓				✓	✓					2
<u>Stannard Beach</u> ✓				✓	✓					3
<u>Chapman Beach</u> ✓				✓	✓					4
<u>Chalker Beach</u> ✓				✓	✓					5
<u>Saybrook Manor</u>				✓	✓					6
<u>Back River</u> ✓			✓	✓	✓					7
<u>Grove Beach</u> ✓	✓		✓			✓				8
<u>Duck Island Roads</u> ✓	✓	Duck I Hbr.								9
<u>Duck Island</u> ✓	✓	✓								10
<u>Menunketesuck River</u> ✓	✓	✓	✓							11
<u>Patchogue River</u> ✓	✓	Pachaug R	✓							12
<u>Menunketesuck Island Point</u> ✓	✓	✓	✓							13
<u>Westbrook Harbor</u> ✓	✓	✓	✓							14
<u>Murdock Hill</u>		✓								15
<u>Westbrook Beach</u>	✓	✓	✓			✓				16
<u>Westbrook</u> ✓	✓	✓	✓							17
<u>Salt Island</u> ✓	✓	✓	✓							18
<u>Long Rock</u> ✓	✓	T-1551a	✓							19
<u>Salt Works Bay</u> ✓	✓	T-1551a	✓	✓	Location					20
<u>Old Kelsey Point</u> ✓	✓	T-1551a	✓	✓	chap- man Pt.					21
<u>Chapman Point</u> ✓	✓	chap- man's Pt. T-1551a	✓	✓	Kelsey Pt.					22
<u>Oyster River</u> ✓	✓	✓	✓							23
<u>Beacon Hill</u>		✓								24
<u>Cornfield Point</u> ✓	✓	✓	✓							25
<u>Long Island Sound</u> ✓	✓	✓	✓							26
<u>Appetek Road</u>		T-1551a								27
<u>old Kelsey Point</u> ✓										28

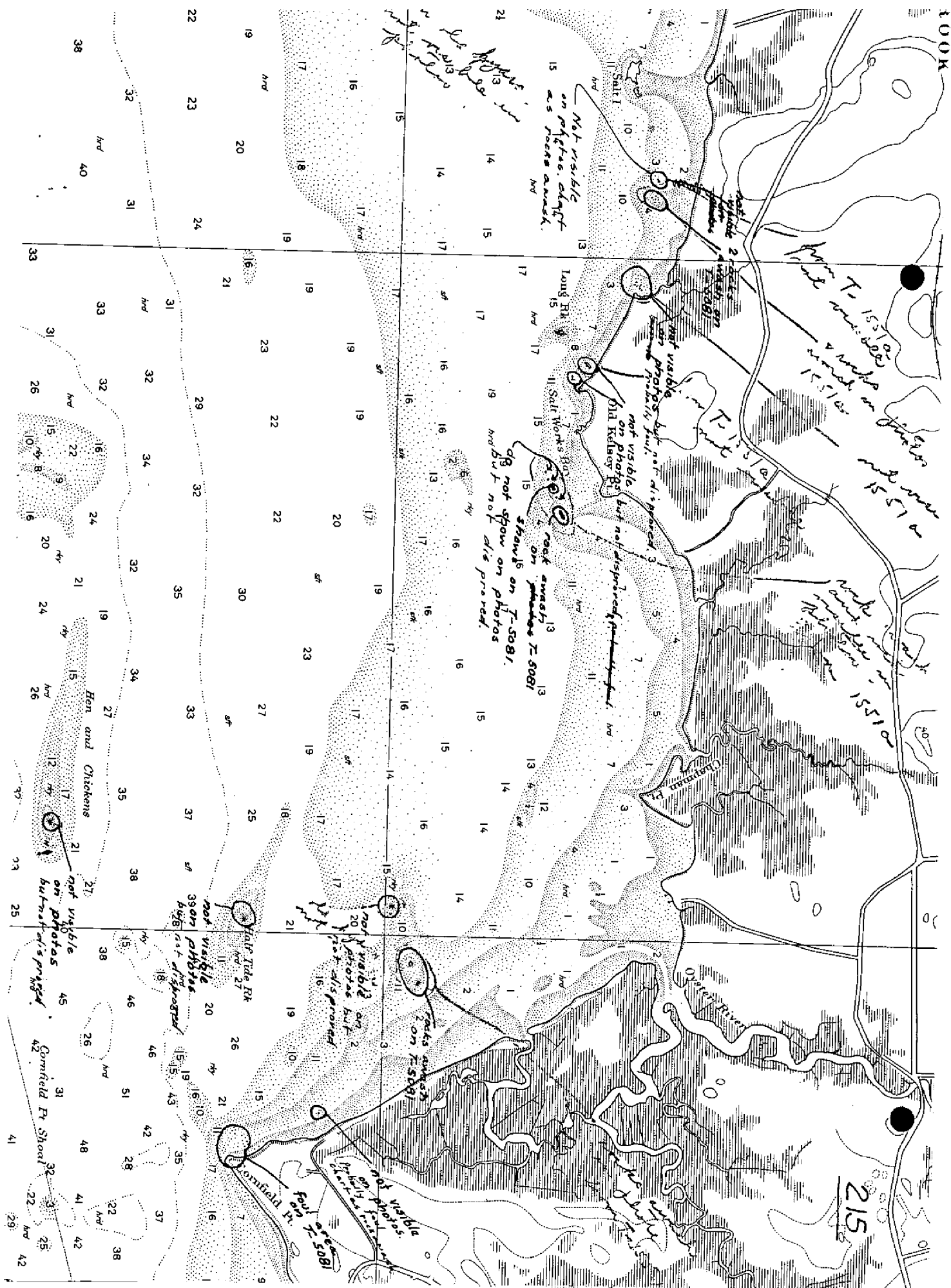
Chapman Pt.
approved by USGB
6-9-38

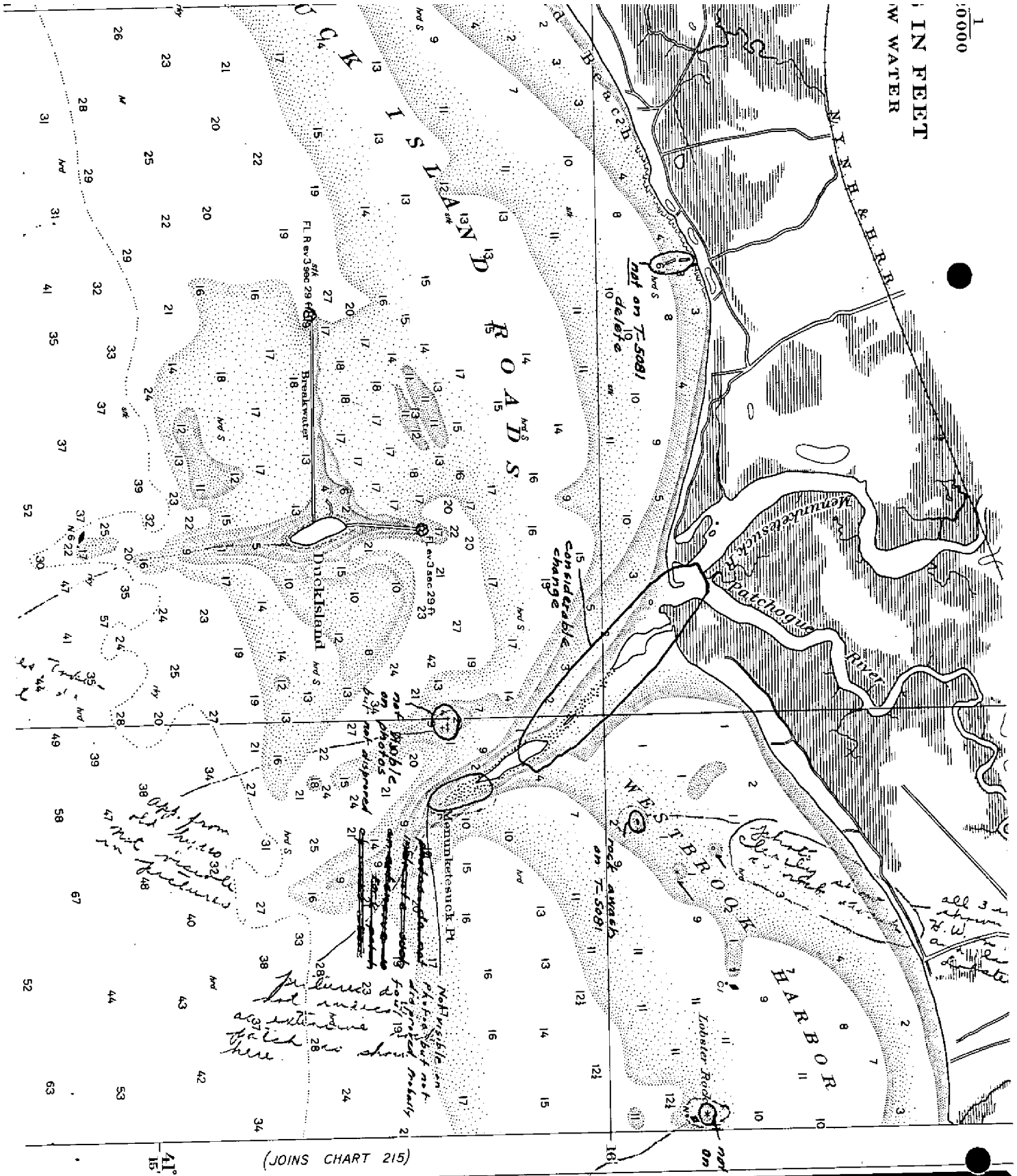
decisions
withheld
P.O. inquiring
made
2/16/37
STE

Names underlined in red approved

by STE on 2/26/37

	Remarks	Decisions
1		see T-5276
2		
3		
4		
5		
6		
7		
8		
9	"Duck I Roads" on Oyster Grounds Map, 1889 Bureau of Labor Statistics Lib. File 846	Acc. No. 1096
10		
11		
12	Patchogue R. on T-1551a	
13	called "Island" on Ch. 1212	
14		
15		
16		
17		
18		
19		see GN 6 (1937)
20		see GN 6 (1937)
21		
22		
23		
24		
25		
26	Lobster Rk on Chs is another rk not shown on this Sh.	Decision withheld for Hydro. Sh.
27		see GN 6 (1937)





(JOINS CHART 215)

not visible on photo
all from this
not visible on photo

REVIEW OF AIR PHOTO COMPILATION T-5081
Scale 1:10,000

There are no recent ^{hydrographic} topographic or graphic control surveys in this area.

Comparison with Previous Topographic Surveys

T-80 (1838), 1:10,000
T-1440 (1877), 1:5,000

This compilation is adequate to supersede the portions of the above surveys which it covers.

T-1551a (1883), 1:10,000
T-1568 (1883-85), 1:10,000

Major changes in shoreline are in the vicinity of Menunketesuck Point. This compilation is adequate to supersede the portions of these two surveys which it covers except for contours, reef symbols, low water line and some rocks. The photographs were taken at high tide and it is impossible to identify low water line or reefs on the photographs. The stage of the tide also makes it difficult to identify rocks.

Comparison with Hydrographic Surveys

There are no recent hydrographic surveys of this area.

Comparison with Charts 1212, 215 and 216

Sections of charts 215 and 216 accompany this review and indicate rocks not verified by the compilation. Charted rocks and reefs which do not show on the compilation should be retained until a hydrographic survey can be made to verify or disprove their existence.

Remarks

All landmarks and aids to navigation in this area submitted by the field party are shown on the compilation.

Descriptions of recoverable stations (Form 524) are filed under the number of this compilation.

J. A. McCormick

February 6, 1937.

J. A. McCormick.

B. G. Jones

Note 2/24/38. A rock about H.W. at lat. $41^{\circ}16.6'$ long $72^{\circ}24.6'$ west 260 meters from Chapman has been added to celestial and to temporary file copy this date. This sheet T-5081 has not been applied to charts 215 or 212 at this date. The rock was taken from its appearance on the photos. It was not noted by field inspection. B.G.J.

REVIEW OF AIR PHOTO COMPILATION NO. T-5081

Chief of Party: Thos. B. Reed

Compiled by: Thos. B. Reed

Project: Coast of Connecticut

Instructions dated: Aug. 24, 1936.

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)

Yes

2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)

Yes

3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)

No ground surveys made.

4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)

None transmitted.

5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.

No contemporary surveys.

6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)

Yes

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

Yes

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

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)

Low water line not shown; see descriptive report.

9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)

Yes

10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)

Yes

11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)

Yes

12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)

Yes

13. The geographic datum of the compilation is N. A., 1927 and the reference station is correctly noted.

Yes

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)

Yes

15. The drafting is satisfactory and particular attention has been given the following:

1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine black dots. ✓
4. Closely spaced lines are drawn sharp and clear for printing. ✓
5. Topographic symbols for similar features are of uniform weight. ✓
6. All drawing has been retouched where partially rubbed off. ✓
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. ✓

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

17. Remarks:

The large number of charted rocks, awash & sunken, not definitely disposed of, is due to no field inspection - and no plan table control sheets - This unfinished work should be called to attention of Hydrographer when work is resumed in this vicinity

18. Examined and approved;

Thos B Reed
Thos. B. Reed
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *J. A. Mc Cormick* *B. J. Jones*

Examined and approved:

E. H. Green
Chief, Section of Field Records
L. O. Robert
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work
G. H. Wade
Chief, Division of Hydrography and Topography.