

5275

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. T-5275

State Connecticut.

LOCALITY

~~North Shore~~
Long Island Sound

~~Gulford Harbor~~

Sachem Head and Vicinity

1935

CHIEF OF PARTY

M. H. Reese.

G. C. Mattison

U. S. GOVERNMENT PRINTING OFFICE: 1934

5275

Applied to Chart Correction 216 Sept. 28, 1937 H.E. MacEwen
Applied to Chart Correction 217 Nov. 12, 1937 H.E.M.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

AIR PHOTO
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. 17

REGISTER NO. ^{T-5275}
~~T-5274~~ (west half) **T5275**

State Connecticut

General locality North Shore Long Island Sound

Locality Sacham Head and Vicinity

Scale 1:10,000 Date of Photographs Nov. 4, 1933
Date of ~~survey~~ Compilation July 30, 1935

Vessel Army Air Corps Airplane

Reviewed and recommended for approval by:

Chief of party Lieutenant Commander G. C. Mattison

Photographs radial plotted by:

~~Surveyor~~ Charles More March 9, 1935

Inked by M. B. Benevento July 30, 1935

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

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

Instructions dated August 10th and September 9th, 1933

Remarks: Compilation of aerial photographs M-195 to M-206

(880-14) on a scale of 1:10,000 and printed by photo-litho-

graphic process.

Blueprint mfg. filed 1/29/37

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.

REGISTER NO. T-5275 (*east half*)

State Connecticut

General locality *North Shore* Long Island Sound

Locality *Guilford Harbor* *Sachem Head & Vicinity*

Scale 1:10,000 photographs- November 4, 1933
Date of ~~survey~~ October 12, 1933

~~Vessel~~ Air Photo Compilation Party No. 24, New London, Conn.

Chief of party M. H. Reese

Surveyed by See data sheet in the descriptive report.

Inked by E. L. Fitch.

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

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

Instructions dated August 12, 1935

Remarks: Compiled and printed on scale of 1:10,000

Scale factor 1.00.

T-5275 (west half)

JOB SHEET

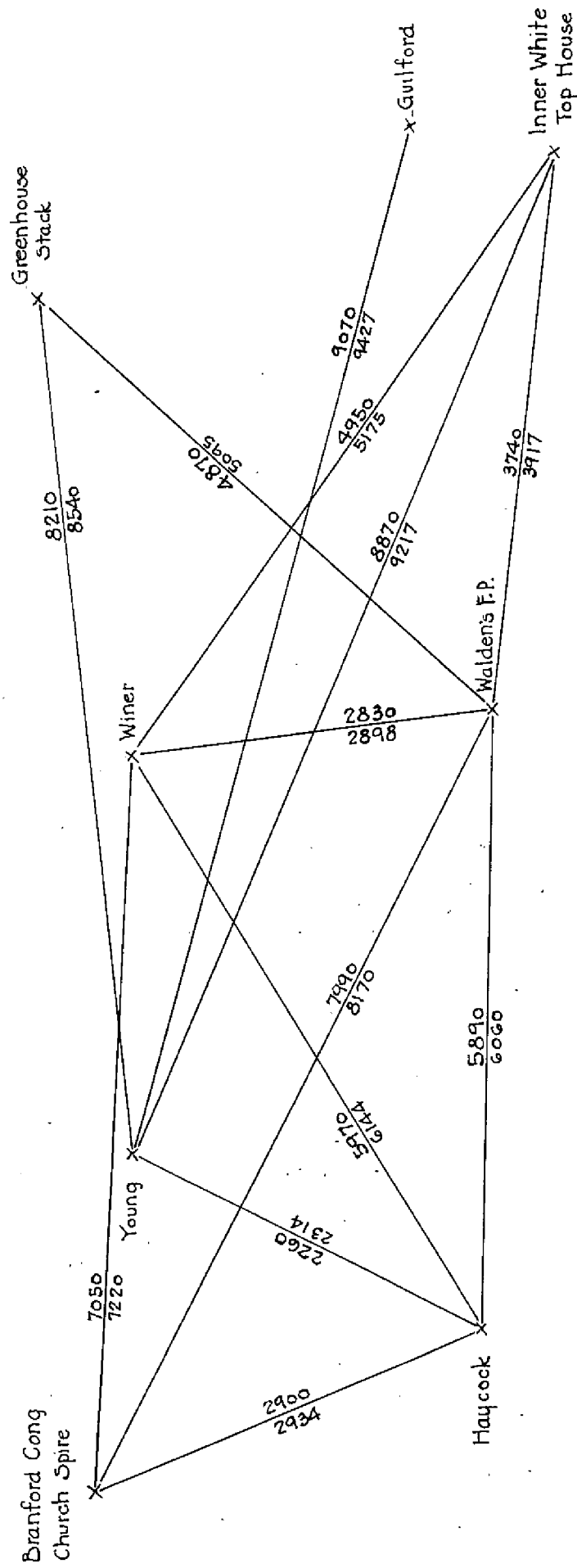
H.T. - 150 Instructions dated 8/10, 9/9, 1935.

PHOTOGRAPHS TRIMMED BY:	Joseph Andrews 3d	April 1934
FIELD INSPECTION BY:	<u>Joseph Andrews 3d</u>	8/13/34
INTERSECTION AND CONTROL POINTS MARKED BY:	Charles More	7/27/34
PHOTOGRAPHS MOUNTED BY:	S. Lebowsky E. W. Hamilton	12/4/34
RADIAL LINES DRAWN BY:	S. Lebowsky	12/6/34
PRELIMINARY RADIAL PLOT BY:	Charles More	1/15/35
SCALE FACTOR COMPUTATIONS BY:	Charles More	1/16/35
SCALE FACTOR COMPUTATIONS VERIFIED BY:	L. E. Marsh	1/16/35
POLYCONIC PROJECTION BY:	E. M. Tierney	1/22/35
POLYCONIC PROJECTION VERIFIED BY:	H. W. Jennings	1/22/35
TRIANGULATION STATIONS PLOTTED BY:	E. M. Tierney	1/23/35
TRIANGULATION STATIONS VERIFIED BY:	Charles More	1/25/35
SMOOTH RADIAL PLOT BY:	Charles More	4/9/35
TRACING OF PHOTOGRAPHIC DETAIL BY:	M. B. Benevento	7/25/35
PRELIMINARY INSPECTION OF SHEET BY:	Charles More	7/30/35
FINAL INSPECTION OF SHEET BY:	G. C. Mattison, Chief of Party	7/31/35
FORWARDED TO OFFICE:		

TOTAL AREA OF SHEET: 8.8 sq. Statute miles.

LENGTH OF SHORELINE: 8.8 statute miles.

LENGTH OF SHORELINE (rivers and sloughs less than 200 m wide) 11.9 Statute miles



SCALE FACTOR COMPUTATION DIAGRAM - PHOTOS 186 to 210
(Not to Scale)

T-5275 (West half)
SCALE FACTOR COMPUTATIONS - PHOTOS 186 to 210

	<u>Measured</u>	<u>Computed</u>	<u>Factor</u>
Branford Cong. Church Spire to			
Haycock	2900	2934	.988
Waldens Flag Pole	7990	8170	.978
Winer	7050	7220	.977
Young to Haycock	2260	2314	.978
Guilford	9070	9427	.962
Inner White Top House	8870	9217	.962
Greenhouse Stack	8210	8540	.962
Winer to Haycock	5970	6144	.972
Walden Flag Pole	2830	2898	.976
Inner White Top House	4950	5175	.958
Greenhouse Stack to			
Waldens Flag Pole	4870	5095	.956
Haycock to			
Waldens Flag Pole	5890	6060	.972
Waldens Flag Pole to			
Inner White Top House	3740	3917	.958
	Average Factor:		.970
	Used Factor:		1.000

Computed by: Charles More 1/16/35

Checked by: L. E. Marsh 1/16/35

This sheet was compiled as two separate compilations and submitted as two separate descriptive reports. The two reports and two sheets have been combined into one, no T 5275.

DESCRIPTIVE REPORT

To Accompany

PHOTO TOPOGRAPHIC SHEET NO. ~~T5274~~ *T-5275 (west half)*

FIELD NO. 17

CONNECTICUT

SACHEM HEAD

GENERAL INFORMATION

Compilation No. ~~T5274~~ *T-5275 (west half)* covers the area in the vicinity of Sachem Head and Stony Creek and extends along the shore from Vineyard Point to Flying Point. It also includes a portion of the Thimble Islands.

The photographs were received from the Washington Office in April, 1934.

The work was done in accordance with instructions from the Director dated August 10th and September 9th, 1933 and all circular letters issued to date.

A general report covering this area has not been made and all information is contained in this report, except as hereinafter mentioned.

PHOTOGRAPHS

Five Lens

The photographs used were numbered M-195 to M-206 inclusive.

For other data regarding these photographs, see report for compilation T5272.

Single Lens

The following single lens flights were used in the compilation of this sheet:

Photographs V54 to V58 (880D-8)
Photographs V46 to V53 (880H-8)

For information regarding photographs V54 to V58 (880D-8) see report for compilation T5273.

Photographs V46 to V53 were taken October 12, 1933 at 11:15 A. M. and the stage of the tide was computed from the tide tables as 1.6 feet. The scale factor is 0.978.

GENERAL DESCRIPTION OF TOPOGRAPHY

This sheet comprises territory in the Towns of Guilford and Branford, New Haven County.

Only a small portion of the Town of Branford is contained in this area. This portion of Branford lies to the west of a meandering line running in a general northerly direction from a point on the shore just east of Hoadley Neck. All the remaining area east of this line is within the Town of Guilford.

Railroads

The railroad crossing the sheet in a general easterly and westerly direction is a two track steam road. It is the Shore Line Division of the New York, New Haven & Hartford Railroad and is represented by a single track symbol. The only railroad station contained in this area is the Leetes Island station.

The Connecticut Company electric railway which crosses the adjacent sheet to the west terminates at the southwest corner of this sheet.

The railroad running in a general northerly and southerly direction near the westerly extremity of this compilation is a privately owned steam road. This railroad is used to carry granite from the quarry near the northwest corner of this sheet.

Water Courses

There are no navigable water courses within the limits of this sheet.

Developments

The area north of the railroad is largely wooded except that portion adjacent to the northeasterly corner of the sheet which is devoted to farm and grazing lands.

That portion south of the railroad is wooded with some marshy areas. The shore is developed to some extent by a number of summer homes and beach colonies.

The earth strata in this area is largely composed of granite and trap rock. There is a granite quarry near the northwesterly corner of this sheet and two abandoned quarries, one at Leetes Island and one at Sachem Head.

An electric power transmission line crosses a portion of this sheet near the northern extremity, in a general easterly and westerly direction.

Formerly an electric trolley line crossed this entire area. This trolley line is no longer in use and although the rails have been torn up, the old embankment and right of way is very clear on the photographs. This was shown by a single broken line and is marked "abandoned trolley road bed".

Terrain

This is a rolling country and reaches a maximum elevation of 250 feet above high water, in the vicinity of a point whose latitude is $41^{\circ} 16' 45''$ and longitude $72^{\circ} 42' 30''$.

Shore Line

The shore line is irregular with the major portion of the off-lying islands and rocks on the westerly portion of the sheet.

Sachem Head. From Vineyard Point around Sachem Head to Joshua Cove the foreshore is largely ledge rock with a few short stretches of sand beach. There are many offlying rocks and shoals in this area.

The small island off the southwesterly shore of Sachem Head is connected to the mainland by a foot bridge. The Sachem Head Yacht Club is situated on this island.

Joshua Cove. The foreshore in this area is sand with a few small patches of salt grass. Horse Island and Foskett Island are offshore in this cove. At low water, Horse Island is connected to the mainland by a sand spit. There are several offlying rocks in this Cove.

The foreshore of both sides of Joshua Point is ledge rock.

Joshua Point to Hoadley Point. The foreshore in the cove just north of Joshua Point is shells and pebbles. There is a rock about 100 meters offshore in this cove.

From this cove to Hoadley Point the foreshore is ledge rock with a few short stretches of sand beach.

Entering Little Harbor are two small stone jetties.

Granite is no longer quarried at the Leetes Island Quarry on Hoadley Neck and only the piles remain of the old wharf shown on the chart in the cove just east of the neck.

Narrows Island and several other smaller islands are offshore from Hoadley Point.

Hoadley Point to Flying Point. From Hoadley Point to the western extremity of this sheet the foreshore is ledge rock except at the marsh area west of Hoadley Neck.

The foreshore of the Thimble Islands is ledge rock.

CONTROL

Sources

1st Order Triangulation	1932	by	C. D. Meaney
2nd Order Triangulation	1933	by	G. C. Mattison
3rd Order Triangulation	1933	by	G. C. Mattison
Theodolite 3 Point Fixes	1934	by	G. C. Mattison

In plotting the triangulation stations on this compilation an adjustment of two (2) meters was added to the D.M.s and D.P.s to agree with the first order work which is on the North American Datum Plane of 1927.

It was impossible to spot certain control stations on the photographs. A sextant angle and distance was measured in the field to some point that could be recovered on the photographs. Triangulation station "Sachem" is one of these control stations where an eccentric point was picked.

Errors

No errors in control were found by the radial plot.

Other Sources of Control

No other sources of control were used.

COMPILATION

Method

The photographs were adjusted by means of the radial plot method. The scale of this sheet as drawn is 1:10,000. The scale factor of the photographs was computed as 0.970 and the value of 1.000 was used in laying out the projection.

In those areas covered by both single lens and five lens photographs, points common to both were picked. The photographic detail was traced from the single lens photographs by adjusting between these points that were determined by the five lens photo radial plot.

Adjustment of Plot

No marked adjustment was necessary on this sheet.

Interpretation

Some difficulty was encountered in deciding the character of photographic detail in certain areas. A field inspection was made of these areas, and the notes were inked on the field prints.

The high water line was drawn on the field prints from actual field inspection.

The low water line was traced from the single lens photographs, which were taken at about low water. The low water is ~~only~~ shown on this compilation in the vicinity of Sachem Head and the Thimble Islands. No photographs taken at low water were available for the remaining portion of this sheet.

Conventional Signs

Except as noted below, only the usual graphic symbols as approved by the Board of Surveys and Maps were used.

Poor motor roads are indicated by a double broken line and very poor roads or trails are shown by a single broken line. The width of roads is slightly exaggerated in order to keep the detail clear and open.

~~It was impossible to trace the true position of all small streams in wooded areas. They are shown with a broken line and marked "stream approximate position" on the overlay.~~

The boundaries of water shoal areas are indicated by a single broken line. These were drawn in from inspection of the photographs only and may depart from the true conditions.

Character of Marshes

The marsh areas adjacent to the shore are overgrown with salt grass and are barely covered at flood tide. The high water line was drawn in by following the berm line on the photographs.

Inshore, there are several fresh water marsh areas. These areas are wooded in parts and are overgrown with small ferns.

Information From Other Sources

There was forwarded with the adjacent sheet to the west, a map of the Town of Branford. A map of the Town of Guilford is not available.

Hydrographic Signals

Several prominent landmarks along the shore were spotted on the photographs and located by radial plot. Some of these are described on form #524 and submitted with this report.

Comparison with former surveys

Previous surveys were made in 1884, as covered by topographic sheets 1551b and 1569a. The bromide sheets received were rather indefinite in places as to shoreline, especially where the bluff symbol obscured the high water line. In general, the photo compilation shows a much more irregular shoreline than the topographic sheets.

(It is evident that the topographer either did not rod in every indentation or else generalized too much.) A careful comparison was made by the Chief of Party, and it is believed that the photo compilation is more nearly correct. As the discrepancies occur over the whole sheet, it would be impracticable to note every small difference, other than that found in each locality.

East of Sachems Head, there are several differences, all apparently due to natural changes in this exposed locality over a period of fifty years. The only offlying shoal areas are those actually shown in the photographs. Good, clear, single-lens photographs of this vicinity indicate very definitely that the photo compilation is correct.

A breakwater has been constructed on the western tip of the lower Sachems Head. Just off this breakwater, the photographs clearly show two submerged ledges not shown on the topographic sheet. This point has been developed and there are several changes in the topographic features.

On Uncas Point, there is a spit and also a breakwater not shown on the topographic sheet. The spit which lies about 100 meters north of the breakwater is apparently of artificial construction.

The shoreline at the head of Joshua Cove has changed considerably, probably due to natural causes.

Joshua Point is more irregular than shown on the topographic sheet. Differences are probably due to natural changes.

The changes from Joshua Point to the western limits of the sheet are all probably due to either natural or artificial changes. A careful comparison between the photographs and the compilation indicates that the photo compilation is correct.

In compiling the shoals in the vicinity of the Thimble Islands, only those showing clearly in the photographs were ~~charted~~ shown on the compilation.

- STATISTICS -

on

SHEET, FIELD NO. _____ REG. NO. T-5275 *(east half)*
 PHOTOS, NO. 207 (880-14) V-46 (880 H-8) TO NO. 218 (880-14) V-49 (880 H-8)
 November 4, 1933 11:30 A. M.
 DATE OF PHOTOGRAPHS October 12, 1933 TIME 11:15 A. M.

	BY	DATE
ROUGH RADIAL LINE PLOT	Charles More	1/15/35
SCALE FACTOR (1.00)		
SCALE FACTOR CHECKED	L. E. Marsh	1/16/35
PROJECTION	E. M. Tierney	1/22/35
PROJECTION CHECKED	H. W. Jennings	1/22/35
CONTROL PLOTTED	E. M. Tierney	1/24/35
CONTROL CHECKED	Charles More	1/25/35
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT	L. E. Marsh	4/26/35
RADIAL LINE PLOT CHECKED		
DETAIL INKED	part <i>E. L. Fitch</i> E. L. Fitch	9/9 to 10/12/35
PRELIMINARY REVIEW OF SHEET	<i>M. H. Reese</i> M. H. Reese	10/15/35

TOTAL AREA OF SHEET 6.0 sq. Statute Miles
 AREA OF DETAIL INKED 6.0 sq. Statute Miles (Land Area)
 AREA OF DETAIL INKED _____ sq. Statute Miles (Shoals in water area)

LENGTH OF SHORELINE(more than 200 m. from nearest opposite shore)
7.1 Statute Miles.
 LENGTH OF SHORELINE(rivers and sloughs less than 200 m. wide)
21.5 Statute Miles.

General LOCATION Long Island Sound

LOCATION Guilford Harbor

DATUM North American 1927.

STATION Clapboard, 1933
 (unadjusted)

29.035"
 Latitude 41° 17' 18.95.7 m.
36.277"
 Longitude 72° 39' 18.44.2 m.

*See pages 4-West Half and 4-East Half for correction
 applied to Field Computations.*

COMPILER'S REPORT

FOR

PHOTO TOPOGRAPHIC SHEET NO. T-5275. *(east half)*

I. GENERAL INFORMATION:

This sheet was compiled in accordance with instructions from the Director to Lieut. Comdr. G. C. Mattison, dated August 10, and September 9, 1933, and instructions to Lieut. (j.g.) M. H. Reese, dated August 12, 1935.

The sheet was transferred to Lieut. Reese by Lieut. Comdr. Mattison for completion when the latter was relieved as chief of party. The sheet at this time was approximately 75% completed, but, because of handling, the ink had so worn off that it was necessary to re-ink the sheet 100%. The area completed by this draftsman was the complete Long Island Sound shore line and the area adjacent thereto.

While re-inking the sheet the orientation of photographs for tracing was carefully checked and found to be quite accurate. It was found necessary however to add a considerable number of radial points, principally along the coast line, to insure accuracy. It was also found necessary to do some additional field inspection because of the lack of notes on the field photos transferred to Lieut. Reese.

Information used in compiling this sheet was obtained from notes on field photos, and from field inspection by the compiler in areas where the exact nature of the detail could not be determined from the photographs.

This sheet comprises the greater portion of the town of Guilford in the northwest section, the settlement of East River, and the summer colony of East River Beach, in the east and southeast sections respectively. The settlement known as Mungerton is in the northeast part of the sheet. East River is the dividing line between the political subdivisions of Guilford and Madison. Guilford Harbor being the most important feature on the sheet.

Data concerning the manner in which the scale factor of this sheet was obtained was not received from Lieut. Comdr. Mattison. However a check of the projection and distances between triangulation stations show it to have a scale of 1.00, and is reported herein as such.

All houses and buildings are shown on this compilation except those within the thickly settled section of the town of Guilford where only the public buildings were shown.

Two main water courses, flowing in a general southerly direction are within the limits of this sheet, namely East River and West River. Neck River, a tributary, empties into East River near its mouth. There is also another small stream, ^{Sluice Creek} flowing in a southerly direction, which empties into the mouth of East River. ~~This stream is not named.~~

A large portion of this sheet is covered by the marsh areas adjacent to East River, West River, and Neck River. These are salt marshes and the berm line is shown as the high water line. In the marsh areas are many ditches presumably used for mosquito control.

The terrain between, and north of the marsh areas, is generally hilly and rolling and there are many cultivated areas which have been shown by conventional symbols.

The Sound shore line is very irregular and ranges from grass through sand and boulder beaches to rock ledges, all of which have been shown by the conventional symbols. On the west side of West River at its mouth, and at the head of Indian Cove, are shoal areas shown by broken lines. A concrete seawall extends around Hogshead Pt., and is shown as such on the overlay. There is also a seawall around the point just west of Hogshead Pt. The marsh around the inner portion of Guilford Harbor thins out on reaching shore, forming a very irregular and broken high water line, and for this reason grass is shown outside the high water line.

The bluffs shown along the Sound shoreline extend from 10 to 20 feet in height.

*Bluffs have
not been shown
see Review*

One steam railroad is shown. This railroad, which crosses the entire central part of the sheet, is a portion of the Shore Line Division of the N. Y. N. H. & H. R. E. It is represented by a single line with the number of tracks denoted by ~~cross lines~~, ^{notes} the symbol for railroads used in aerial mapping. ~~This symbol being used because of space requirements.~~ The one line represents the center line of the right-of-way. From the western extremity of the sheet to the railroad yards at Whitfield Street are two tracks; from the east end of the railroad yards to the station at East River are four tracks; and from this point to the eastern extremity of the sheet are two tracks. There are also numerous sidings shown by the same symbol.

In the north central portion of the sheet is an abandoned trolley line, indicated on the overlay, and shown by conventional symbol.

All bridges shown on this sheet are of the fixed type and are over streams only navigable by very small craft. For this reason no information as to clearance, etc., is shown.

The tank noted on overlay near East River station is a wooden railroad water tank.

A single flight of five lens photographs comprise the major portion of the photos used in this compilation. This flight, running in an east and west direction approximately along latitude $41^{\circ} 16' 15''$, was taken by the U. S. Army Air Corps with model AC 31-78 camera on November 4, 1933, at approximately 11:30 A. M. The flight was designated 880-14 and the photographs numbered M-207 to M-218 inclusive, the numbering increasing in the direction of flight which was west to east. The photographs were taken at approximately high tide.

A flight of single lens photographs were taken by the U. S. Army Air Corps October 12, 1933 at 11:15 A. M. This flight began just south of Mulberry Pt., and continued westward. The flight was designated 880H-8 and the photographs numbered V-46 to V-49 inclusive, the numbering increasing in the direction of flight which was east to west. These photographs were taken at approximately low tide.

The centers of extreme pictures on both flights are indicated on the overlay, except for the most western photo of the single lens flight. In this case V-47 is shown, as the centers of the other photos fall off the sheet, but were used in this compilation

In as much as the single lens pictures were taken at low tide it was possible to show all rocks awash at low water in the area covered by these photos. This includes the area adjacent to Lobster Rock, Mulberry Pt., and Indian Cove. In the area to the east of this, covered by the five lens photographs taken at approximately high tide, it was only possible to show rocks awash at high tide. A special effort has been made to show all rocks possible but it is realized that important rocks may have been missed because they did not show on the five lens photos.

See review at back.

II CONTROL:

(A) Sources:

Triangulation by G. C. Mattison, 1933.

The geographic positions as established by the above party were computed on the North American 1927 datum from unadjusted values and an adjustment of .2 meters was added to the D. M.s and D. P.s to agree with the adjusted values.

A three point fix was taken on the second base of the Guilford baseball field and used as additional control. This fix is outside the tracing limits of the sheet but is shown by a 2.5 mm. circle.

The triangulation station "Gable E. side Guilford Harbor"-1933, is not shown on this compilation because the house, of which this gable was a part, was burned down after the photos were taken and a new house built on the old foundation. As it is not certain the present house coincides with the position the station is omitted.

(B) Errors:

In checking over this sheet, and while doing the additional drafting, no errors in control were disclosed.

(C) Character:

The control for the radial line plot on this compilation was quite adequate.

III COMPILATION:

(A) Method:

The usual five lens method of radial line plotting was used in the compilation of this sheet. Where the single lens flight overlapped the five lens flight, points common to both were picked. The topographic detail was traced in from the single lens photos by adjustment between these points as determined by the five lens photo plot, which checked the single lens radial points. The single lens were used because they were clearer and much nearer the scale of the projection.

(B) Adjustment of Plot:

The photographs of this area appear to be free of excessive tilt, however, because of the changes in elevation marked adjustment was required to trace in some of the detail, and additional radial line points were added along the shoreline.

The location of rocks in the vicinity of Mulberry Pt. was obtained by radial intersections from the single lens photos and as these photographs did not have a large amount of overlap there were a few two cut intersections.

(C) Interpretation:

The graphic symbols used are those authorized by the Board of Surveys & Maps (1932). ~~The symbol for railroads used in aerial mapping being used as mentioned above.~~

Where it was possible to interpret from the photos small rock islands were shown with their rock ledges. Outstanding rocks, bare at high water, were shown by a star with dotted circle, smaller rocks, covered at high water, and rocks inshore were shown by a cross. *Doubtful interpretation.*

See review at back

The high water line was traced in on the field photos from actual inspection except in the marsh areas where the berm line was traced in directly from the photographs.

Boundaries of fields are indicated by a single broken line. Poor motor roads are indicated by a broken double line and very poor roads or trails by a single broken line. The width of roads is slightly exaggerated in order to keep the detail clear.

(D) Information from other Sources:

No information other than mentioned under "General Information" and "New Names" was used in the compilation of this sheet.

(E) Conflicting Names:

There are no conflicting names on the different charts and blueprints of this area.

(F) New Names:

Names on the present Coast & Geodetic Survey Charts of this area were found by the field inspection to still be in local use. These are incorporated in this compilation.

The following new names were obtained by the field inspection party:

"Chaffinch Island" - name on sign boards showing route to follow to same, also from fire marshal at Chaffinch Is.

A visit was made to the town clerk of Guilford, Conn., Mr. C. M. Leete, and he with the use of the local town maps disclosed the names of the streets in the town of Guilford, and also the following names:

"Neck River".

"East River" - (settlement).

"Seaside Ave".

A visit was also made to Mr. Stanley M. Smith, a realtor whose office and home are located in East River Beach. Mr. Smith has lived in this section for some few years and is the authority for the following names, said by him to be in local usage:

"Neck River" - the same as reported by Mr. Leete above.

"Neck Road" - this name also found on road sign pointing out same.

"East River Beach".

"Clapboard Hill" - this name also found on print of State Highway Department Map of Connecticut.

"Mungerton"-a sparsely populated section in the northeast section of this sheet.

"Bishop Rocks".

"Crow Egg Rock".

"Betty Rock".

IV COMPARISON WITH OTHER SURVEYS:

It is impossible to compare the junction of this sheet and the sheet to the west, T-5274, as neither the latter nor a copy are at hand. However only the Sound coast line, a few field divisions, and one street in Guilford were added to the compilation by this compiler. It is supposed that the main portion of the sheet matches correctly with sheet T-5274. The compilation to the east has not been made at this time. *Junction O.K. T-5274 is now part of T-5275.*

In comparing this sheet with photostat copy of U. S. Coast & Geodetic Survey, North Shore of Long Island Sound, Topographic Sheet No. 1551b, dated 1884, the major changes are as noted below:

The dock shown on the west side of Indian Cove no longer exists.

At the head of Indian Cove, and along the marshy shore between Mulberry Pt., and West River the shoreline has cut back, in one place as much as 100 meters, probably due to erosion.

The old shoreline of West River compares favorably except for natural causes by erosion, however north of the railroad bridge the river seems to be out of position on the old sheet.

Just west of Guilford Pt., the marsh has receded and the high water line is now from 25 to 80 meters inshore, leaving a marshy shoreline.

The shoreline of the marsh just north of Guilford Pt. has cut back in one place 30 meters, and grown out, a little further north, about the same amount.

The hotel shown on Guilford Pt., no longer exists.

The largest change on the sheet is the neck of land east of Guilford Pt., the southern point of which has washed back approx. 20 meters. However from this point northwesterly around the neck the marsh has built out considerably and on the north side, on the shore of East River, it has built out approx. 150 meters into a number of small islands.

East River compares favorably in position but there are numerous small changes due to erosion of the marsh banks. Just north of the railroad bridge however the river as shown on the old sheet is approximately 30 meters out of position.

There are numerous differences in the positions of Neck River and other tributaries flowing into East River.

From Hogshead Pt., to the eastern extremity of this sheet the rocky shoreline has suffered little change. However the few sand beaches along this section have eroded from 10 to 30 meters.

The docks shown just north of what is now called Bishop Rocks no longer exist.

Off lying rocks have been compared with the older survey and as far as can be ascertained they may be said to compare favorably. However there are numerous rocks shown on the old survey which it was impossible to show on this compilation for reasons given above. *See review of book*

The remainder of the sheet compares favorably, and in some places excellently, with the older survey.

No attempt has been made to describe each small discrepancy but the major comparisons are as noted above. In summary it may be said that the major changes have naturally been in the coastal marshy areas.

V LANDMARKS:

There are no landmarks of value to navigation in the area covered by this compilation.

-----0-----

To the best of my knowledge the work is complete within the limits of this sheet in all details of importance for charting purposes, except as noted above concerning off shore rocks.

Respectfully submitted

E. L. Fitch

E. L. Fitch, Surveyor, U.S.C. & G.S.

M. H. Reese

Approved by: M. H. Reese.
Chief of Party.

GEOGRAPHIC NAMES

Survey No. F5274

T-5275 (west half)

Name on Survey

	A	B	C	D	E	F	G	H	K	T5274
<u>Sachem Head</u>	*		✓	✓	✓	✓	✓			1
<u>East Stooping Bush I.</u>				✓					*	2
<u>Spencer I.</u>				✓					*	3
<u>Goose Rocks</u>	*	✓		✓						4
<u>Sachem Head Harbor</u>	*		✓	✓						5
<u>Woods Point</u>									*	6
<u>Joshua Point</u>	✓	✓							*	7
<u>Hatch Rock</u>	*			✓						8
<u>Jefferson Rock</u>	*									9
<u>Vineyard Point</u>				✓					*	10
<u>Joshua Cove</u>	*	✓	✓	✓						11
<u>Foskett I</u>				✓					*	12
<u>Horse I</u>				✓					*	13
<u>Island Bay</u>	*	✓		✓						14
<u>Little Harbor</u>	*			✓						15
<u>N.Y. M.H. & H. R.R.</u>	*						✓			16
<u>Leetes Island R.R. sta.</u>				✓					*	17
<u>Harrison Point</u>	*		✓							18
<u>Clarke Point</u>	*									19
<u>Narrows I</u>	*		✓	✓						20
<u>Hoadley Point</u>	*	✓	✓	✓	✓					21
<u>Hoadley Neck</u>	*			✓						22
<u>Leetes Island</u>				✓	✓		✓		*	23
<u>The Thimbles</u>	*	✓	✓		✓		✓			24
<u>Stony Creek</u> (Village)	*		✓		✓	✓	✓			25
<u>Gallop</u>	*	✓	✓	✓	✓	✓	✓			26
<u>Bright</u>	*	✓	✓	✓	✓	✓	✓			27

Don't stick up L.S.S.

Names underlined in red approved by P.P.T. on 7/18/36

off sheet

Town ship

T-5275 (west half)
~~T-5274~~

Remarks

1

Decisions

1	this is a <u>town</u> , not a <u>cove</u> or <u>bay</u>	
2		
3		
4		
5		
6	called Joshua Pt. on 27/12/12	USGS? R.C. IV. Joshua Pt. U.S.G.B. decision T.M.P. 7/21/37
7	217+1212 show this point on South side of Joshua Cove: T5274 says incorrect. (Joshua Pt. has now become linear Pt. but (CQ47104) this survey is incorrect in saying Joshua point is now the one on West side of Joshua Cove. See G.N. 120	
8	name of a point, and not a settlement. the harbor there are part of Guilford	
9	T5699 calls this "Great Harbor"	
10		
11		
12		
13		
14	USGS calls this "Little Harbor"	Island Bay
15		
16		
17	this should be spelled out, as it refers to a town, not an island.	Leetes Island R.R. Stg.
18		
19	charted on Ch. 260 since 1898	
20		
21	USGS has Hoodly: T5699/50: road map	Hoodley
22	The P.M. of Stony Creek also corroborates the spelling: see E.R.H. 13	
23	USGS has Leetes: road map has "Leetes" this is a town, not an island	Leetes
24		
25	Not the name of a creek, but of a village: has P.O.	on T-5273
26	See the appx. pro. of this P.O. I placed in red in overlay.	
27		

GEOGRAPHIC NAMES

Survey No. F 5274
T-5275 (west half)
2

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No. 217									
	On previous survey No. 1212									
	On U. S. quadrangle Maps No. T/5699									
	From local information									
	On local Maps									
	P. O. Guide or Map									
	Rand McNally Atlas									
	U. S. Light List									
	T-5274									
<u>Bear I</u>	*	✓	✓	✓						1
<u>Cut-in-two I</u>	*		✓	✓						2
<u>Dogfish I</u>	*		✓	✓						3
<u>Beers I</u>				✓					*	4
<u>Davis I</u>	*		✓	✓						5
<u>Smith I</u>	*		✓	✓						6
<u>Hen I</u>	*		✓	✓						7
<u>Wayland I</u>	*		✓	✓						8
<u>Watch I</u>				✓					*	9
<u>Cat I</u>				✓					*	10
<u>Northford Rock</u>				✓					*	11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved

by P.N. on 7/18/36

T- 5275 (west half)
~~F- 5274~~

2

Remarks

Decisions

1		
2		
3	T1849 has "Dogfish Rock"	Dogfish I
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

T 5275 (east half)

Remarks

Decisions

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	of doubtful propriety — naming a shore rock	
12	its position and unimportant appear an	
13	argument against this, or any, name	
14		
15	(town)	
16	(river)	
17		
18		
19		
20	also Railway G4145	
21		
22	an actual hill: marked 108 ft. on chart 1212,	
23	but not named thereon.	
24		
25		
26		
27		
M 234		

GEOGRAPHIC NAMES

Survey No. T5275
(east half)

Name on Survey	A	B	C	D	E	F	G	H	K	T5275
<u>Long Island Sound</u>	*	✓	✓	✓	-		✓	-		1
<u>Lobster Rock</u>	*				✓				✓	2
<u>Half Acre Rock</u>	✓*			✓					✓	3
<u>Indian Cove</u>	*	✓		✓						4
<u>Mulberry Point</u>	*	-	✓	✓	✓					5
<u>Chaffinch I.</u>				✓	✓					*6
<u>Guilford Point</u>	*	✓	✓	✓	✓					7
<u>Guilford Harbor</u>	*#	✓	✓	✓	✓		✓	✓	✓	8
<u>Hoghead Point</u>	✓*	-	✓	✓	✓					9
<u>Bishop Rocks</u>				✓						*10
Cow Egg Rock?										*11
Rock Rock?										*12
Neck Rock				✓	✓					*13
<u>East River Beach</u>				-	✓					*14
<u>East River</u>	*	✓	✓	✓	✓	✓	✓		✓	*15
<u>East River</u>	*	-	✓	✓	✓		✓		✓	16
<u>Neck River</u>			✓	✓			✓			*17
<u>Guilford</u>	✓*	✓	✓	✓	✓	✓	✓			18
<u>West River</u>	*	✓	✓	✓	✓		✓		-	19
<u>NY, NH & H. R.R.</u>	*#		✓		✓		✓			20
<u>Mungerton</u>				✓						*21
<u>Clapboard Hill</u>			✓	✓	✓					*22
<u>Boston Post Road, U.S. No. 1</u>				✓	✓					*23
<u>Sluice Creek</u>				✓	✓				*	24
<u>Guilford</u>										25
Names underlined in red approved										26
by <u>C.P.W.</u> on <u>7/24/36</u>										27

REVIEW OF AIR PHOTO COMPILATION T-5275

Scale 1:10,000

There are no recent plane table or hydrographic surveys within the limits of this survey.

Comparison with previous topographic surveys.

T-82	(1838)	1:10,000
T-1551b	(1884)	1:10,000
T-1569a	(1885)	1:10,000

A comparison of T-1551b and T-1569a with this survey is given on pages 6, west half and 7 east half of this report.

The general agreement between T-5275 and the above old surveys is good, except that on T-1569a (1885) and 1551b (1884), hachured lines were used to delineate the inner edge of the marshes, whereas these limits are defined by the marsh symbol on T-5275. T-1569a (1885) and T-1551b (1884) show bluff symbols along the greater portion of the shoreline. It is stated on page 3 (east half) of this report that the bluffs along the shore are from 10 to 20 feet high. Information from T-82, T-5276, Coast Pilot, field inspection, together with an examination of the photographs indicate that these bluffs are of little prominence and, therefore, are not shown on T-5275.

In Guilford Harbor a considerable number of rocks and small islands are not shown on the compilation T-5275. This is due to the fact that the pictures in this vicinity were taken at high tide, and consequently the features do not show up in the photographs. The islands and rocks listed below, *as well as those shown on Chart 214, 217 and 218* should be retained on the chart until a hydrographic survey of this area is accomplished. *See also the section of chart attached to this review.*

T-82 (1838)

1. Rocky reef (charted as rocks awash) lat. $41^{\circ}15.45'$; long. $72^{\circ}39.8'$
2. Bare rock (charted as rock awash) lat. $41^{\circ}15.54'$; long. $72^{\circ}39.89'$
3. Bare rock (charted as rock awash) lat. $41^{\circ}15.93'$; long. $72^{\circ}43.8'$

T-1551b (1884)

1. Three rocks awash. Lat. $41^{\circ}15.4'$; long. $72^{\circ}38.9'$
2. Bare rock (shown on Chart as 3 rocks awash)
Lat. $41^{\circ}15.45'$; Long. $72^{\circ}39.05'$
3. Rock awash, lat. $41^{\circ}15.64'$; Long. $72^{\circ}39.33'$
4. Rock awash, lat. $41^{\circ}15.65'$; Long. $72^{\circ}39.58'$
5. Several rocks awash, Lat. $41^{\circ}15.54'$; Long. $72^{\circ}39.9'$
6. Rocky reefs (charted as rocks awash)
Lat. $41^{\circ}15.42'$; Long. $72^{\circ}39.8'$
7. Rocky reef (charted as rock awash), Lat. $41^{\circ}15.25'$; Long. $72^{\circ}38.28'$
8. Several rocks awash, Lat. $41^{\circ}15.85'$; Long. $72^{\circ}39.65'$

Sections of Charts 216 and 217 accompany this report indicating in blue dangers on the chart to be superseded or supplemented by this survey and indicating in red dangers on the chart to be retained.

LB

T-1569a (1885)

1. Two bare rocks (charted as rock awash) Lat. $41^{\circ}15.08'$;
Long. $72^{\circ}43.65'$
2. Two bare rocks (charted as rocks awash) Lat. $41^{\circ}15.57'$;
Long. $72^{\circ}43.1'$

The present survey, T-5275 is adequate to supersede T-82 (1838) T-1551b (1884) and T-1569a (1885) for charting purposes, except for contours and the rocks discussed in this review *and noted on the revision of the chart attached to this report*
Comparison with Chart No. 216 and 217.

Additions and corrections to the charts as a result of this survey are discussed under comparison with previous topographic surveys.

~~Numerous rocks in Guilford Harbor close inshore, as well as the more important ones circled in red on sections of Chart 216 and 217, included in this report, are not shown on the compilation but should be retained on the chart until this area is covered by a new hydrographic survey.~~

General.

T-5275 covers the area of two separate compilations which have been joined together in the office and printed as one sheet. The number of the west half, T-5274 has been dropped.

A hydrographic survey in this area is necessary to furnish complete information regarding rocks.

January 27, 1937.

Leo. S. Straw.



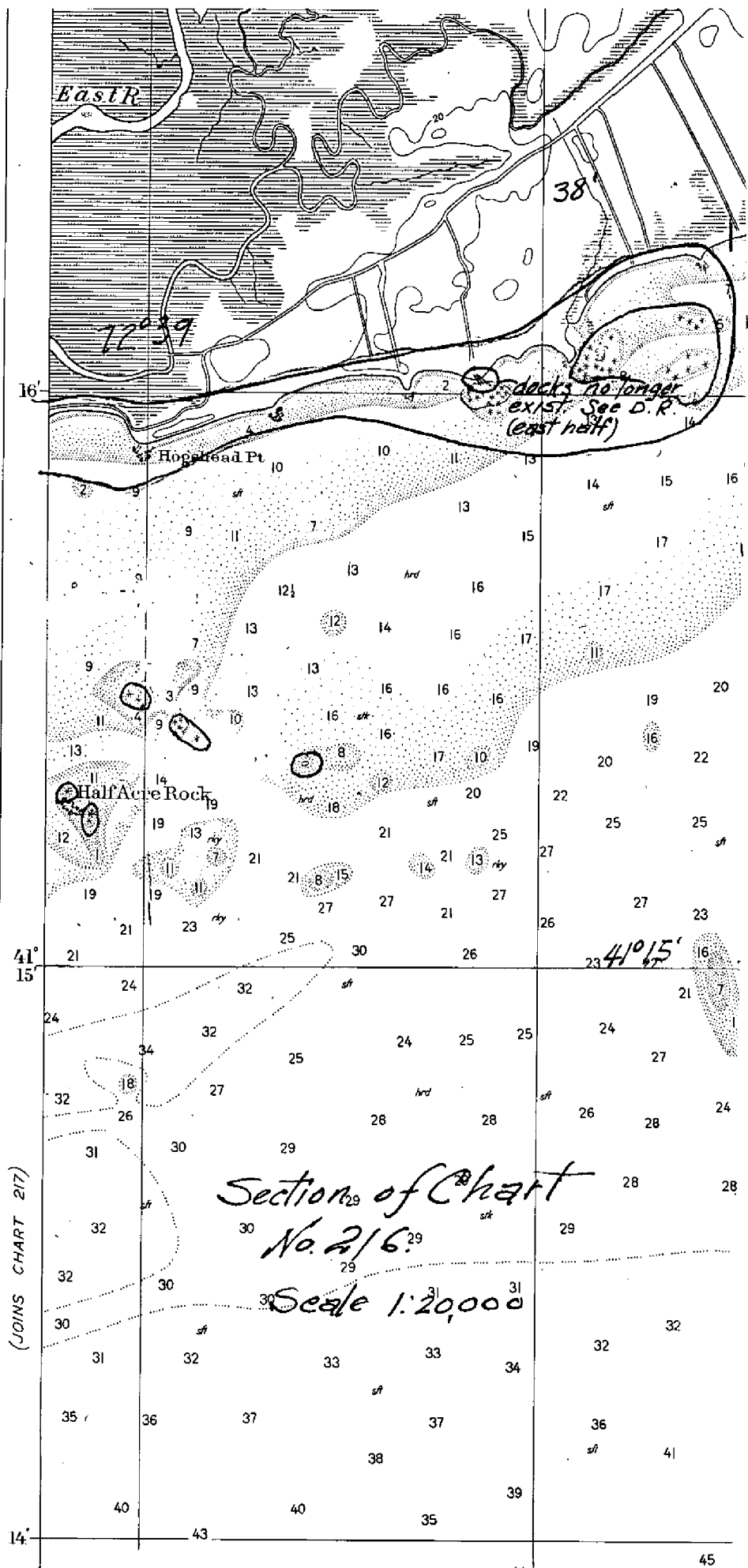
Aug 6/1
53-46

Aug 6/2
58-54

Aug 25/17215

Section of Chart 217.
SOUNDINGS IN FEET
AT MEAN LOW WATER
Scale 1:20,000





(JOINS CHART 217)

Section of Chart
No. 216

Scale 1:20,000

REVIEW OF AIR PHOTO COMPILATION NO. 5275 ^(west half) ~~(east half)~~
G. C. Mattison

Chief of Party: M. H. Reese

Compiled/Partly By: E. L. Fitch.

Project: North Shore, Long Island Sound
Compilation.

Instructions dated: 8/10 & 9/9/33
8/12/35

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)
All information necessary is shown on this compilation, or described in the descriptive report.

- 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)

None necessary

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 submitted

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 in this area.

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 ^{high}~~low~~ water lines, reefs, ~~local reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

Yes

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)

None

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)

None

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)

Discussed in descriptive report

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)

Discussed in descriptive report

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.

Yes

2. The degrees and minutes of Latitude and Longitude are correctly marked.

Yes.

3. All station points are exactly marked by fine black dots. Yes
 4. Closely spaced lines are drawn sharp and clear for printing. Yes
 5. Topographic symbols for similar features are of uniform weight. Yes
 6. All drawing has been retouched where partially rubbed off. As well as possible
 7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. Yes
- (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: *This sheet should be photographed as soon as convenient for it has been drawn for sometime, and in view of the fact that the entire sheet had been retouched the celluloid will be turning brown in the very near future. The fine lens photos were taken at about N. W. and a number of rocks could not be identified. It is suggested that these rocks be added from the old tops sheet, as this sheet is very reliable.*

18. Examined and approved; *west half " " " Aug. 30. (Signed) G. C. Morrison.*

M. H. Reese
M. H. Reese.
Chief of Party

19. Remarks after review in office:

Ed. Strain
Reviewed in office by: *Frank G. Eiskine*

Examined and approved:

C. K. Green.
Chief, Section of Field Records
L. O. Solbert.
Chief, Division of Charts

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