

6022

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U.S. COAST & GEODETIC SURVEY  
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Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton Director

State: New York

DESCRIPTIVE REPORT

Topographic

Hydrographic

Sheet No. A 6022

LOCALITY

Long Island Sound

Mianus to Great Captain Island

Star Island to Fort Adolphus

London

193 3

CHIEF OF PARTY

Harold A. Cotton, H. & G. E.

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET A

SOUTH SHORE OF CONNECTICUT FROM STAMFORD HARBOR LIGHT HOUSE  
TO BYRAM HARBOR

Instructions:

This survey was executed in compliance with the Director's Instructions dated March 23, 1933, Project HT-134.

Scope:

The sheet comprises the south shore of the State of Connecticut from the west side of Stamford Harbor to the west side of Byram Harbor.

Control:

Second order triangulation supplemented by control of third order accuracy was used for control on this sheet.

Method:

The usual plane-table method of topographic survey was used throughout. All traverses closed well within the allowable and the closures were so small that the adjustments were hardly discernible. Three point fixes were rarely used because of the lack of control in inland waterways.

Off lying features such as rocks, etc., were located by telemeter readings.

General Description of Coast Surveyed

The shore on the west side of Stamford Harbor north of the narrow neck leading to Greenwich Point is fringed with rock reefs and rock strewn areas interspersed with mud in the protected bights. The shore line south of the aforementioned area and extending to Greenwich Point is of sand. The seaward sides of Greenwich Point and Flat Neck Point are bordered by rocky areas. The highwater line is bordered by trees and grass.

In general, Greenwich Cove has a low water coast of marsh and mud; Pelican Island being the only sand formation in the Cove. Elias and Todd Points are bounded by rock ledges and areas of boulders. The prevalence of estates in this vicinity causes the area back of the high water line to be composed of trees and well kept lawns.

Cos Cob Harbor has a coastline of mud and marsh throughout its extent. The area back of high water is composed of trees and grass, giving way to buildings in the upper portion of the harbor. The New York, New Haven, and Hartford Railroad has a drawbridge across the Mianus River in Cos Cob Harbor; this is the only railway bridge located on Sheet A.

From Goose Island, on the west side of Cos Cob Harbor, to Tweed Island at Chimney Corner the coastline has a low water area of rocks and rock reef. The highwater line is bordered by estates on the eastern portion but has an area of

grass and trees near Chimney Corner.

Chimney Corner is a marsh and mud area, the highwater line being bounded by trees and grass on the east side and houses on the West. Indian Harbor is also a mud and marsh area, but the points on the sides at the entrance are rocky. The highwater line on the east side is composed of estates and on the west side of houses in the Village of Greenwich.

The harbor of Greenwich has a low water line of marsh and mud except where docks and bulkheads make the high and low water lines coincident. The easterly and northerly sides of the harbor have buildings on the high water line, while the <sup>WEST</sup> east side is bordered by trees and grass.

The coast line from Round Island to the east side of Byram Harbor is generally rocky. The high water line is bounded by estates.

Byram Harbor is choked with marsh and mud and the high water position is composed of marshy areas on the northeast side and of estates on the west. A small stretch of sandy beach is to be found on the west side.

All off lying islands are rocky with the exception of a stretch of sand on the north side of Little Captain Island. The islands in the inshore area are bordered by marsh or mud as a general thing.

Statistics:

Miles of shore line	52.2 (statute)
Area in miles	7.5 (statute)
Miles of roads	3.5 (statute)
Number of rocks	104
Number of Topographic Signals	107
Number of Set-ups	131
Miles of low water shoreline	50.2

Landmarks:

All land-marks located on this sheet are listed on the form "Landmarks for Charts."

Respectfully,

*Harold Cotton*  
Chief of Party No. 3

*William F. Deane*  
William F. Deane  
Aid.



6022

MEMORANDUM BY CHIEF OF PARTY

To accompany Topographic Sheet "A" ( H.A.Cotton - 1933)

LOW WATER LINE

In common with other topographic sheets executed during the present (1933) field season it was impracticable to locate much of the low water line by launch hydrography. Most of this shore line is strewn with off lying boulders and it was not considered safe to extend hydrography inside the low water line even during periods of high water.

Accordingly, the location of the low water line on all these topographic sheets was a distinct job in itself, i.e., it was necessary to visit the entire low water area during periods of low water and to locate the low water line with due regard to existing tidal conditions. Low water examination also made in this area by Hydrographic parties.

PROMINENT OBJECTS - "LANDMARKS"

A great number of extensive estates are located over the area covered by the topographic sheets executed during the present (1933) season. Some of the large buildings on these estates comprise the most prominent objects of the landscape. This is particularly true where such buildings have bright red tile roofs; others with green, blue or gray tile roofing are also very prominent.

As these buildings are not only of outstanding prominence but also have particular promise of permanency it is believed that the charts should show a reasonable number of them. Accordingly the principal objects of this character have been listed at frequent intervals on Form 567 "Landmarks for charts". In each case a particular point of the roof in question has been noted.

CONNECTION WITH WORK OF U.S. ENGINEERS.

U.S.Army Engineers have made surveys and established monuments in Cos-Cob Harbor - Chimney Corner and Greenwich Harbor. A number of such monuments in each of these localities have been located on the topographic sheet. This method was considered more expedient than trying to connect with this work by triangulation.

The U.S. Engineer's monuments located in each of those localities were as follows:

- (a) Cos-Cob Harbor - Brush, U.S.E. - Yacht Club, U.S.E. - #6, U.S.E.
- (b) Chimney Corner - #18, U.S.E. - #20, U.S.E. -
- (c) Greenwich Harbor - #1, U.S.E. - #3, U.S.E., Grass Island, U.S.E.

Each of these monuments have been described on Form 524. The descriptions of these stations is as prepared by the U.S. Engineers.

RECOVERABLE STATIONS

The descriptive report lists about 40 recoverable topographic signals. The nature of these signals is such that it is not believed necessary to prepare further descriptions on Form 524.

Accordingly the only descriptions prepared on Form 524 for this sheet are the monuments of the U.S. Engineers listed above, also stations Rod and Yacht



6.22

### CHANGES

Mr. Deane has made no comment relative to "Changes" in his report. There are quite a number of changes due to filling in and excavating which do not appear to need further comment.

The principal natural changes are as follows:

- (a) Greenwich Point. The end of the point has eroded away for about 80 meters.
- (b) Pelican Island. Only a small (northeast end) portion of Pelican Island now lies above high water.
- (c) Point East Entrance Chimney Corner. The extremity of this long narrow point has broken up into a couple of off lying islands and the delineation of the shore line considerably changed.

All of these changes are confirmed by aerial photographs.

### NAMES

Local inquiry did not determine any new place names. The names on the sheet appear to be in general use.

The low long point at the eastside of the entrance to Chimney Corner does not appear to have any name, NARROW POINT is suggested.

### BRIDGES

The N. Y. N. H. & H. R.R. bridge across the mouth of the Mianus River is the only bridge on the sheet. Span and clearance for this bridge are as follows (data from Chief Engineer - N.Y.N.H. & H. R.R.).

Clear span (between neat lines of piers)	75-ft.
Channel (clear between fenders)	67' - 7"
Clearance to mean high water	20.3- ft.
Clearance to extreme high water	17.10 ft.

### ACCOMPANYING DATA

The following data from the U.S. Engineers (Providence Office) accompany this sheet.

- (a) U.S. Harbor Lines - Greenwich Harbor
- (b) Mianus River - two sheets.

These sheets show the location of the monuments of the U.S. Engineers in this area - some of which <sup>were</sup> located on this topographic sheet "A" by Mr. Deane.

Respectfully submitted

*Harold A. Cotton*  
Harold A. Cotton,  
Chief of Party.

Card Forms 524 accompany this report for the following stations:

Yacht Club U.S.E., No. 6 U.S.E., Ala (Brush U.S.E.), Grass Island U.S.E., No. 1 U.S.E.,  
No. 3 U.S.E., No. 27 U.S.E., No. 26 U.S.E., Rod, Yacht.

## RECOVERABLE TOPOGRAPHIC SIGNALS

NAME	DESCRIPTION
Buff	Buff colored flag pole
Row	Small red roofed house on end of dock
Mast	Mast on concrete replica of ship
Barn	Cupola on barn
Tor	Tower
Yell	East gable of yellow house
Rod	Small red roofed house
Red	Small red roofed house
Rip	End of dock
Bean	Spindle
Yam	Tallest of trees on island
Pol	Cupola on Riverside Yacht Club
Riv	Flag pole
Bum	Corner of bulkhead
Owe	Cupola on boat house
Nic	House on end of dock
Sid	End of dock
Wal	North west corner of bulkhead
Pos	West end of bridge
Don	End of dock
Pen	End of dock
Rim	Northeast corner of house on dock
Brick	Brick stack
Pam	Southeast corner of Palmer Marine Engine building
Min	End of dock
Cos	End of dock
Lip	North chimney on house
Mort	Isolated tree
Green	Small green roofed house
Vane	Weather vane on house
Pier	Middle pier of bridge



Come	Southeast corner of bulkhead
Vent	West chimney on red roofed house
Yacht	Flag pole
Gab	West gable of Ruddock Yacht yard building
Small	Black stack
Pub	South gable of Public Service Corp., Building
Sin	Chimney on sewage disposal plant
Hung	Flag pole on end of dock
Lo	Flag pole on end of dock
Boot	West chimney of red roofed house
Will	East chimney of green roofed house
High	Northwest chimney of red roofed house
Brow	Northwest white chimney of white house, gray roof
Hill	South white chimney of red roofed house
Front	Small house in front of boat house
Run	Flag pole
West	West chimney of gray roofed house
Fin	Finial on small pavilion



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 6022

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. A

REGISTER NO. 6022

Graphic Control

State Connecticut

General locality Long Island Sound

Locality Mianus to Great Captain Island

Scale 1-10 000 Date of survey April-May, 1933, 192

Vessel Project HT-134

Chief of Party Harold A. Cotton

Surveyed by William F. Deane

Inked by William F. Deane

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

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

Instructions dated March 23, 1933, 192

Remarks:.....



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

~~A~~ T 6022

## LANDMARKS FOR CHARTS

Mamarineck, N.Y.

October 25, 1933

RECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Harold A. Cotton, H. & G. E.

Chief of Party.

[illegible]

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstuffs and like objects are not sufficiently permanent to chart.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

AT 6022

Manaroneck, N. Y.

October 25, 193 3

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

*Harold A. Cotton*  
Harold A. Cotton, H. & G. E.

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED		
	LATITUDE		LONGITUDE		DATUM				
	°	'	D. M. METERS	°				'	D. P. METERS
<u>1/2</u> Hull Gray roofed house on dock	41	01	157.5	73	33	629.9	N. A.	Triang	221, 222, 1215
<u>0</u> Tor Tower, small building	41	00	773	73	35	0		Topo	222
<u>0</u> Fin Finial on small pavilion	40	59	555	73	36	1069		"	"
<u>0</u> Go E Gable Red Roofed House	41	00	1513	73	35	887		"	"
<u>0</u> Bean Spindle	41	01	355	73	35	1033		"	"
<u>0</u> Pol Cupola on yacht club	41	01	610	73	35	847		"	"
<u>0</u> Vane Weathervane on house	41	00	1535	73	36	446		"	"
<u>0</u> Went W. Chim. Red Roofed House	41	00	1180	73	37	201		"	"
<u>0</u> Sin Chimney on disposal plant	41	00	1695	73	37	869		"	"
<u>0</u> Boot W. Chim. Red roofed house	41	00	436	73	37	858		"	" 1215
<u>0</u> Will W. Chim. Green roof house	41	00	227	73	37	991		"	"
<u>0</u> High NW. Chim. red roof house	41	00	416	73	37	1089		"	"
<u>0</u> West W. Chim. Gray roof house	41	00	247	73	38	242		"	"
<u>0</u> Club Indian Harbor Yacht Club	41	00	1263.5	73	37	540.0		"	"
{Center of building located from corners}									



REVIEW OF GRAPHIC CONTROL SURVEY T-6022, SCALE 1: 10,000

Date of Review 7/26/38

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5259, , , with particular attention to the following details:

- (a) Projection has been checked in the Field.
- (b) Accuracy of location of plane table control points.
- (c) Discrepancies between detail on this survey and the air photo compilations listed above. *See Report and review T 5259*
- (d) Discrepancies found in descriptions submitted on Form 524 when compared with the air photo compilations listed above.

2. Refer to the reviews and descriptive reports of air photo compilations Nos. T-5259, , , for a more complete discussion of any errors or discrepancies found.

Any material errors found on this survey are noted in subsequent paragraphs of this review, and these have been reported to the Field Records Section and the Cartographic Section.

Notes and corrections resulting from the review are shown on this survey in green.

*L. C. Landy*

*There are numerous differences between the shoreline on T6022 and air photographic survey T5259. T5259 has been corrected against T6022 and the photographs and should be used in preference to T6022. Refer to review and descriptive report T5259 for detailed statement regarding differences between the two surveys.*

*B. G. J.  
8/11/38.*