

4570

4570

SUPPLEMENTAL T

SUPPLEMENTAL T

4570

Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
R. S. Patton <i>Director</i>	
<div>U. S. COAST &amp; GEODETIC SURVEY LIBRARY AND ARCHIVES MAY 16 1931 Acc. No. _____</div>	
State: <u>New Jersey</u>	
DESCRIPTIVE REPORT	
Photo- Topographic Hydrographic	Sheet No. <u>4570</u>
LOCALITY	
<u>West bank of Hudson River</u>	
<u>Englewood Yacht Club to Alpine</u>	
1930	
CHIEF OF PARTY	
<u>O. S. Reading</u>	

DESCRIPTIVE REPORT TO ACCOMPANY  
AIR PHOTO TOPOGRAPHIC SHEET

No. 4570 - Englewood Yacht Club to Alpine

This sheet is a compilation of two overlapping strips of single lens photographs, numbers 209 to 219, 253 to 261, shore strip; 159 to 171, inshore strip. Photographs 209 to 219 were taken September 4, 10:20 A.M. Photographs 253 to 261 were taken September 4, 11:00 A.M. Photographs 159 to 171 were taken September 28, 12:00 N. The stage of the tide on September 4, 10:20 A.M. is 0.7 foot; on September 28, 12:00 N., the height of tide is 3.2 feet.

Limits of Sheet 4570

This sheet includes the area between Englewood Yacht Club to Alpine on the west bank of the Hudson River and extends about one mile inland.

Control.

This sheet is controlled by triangulation executed in 1930 and a plane table survey of the shoreline made in August, 1930. There were sufficient stations along the shore to control the plotting of the shore strip, but there was only one station over one-half mile inshore. This resulted in the western limits of the sheet not being controlled as well as they should be.

Compilation.

A 1:5,000 projection was made on a celluloid sheet. All triangulation stations and other points obtained from the plane table sheet were plotted on the celluloid projection. The shoreline obtained from Topographic Sheet 4557 was traced on the projection.

The scale of the photographs is approximately 1:10,000. A <sup>spotting</sup> radial plot was made to obtain the average scale of the photographs. After obtaining the average scale of the photographs, the negatives were enlarged to a scale of 1:5,000.

A graphic radial line plot was made with the enlarged pictures holding to the control on the sheet. The same points were identified on photographs of the different strips. The radial plot of the shore strip was made first due to having more control. A plot was then made of the inshore strip, and if the common points did not intersect, a replot was made until the correct intersections were obtained. If the two strips had been plotted correctly in the beginning, points common to both strips would have had common inter-

sections. It is very easy to get off in azimuth in making the radial plot. Therefore if the proper azimuth is not held to in making the radial plot, good intersections of the radials will not be obtained.

The inshore strips of pictures had an overlap of 40 per cent, which is not sufficient to obtain a rigid radial plot. This deficiency of overlap was easily noticed as trouble was experienced in securing the proper radial plot between the two strips. Therefore, it is seen that an overlap of at least 55 per cent is needed and 60 per cent is desired to obtain a rigid radial plot.

Landmarks for Charts.

Landmarks for charts are submitted on Form 567.

Names.

Names for this sheet were obtained from topographic sheet 4557 and a blue-print obtained from the Palisades Interstate Park Commission.

Symbols.

Standard topographic symbols were used throughout the sheet. The widths of the roads extend to the property lines.

*Marshall H. Reese*  
Marshall H. Reese

Aid, C. & G. Survey.

Approved;

*O. S. Reading*  
O. S. Reading,  
Chief of Party.

APPROVED

*K. T. Adams*  
FIELD RECORDS (C)

*L. O. Dolbuit*  
Chief, Division of Charts

*J. B. Gordon*  
Chief, Section Field Work

*G. H. Hude*  
Chief, Div. of Hyd'y and Top'y

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## LANDMARKS FOR CHARTS

Washington, D. C.March 30, 1931

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. and are recommended for charting on the proposed anchorage chart by the Commanding Officer of the NATOMA, 1930

O. S. Reading

Chief of Party.

DESCRIPTION	Approximate POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	°	'	D. M. METERS	°			
X Observation stand	40	53.0		73	56.8	N.A.	Photo topo 747
X House with many chimneys	40	53.7		73	56.4	"	" " " 747
X Observation stand	40	54.5		73	56.0	"	" " " 747
X Green House	40	55.6 <sup>7</sup>		73	55.6	"	" " " 747
X Large grey house with red roof	40	55.7 <sup>3</sup>		73	55.6	"	" " " 747
X Small grey house with red roof	40	55.8		73	55.6	"	" " " 747
X Light brown house with black roof	40	55.9		73	55.6	"	" " " 747
* Chimney north end two-story green house	40	55.5	250 (675)	73	55.5	33 (670)	" Topo 747 chy. not charted
* North F.P. on park bldg. at Under Cliff Beach	40	53	661 (264)	73	56	661 (52)	" " 747 F.P. not charted
* Large rock 10 ft. high	40	53	08 (912)	73	56.5	199 (504)	" " 747
* These positions were taken from Topographic No. 4557.							
X Approximate position, See Air Photo Sheet 4570							

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, 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 of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4570

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. ....

REGISTER NO. 4570

State New Jersey

General locality West bank Hudson River

Locality Englewood Yacht Basin to Alpine

Scale 1:5,000 Date of survey Sept. 4 & 28, 1930

Vessel Aerotopograph Corporation airplane

Chief of Party O. S. Reading

Surveyed by M. H. Reese

Inked by M. H. Reese

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

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

Instructions dated (Control and compilation) July 22, 1930

Remarks: Compilation of single lens air photographs Nos.

209-219, 253-261 and 159-171, and printed by photolithographic  
process.

GPO

## REPORT FOR SUPPLEMENTAL T-4570

Corrections shown in red on T-4570 were plotted in the office in March 1939, from single lens Air Photographs without field inspection and reported to the Cartographic Section for correction of Chart 747.

Corrections shown in blue were plotted in this office in May 1939, after receipt of the field inspection data supplied this office by the Tender GILBERT. Details in blue reported to Nautical Chart Section June 3, 1939.

### Photographs

Single lens 7 x 9, Scale 1:10,000. Negatives are on file in this office. The photographs were taken in February 1939, by the Photographic Unit of the Naval Air Station, Washington, D. C.

### Plot

The details in red and blue were plotted from contact prints by L. C. Lande.

### Hydrographic Survey

The shoreline on the contemporary Hydrographic survey is from T-4570 prior to the above correction, and has not been corrected to agree with T-4570 Supplemental.

*Field inspection notes are on the field photos and on a copy of chart 747 filed as 137.32854*

*B. G. Jones  
6/19/39*