State: New York

DESCRIPTIVE REPORT

Topographic | Sheet No. T-5021.

LOCALITY

Hudson River.

Piermont to North Yonkers.

1933.

CHIEF OF PARTY

M. H. Besse.
General Information:

a. Date of Instructions—November 15, 1932.

b. Sheet data—
   Projection by E. L. F.
   Projection Checked by M. H. R.
   Control plotted by E. M. N.
   Control checked by N. R. M.
   Radial line plot by E. M. N.
   Drafting of photographs by E. M. N.

   Feb. 28, 1933.
   Feb. 28, 1933.
   Feb. 28, 1933.
   March 1, 1933.
   March 3-18, 1933.
   March 20-Apr. 20, 1933.

c. Statistics—
   Area of sheet; 2.4 sq. statute miles.
   Miles of Shoreline: 5.2 statute miles.

d. Reports affecting sheet—
   Topography of the shoreline by C. A. Egner, 1932.
   The information shown on this sheet is confined entirely to the interpretation of the detail from the photographs. The field inspection party did not make any notes on the photographs. This made it necessary to show the detail only as interpreted from viewing it under the stereoscope.

e. Numbers, time, and date, of photographic flights—
   15 - 222 - 233, 11:00 A. M., Sept. 4, 1930.

Control:

a. Sources—
   1. Triangulation by C. A. Egner, 1930 and 1932. The computations have not been adjusted to the N. A. Datum 1927.

Compilation:

a. Method used—
   The radial line method as applied to single lens photographs was used throughout the sheet.

b. Adjustment of plot—
   Considerable difficulty was experienced in making the radial line plot. This difficulty was largely due to the conditions of the photographs. The line of flight was broken and irregular.
Compilation: (continued),

b. Adjustment of plot—(continued).
Due to the irregular flying a number of the pictures had excessive tilt. It was necessary to disregard some of these pictures in making the radial plot. The flight 15 - 222 - 233 had less than 50 percent overlap. The amount of overlap averaged about 35 percent. With this shortage of overlap only two cuts were obtained for each point, therefore the data traced from this flight is subject to considerable error. The detail west of longitude 73°55'30" is questionable due to shortage of overlap in the pictures.

c. Information from other sources—
The shoreline was traced from Aluminum Field Sheet No. A. In some instances it was necessary to change the shoreline to agree with the pictures where it was apparently in error as shown on the planable sheet, or had changed since the pictures were taken. Due to the omission of the field party to make notes on the photographs as to the changes that had taken place since the photographs were taken, the information shown on the sheet corresponds to the condition of the shoreline in 1930.

d. Comparison with other Surveys—
1. Satisfactory junctions were obtained with Sheets T-4588 and T-5023.
2. Discrepancies between planable Sheet Field No. A.
   In several instances there seems to be considerable discrepancy between the two sheets which may be due to changes that have taken place since 1930. In the vicinity of Lat. 41°03'.4, Long, 73°55.1, the detail is 6 meters in error in the north direction. The location of topographic points East and West appear to be correct, but the detail between them does not agree with the photo compilation. There apparently has been some changes in the docks and buildings just north of East. The detail is shown as it appears in the pictures. In the vicinity of Lat. 41°04'.5, Long, 73°55.2, the shoreline is in error from Topo Station Boat to Topo Station Turn, and from Topo Station Turn to Station Wharf. The error is about 6 meters to the westward and azimuths do not agree. The road that runs near the shore south of Lat. 41°04'.5 agrees with the photo compilation in a number of places, the maximum error being about 10 meters in azimuth. The remainder of the sheet agrees very good except minor changes in azimuth and shape of small wharves.

Landmarks

Landmarks for this sheet were submitted by the field party of 1932.

[Signature]

M. H. Reese,
Lieut.(j.g.), C. & G. Survey.
Title (Par. 56)

Chief of Party M.H. Reed Surveyed by E.M.N. Inked by E.M.N.

Instructions dated Nov. 15, 1932 Photographed Dec. 4, 1930

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 16, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 22.) See (Par. 1), page 2 of the text. Infield and infield measuring checks.

4. The amount of vertical control that the Manual specifies for contours-formlines was accomplished. (Par. 10, 19, 20, 21, 22, 23.)

5. The delineation of contours-formlines is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None transmitted.

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

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.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) Vertical works near the shore line as shown on T4699, 1952, are not visible on the photographs and are not shown on this chart.

10. The span, draw and clearance of bridges are shown. (Par. 16c.) None.

11. Locations and elevations of summits are given. (Par. 10, 51.)

12. The tree line was shown on mountains. (Par. 16c.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Les remarks on reverse side this page.
1. Comparison with other mines: See para. 1, page 2, of the mine report. In the absence of adequate field inspection notes this sheet must be considered as of lift 4, 1930; the date on which the photographs were taken.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 68.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 28, 30, 57, 67 except scaling of DMs and DPs, 68.)

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 15c, e, 60.)

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is North American and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks: Recoverable topographic stations shown on this sheet are described in the descriptive abstract for 4699 and on Form 514 filed under number 4699.

Reviewed in office by B. J. Jones

Examined and approved:

K. T. James
Chief, Section of Field Records

J. O. Roberts
Chief, Division of Charts

B. W. Bolden
Chief, Section of Field Work

S. M. Hydes
Chief, Division of Hyd. and Top.
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-5021.

State... New York. 

General locality... Hudson River.

Locality... Piermont to North Nyack. 

Date of photographs... Sept. 4, 1930. 

Scale... 1:15,000 Date of survey... April 20, 1933.

Photographs taken by the Aerophoto Corp. of America. 

Reviewed and recommended for approval by Chief of party Compilation... M. H. Hess, May 20, 1933. 

Photographs plotted by... E. M. Noon, March 18, 1933.

Inked by... E. M. Noon, April 20, 1933.

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

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

Instructions dated...November 15, 1932...19...

Remarks: Compilation of aerial photographs Nos. 1, 15, 31, 37, and 15, 22, 233. Reduced to scale and printed by photo lithographic process.

Polyconic projection by... E. L. Fitch...Feb. 28, 1933.

Projection verified by... M. H. Reese...Feb. 28, 1933.

Control plotted by... E. M. Noon...Feb. 28, 1933.

Control verified by... W. R. McLeod...March 1, 1933.