

4668

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Director

State: Delaware

DESCRIPTIVE REPORT

Aero-
Topographic
Hydrographic

Sheet No. 4668

LOCALITY

Delaware Bay

South and east shores

1932

CHIEF OF PARTY

O. S. Reading

U. S. GOVERNMENT PRINTING OFFICE: 1920

4668

There are assembled on Sheet No. 4668, to which this report is attached, seven plots of sections of the topography along the south and west shores of Delaware Bay. These plots were compiled from single lens air photographs for chart revision purposes. *They are not orthodox compilations.*

Scale

The scale of these plots is approximately 1:10,000.

Photographs

The single lens photographs, Nos. 3 to 460, of the shorelines of Delaware Bay and the Delaware River from Wilmington, Delaware, to the Capes were photographed by the U. S. Army Air Corps.

Time and Date of Photographs

There is submitted herewith a statement, furnished by the U. S. Army Air Corps, of time and date on which these photographs were taken.

There is listed one flight of pictures Nos. 108 to 211 as photographed from 12:00 noon to 1:10 P.M., December 5. Examination of the photographs shows that the flight in question was started with photo No. 108 and ended with photo No. 136 at Woodland Beach, Delaware. Another flight began with photo No. 137 at Woodland Beach, Delaware, and continued to photo No. 221 at Edgemoor, Delaware.

Photos 137 to 211 were taken some time between noon and 4:00 P.M., as evidenced by the shadows, but no definite time is available for this flight. The clock shown on the photographs was stopped at 5:02 P.M., which is obviously wrong as that would be after sunset. It seems probable that the date, December 5, as given in the U. S. Air Corps report, is also wrong for these photos, Nos. 137 to 211.

Negative Number	Date	Time
3 to 105	Dec. 3, 1931	11:45 A.M. to 12:40 P.M.
108 to 211	Dec. 5, 1931	12:00 noon to 1:10 P.M.
215 to 264	Dec. 7, 1931	11:10 A.M. to 11:30 A.M.
266 to 325	Dec. 8, 1931	10:30 A.M. to 11:15 A.M.
327 to 338	Dec. 8, 1931	11:17 A.M. to 11:25 A.M.
340 to 348	Dec. 12, 1931	12:52 P.M. to 12:56 P.M.
350 to 378	Dec. 12, 1931	1:10 P.M. to 1:30 P.M.
381 to 460	Dec. 15, 1931	10:45 A.M. to 11:40 P.M.

Method of Compilation

a. Scale. Each plot was made to the scale of a selected line (line between centers) on one of the photographs used in its compilation. The photographs are to scales of between 1:9,000 and 1:10,000. The plots have been reduced and printed by photolithographic process to an approximate scale of 1:10,000.

b. Compilation. The plots were compiled by the radial line method and particular care has been taken to reduce any errors in azimuth and distance below a magnitude at which they would be considerable on the scale of the chart.

c. Photographs. Many of the photographs have less than fifty per cent overlap, and were taken with their centers over the water. In order to retain accuracy in scale and azimuth, it has, therefore, been necessary to restrict the extent of the plots to small areas.

d. No Field Inspection. This work has been done without field inspection. The topographic sheets and U.S. Engineers' blue-prints have been used to assist in interpretation of the photos. Where identification of an object was in doubt, full particulars have been given in the following reports on the individual plots. These reports should be used in applying the plots to the chart.

e. Control. These compilations have been made entirely from the photographs and without control. In order to determine the scale of the plots and to provide points with which to apply them to the chart, there have been located on each plot two or more reference points, the positions of which have been previously determined. The reference points are either objects located by triangulation, objects located on the topographic sheets, or on the U. S. Engineers' blue-prints. Only a few triangulation stations can be identified on the photos, and it has been necessary in most cases to use as reference points objects shown on the topographic sheets. Where the reference points are objects located on the topographic sheets, the scale as determined from those reference points must be considered as a close approximation rather than an exact scale. For this reason, the term "approximate scale" is used in the titles.

Localities

Plots have been made only in those localities where considerable changes are evident.

Water Line

Low water line can not be determined from the photos. The water line appearing on the photos is shown either by a broken line

or by the outer limit of the sanded area in the case of sand beaches.

High Water Line

These plots were made for revision of a 1:80,000 scale chart and a larger probable error in the selection of the high water line on the photos has been tolerated than in the case of a standard 1:10,000 scale topographic sheet. Where the high water line could be selected within approximately ten meters of its true position, it has been shown without question. Otherwise, it has been shown as a broken line. ~~and the fact noted in the report.~~

Plot No. 1

Broadkill River to Lewes, Delaware. Photos Nos. 28 to 39.

Reference Points are Methodist Church spire, Episcopal Church spire, and Presbyterian Church spire at Lewes, all of which are triangulation stations; range mark (triangulation station "North Range West C" is located under the center of this range mark), and the tank on the wharf at Lewes, which is located on T-4468.

Changes - This plot was made to show changes at the mouth of the Broadkill River and numerous changes in Lewes Creek.

This plot connects with T-4468, 1929, at Lewes.

All important roads and streets within the area of the plot are shown.

The old tower shown on chart 1218 about 1-1/2 miles northwest of Lewes does not show on the photos. A building in that locality is shown on the plot.

At Lewes only those buildings along the waterfront are shown.

*

Tide Data - The photographs were taken from 12:10 to 12:16 P.M., December 3, 1931, or with tide about 2-1/2 feet above mean low water.

Plot No. 2

Photos. 234 to 239. Vicinity of Town Bank, N. J.

Reference Points are the following detail which is shown on T-1549: Coxalls Creek, New England Creek, and the two roads noted on the plot. The tank shown on chart 1218 near Coxalls Creek does not show on the photos, but may be obscured by the trees in that vicinity.

Changes - The marsh areas are correctly shown on T-1549 and are not shown on this plot.

* Marsh areas are lettered "Marsh" and the limits shown by the standard symbol

The plot was made to show the small wharf and the roads at Town Bank. All roads and streets of any importance within the area of this plot are shown.

North of Town Bank the photos show three dark lines outside of and normal to the high water line. These objects are too dim on the photos for positive identification, but are apparently low and covered at high water. They are shown by broken lines on the plot.

Stage of Tide - See report for Plot No. 3.

Plot No. 3

Photos 241 to 247. Vicinity of Fishing Creek, N. J.

Reference Points are Fishing Creek and the roads and road intersections noted on the plot, all of which are shown on T-1549.

Changes - The limits of the marshes are practically the same as shown on T-1549 and on the chart and are not shown on this plot. The small pond shown on the chart and on T-1549 about 1 mile south of Fishing Creek has been drained. The limits of the marsh in this vicinity are shown on T-1549 and a small creek, as shown on the plot, makes into the marsh.

Only the more important roads and streets are shown on the plot. Narrow trails and roads shown on the photos have not been traced.

All of the buildings shown on the photos at Marey Landing have not been shown on this plot.

Several small wharfs are shown along this waterfront. The photos also show a number of dark lines leading out from the H.W. line and ends of some of the wharfs. These objects are not clear enough on the photos for positive identification, but are perhaps some kind of fish trap. They are shown on the plot by broken lines. Some of them seem to be of solid construction, as evidenced by the way the sand is banked around their inshore ends.

Marey Landing near Fishing Creek is designated as Marcy Landing in the Tide Tables.

Tides - These photos were made from 11:22 to 11:24 A.M., December 7, 1931, or with the tide about 2 feet above mean low water.

Plot No. 4

Photos 248 to 253. Dias Creek and vicinity.

Reference Points - The creeks and two of the roads shown on the plot are also shown on T-1549.

Changes - The plot was made to show changes in the roads, new roads, and minor changes at mouth of Dias Creek. The small creeks shown on the plot have no drainage to the bay as seen on the photos.

The small creek at the south end of the plot is now shown on chart 1218, but it is of no more importance than several drainage ditches near it, all of which are shown on T-1549. The small drainage ditches in the marshes have not been shown on the plot.

Limits of the marshes are as shown on the chart and on T-1549.

The objects outside of and normal to the H.W. line shown on the plot by broken lines are probably some form of fish traps but are too dim on the photos for positive identification.

Tide Data - See descriptive report for Plot No. 3 for height of tide when these photos were taken.

Plot No. 5

Photos 254 to 261. The Hummocks to Goshen Creek.

Reference Points - Goshen Creek and the two narrow roads at the south end of the plot are shown on T-1549.

Changes - Minor changes are shown around the entrance to Goshen Creek. The Creek at about center of the plot is not shown on the chart nor on the topographic sheets.

*

The north one of the three roads shown is an improved road and the most important of the three.

Limits of the marshes are shown correctly on T-1549 and on the chart.

The broken lines normal to and outside of the H.W. line represent what are probably fish traps or pounds. These objects are too faint on the photos for positive identification.

Tides - Photos were taken at 11:26 to 11:30 A.M., December 7, 1931, or with tide about 2 feet above mean low water. Local tide station Dennis Creek Entrance.

High Water Line - The high water line is shown as a broken line along a section of the shore where it could not be identified within the limits specified in this report. Inspection of the photographs Nos. 258 to 260.

Plot No. 6

Egg Island Point to False Egg Island Point. Photos 302 to 310.

* short section of the shore line shown by a broken line is in error not more than about 30 meters. of the correct position. It is not possible to tell from the photographs whether or not the small islands shown by a broken line are covered at high water.

Reference Points are Egg Island Light, which is a triangulation station, and points of detail along Straight Creek, which can be identified on T-1661.

Changes - 1. Egg Island, shown on 1218 just off Egg Island Point, no longer exists. See photo 304. The photograph is clear and was taken at about half tide.

2. Straight Creek has changed very little, but the outside shore-line has receded considerably.

The plot could not be extended along the shore-line between Egg Island Point and Dividing Creek because centers of the photos fall over the water.

Tides - These photographs were taken at about 11:05 A.M., December 8, 1931, or with tide 3-1/2 feet above mean low water.

*

Plot No. 7

Vicinity of Fortescue Beach, N. J.; photos 312 to 319.

Reference Points are the Highway Bridge across Fortescue Creek and points of detail along the creeks which are shown also on T-1661.

Changes - The plot shows a number of changes around Fortescue Beach and in the channel of Fortescue Creek.

Tide Data - The photos were taken at about 11:10 A.M., December 8, 1932, or with tide 4 feet above mean low water.

+

Respectfully submitted,

B. G. Jones
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APPROVED:

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All areas inside of high water line are Marsh on this plot.

+ Marsh area are lettered "MARSH" and their limits noted by the standard symbol

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TOPOGRAPHIC TITLE SHEET

Aerial

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. 4668

REGISTER NO.

State Delaware

General locality Delaware Bay

Portions of
Locality **South and east shores**

approximate Scale 1:10,000 Photographs taken Dec., 1931
Date of survey May, 1932
 compilation

Vessel Army Air Corps Plane

Chief of Party O. S. Reading

Compiled by B. G. Jones
 Reviewed by _____

Inked by B. G. Jones

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

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

Instructions dated _____, 19____

Remarks: This sheet ~~combines~~^{is} an assembly of 7 plots of sections of the ~~West~~^{East} shore of Delaware Bay compiled from single lens air photographs for chart revision^{o.p.o.} purposes.