This report includes the "Air Photo Field Inspection Report for North Shore of Long Island, Long Island City to Center Island".

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R.S. Patton, Director

State: New York

DESCRIPTIVE REPORT
Topographic Hydrographic Sheet No. 5088

LOCALITY
Northwestern Shore of Long Island
FLUSHING
West to Port Totten

1934

CHIEF OF PARTY
Roswell C. Bolstad, Jr., H. A. & G. R.
AIR PHOTO FIELD INSPECTION REPORT

for

NORTH SHORE OF LONG ISLAND

LONG ISLAND CITY TO CENTER ISLAND
AIR PHOTO FIELD INSPECTION REPORT
for
LONG ISLAND CITY TO CENTER ISLAND

The inspection was carried on intermittently (alternating with other field inspections and office work) during 1933 and 1934. After the preliminary inspection, additional trips were made in order to use new control established by Lieut. Comdr. E. A. Cotton and Lieut. I. E. Rittenberg.

The area comprises approximately 80 square statute miles, and was made by two members of Party No. 12, with trucks No. 202 and 397.

PHOTOGRAPHS

Flight lines of photographs involved are indicated on the preceding index map and the numbers and times at which the photographs were taken are given below.

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 366(876 - 14) to M 364(876 - 14)</td>
<td>5-17-33</td>
<td>11:41 to 11:46</td>
</tr>
<tr>
<td>M 365(876 - 14) to M 396(876 - 14)</td>
<td>5-17-33</td>
<td>11:30 to 11:35</td>
</tr>
<tr>
<td>M 450(876 - 14) to M 466(876 - 14)</td>
<td>5-17-33</td>
<td>2:10 to 2:16</td>
</tr>
<tr>
<td>M 467(876 - 14) to M 490(876 - 14)</td>
<td>5-17-33</td>
<td>2:25 to 2:32</td>
</tr>
<tr>
<td>M 491(876 - 14) to M 519(876 - 14)</td>
<td>5-17-33</td>
<td>2:37 to 2:45</td>
</tr>
<tr>
<td>M 520(876 - 14) to M 546(876 - 14)</td>
<td>5-17-33</td>
<td>2:56 to 3:03</td>
</tr>
</tbody>
</table>

These photos were taken by the U.S. Army Air Corps, 2nd Lieut. James F. Olive, Jr., using their camera No. 31 - 78.

AREA OF INSPECTION

The area covered by this inspection embraces the following air photo topographic sheets:

<table>
<thead>
<tr>
<th>Field No.</th>
<th>Reg. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>T 5088</td>
</tr>
<tr>
<td>40</td>
<td>T 5090</td>
</tr>
<tr>
<td>41E</td>
<td>T 5091</td>
</tr>
<tr>
<td>41W</td>
<td>T 5333</td>
</tr>
<tr>
<td>42</td>
<td>T 5092</td>
</tr>
</tbody>
</table>

GENERAL DESCRIPTION OF TOPOGRAPHY

The section from Astoria to Whitestone is fairly flat whereas the entire section, for the greater part, west of Whitestone, consists of low rolling hills with bluffs along the shore. This latter section, particularly near the shore, is spotted with large estates covered by both deciduous and evergreen trees, with good roads traversing throughout.

As adequate notes were made on the photographs and since reports describing topography of the same area were submitted by Lieut. Comdr.
Cotton and Lieut. I. E. Rittenberg, no further description will be treated in this report.

CONTROL

(1) Triangulation

Triangulation performed by the parties of Lieut. R. W. Woodworth (1930 - 1932); S. Forney (1915 - 1916); B. H. Rigg (1930); C.D. Meany (1932); Harold A. Cotton (1933) and Lieut. I. E. Rittenberg (1933 - 1934) forms the basis of control for this area.

(2) Topographical Sheets

<table>
<thead>
<tr>
<th>Reg. No.</th>
<th>Date</th>
<th>Scale</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4776</td>
<td>1933</td>
<td>1:10,000</td>
<td>Lieut. I.E. Rittenberg</td>
</tr>
<tr>
<td>4777</td>
<td>1933</td>
<td>1:10,000</td>
<td>Lieut. I.E. Rittenberg</td>
</tr>
<tr>
<td>4778</td>
<td>1933</td>
<td>1:10,000</td>
<td>Lieut. I.E. Rittenberg</td>
</tr>
<tr>
<td>Manhasset Bay</td>
<td>1934</td>
<td>1:10,000</td>
<td>Lieut. I.E. Rittenberg</td>
</tr>
</tbody>
</table>

Hempstead
Harbor Sheets

(3) Traverse

L. I. R. R. track traverse data was obtained and can be used to aid in the control of the compilation.

(4) Stations Spotted on Photos

| Number of triangulation stations spotted | 175 |
| Number of topo stations, U.S.E. stations | 131 |

Total number of control points spotted 305

On this project 305 triangulation stations, topographic control stations and U.S.E. stations were visited and spotted on the photographs, giving a station intensity of 3.8 per square statute mile.

In addition, 16 other triangulation stations were searched for and not recovered, the majority of which were lost. Recovery cards for these lost stations are submitted with this report.

Numerous other recoverable objects were spotted on the photos, which may be used as additional future control, however, no descriptions, except for two prominent windmills at Wheatley Hills, are submitted since subsequent field parties have established recoverable objects at required intervals.

When the actual point of above stations was not picked on the print, reference data is given on sketches on field print which will determine the location.

In addition to recovery cards for lost stations and discrepancies in descriptions of stations, recovery cards are submitted for triangulation stations recovered in the vicinity of Oak Neck and Center Island, since no information showing that the said stations were recovered since 1922, was available.
NAMES AND CHANGES

With the exception of the beginning of construction of
the Triboro Bridge, no important changes or new names were
determined over this area.

Minor changes are continually being made along the
shoreline such as new docks, sea walls etc. These are clearly
indicated on the field prints.

BRIDGES

No additional information of bridges was determined; it
being assumed that the notes on bridges in the U.S.C. & G.S.
Coast Pilot Notes are correct since no recent changes have
been made.

COAST PILOT NOTES

No discrepancies with the present edition of the Coast
Pilot Notes have been noted by this inspection party.

RECOVERABLE OBJECTS

The party of Lieut. I. E. Rittenberg is operating in
this locality and will submit descriptions of all recoverable
objects in the vicinity.

LANDMARKS

The party of Lieut. I. E. Rittenberg is operating in
this locality and will submit descriptions of all recoverable
objects in the vicinity.

CHANGES

Changes in the topographic detail since the date the
photographs were taken have been clearly indicated on the
field prints, so that the compilations will be up to date.

Since the shoreline was run in by Lieut. I. E. Ritten-
berg, changes in the shoreline will be shown on his aluminum
control sheets.

Submitted by

J. Blockstein
Draftsman

Nov. 1, 1934

H. M. Steffensen
H. T. Steffensen
Draftsman

F. J. Vaniger
Draftsman
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. 36

REGISTER NO. T 5088

State New York

General locality Northwestern Shore of Long Island. FLUSHING

Locality Astoria to Fort Totten

Scale 1:10,000 Date of Photographs Survey May 17, 1935

Date of Compilation Oct. 9 1924

Wesel Air Photo Compilation Party No. 12

Reviewed and recommended for approval Chief of party Roswell C. Bolstad, Jr. H & E. B.

Surveyed by See data sheet in descriptive report for this sheet

Inked by C. R. Weaver

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 15 1932

Remarks Compiled on the scale of 1:11,561 and printed by

Photo Lithography
- STATISTICS -

on

SHEET, FIELD NO. 38, REG. NO. 25088

PHOTOS NO. M 368 (876-14) TO NO. M 396 (876-14) TAKEN MAY 17, 1933

BY

ROUGH RADIAL PLOT
R.A. Phillee
12/5  12/5/33

SCALE FACTOR (865)
R.A. Phillee
12/5  12/5/33

SCALE FACTOR CHECKED
J. P. O'Donnell
12/6/  12/6/33

PROJECTION
R.A. Phillee
2/27  2/27/34

PROJECTION CHECKED
M.S. Abramson
2/27  2/27/34

CONTROL PLOTTED
D.B. Bennett
3/1/  3/8/34

CONTROL CHECKED
M.S. Abramson
3/9/  3/10/34

TOPOGRAPHY TRANSFERRED
D.B. Bennett
3/12/  3/14/34

TOPOGRAPHY CHECKED
H.L. Hawkins
3/18/  3/19/34

SMOOTH RADIAL LINE PLOT
C. Crowther
4/7/  4/21/34

SMOOTH RADIAL LINE PLOT CHECKED
H.L. Hawkins
4/22/  4/23/34

DETAIL INKED
C. R. Weaver
less 1 month

PRELIMINARY REVIEW
H.L. Hawkins
10/29  12/6/34

AREA OF DETAIL INKED 20.3 sq. statute miles (Land area)

AREA OF DETAIL INKED 0.1 sq. statute miles (Shoals in water area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)
15.0 Statute miles

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

LENGTH OF ROADS? STREETS, TRAILS, RAILROADS 407.9 Statute miles.

GENERAL LOCATION Northwestern Shore of Long Island

LOCATION Astoria to Fort Totten

DATUM North American 1927

Latitude 40° 47' 09.882" (83.2m)

Station Whitestone Schoolhouse (1907-28)
Longitude 73° 49' 02.546" (59.7m)
COMPILERS REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 38

GENERAL INFORMATION

The AIR PHOTO FIELD INSPECTION REPORT for the North Shore of Long Island, Long Island City to Center Island, attached to this Descriptive Report, furnished the necessary field data for the compilation of this sheet. The report also contains a graphic diagram showing the flight lines of the five lens photographs which were taken by the U.S. Army Air Corps.

The accompanying STATISTICS SHEET details all data in connection with the compilation of this sheet.

The tide in Flushing Bay, at the time that the photographs were taken, May 17, 1935 at 11:32 A.M. and 11:44 A.M. was approximately 0.9 ft. above the Low Water for that day, as computed from the U.S. Coast and Geodetic Survey's "Predicted Tide Tables".

This sheet was compiled from photographs taken by the U.S. Army Air Corps with their five lens camera, Model T-3A, No. 31-78, photographs Nos. M 368 (876-14) to M 396 (876-14) inclusive.

CONTROL

(A) Sources

The following sources of control were used in the compilation of this sheet.

(a) Triangulation by G. Bradford in 1885
(b) Triangulation by in 1907
(c) Triangulation by A. T. Moorman in 1908
(d) Triangulation by J. H. Hawley in 1915
(e) Triangulation by B. H. Rigg in 1930
(f) Triangulation by R. W. Woodworth in 1932, field computations, unadjusted.

(g) Aluminum Control Sheet, Reg. No. 4776, by Lieut. I. E. Rittenburg, Scale 1:10,000, in Oct. 1933.

All control has been adjusted to the North American 1927 Datum.

The difference between the unadjusted field computations and the final office positions would be unplottable on the scale of this computation (1:11,561).

In addition to the above triangulation, the following topographic signals, taken from the aluminum control sheets, were spotted on the photographs and used in controlling this sheet.
Conveyor, U.S.E.  Flagstaff
Fog  Chy.- Electric Co.
Lit  Chy.- Incinerator
Beacon Light  Tank
Lighted Wind Cone  You
Doc  Chi.-Chimney, P.S.129
Pole (inshore and dock)  Flagpole
Lid  U.S.E. 46
Spire, Gold Cross  U.S.E. 48
Stack (I.R.T.)  U.S.E. 50
Stack, (Highway Dept)

The signals in the above list which are suitable
have been shown as recoverable topographic stations by the
small black circle. The rest, ends of docks and the like,
have been shown by a double blue circle (O) together with the
topographic name as given on the aluminum control sheet, also
in blue, on the celluloid topographic sheet. As the blue will
not photograph in the photo-lithographic process, no record of
these control signals will appear on the finished sheet.

If it is the desire of the Chart section to have these
shown, they may be indicated with red ink with the usual circle
and name; this may be done best in the Washington office as the
data will all be at hand.

The control stations were taken from the Aluminum
Control Sheets and plotted on the celluloid by direct scaling.

There are some other recoverable topographic stations
on this sheet which were not shown as they are street monuments
and have no prominence whatever. They could not be spotted in
the office under the stereoscope and consequently could not be
verified by the radial line plot.

The track traverse data of the New York Connecting
Railroad and the Long Island Railroad was used as supplementary
control in the compilation of this sheet.

(B) Errors.

In making the radial line plot of this sheet the fol-
lowing relocations of spotted aluminum control signals resulted.
Spire (Gold Cross), Lat. 40° 45.2', Long. 73° 51.8'
was found to be in error. The position as determined
by the radial plot lies 11.6 m. distant on an azimuth
of 347° from North from the position given on the
Aluminum Control Sheet.

The new position is at Lat. 40° 45' 405.1 m.
  (223.3) m.
Long. 73° 51' 1184.3m.

This signal could be easily seen in the stere-
scope, and as the control on this sheet is in
general strong, it is believed that the position
as determined by the radial plot is correct.
Beacon #10, Flushing Bay, 1932 Triangulation—The radial plot of this beacon, as spotted on the photographs, does not check the position given by Lieut. R.W. Woodworth. The beacon is on a low dike that is submerged at high water. It is very possible that ice has destroyed the beacon located by Mr. Woodworth and that a new beacon has been erected at the location given by the radial plot. The beacon is of very light construction and might easily be destroyed by ice.

A special field inspection was made to check the spotting of this point. As the dike is accessible only by boat very careful ranges were taken from known points to other points whose position could be accurately determined on the celluloid sheet. The ranges were:

1. From a point two (2) meters north of O Lid, the beacon is on range to a stack at the Flushing Gas Works, Lat. 40° 46' 125.4 m. (1725.4 m.) — Long. 73° 50' 84.0 m. (1325.2), a prominent yellow brick stack located by the radial plot.

2. From a point near the intersection of two roads on the west side of Flushing Bay, marked by a double red circle and the letter "A" on print M 379 "C", to the center of the southerly of two hangers at the Flushing Airport marked with a double red circle and the letter "B".

3. From a point ten meters west of a pile of rip-rap on the southerly shore of Flushing Bay, marked "C" on print M 379 "C", and a double red circle, to Triangulation Sta. East Radio Tower.

These ranges clearly show that the spotting of the beacon is correct, and when applied to the celluloid sheet pass very nearly through the radial position.

The new position of Beacon #10, Flushing Bay lies 16.4 m. distant on azimuth 306° 30' from North.

The scaled position is:

<table>
<thead>
<tr>
<th>Lat. 40° 45' 1596.8 m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long. 73° 50' 1371.7 m.</td>
</tr>
</tbody>
</table>

(c) Discrepancies

No control stations established by any other organization were used in this compilation.

Triangulation Station "Flagpole west of Willets Point" 1915, has been taken down. The base remains and was spotted on a few pictures to verify the position. Another flagpole has been erected to the south of the original pole. This pole was spotted on the pictures but used only as a plotting point.

Compilation

(A) Method

The usual radial line method of plotting was used in the compilation of this sheet.

(B) Adjustments of Plot

The photographs of this strip have only slight scale variation and are not badly tilted. The control was adequate.
and there is no excessive adjustment, to the extent of causing
a ny appreciable error in this compilation.

(c) Interpretation

The usual graphic symbols were used as approved by the
Board of Surveys and Maps (1932) and no great difficulty was
experienced in interpreting the photographic detail.

The double full lines used to indicate first order roads
and the double broken line for private driveways and roads of
lesser importance. An exceedingly poor road was shown
by a single dashed line. In most cases, unless labeled on the
field inspection print, the classification of these roads had to
be determined under the stereoscope by comparison in appearance
with labeled roads.

There are three bridges of importance to navigation on
this sheet. They are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Clear Width</th>
<th>Vert. Cl.M.H.W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadway Bridge</td>
<td>Bascule</td>
<td>62'</td>
<td>11'</td>
</tr>
<tr>
<td>Roosevelt Ave.</td>
<td>Bascule</td>
<td>70'</td>
<td>25'</td>
</tr>
<tr>
<td>Main Street</td>
<td>Swing</td>
<td>30'</td>
<td>3'</td>
</tr>
</tbody>
</table>

These bridges are over Flushing Creek at approx. 40° - 45' Lat.
and 73° - 50' Long. This creek is used mostly by coal barges.
The information on these bridges has been obtained from the
Coast and Geodetic Survey "Coast Pilot".

The New York Connecting Railroad is elevated on high con-
crete piers from the approach to Hell Gate Bridge to a point
south of Second Ave. or Thirty third Street, bridging all streets.
The easterly of the two track branches runs below street grade
form a point approx. Lat. 40° - 44.9' Long. 73° - 55.8'.

The Long Island Railroad is elevated on an earth fill,
structures pass under where underrides are shown.

The Whitestone Branch of the Long Island Railroad east
of Flushing Creek has been abandoned, and the tracks removed.
The right of way has been shown by a double dashed line.

The trackage shown at the Astoria Light, Heat, and Power
Company's plant, Lat. 40° - 47.2' Long. 73° - 54.5' is solely
an industrial railroad. No connection with any main line is
visible on the photographs.

Aluminum Control Sheet Reg. No. 4776 shows trackage at
Lat. 40° - 44.8' Long. 73° - 50.2'. This was narrow gage track
for the placing of fill in the marshes to the north. This track
has been removed, the fill now being placed by truck.

The Astoria Light, Heat and Power Co. uses the northerly
part of their waterfront for the delivery of coke to barges.
Large piles of coke line this waterfront and loading is accomplished
by large Gantry cranes. The easterly waterfront is used for the
unloading of coal used in the manufacture of the gas and coke.
There are also large piles of cranes in this area.

At Lat. 40° - 47' Long. 73° - 55.8' there is a large
pile crib. This enclosure is used for the storage of logs under
water by a wood veneer company.

The Grand Central Airport, Lat. 40° - 45.7' Long. 73° - 50.1'
is used by the Goodyear Zeppelin Co. as a base for a small
dirigible. There are no hangars other than the dirigible dock
and this airport is not generally used by airplanes.

The Glen Curtiss Airport at north Beach offers facilities
for land and seaplanes, having a seaplane ramp on the west side
of the landing area. The runways are oiled shavings and dirt.
The Flushing Airport, Lat. 40°-46.6' Long. 73°-50'
is being built on fill deposited on the marsh.

The Interboro Rapid Transit tracks run on an elevated
structure above Roosevelt Ave. At. Lat. 40°-45.4' Long. 73°-50.1'
the tracks go underground to enter the station at the end of the
line.

The area shown as a marsh at Lat. 40°-45.1' Long. 73°-50.9'
is covered by tall marsh grass. This area is dry at most times,
being damp only at extreme high tides. The ground is only slightly
spongy but has marshy characteristics.

Drainage ditches in the marsh areas have not been shown
as they are so numerous that they would confuse the compilation.
The filled areas and dumbs shown are in progress, using ashes,
street sweepings and surplus excavated material for the fill.

In the near future a road, the Grand Central Parkway,
will be built. This road will cross Flushing Creek at about
Lat. 40°- 45' and run northwesterly near the west shore of
Flushing Bay and across Astoria to connect with the new
Tri-Boro Bridge which is now under construction. This will be
a four strip concrete road.

The greatest part of this area is covered with houses
wherever the land is suitable.

(C) Information from other sources

The Long Island Railroad track data was used as an
aid in determining the types of road crossings at the railroad
intersections. Lieutenant I.E. Rittenburg's topographic sheets,
Reg. Nos. 4776, 4777, 4778 gave assistance in the determination
of the high water line. No other information from other sources
was used.

(D) Conflicting Names

There are no names that conflict with the names on the
present charts.
ADDITIONAL NOTE. COMPARISON WITH OTHER SURVEYS.

At Lat. 40° 46.7', Long. 73° 51' and to Lat. 40° 47' Long. 73° 51' this compilation differs from the Topographic Sheet No. 4776. The compilation locates the detail along the shoreline about 10 meters to the northward of the detail on the Topo Sheet.

The areas immediately above and below on the topo sheet check with the compilation. Photo M 395 (876-14) is almost to the exact scale of the compilation and by holding the control on this photo (about 6 stations on the "B" print) the compilation is verified.

The dock at Lat. 40° 46.6' Long. 73° 53' is shown on this compilation in a slightly different location than the one shown on sheet T 4776. This dock is plainly visible on the photographs and is shown on the compilation in the position given by the photographs.

At Lat. 40° 47.4' Long. 73° 54.4', the larger of the two piers just offshore is evidently in error on Topo Sheet No. 4776. The pier is clearly shown in the photographs with the sides parallel.
COMPARISON WITH OTHER SURVEYS

The junctions with other sheets are satisfactory.
The High Water Line on Topographic sheet Reg. Nos. 4776, 4777, 4778 agrees with the high water line on this compilation, except as noted on the opposite page.

LANDMARKS

The list of landmarks for this area, including those to be removed from the charts has been previously submitted by Lieut. R. W. Woodworth in April, 1933.

There are, however, the following additions.

There is shown on the present edition of Chart # 226 a house cupola (HO. CUP) at

Lat. 40° - 46' - 1345.7 m.
(507.1) m.

Long. 73° - 53' - 1201.1 m.
(205.8) m.

Lieut. Woodworth has listed this landmark but with no position in meters. A radial plot of the cupola was made and the above position obtained. The cupola still exists (from a field inspection Dec. 7, 1934) and was spotted in the office under the stereoscope.

Chart #226 also shows a tank at Lat. 40° - 46.81
Long. 73° - 54.01; the southerly tank of four tanks in this area shown on the edition of Chart #226 of August, 1934. This landmark should be removed from the charts. The tank does not show on the photographs. A special field inspection was made on Dec. 7, 1934 to determine the existence or prominence of this landmark, and no tank or structure that could be called a tank was found in this position. The three other tanks were prominent but only three tanks exist in this area.

No mention of this tank is made either in Mr. Rittenburg's or Mr. Woodworth's list of landmarks.

There are many other objects such as houses, ends of docks, etc. which are located within the accuracy specified under the following heading, RECOMMENDATIONS FOR FURTHER SURVEYS, and may be used to obtain hydrographic fixes. Care should be taken in using the houses to use the center as they may be expanded somewhat.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of not over two (2) meters in well defined detail of importance for charting and of not over four (4) meters for other data. It is understood that the widths of roads and similar objects may be slightly expanded in order to keep the detail clear and to keep it from photographing as a solid area in the photo-lithographic process.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no further surveys are required.

Submitted by C. R. Weaver
Draftsman.

Assisted by H. L. Hawkins
Draftsman
The following information was obtained by a field inspection made May 21, 1935.

Station "Beacon Light" (see opposite page) has been deleted as it no longer exists. This beacon has been moved to triangulation station "Ind Indicator" (Airport) 1932, to replace the wind indicator. A note has been added to the cover sheet at the triangulation station to indicate the change.

Station "Lighted Ind Cone" no longer exists in the location and has also been deleted.
LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS "C" LANDMARKS

Includes all recoverable objects, sufficiently prominent for use as hydrographic "fixes", shown as topographic stations with small black circle on this sheet and not described on form 524 by this party.

<table>
<thead>
<tr>
<th>Description</th>
<th>Latitude (f)</th>
<th>Longitude (g)</th>
<th>Method Of Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>House Cupola</td>
<td>40 - 46</td>
<td>-1343.7</td>
<td>A.P.T.</td>
</tr>
<tr>
<td>Spaceman Light</td>
<td>40 - 46.4</td>
<td>-52.9</td>
<td>A.C.S.</td>
</tr>
<tr>
<td>Lighted Wind Cone</td>
<td>40 - 46.4</td>
<td>-52.9</td>
<td>A.C.S.</td>
</tr>
<tr>
<td>(Lid) Tall Manhole</td>
<td>40 - 45.7</td>
<td>73 - 51.7</td>
<td>A.C.S.</td>
</tr>
<tr>
<td>Spire, Gold Cross</td>
<td>40 - 45.2</td>
<td>73 - 51.8</td>
<td>A.C.S.</td>
</tr>
<tr>
<td>Stack, tall black</td>
<td>40 - 45.2</td>
<td>73 - 50.8</td>
<td>A.C.S.</td>
</tr>
<tr>
<td>at I.R.T. car barns</td>
<td></td>
<td></td>
<td>#4776</td>
</tr>
<tr>
<td>Stack, tallest of several, black, H.W.Dpt. 40-44.8</td>
<td>73 - 50.1</td>
<td>A.C.S. #4776</td>
<td></td>
</tr>
<tr>
<td>Flagstaff, white on red bk. bldg.</td>
<td>40 - 45.2</td>
<td>73 - 50.1</td>
<td>A.C.S. #4776</td>
</tr>
<tr>
<td>Chy. - Electric Co., gray stack</td>
<td>40 - 45.4</td>
<td>73 - 50.1</td>
<td>A.C.S. #4776</td>
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<tr>
<td>Chy. - Incinerator, tall red brick.</td>
<td>40 - 46.1</td>
<td>73 - 50.4</td>
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<td>Tank, wooden roof stop factory.</td>
<td>40 - 47.0</td>
<td>73 - 51.5</td>
<td>A.C.S. #4776</td>
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<td>Flagpole</td>
<td>40 - 47.6</td>
<td>73 - 51.2</td>
<td>A.C.S. #4776</td>
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<td>Chy. - chimney on P.S. 129.</td>
<td>40 - 47.5</td>
<td>73 - 50.4</td>
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<td>40 - 47.8</td>
<td>73 - 49.8</td>
<td>A.C.S. #4776</td>
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(Note: See following page)

Note: A.C.S. denotes Aluminum Control Sheet, A.P.T. denotes Air Photo Topography. Name in parenthesis preceding the description is the topographic name of the station. For classification of Class "C" landmarks, see Report T5059.

* Monumented stations
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<th>Longitude</th>
<th>Method of Determination</th>
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<td>Remarks</td>
<td>Decisions</td>
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### Geographic Names

**Survey No. T-5088**

<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A.</th>
<th>B.</th>
<th>C.</th>
<th>D.</th>
<th>E.</th>
<th>F.</th>
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</table>

Names underlined in red approved by **JJE** on 10/10/67
Note T5088 has been checked against both the photographs and the planetable surveys and has been corrected where necessary. Where differences remain between T5088 and the planetable surveys T5088 is accepted as correct.

O3gg.
REVIEW OF AIR PHOTO COMPILATION T-5088
Scale 1:10,000

Data Record

Triangulation to 1932
Photographs to 1933
Planetary surveys to 1934
Hydrography to 1934
Field inspection to 1934

Field inspection added no important detail of a later date than
the photographs. Interior details on this compilation are of the date
of the photographs. The entire high water line has been brought up to
date of the plane table surveys of 1933 and 1934.

Comparison with Graphic Control Surveys

T-4776 (1933), 1:10,000
T-4778 (1933), 1:10,000
T-6110 (1934), 1:10,000

These surveys have been verified and filed as topographic surveys
in this office but have been treated as graphic control surveys in this
review.

The above surveys have rodded in all the shoreline in the area of
this compilation. After a comparison with the photographs this shoreline
has been transferred to the compilation with the exception of those dis-
crepancies as noted opposite page 8 of descriptive report. The original
compilation shoreline was too heavy for clear definition and has been
entirely redrawn in this office. Additional described topographic sta-
tions were transferred from T-6110 to the compilation in this office by

L. S. Lands 

and checked by H. F. Mahler.

All details shown on the above graphic control surveys are now shown on
this compilation except temporary topographic signals and magnetic meridian.

Comparison with Contemporary Hydrographic Surveys

H-5333 (1933), 1:10,000
H-5547 (1934), 1:10,000

A dike at lat. 40° 46', long. 73° 51' has not been shown on H-5333
but has been referred to the verifying section. There are no other dis-
crepancies between the above hydrographic surveys and the compilation.
Comparison with Former Topographic Surveys

T-14 (1837), 1:10,000
T-488 (1855), "
T-605 (1858), "
T-808 (1858), "
T-1725 (1855), "

The topographic surveys T-14, T-488, T-808 and T-1725 at lat. 40° 47', long. 73° 54' show Berriana Island (just off the mainland) which is now non-existent as the channel between the island and the mainland has since been filled in. The shoreline of the above surveys agrees very well with the present shoreline showing very little erosion if any.

The compilation is complete and adequate to supersede the portions of the above surveys which it covers except the contours shown on T-605 and T-808.

Comparison with Charts 1213 and 226

Chart 226 shows a sewer projected to triangulation station Bn. Head House 1932 at lat. 40° 46.9', long. 73° 53.1' from the mainland. This portion of the sewer can not be seen on the photographs and has not been shown on the compilation but is not disproved. Chart 226 in the vicinity of lat. 40° 46.4', long. 73° 53.4' shows a number of buildings which no longer exist.

The topographic location of Bn. 10, Flushing Bay as shown on the compilation was determined in the interval March to May 1934. The beacon has apparently been moved since the triangulation location in 1932. See page 5 of the descriptive report for discussion.

The rocks shown on chart 226 northeast of Lawrence Point cannot be located on the photographs and have not been located by graphic control survey and are not shown on the compilation but are not disproved and should be continued on the chart.

Landmarks in the area of this compilation have been submitted by Lieut. Woodworth, 1932, and Lieut. Rittenburg, 1933 and 1934. Refer also to page 8 of the descriptive report T-5088.

The wrocks shown on this compilation were taken directly from the graphic control surveys. See section of Chart 226 at the back of the report for data.

Remarks

The compilation was so unsatisfactory that it has been necessary to check the plot, recompile the shoreline detail and redraw the entire sheet in this office at a total cost of about 2 man-months above normal verification and reproduction work.

See page 8 of descriptive report for a discussion on landmarks.

March 26, 1937.

L. C. Lande
Chief of Party: Roswell C. Bolstad

Compiled by: (see preceding Statistics Sheet)

Project: New York Air Photo Compilation
Instructions dated: Nov. 15, 1932
Party No. 12

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)

2. Change in position, or non-existence of wharfs, lights, and
   other topographic detail of particular importance to naviga-
   tion which affect the chart, is discussed in the descriptive
   report. (Par. 26; and 66 g,n)
   See paragraph (C) Interpretation, page 6.

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. 35; and 66 d,e)
   See paragraph CONTROL (A), page 3.

4. Blue-prints and maps from other sources which were transmitted
   by the field party contain sufficient control for their applica-
   tion to the charts. (Par. 28)
   See paragraph CONTROL (A), page 3.

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.
   See paragraph (B) Errors, page 4.

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,l)
   See paragraph CONTROL (A), page 3 and paragraph COMPILATION (B),
   page 5, Adjustments of Plot.

7. High water line on marshy WAREHAM coast is clear and ade-
   quate for chart compilation. (Par. 16a, 43, and 44)

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 Compli-
tation of Planimetric Line Maps from Five Lens Air Photographs."
8. The representation of low water lines, marks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

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 37)

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)
    Previously submitted by Lieut. R.W. Woodworth in 1933. See also paragraph LANDMARKS, page 8 in Compiler's Report.

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)
    See paragraph (C) Interpretation, page 6.

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. 54, and 56k)

13. The geographic datum of the compilation is North American 1927 and the reference station is correctly noted. See page 2.

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)

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.

   2. The degrees and minutes of Latitude and Longitude are correctly marked.
3. All station points are exactly marked by fine black dots.

4. Closely spaced lines are drawn sharp and clear for printing.

5. Topographic symbols for similar features are of uniform weight.

6. All drawing has been retouched where partially rubbed off.

7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(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: Any additional notes and requirements affecting this area are referred to Lieut. R.W. Woodworth's and Lieut. I.E. Rittenburg's reports covering the triangulation and topography executed respectively in 1932 and 1933 under their charge.

18. Examined and approved; 

    Preliminary Review: 
    
    Draftsman

19. Remarks after review in office:

Reviewed in office by: L. C. Landl

Examined and approved:

Art Chief, Section of Field Records

Chief, Division of Charts

Chief, Section of Field Work

Chief, Division of Hydrography and Topography.
Applaid to Chart 226 - May 16, 1938 2:20 p.m.

228 Jan. 1938 2:20 p.m.

229 Re-examined June 11, 1949 - P.D.C.