

5088

(ORIGINAL)

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

5088

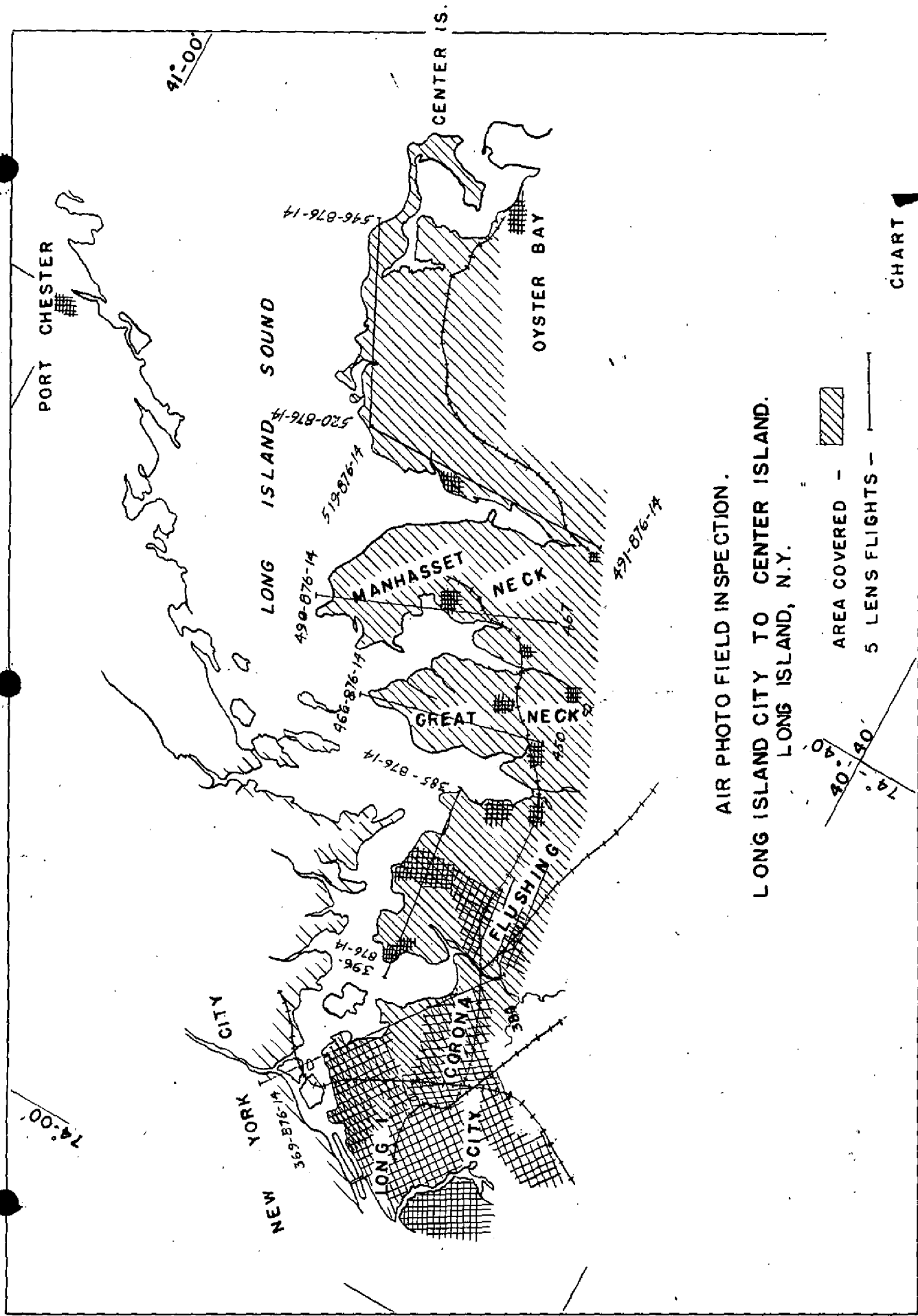
Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
R. S. Patton, Director	
State: <u>New York</u>	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. T5088
LOCALITY	
<u>Northwestern Shore of Long Island</u>	
<u>FLUSHING</u>	
<u>Astoria to Fort Totten</u>	
1934	
CHIEF OF PARTY	
<u>Roswell C. Bolstad, Jr. H. & G. E.</u>	

AIR PHOTO FIELD INSPECTION REPORT

for

NORTH SHORE OF LONG ISLAND

LONG ISLAND CITY TO CENTER ISLAND



AIR PHOTO FIELD INSPECTION.

LONG ISLAND CITY TO CENTER ISLAND.

LONG ISLAND, N.Y.

AIR PHOTO FIELD INSPECTION REPORT

for

LONG ISLAND CITY TO CENTER ISLAND

The inspection was carried on intermittantly (alternating with other field inspections and office work) during 1933 and 1934.

After the preliminary inspection, addition trips were made in order to use new control established by Lieut. Comdr. H. 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 preceeding index map and the numbers and times at which the photographs were taken are given below.

<u>Number</u>	<u>Date</u>	<u>Time</u>
M 368(876 - 14) to M 384(876 - 14)	5-17-33	11:41 to 11:46
M 385(876 - 14) to M 396(876 - 14)	5-17-33	11:30 to 11:35 ✓
M 450(876 - 14) to M 466(876 - 14)	5-17-33	2:10 to 2:18
M 467(876 - 14) to M 490(876 - 14)	5-17-33	2:25 to 2:32
M 491(876 - 14) to M 519(876 - 14)	5-17-33	2:37 to 2:45
M 520(876 - 14) to M 546(876 - 14)	5-17-33	2:56 to 3:03

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

AREA OF INSPECTION

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

<u>Field No.</u>	<u>Reg. No.</u>
38	T 5088
40	T 5090
41E	T 5091
41W	T 5333
42	T 5092

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 - 1933); S. Forney (1915 - 1916); B. H. Rigg (1930); C.D. Meaney (1932); Harold A. Cotton (1933) and Lieut. I. E. Rittenberg (1933 - 1934) forms the basis of control for this area.

(2) Topographical Sheets

<u>Reg. No.</u>	<u>Date</u>	<u>Scale</u>	
4776	1933	1:10,000	Lieut. I.E.Rittenberg
4777	1933	1:10,000	Lieut. I.E.Rittenberg
4778	1933	1:10,000	Lieut. I.E.Rittenberg
6027	Sept. & Oct. 1933	1:10,000	Lt. Comdr. H.A.Cotton
6028	Sept. & Oct. 1933	1:10,000	Lt. Comdr. H.A.Cotton
6029	Sept. & Oct. 1933	1:10,000	Lt. Comdr. H.A.Cotton
6030	Sept. & Oct. 1933	1:10,000	Lt. Comdr. H.A.Cotton
Manhasset Bay	1934	1:10,000	Lieut. I.E.Rittenberg
Hempstead			
Harbor Sheets			

(3) Traverses

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	<u>131</u>
Total number of control points spotted	306

On this project 306 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, seawalls 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. Rittenberg, changes in the shoreline will be shown on his aluminum control sheets.

Submitted by

Nov. 1, 1934

J. Rippstein
J. Rippstein

Draftsman

H.T. Steffensen
H.T. Steffensen

Draftsman

J.J. Vanigan
J.J. Vanigan

Draftsman

-1-
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 38

T5088

REGISTER NO. T 5088

State New York

General locality Northwestern Shore of Long Island.

Locality FLUSHING
~~Astoria to Fort Totten~~

Scale 1:10,000 Date of Photographs May 17, 1933

Date of Compilation Oct. 9 1934

Vessel Air Photo Compilation Party No. 12

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

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. T5088

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

	BY	DATE	
		From	To
ROUGH RADIAL PLOT	R.A. Philleo	12/5	12/5/33
SCALE FACTOR (.865)	R.A. Philleo	12/5	12/5/33
SCALE FACTOR CHECKED	J.P.O. Donnell	12/6/	12/6/33
PROJECTION	R.A. Philleo	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	G. Crowther	4/7/	4/21/34
RADIAL LINE PLOT CHECKED	H.L. Hawkins	4/22/	4/23/34
DETAIL INKED	C.R. Weaver	less 1 month	5/22/34 10/9/34
PRELIMINARY REVIEW	H.L. Hawkins	total 9 days	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° - 09.862" (304.2m) ^{849 303.8}

STATION Whitestone Schoolhouse (1907-32) Longitude 73° - 49' - 02.546" (59.7m) ^{542 59.6 adjust}

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, 1933 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. Mosman 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.
- (h) Aluminum Control Sheet, Reg. No. 4778, by Lieut. I.E. Rittenburg, Scale 1:10,000, in Sept. 1933.
- (i) Aluminum Control Sheet, Reg. No. 4777, by Lieut. I.E. Rittenburg, Scale 1:10,000, in Sept-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 unplotable 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.

Conveyer, U.S.E.	Flagstaff
Pig	Chy.- Electric Co.
Lit	Chy.- Incinerator
Beacon Light	Tank
Lighted Wind Cone	You
Doc	Chi.-Chimney, P.S.129
Pole (inshore end 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 (⊙) 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 ^{not} used as supplementary control in the compilation of this sheet.

(B) Errors.

In making the radial line plot of this sheet the following relocations of spotted aluminum control signals resulted.

Spire (Gold Cross), Lat. $40^{\circ} 45.2'$, Long. $73^{\circ} 51.8'$ 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. (1445.7)m.
 The new position lies at Lat. $40^{\circ} 45' 405.1$ m. (223.3) m.
 Long. $73^{\circ} 51' 1184.3$ m.

This signal could be easily seen in the stereoscope, 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 \odot Lid, the beacon is on range to a stack at the Flushing Gas Works, Lat. $40^{\circ}-46' - 125.4$ m. (1725.4 m.) -- Long. $73^{\circ}-50'-84.0$ m. (1323.2), 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 $308^{\circ}-30'$ from North.

The scaled position is: (254.0)
Lat. $40^{\circ}-45' 1596.8$ m.
(35.8)
Long. $73^{\circ}-50' 1371.7$ m.

(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 my appreciable error in this compilation.

(C) Interpretation and data

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 line was used to indicate first order roads and the double broken line for private driveways and roads of lesser importance. An exceedingly poor road ~~on the map~~ 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:

<u>Name.</u>	<u>Type</u>	<u>Clear Width</u>	<u>Vert. Cl. M. H. W.</u>	
Broa dway Bridge	Bascule	62'	11'	✓
Roosevelt Ave.	Bascule	70'	25'	✓
Main Street.	Swing	30'	3'	✓

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 concrete 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 from a point approx. Lat. 40° - $44.9'$ Long. 73° - $53.8'$.

The Long Island Railroad is elevated on an earth fill, streets pass under where undrepasses 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 Companies 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 and cranes in this area.

At Lat. 40° - $47'$ Long. 73° - $53.8'$ there is a large pile crib. This inclosure 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. $40^{\circ}-46.6'$ Long. $73^{\circ}-50'$ is being built on fill deposited on the marsh.

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

The area shown as marsh at Lat. $40^{\circ}-45.4'$ Long. $73^{\circ}-50.9'$ 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 dumps 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. $40^{\circ}-45'$ 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.

(D) 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.

(E) Conflicting Names

There are no names that conflict with the names on the present charts.

ADDITIONAL NOTE. COMPARISON WITH OTHER SURVEYS.

At Lat. $40^{\circ} 46.7'$, Long. $73^{\circ} 51'$ and to Lat. $40^{\circ} 47'$ Long. $73^{\circ} 51'$ 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. $40^{\circ} 46.6'$ Long. $73^{\circ} 53'$ 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. $40^{\circ} 47.4'$ Long. $73^{\circ} 54.4'$, 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 (507.1) m.

Lat. $40^{\circ}-46'-1343.7$ m.

(205.8)m.

Long. $73^{\circ}-53'-1201.1$ 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. $40^{\circ}-46.8'$; Long. $73^{\circ}-54.0'$; 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, and the like 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

C. R. Weaver
Draftsman.

Assisted by

H. L. Hawkins
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 "Wind 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 Wind 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.

<u>Description</u>	<u>Latitude</u> °	<u>Longitude</u> °	<u>Method</u> <u>Of Determination</u>
	(507.1)m	(205.8)m	
House Cupola	40 - 46-1343.7m	73 -53 -1201.1m	A.P.T. A.C.S.
Beacon Light	40 - 46.4	73 - 52.9	#4776 A.C.S.
Lighted Wind Cone	40 - 46.4	73 - 52.9	#4776 A.C.S.
(Lid) Tall Manhole	40 - 45.7	73 - 51.7	A.C.S. #4776
Spire, Gold Cross	40 - 45.2	73 - 51.8	A.C.S. #4776
Stack, tall black at I.R.T. car barns	40 - 45.2	73 - 50.8	A.C.S. #4776
Stack, tallest of sev- eral, black, H.W.Dpt.	40- 44.8	73 - 50.1	A.C.S. #4776
Flagstaff, white on red bk. bldg.	40 - 45.2	73 - 50.1	A.C.S. #4776
Chy.- Electric Co., gray stack.	40 - 45.4	73 - 50.1	A.C.S. #4776
Chy. - Incinerator tall red brick.	40 - 46.1	73 - 50.4	A.C.S. #4776
Tank, wooden roof atop factory.	40 - 47.0	73 - 51.5	A.C.S. #4776
Flagpole	40 - 47.6	73 - 51.2	A.C.S. #4776
Chi. - chimney on P.S. 129.	40 - 47.5	73 - 50.4	A.C.S. #4776
*U.S.E. #46	40 - 47.6	73 - 51.2	A.C.S. #4776
*U.S.E. #48	40 - 47.8	73 - 50.4	A.C.S. #4776
*U.S.E. # 50	40 - 47.8	73 - 49.8	A.C.S. #4776

(Note: See following page)

Note: A.C.S. denotes Aluminum Control Sheet, A.P.T. denotes Air Photo Topography. Name in parenthesis preceeding the description is the topographic name of the station.

For classification of Class "C" landmarks, see Report T5059.

* Monumented stations

Additional Class " C " Landmarks

<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Method</u> <u>Of Determination</u>
	(1725.4)	(1323.2)	
Stack, (Flushing)	40°-46'- 125.4 m.	73°-50'- 84.0 m.	A.P.T.
Beacon #10 Flushing	(254.0)	(35.8)	
Bay.....	40°-45'-1596.8m.	73°-50'- 1371.7m.	A.P.T.

Remarks

Decisions

1		
2		
3		
4		USGB decision
5		USGB decision
6		
7		
8		
9		
10		
11		USGB decision
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24	Name to be changed	
25	Holmes Airport on Airway Map & Bulletin No. 2	<u>Holmes Airport</u>
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GEOGRAPHIC NAMES

Survey No.

T-5088

GEOGRAPHIC NAMES										
Survey No. T-5088										
Name on Survey	<div>On Chart No. 226, 223 On previous survey No. T-605, 808, 1225 On U. S. quadrangle Maps From local Bureau information, No. 15635 On local Maps of Est. (1940) 8 APP Map. N. Y. C. P. O. Guide or Map Rand McNally Atlas U. S. Light List Port of N.Y. K. Auth. (1935)</div>									
	A	B	C	D	E	F	G	H		
<u>East River</u>	appd		✓							1
<u>Flushing Bay</u>	✓	✓	✓		✓					2
<u>Bowery Bay</u>	✓			✓	✓					3
<u>College Point</u>	✓ appd	✓	✓							4
<u>Lawrence Point</u>	✓		✓							5
<u>Sanford Point</u>	✓	✓	✓							6
<u>Steinway</u>	✓		✓							7
<u>North Beach</u>	✓			✓						8
<u>Corona</u>	✓		✓			✓				9
<u>Astoria</u>	✓ appd		✓			✓				10
<u>College Point (town)</u>	✓		✓							11
<u>Whitestone</u>	✓		✓		✓	✓				12
<u>Malba</u>				✓	✓					13
<u>Flushing</u>	✓		✓		✓	✓				14
<u>Whitestone Point</u>	✓	✓	✓							15
<u>Cape Ruth</u>	✓		✓							16
<u>Powell Cove</u>	✓		✓		Powell's Cove					17
<u>Little Bay</u>	✓		✓		✓					18
<u>Flushing Creek</u>	✓	✓	✓			Flushing River				19
<u>East Elmhurst</u>	✓			✓						20
<u>Beechhurst</u>										21
<u>Chisholm Park</u>										22
<u>Tallman Island</u>	✓	✓	✓					✓		23
<u>Glen Curtiss Airport</u>	North Beach Airport								Glen L. Curtiss Airport	24
<u>Grand Central Airport</u>	see page opposite								Terminal	25
<u>Flushing Airport</u>								✓		26
<u>Exeters Pt</u>			✓							27

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. T-5088

Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.	
<u>Mill Creek</u>	✓	✓								1
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Names underlined in red approved
by GLE on 10/15/57

Note T5088 has been checked against both
the photographs and the planotable surveys
and has been corrected where necessary.
Where differences remain between T5088
and the planotable surveys T5088 is
accepted as correct.

Bgg.

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

Data Record

Triangulation to 1932
Photographs to 1933
Planetable 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 discrepancies as noted opposite page 8^{and pages 4 and 5} of descriptive report. The original compilation shoreline was too heavy for clear definition and has been entirely redrawn in this office. Additional described topographic stations were transferred from T-6110 to the compilation in this office by

L. C. Lande and checked by H. K. Schleuter.
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 discrepancies between the above hydrographic surveys and the compilation.

*done
see note on opposite page.*

Comparison with Former Topographic Surveys

T- 14 (1837), 1:10,000
 T- 488 (1855), "
 T- 605 (1858), "
 T- 808 (1858), "
 T-1725 (1885), "

The topographic surveys T-14, T-488, T-808 and T-1725 at lat. $40^{\circ}47'$, long. $73^{\circ}54'$ show Berrians 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. $40^{\circ}46.9'$, long. $73^{\circ}53.1'$ 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. $40^{\circ}46.4'$, long. $73^{\circ}53.4'$ 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 wrecks shown on this compilation were taken directly from the graphic control surveys.

See set of chart 226 at in the back of this report for
Remarks a comparison with the compilation.

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 descriptive report for a discussion on landmarks.

March 26, 1937.

L. C. Lande

REVIEW OF AIR PHOTO COMPILATION NO. T 5088

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 navigation 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. 65; 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 application 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,i)
See paragraph CONTROL (A), page 3 and paragraph COMPILATION (B), page 5, Adjustments of Plot.
- ✓ 7. High water line on marshy ~~submarine~~ coast is clear and adequate 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 Compilation of Planimetric Line Maps from Five Lens Air Photographs."

- ✓ 8. The representation of low water lines, ~~and depths and soundings~~ 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 57)
See report of Control Party, Lieut. I.E. Rittenburg in 1933.

- ✓ 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. 64, and 66k)

- ✓ 13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927 *adjusted*
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:

H. L. Hawkins
H. L. Hawkins

Draftsman

Roswell C. Bolstad
Roswell C. Bolstad
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *L. C. Lande* - *B. J. Jones*

Examined and approved: *WBA*

K. T. Adams
Asst Chief, Section of Field Records
Division of Charts
L. O. Colburn
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work
G. Hude
Chief, Division of Hydrography
and Topography.

Applied to Chart 226 - May 16, 1938 L.M.J.

" " " 223 June 1938 J.M.J.

" " " 223 reexamined June 16, 1949 - R.D.C.