

5460

5460

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Air Photo
Hydrographic } Sheet No. T-5460

State New York

LOCALITY

New York City

Brooklyn

GOVERNORS ISLAND

AND VICINITY

1936

CHIEF OF PARTY

J. C. Partington
Jr. H. & G. E.

Applied to Chart 745 - Aug 12, 1937 - L.M. Z.

Applied to Chart 541 - Oct 20, 1937 - L.M. Z.

" " 369 - April 18, 1939 - L.M. Z.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 92

T5460

REGISTER NO. **T 5460**

State New York

General locality New York City **BROOKLYN**

Locality Brooklyn **GOVERNOR'S IS. AND VICINITY**

Scale 1:5000 Photos, Nov 25, 1934; Mar 27, 1935; May 15, 1935.
Date of survey _____, 19____

Vessel Air Photo Compilation Party # 25

Chief of party J. C. Partington

Surveyed by See Statistic Sheet, page 2 of this report. **J.C.P.**

Inked by " " " " " " " " R.S. Peck

Heights in feet above mean to ground to tops of trees

Contour, Approximate contour, Form line interval 5 feet

Instructions dated March 14, 1934

Remarks: _____

STATISTICS ON SHEET, FIELD NO. 92; REGISTER NO. T-5460

PHOTOGRAPH NO.	DATE	Time	TIDE				Y
			High Time	Ht.	Low Time	Ht.	
103-104 (870 N-8)	Nov.25,1934	1:07 PM	10:34 AM 11:27 PM	4.3 3.5	4:22 AM 5:09 PM	0.3 0.0	
155-159 (870 N-8)	Mar.27,1935	11:50 AM	0:31 AM 12:58 PM	4.5 3.5	7:24 AM 6:51 PM	0.5 0.6	
213-217 (870 N-8)	May 15,1935	10:29 AM	5:40 AM 6:01 PM	3.8 4.9	11:49 AM - - -	0.3 -	
432-434 (876 B-8)	Mar.27,1935	11:55 AM	0:51 AM 1:18 PM	4.4 3.4	7:44 AM 7:11 PM	0.5 0.6	

	By	Date	
		From	To
SCALE FACTOR (1.000)	R.C.Bolstad	(Previously determined)	
PROJECTION	F.M.Overby	4-11-35	
PROJECTION CHECKED	J.P.O'Donnell	4-11-35	
CONTROL PLOTTED	J.C.Partington	3-4 -36	3- 5-36
CONTROL CHECKED	R.H.Young	6- 1-36	
SMOOTH RADIAL LINE PLOT	J.C.Partington	6-11-36	6-20-36
RADIAL LINE PLOT CHECKED	R. S. Poor	11 -2-36	12-7 -36
DETAIL INKED	R. S. Poor	11 -2 -36	12-7 -36.
PRELIMINARY REVIEW OF SHEET	J.C.Partington	12-10-36	
AREA OF DETAIL INKED (land area)	4	Square Statute Miles	
AREA OF DETAIL INKED (shoals)	0	Square Statute Miles	

LENGTH OF SHORELINE (more than 200 M. from opposite shore) 25.8 Statute Mi.
 LENGTH OF SHORELINE (rivers & sloughs less than 200 M.wide) 2.7 Statute Mi.
 LENGTH OF STREETS, ROADS, RAILROADS, TRAILS 98.3 Statute Mi.

GENERAL LOCATION New York City

LOCATION Brooklyn

DATUM North American 1927

STATION Standish Arms 2 Latitude 40° 41' 50.353" 1553.2 m.
 1931;r'32 (N.Y.) Longitude 73 59 49.445 1160.9 m.

(Adjusted computations)

2

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET, FIELD NO. 92, REGISTER NO. T-5460

GENERAL INFORMATION

The Air-photo Field inspection Report for Metropolitan New York attached to the descriptive report of AIR-PHOTO TOPOGRAPHIC SHEET, Field No. 90, Register No. T-5458, furnished the necessary information for the compilation of this sheet.

This sheet has been compiled from single lens photographs listed on the previous page of this report. Photographs numbers 103 to 105 (870 N-8) were taken on Nov. 25, 1934 at approximately two hours and thirty minutes after high water. Photographs numbers 155 to 159 (870 N-8) were taken on March 27, 1935 at approximately one hour before high water. Photographs Numbers 213 to 217 (870 N-8) were taken on May 15, 1935 at approximately one hour and twenty minutes before low water. Photographs numbers 432 to 434 (876 B-8) were taken on March 27, 1935 at approximately one hour and twenty minutes before high water.

The photographs were taken by the U.S.Army Air Corps at Mitchell Field, L.I., N.Y. with a special camera recently developed by the Fairchild Camera Corporation, 62-10 Woodside Ave., Woodside, New York City. Due to the fact that these photographs were among the first to be taken by this camera, mechanical troubles were encountered which caused considerable difficulty at first. This probably accounts for the irregular time interval between exposures which in turn affects the overlap. This is also probably the cause of excessive tilt on some pictures. The camera is known as the "K-7C" by the Army and as the "K-7A" by the Fairchild Corporation.

The Army plane was piloted by Lieut. Cullen at an altitude very close to 15,000 feet; the photographer was Sergeant Cates. A 24 inch cone (focal length 24") was used with this camera, producing the negatives on a scale of 1: 7,500. Contact prints were furnished the field party for use in field inspection. The original negatives were used by the Washington office of the U.S.Coast and Geodetic Survey for enlarging a set of office prints on a scale of 1:5,000. The 1: 5,000 prints were furnished the field party and were used in compiling this sheet.

CONTROL

(a) Sources.

Control for the compilation of this sheet was obtained from the following sources:

1. Triangulation, 1930-33 by R.W.Woodworth (Adjusted)
2. Triangulation, 1903-08, Greater New York.
3. Triangulation, 1887 or 1899 (Chief of Party not known).
4. U.S.Engineers stations as described on Form 524 submitted with this report.

The triangulation mentioned in the above paragraph under 3 (1887 or 1899) is only one station namely "Brooklyn Pier Fl. St. Bridge". This station is discussed in the following paragraph.

(b) Errors.

Show this to Landy Muller

The only error found in the position of a triangulation station established by the U.S. Coast and Geodetic Survey was the station "Brooklyn Pier Fl. St. Bridge". The triangulation position differs from the radial plot position by 6.0 meters in azimuth 240° (from north). This station was recovered by R.W. Woodworth in 1932 (card 757) and is described as a flagpole in the top of the center of the east pier of the Brooklyn Bridge. No original description of this station was available so there is some doubt as to its exact recovery. The station was not located in the 1930-33 triangulation of New York City nor in the 1903-08 scheme. The position is computed from an azimuth and distance from triangulation station "N.Y. Produce Exchange Fl. St." Although the latter seems to be correct the "Brooklyn Pier Fl. St. Bridge" appears to be in error. No data is on hand in this party prior to the 1903-08 Triangulation of Greater New York. It is quite possible that the present flagstaff has been built since the 1887 or 1899 triangulation. The radial plot position is shown on the sheet with a $2\frac{1}{2}$ mm. black circle.

This has been referred to Mr. Lutzoff B.G.F.

The only U.S. Engineers station which failed to agree with the radial line plot is "Sdg. Sta. Pier # 22". The U.S. Engineers position differs from the radial plot position by 31.5 meters in azimuth 289° (from north). The coordinates of this station are given by the U.S. Engineers as

S 32,836.14 ft. (The origin of coordinates is triangulation
W 13,191.83 ft. station "Memorial Church".)

The geographic position of this station as computed from the above coordinates is

Latitude	40°	41'	32.673"	1007.8 m.)	N.A. 1927 Datum
Longitude	74	00	17.040	400.1 m.)	

W.F.M.

This station can be clearly spotted on the photographs and there seems little doubt that the coordinates are in error. The radial plot position is strongly located by five "cuts". The position of this station as determined by the radial line plot is shown on the sheet with a $2\frac{1}{2}$ mm. circle.

The geographic position of all of the U.S. Engineers stations were computed from their coordinates and plotted on the sheet with a $2\frac{1}{2}$ mm. circle. They were all found to agree with the radial line plot within 1.0 meter, except the one mentioned above. All of the U.S. Engineers station shown on this sheet are described on Form 524 and form a part of this report. Other recoverable objects are shown by the same $2\frac{1}{2}$ m m. circle but are not described on Form 524.

Some of the U.S. Engineers stations which were found by the field inspection party are not shown on this sheet because they are not permanently marked. An effort has been made to show the most permanently marked stations at intervals of about one-half mile along the waterfront.

Field measurements to the centerlines of streets as shown in descriptions of the following triangulation stations did not check: Standish Arms 2, F. P. National City Bank, F. P. A. T. & T. Co. It is believed that the data shown on these triangulation sketches ~~are~~ is in error.

Compilation.

(a) Method.

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

The U. S. Engineers stations were used as supplementary control and their positions accepted only after it was found that they agreed with the radial line plot.

(b) Adjustment of plot.

No unusual adjustment of plot was necessary in running the radial plot.

The radial plot makes a satisfactory connection with the adjoining sheets but is rather weak in the vicinity of the junction with Sheet No. T 5461. In as much as the photographs covering this area were very close to scale it is believed that the compilation is well within the desired accuracy.

(c) Interpretation.

The usual graphic symbols were used and no difficulty was experienced in interpreting the photographic detail.

Railroad yards were generalized as requested by the office.

The stereoscope was used freely in determining the shapes of the buildings shown along the waterfront.

The double full line used to show first class roads and streets is the actual width from curb to curb.

The double dashed lines were used for second class roads and for sidewalks in parks.

(d) Information from other Sources.

No information from outside sources was used in the compilation of this sheet, with the exception of a few names which were taken from a Map of the City of New York, Board of Estimate and Apportionment.

(e) Names.

A list of the geographic names shown on this sheet are given on Form M234 included with this report.

(f) Bridges.

The bridge data shown on the overlay was taken from the Coast Pilot, Atlantic Coast, Section B, 1933; and List of Bridges over the Navigable Waters of the United States, 1927.

(f) Bridges (Cont.)

not for Coast Pilot *5
over 12
Governors Canal*
Data on the Fixed Rapid Transit Bridge at Ninth St. was obtained from the Coast Pilot. According to the Coast Pilot this bridge is supposed to be 0.2 miles above the Ninth St. Bridge but actually the Ninth St. Bridge is under the Rapid Transit Bridge and for this reason the Ninth St. Bridge is not shown on this compilation.

There were no discrepancies between the Coast Pilot and the List of Bridges over the Navigable Waters. *X*

No data was listed in the List of Bridges pertaining to the Fixed Rapid Transit Bridge.

JUNCTIONS.

The above has been referred to Coast Pilot 13.94
All junctions with adjoining sheets are satisfactory.

LIST OF RECOVERABLE OBJECTS

Eleven cards Form 524 are included with this report which give the description and position of U. S. Engineer Stations.

Other recoverable objects located by the radial line plot but for which no descriptions are given are as follows:

Name	Latitude	Meters	Longitude	Meters
STACK, west twin (150')	40 40	253.5	73 59	1302.5
STACK, east twin (150')	40 40	247.0	73 59	1293.5
TANK, silver (150')	40 41	408.0	74 00	472.5
TANK, silver (75')	40 41	261.0	74 00	786.0
FLAGPOLE; Brooklyn side Manhattan Br. (charted)	40 42	555.0	73 59	550.0
SIREN; Governors Is (new position)	40 41	852.0	74 00	1030.0
SIREN, Governors Is.	40 41	1148.0	74 00	1359.0
SIREN, Governors Is	40 41	1057.0	74 01	301.0

Scaled by R. S. Poor
Checked by J. C. Partington

All of these recoverable objects are shown on the sheet with a $2\frac{1}{2}$ mm circle.

COMPARISON WITH OTHER SURVEYS.

Topo Sheet No. T 6380. *Graphic Control Survey, (1:10 000) (Oct. 1934)*

This Sheet checks the compilation exceptionally well with the exception on a small area near Erie Basin, Lat 40 40, Long. 74 00. In this area there is a discrepancy of approximately 10 meters in the location of several of the docks etc.

The photograph covering this area was almost exactly to scale and

it would be impossible to have a 10 meter error in this vicinity with the control stations situated and holding on the radial plot as in this case.

Referring to the Topographers report, it is noted that the docks were located by setting up a convenient points, establishing the position by three point fixes on triangulation stations, and locating all points which could be obtained from each setup. It is probable that a strong 3 point fix could not be obtained in this area which would account for this discrepancy.

COMPARISON TO CHARTS

Due to the fact that the charts of this area are on a 1:10,000 scale and the compilation is on a scale of 1:5000 scale, no direct comparison between the two has been made.

However, a visual comparison shows the following discrepancies between Chart 745, edition of January 23, 1936 and this compilation;

Pier No. 7 as numbered on the chart has no shed on it at the time of the photographs.

Bluff symbols around some sort of a fortification on Governors Is. should be removed. Apparently this has been torn down because the field inspection party mentioned nothing about it and a careful inspection by the use of the stereoscope shows no elevation or anything in this area. It should be mentioned here that all the buildings on Governors Is. have been shown on this compilation. There was considerable doubt as to whether any of the buildings on this Government Reservation should be shown but since most of the buildings were already charted and the Island is not fortified, it was decided to show all buildings and then if the office decides that they should not be shown, they can easily remove the buildings from the negative.

The streets shown in the vicinity of Henry St. Basin were not visible on the photographs and are proposed streets. Hence they are not shown on this compilation.

According to the Coast Pilot "Gowanus Canal" as used in this vicinity refers to that waterway north of Percival St.

The chart shows some sort of a bridge or pier in a small basin in the northeast part of Erie Basin. This has fallen to ruin and there are only a few rows of pilings there at the time of the photos.

Wrecked barge shown near Pier 45 was not mentioned by the field party and does not show on the photos. It is not shown on this compilation and there is a possibility ~~xxx~~ it has been removed.

There were no field notes on the light at Red Hook shown on Chart 541, hence it was not located on this compilation.

LANDMARKS

The following landmarks are recommended for charting in addition to the one shown on Chart 745.

Stack, west twin 150 ft.
Stack, east twin 150 ft.

LANDMARKS (Cont.)

TANK, silver 150 ft.
 TANK, silver 75 ft.
 FLAGPOLE, Brooklyn side Manhattan Bridge
 SIREN, Governors Is. (charted)
 SIREN, Governors Is. (new position)
 SIREN, Governors Is.

The landmarks in this area which are shown on chart 745 are still in existence and should be shown with one exception and that is the unnamed landmark shown on Pier 23 Brooklyn. A careful inspection of the photo under the stereoscope showed nothing prominent or outstanding on this shed and the field inspection party had no notes of anything in this place.

The new landmarks are listed on for 567 included with this report.

RECOMMENDATION FOR FURTHER SURVEYS

This sheet is believed to be complete in all detail of importance for charting and no further surveys are required and that the probable error is not greater than 2 meters for well defined objects along the waterfront and not more than 4 meters for other detail.

Submitted by

Raymond S. Poor
 Raymond S. Poor
 Head, U. S. C. & G. S.

Approved and forwarded

J. C. Partington
 J. C. Partington, Jr H & G E
 Chief of Party No 25

Remarks

Decisions

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		<i>See Part of N.Y. Part III No. 53</i>
18	According to Coast Pilot. Gowanus Canal applies to the waterway north of Percival St.	" "
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No.

T 5460

Name on Survey

GEOGRAPHIC NAMES										
Survey No.										
T 5460										
Name on Survey	A	B	C	D	E	F	G	H	K	
<u>East River</u>				x	x	x	x			1
<u>Manhattan Bridge</u>				x	x	x	x			2
<u>Brooklyn Bridge</u>				x	x	x	x			3
<u>Browne Park</u>					x					4
<u>McLaughlin Park</u>					x					5
<u>Red Hook Park</u>				x	x					6
<u>Brooklyn</u>			✓	x	x	x				7
<u>Governors Island</u>	x	x	✓	x	x	x	x			8
<u>Buttermilk Channel</u>	x	x	✓		x	x	x			9
<u>Red Hook</u>	x		✓			x				10
<u>Red Hook Channel</u>	x	x					x			11
<u>Upper Bay</u>	x	x	✓		x		x			12
<u>Atlantic Basin</u>	x	x	✓		x	x				13
<u>Erie Basin</u>	x	x	✓		x		x			14
<u>Henry St. Basin</u>			Brooklyn Basin		x	x				15
<u>Gowanus Bay</u>	x	x	✓				x			16
<u>Gowanus Creek</u>							x			17
<u>Gowanus Canal</u>					x	* x*				18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved

ME

on 2/15/37

M 234

Names underlined in red approved
by HFE on 2/15/37

PLANE COORDINATE GRID SYSTEM

Positions of grid intersections used for fitting the grid to this compilation were computed by Division of Geodesy and the computation forms are included in this report.

Positions plotted by R. E. Ask

Positions checked by R. E. Ask

Grid inked on machine by R. E. Ask

Intersections inked by P. Sushka

Points used for plotting grid:

x 2,006,000 ft
y 174,000

x 2,000,000
y 166,000

x 2,006,000
y 158,000

x
y

x 1,994,000
y 158,000

x
y

x 1,994,000
y 174,000

x
y

Triangulation stations used for checking grid:

$x=2,000,811.95$ $y=171,887.28$ ft.

1. Standish Arms 2 (1931) Ref. Sta 5. _____
2. School House #142 (1908) 6. _____
3. Smith + Gray Tower (1908) 7. _____
4. _____ 8. _____

Geodetic positions from Lambert coordinates

State Long Island Station Sheet 5460

X

x	2,006,000	$R_b + A$	24,462,545.30
C		y	174,000
$x' (= x - C)$	+ 6,000	$R_b + A - y$	24,288,545.30
	3.77815125		
$\tan \theta$	7.38540150	R	
θ	$\left\{ \begin{array}{l} 6.39274975 \\ 4.68557488 \\ 1.70717483 \text{ } 0.50. \end{array} \right.$	y	174,000
$\frac{\theta}{\ell} (= \Delta \lambda)$	1.89154261	y''	- 0.74
		y'	173,999.26
λ (central mer.)	74° 00' "		
- $\Delta \lambda$	1 17.9009	ϕ (by interpolation)	40° 42' 11.2182
λ	73 58 42.0991		
	56.81 mm		69.20 mm

Station Sheet 5460

X

x	2,006,000	$R_b + A$	24,462,545.30
C		y	158,000
$x' (= x - C)$	+ 6,000	$R_b + A - y$	24,304,545.30
	3.77815125		
$\tan \theta$	7.38568750	R	
θ	$\left\{ \begin{array}{l} 6.39246375 \\ 4.68557488 \\ 1.70688887 \end{array} \right.$	y	158,000
$\frac{\theta}{\ell} (= \Delta \lambda)$	1.89125661	y''	- 0.74
		y'	157,999.26
λ (central mer.)	74° 00' "		
- $\Delta \lambda$	1 17.8496	ϕ (by interpolation)	40° 39' 33.1168
λ	73 58 42.1504		
	570.9 mm		19.22 mm

$$\tan \theta = \frac{x - C}{R_b + A - y}$$

$$\Delta \lambda = \frac{\theta}{\ell}$$

$$\lambda = \lambda \text{ (central mer.)} - \Delta \lambda$$

$$R = (R_b + A - y) \sec \theta$$

$$y'' = 2R \sin^2 \frac{\theta}{2}$$

$$y' = y - y''$$

C is constant added to x' in computation
of coordinates

R_b is map radius of lowest parallel

A is value of y' for R_b ; in most cases it is zero

ϕ is interpolated from table of y'

Geodetic positions from Lambert coordinates

State Long Island Station Sheet 5460

x	1,994,000	$R_b + A$	24 462 545.30
C		y	158,000
$x' (= x - C)$	-6,000	$R_b + A - y$	24 304,545.30
	3.77815125		
$\tan \theta$	7.38568750	R	
θ	$\left\{ \begin{array}{l} 6.39^\circ 24' 37.5'' \\ 4.68557488 \end{array} \right.$	y	158,000
$\frac{\theta}{\ell} (= \Delta \lambda)$		y''	- .74
		y'	157,999.26
λ (central mer.)	74° 00' "		
$-\Delta \lambda$	1 17.8496	ϕ (by interpolation)	40° 39' 33.1168
λ	74 01 17.8496		
	83.86 mm		19.22 mm

Station Sheet 5460

x	1,994,000	$R_b + A$	24,462,545.30
C		y	174,000
$x' (= x - C)$	-6,000	$R_b + A - y$	24,288,545.30
	3.77815125		
$\tan \theta$	7.38540150	R	
θ	$\left\{ \begin{array}{l} 6.39^\circ 27' 49.75'' \\ " \end{array} \right.$	y	174,000
$\frac{\theta}{\ell} (= \Delta \lambda)$		y''	- .74
		y'	173,999.26
λ (central mer.)	74° 00' "		
$-\Delta \lambda$	1 17.9009	ϕ (by interpolation)	40° 42' 11.2182
λ	74 01 17.9009		
	84.04 mm		69.20 mm

$$\tan \theta = \frac{x - C}{R_b + A - y}$$

$$\Delta \lambda = \frac{\theta}{\ell}$$

$$\lambda = \lambda (\text{central mer.}) - \Delta \lambda$$

$$R = (R_b + A - y) \sec \theta$$

$$y'' = 2R \sin^2 \frac{\theta}{2}$$

$$y' = y - y''$$

C is constant added to x' in computation
of coordinates

R_b is map radius of lowest parallel

A is value of y' for R_b ; in most cases it is zero

ϕ is interpolated from table of y'

Geodetic positions from Lambert coordinates

State Long Island

Station Sheet 5460

x	2,000,000	$R_b + A$	24 462,545.30
C		y	166,000
$x' (= x - C)$	0	$R_b + A - y$	24,296,545.30
$\tan \theta$		R	
θ	° ' "	y	166,000
	0 "	y''	-
$\frac{\theta}{\ell} (= \Delta \lambda)$		y'	166,000
λ (central mer.)	74° 00' "	ϕ (by interpolation)	40° 40' 52".1750
$-\Delta \lambda$			
λ	74 00 00.0000		136,80 mm

Station _____

x		$R_b + A$	
C		y	
$x' (= x - C)$		$R_b + A - y$	
$\tan \theta$		R	
θ	° ' "	y	
	"	y''	-
$\frac{\theta}{\ell} (= \Delta \lambda)$		y'	
λ (central mer.)	° ' "	ϕ (by interpolation)	° ' "
$-\Delta \lambda$			
λ			

$$\tan \theta = \frac{x - C}{R_b + A - y}$$

$$\Delta \lambda = \frac{\theta}{\ell}$$

$$\lambda = \lambda \text{ (central mer.)} - \Delta \lambda$$

$$R = (R_b + A - y) \sec \theta$$

$$y'' = 2R \sin^2 \frac{\theta}{2}$$

$$y' = y - y''$$

C is constant added to x' in computation
of coordinates

R_b is map radius of lowest parallel

A is value of y' for R_b ; in most cases it is zero

ϕ is interpolated from table of y'

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED

STRIKE OUT ONE

LANDMARKS FOR CHARTS

Baltimore, Md.Dec. 10, 193 6

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks, be charted on ~~charts~~ the charts indicated.

The positions given have been checked after listing.

J.C.Partington											Chief of Party.			
GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION							METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE			DATUM							
		°	'	D. M. METERS	°	'		D. P. METERS						
		40	40	255.8	73	59	1302.5	N.A. 1927	Radial Plot	1935	X			745
		40	40	247.0	73	59	1293.5	"	"	"	X			"
		40	41	409.0	74	00	472.8	"	"	"	X			"
		40	41	261.0	74	00	766.0	"	"	"	X			"
		40	42	665.0	73	59	680.0	"	"	"	X			"
		40	41	852.0	74	00	1050.0	"	"	"	X			"
		40	41	1148.0	74	00	1359.0	"	"	"	X			"
		40	41	1057.0	74	01	301.0	"	"	"	X			"

J.C. Partington

Chief of Party.

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

REVIEW OF AIR PHOTO COMPILATION T-5460
Scale 1:5,000

Comparison with Graphic Control Survey

T-6380 (Oct. 1934), 1:10,000

Refer to page 5 of this descriptive report, T-5460, for a comparison of the compilation with T-6380. Regarding the difference of 10 meters in location of piers as discussed on page 5 of this descriptive report, T-5460, the compilation is accepted as correct for the reasons stated and a note has been placed on the graphic control survey. All detail on the above graphic control sheet within the area of this compilation is now shown on the compilation except temporary planetable stations.

There are no contemporary hydrographic surveys in this area.

Comparison with Previous Topographic Surveys

T- 12 (1837),	1:10,000
T- 483 (1855),	"
T- 608 (1857),	"
T- 677 (1857),	1:5,000
T-1414 (1875),	1:10,000
T-1576 (1885),	"
T-1586 (1885),	"
T-2323 (1889),	"
T-3226 (1911),	"

There have been numerous large changes in structural features and in the location of the high water line due to extensive construction and filling. Governors Island and the shoreline in the vicinity of Erie Basin have been greatly changed due to extensive filling.

This compilation is complete and adequate to supersede the sections of the above topographic surveys for charting.

Comparison with Charts Nos. 745, 541 (1:10,000)

There are numerous minor differences in the shapes of waterfront buildings, piers, and other detail. All landmarks shown on the charts in the area covered by this compilation have been shown including the Governors Island Siren which has been moved slightly. The new position is described on page 5 of this descriptive report, T-5460.

A fixed red light at the foot of Dikeman Street, lat. $40^{\circ} 40.8'$, long. $74^{\circ} 01.1'$, has been placed since the photographs were taken and is therefore not shown on the compilation.

Supplemental Information

Triangulation - See page 2 of this descriptive report, T-5460, for list of control used.

Field Inspection - Detailed inspection of waterfront was made between December 1934 and June 1935 (exact date not shown). Field inspection notes consisted largely of interpretation of detail and addition of dolphins and piling not visible on photographs.

Planetable Surveys - Graphic control survey T-6380 of October 1934 duplicates and checks with compilation along waterfront but shows no detail in addition to the photographs.

State Coordinate System

The New York State coordinates, Long Island Zone, will be added to this compilation before printing.

Geographic positions of grid intersections computed in Division of Geodesy and filed at back of this report.

Positions plotted by

Positions checked by

Ruled on ruling machine and inked by

Feb. 26, 1937.

H. H. Schleuter

B. G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5460

Chief of Party: J. C. Partington

Compiled by: R. S. Poor

Project:

Instructions dated: 3/14/34.

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)

Yes

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)

Yes

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)

None used.

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)

None submitted.

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.

Yes

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)

Yes

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

Yes

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, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

Yes

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)

Yes

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)

Yes

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)

Yes

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)

Yes

13. ✓ The geographic datum of the compilation is N. A. 1927 and the reference station is correctly noted.

Yes

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

Yes

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)

Yes

16. ✓ No additional surveying is recommended at this time.

No

17. Remarks:

18. Examined and approved;

J.C. Partington
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *H.W. Schleiter 2/26/37 -Bgg*

Examined and approved:

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

Fred. R. Peacock
Chief, Section of Field Work
At Hall
Chief, Division of Hydrography
and Topography.