

6763

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. \_\_\_\_\_ Office No. H6763

LOCALITY

State New York

General locality Rockaway Inlet  
~~New York Harbor~~

Locality Gerritsen Inlet  
~~Rockaway Inlet~~

194 2

CHIEF OF PARTY

I.E. Rittenburg

LIBRARY & ARCHIVES

DATE \_\_\_\_\_

6763

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. **H6763**

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. **H6763**

Field No. \_\_\_\_\_

State New York

General locality Rockaway Inlet  
New York Harbor

Locality Rockaway Inlet  
Gerritsen Inlet

Scale 1:10,000 Date of survey May 27-28, 1942

Instructions dated May 23, 1942

Vessel Motor launch COWIE

Chief of party I. E. Rittenburg

Surveyed by do

Soundings taken by fathometer, graphic recorder, hand lead, wire \_\_\_\_\_

Protracted by J. O. Phillips

Soundings penciled by J. O. Phillips

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXX~~

REMARKS: This sheet was processed at the Norfolk Processing Office.

POST-OFFICE ADDRESS: Glenwood Landing, L.I. N. Y.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

H6763

*Descriptive Report*

*45734*

*Mr. Cole*

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

May 29, 1942

To: The Supervisor  
Eastern District

From: The Commanding Officer  
M. V. Cowie

Subject: Report, Special Hydrographic Survey, Rockaway  
and Gerritsen Inlets, N. Y.

This survey was made as per your instructions of May 23, 1942 for a special hydrographic survey in Rockaway and Gerritsen Inlets, ( including Deep Creek ), New York.

Control for this sheet consists of Triangulation and Air Photo Compilation Topographic Stations ( natural objects ) and hydrographic Stations located from sextant cuts. Triangulation Stations are depicted on the sheet by double red circles and Air Photo compilation stations are shown by small red circles. Hydrographic signals are shown by blue circles. All control, (other than Hydrographic Stations) was transferred to the boat sheet from the Air Photo Compilation sheets, Shore line shown solid is also from this source. Shoreline shown by dashed lines is from Chart 542. Soundings shown in red on the boat sheet are from Chart 542. These soundings may show on a photostat of the sheet but it is believed that they will be much lighter and can be ~~recognized~~ <sup>recognized</sup> easily, (blue ink should have been used for these figures).

The hydrography was accomplished with a 26 foot Navy motored whaleboat, the Navy furnishing their engineer and an additional man. These men were very cooperative at all times. All other personnel was furnished by the Cowie. Soundings were taken with the hand lead every 15 or 20 seconds and fixes taken every 1½ to 2 minutes.

H6763

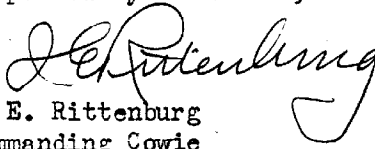
Due to lack of time, owing to the urgent sailing of the Cowie, several shoal soundings and splits indicated or evident on the boat sheet were not developed. It is regretted also that the area in the vicinity of Plumy Beach could not be sounded at this time. Chart 542 is very inadequate here. There has been considerable dredging done by the Arundel Corporation in this area. A copy of a Survey in 1939 by this corporation is at hand and attached to this sheet. There is also a copy of a survey in this area by the U. S. Engineers in 1940, and a bromide of Hydrographic Survey No H 4868 made in 1928.

A tide staff was installed at the old City Dock on the southeast end of Barren Island, at Floyd Bennett Air Field. Mean low water on the staff was determined to be 1.76 feet. B.M.s No. 4 and No. 5 established by J. Bowie, Jr. in 1941 were recovered and leveled to. Tides were read every 15 minutes by a seaman furnished by the Navy during the time engaged in sounding. All soundings shown on the boat sheet have been reduced to M.L.W. and are shown to the nearest foot. No correction was made at this time for lead line error. This is less than 1%.

The following are the statistics for this sheet:

Day letter	Positions	Soundings	Miles
a	110	606	11.4
Total <sup>b</sup>	176	763	18.7
	<hr/> 286	<hr/> 1369	<hr/> 30.1

Respectfully submitted,

  
I. E. Rittenburg  
Commanding Cowie

## TIDAL BENCH MARKS, STATE OF NEW YORK

Mill Basin,  
Brooklyn (cont'd)

BENCH MARK 225 established by the Board of Estimate and Apportionment, New York City (Serial 652 of N.Y. Tidal Bench Marks) is the center of a brass bolt marking the U.S. Coast and Geodetic Survey triangulation station Avenue "U", on the north side of Avenue "U", between East 35th and East 36th Streets. The bench mark is on the monument line on the north side of Avenue "U", and 86.5 feet west of East 36th Street. The bolt is about 6 inches below the present sidewalk level. Access to the mark may be obtained by lifting the iron plate about 10 inches square which is set in sidewalk and bears the inscription "Monument Topographical Bureau of Brooklyn". Elevation: 11.20 feet above mean low water; 8.60 feet above half tide level; 6.00 feet above mean high water.

BENCH MARK 225 A is the center of top of underground monument in sidewalk near north corner of Avenue "U" and East 36th Street. Mark is about 8 inches below level of sidewalk and is accessible through an iron cover which contains the inscription "Monument Topographical Bureau of Brooklyn". Elevation: 11.06 feet above mean low water; 8.46 feet above half tide level; 5.86 feet above mean high water.

BENCH MARK 225 B is the center of top of underground monument in sidewalk near north corner of Avenue "U" and 37th Street. Mark is about 8 inches below level of sidewalk and is accessible through an iron cover which contains the inscription "Monument Topographical Bureau of Brooklyn". Elevation: 11.38 feet above mean low water; 8.78 feet above half tide level; 6.18 feet above mean high water.

Elevations are based on 16 months of automatic gage records, December 1, 1926 to March 31, 1928, reduced to mean values.

Barren Island (Municipal Airport), Jamaica Bay

BENCH MARK 1 (1928) is a standard disk, stamped "1/1928", set in the concrete curbing on the south side of the concrete pier just in front of the Municipal Airport. Elevation: 10.04 feet above mean low water; 7.59 feet above half tide level; 5.14 feet above mean high water.

BENCH MARK 2 (1928) is a standard disk, stamped "2/1928", set in the northeast corner of concrete abutment of ruins of building foundation. The disk lies about 300 feet north 3° west from Triangulation Station Barren Island Concrete Chimney, and about 33 feet south of Main Street which terminates at this point. Elevation: 10.93 feet above mean low water; 8.48 feet above half tide level; 6.03 feet above mean high water.

TIDAL BENCH MARKS, STATE OF NEW YORK

Barren Island (Municipal Airport),  
Jamaica Bay (cont'd)

BENCH MARK 3 (1928) is a standard disk, stamped "3/1928", set about 3 feet above ground level on the north side of Triangulation Station Barren Island Concrete Chimney. Elevation: 16.15 feet above mean low water; 13.70 feet above half tide level; 11.25 feet above mean high water.

Elevations are based on 37 high waters and 37 low waters, September 28 to October 24, 1928, reduced to mean values.

Barren Island, Flatbush Ave., Jamaica Bay

BENCH MARK 1 (1928) is a standard disk, stamped "1-1928", set in the northeast corner of the east pier of the Ferry Landing at Barren Island. Elevation: 9.13 feet above mean low water; 6.63 feet above half tide level; 4.13 feet above mean high water.

BENCH MARK 2 (1928) is a standard disk, stamped "2-1928", set in the top of a large concrete block. It is 108 meters west of the center line of Flatbush Ave., and 53 meters north of the outer face of wharf ruins just west of ferry. The concrete block is 1.6 meters wide, 2.0 meters long, and about 5 feet above the surface. Elevation: 14.16 feet above mean low water; 11.66 feet above half tide level; 9.16 feet above mean high water.

BENCH MARK 3 (1928) is a standard disk, stamped "3-1928", set in the west side of concrete foundation for water standpipe at Barren Island. The disk lies 88 meters north about 10° east from center line of Flatbush Avenue at a point 55 meters northwest along Flatbush Avenue from where the west Ferry road joins the avenue. Elevation: 7.20 feet above mean low water; 4.70 feet above half tide level; 2.20 feet above mean high water.

BENCH MARK 315J U.S.E. (1927) is a square cut in the southeast corner of a small concrete block west of Flatbush Ave., and north of Barren Island Ferry House. Elevation: 11.32 feet above mean low water; 8.82 feet above half tide level; 6.32 feet above mean high water.

Elevations are based on 135 high waters and 186 low waters, June 13-September 17, 1934, reduced to mean values.

## TIDAL BENCH MARKS, STATE OF NEW YORK

Gerritsen Creek, Jamaica Bay, Brooklyn

BENCH MARK 1 (1934) is a standard disk, stamped "1/1934", set in the top of the concrete sewer at the northeast corner at the base of the east manhole of the east branch of the sewer line and approximately 100 feet south of Avenue "U". Bench mark is approximately 125 meters westward of Bench Mark 2. Elevation: 6.74 feet above mean low water; 4.29 feet above half tide level; 1.84 feet above mean high water.

BENCH MARK 2 (1934) is a standard disk, stamped "2/1934", set in the concrete curbing at the northeast corner of the junction of Avenue "U" and 33rd Street, and approximately 125 meters east of Bench Mark 1. Elevation: 10.74 feet above mean low water; 8.29 feet above half tide level; 5.84 feet above mean high water.

Elevations are based on 43 high waters and 42 low waters, August 6-28, 1934, reduced to mean values.

Norton Point, Coney Island

BENCH MARK 1 (1934) is a standard disk, stamped "1/1934", set in the west end of the concrete bulkhead at the dead end (north end) of West 37th Street. Mark is located approximately 100 meters southwest of wharf where tide staff was located. Elevation: 10.25 feet above mean low water; 7.90 feet above half tide level; 5.55 feet above mean high water.

BENCH MARK 2 (1934) is a standard disk, stamped "2/1934", set in surface of concrete bulkhead on the north side of Coney Island about 180 feet east of West 37th Street. Mark is on the same bulkhead as Bench Mark No. 1 and is located about 180 feet east of Bench Mark No. 1. Elevation: 10.03 feet above mean low water; 7.68 feet above half tide level; 5.33 feet above mean high water.

BENCH MARK 3 (1934) is a standard disk, stamped "3/1934", set in the concrete curbing on the east side of West 37th Street and about 175 feet south of the concrete bulkhead on north side of Coney Island. Mark is located about 190 feet south-southeast of Bench Mark No. 1, and 5 feet south of fire hydrant on same side of street. Elevation: 10.65 feet above mean low water; 8.30 feet above half tide level; 5.95 feet above mean high water.

Elevations are based on 2 months of automatic tide gage records, September-October, 1934, reduced to mean values.

TIDAL BENCH MARKS, STATE OF NEW YORK

Fort Hamilton

BENCH MARK "Bolt U.S.E.", established by the U. S. Engineers is the top of a 1-inch spike with head flush with top of string piece along east side of southerly offset at outer end of wharf. It is 21.2 feet south of the inner angle made by offset and 50.9 feet from south side of offset. It is several yards north of police house and about 5 yards north of the tide staff. Elevation: 11.97 feet above mean low water; 9.62 feet above half tide level; 7.27 feet above mean high water.

BENCH MARK 2 (1892) is a chiseled square on the Government Wharf on southern offset of old stone pier, 16 feet south of southern edge of wooden pier, 7 feet north of northwest corner of stone pier, and 1.4 feet east of the eastern edge. Elevation: 11.18 feet above mean low water; 8.83 feet above half tide level; 6.48 feet above mean high water.

BENCH MARK 17 (1916) is a small cross in the top of new sea wall near the southwest corner of the capstone adjoining stone pier on north side. Elevation: 11.32 feet above mean low water; 8.97 feet above half tide level; 6.62 feet above mean high water.

BENCH MARK 14 (1908) is a square cut in the surface of the chassis of the gun carriage of a 20-inch Parrott gun in the southerly corner of Fort Hamilton Park. The gun with its carriage weighs over 12 tons and is mounted on a concrete foundation 4 feet deep. The bench mark is 1.2 feet above the ground and is located about 60 feet northwest of the northwest curb of Fort Hamilton Parkway, and about 60 feet east of the east curb of the Shore Road. Elevation: 44.18 feet above mean low water; 41.83 feet above half tide level; 39.48 feet above mean high water.

BENCH MARK 20 (1921) is a standard disk set in cement in top of granite sea wall, 1 meter from south end at road leading to stone dock. It is about 1 yard north of Bench Mark 17 and in the same stone. Elevation: 11.37 feet above mean low water; 9.02 feet above half tide level; 6.67 feet above mean high water.

BENCH MARK 21 (1921) is a standard disk, set in cement in top of granite sea wall 50 meters from south end of road leading to stone dock. Elevation: 11.37 feet above mean low water; 9.02 feet above half tide level; 6.67 feet above mean high water.

BENCH MARK 9 (1892) is the highest point in a chiseled cut 4 inches long and 1/2-inch wide on the west side of the fort, in the second course of masonry of the retaining wall around the west line of batteries and in line with the center line of the Government Wharf, 47 yards east of the eastern edge of the Government Wharf, 19 feet east of the center line of the roadway, and 10.6 feet south-east of the cast iron covering of a manhole. Elevation: 31.11 feet above mean low water; 28.76 feet above half tide level; 26.41 feet above mean high water.



H6763

Tideal Bench Marks

*near Ely end.*

Serial No. 672. MANHATTAN BEACH: B.M.(U.S.E.) is a ~~mark~~"U" cut on the curbstone on the south side of shore boulevard, 60 feet west of Thornhill St. Elevation: 11.3 feet above mean low water; 9.00 feet above standard sea level. *Also 164 ft. W. of cor. of fence adjacent to Sheephead Bay and 72 ft. W. of most Ely hydrant on Shore Blvd.*

Serial No. 673. MANHATTAN BEACH: B.M.(U.S.E.) is the letter "J" on the manhole cover of the New York & New Jersey Telephone Co., near the east end of Manhattan Beach estate and about 75 feet north of Commercial Cable Co.'s frame building. Elevation: 11.3 feet above mean low water; 8.95 feet above standard sea level. *Also 38 ft. N. of North Curb of Oriental Blvd.; 3 1/2 ft. W. of West curb of Oxford St. and 16 ft. from Elec. Co's pole on N.W. cor. of Oriental Blvd. & Oxford St.*

Serial No. 677. MANHATTAN BEACH: B.M.(U.S.E.) is a "U" cut on top of brick foundation twenty-second brick east of the east side of large door of the railroad station directly under the south window. Elevation: 18.9 feet above mean low water; 16.55 feet above standard sea level.

Serial No. 674. B.M.(U.S.E.) is a ~~mark~~"U" cut into the iron on the west side of base of holding cover of manhole and near north one of of two lugs in casting. Elevation: 10.8 feet above mean low water; 8.43 feet above standard sea level.

Serial No. 675. MANHATTAN BEACH: B.M.(U.S.E.) "~~Corbin~~" is the north-east nut on the hydrant on the west side of Corbin lace, Ocean End. Elevation: 15.3 feet above mean low water; 12.97 feet above standard sea level.

~~Serial~~ Serial No. 676. Manhattan Beach: B.M.(U.S.E.) is an H scratched in top of brick under the west edge of middle window on the South side of Long Island R.R. passenger station building. Elev: 18.9 ft. above M.L.W ; 16.55 ft. above standard sea level.

## Tideall Bench Marks

Serial No. 672. MANHATTAN BEACH: B.M.(U.S.E.) is a ~~xxx~~"U" cut on the curbstone on the south side of shore boulevard, 60 feet west of Thornhill St. Elevation: 11.3 feet above mean low water; 9.00 feet above standard sea level. ~~Near E 1/4 end~~ 164 ft. W. of cor. of fence adjacent to Sheephead Bay. and 72 ft. W. of most E 1/4 hydrant on Shore Blvd.

Serial No. 673. MANHATTAN BEACH: B.M.(U.S.E.) is the letter "J" on the manhole cover of the New York & New Jersey Telephone Co., near the east end of Manhattan Beach estate and about 75 feet north of Commercial Cable Co.'s frame building. Elevation: 11.3 feet above mean low water; 8.95 feet above standard sea level. Also 38 ft. N. of North Curb of Oriental Blvd. 3 1/2 ft. W. of W. curb of Oxford St. 16 ft. from Elec. Co.'s pole on NW cor. of Oriental Blvd & Oxford St.

Serial No. 677. MANHATTAN BEACH: B.M.(U.S.E.) is a "U" cut on top of brick foundation twenty-second brick east of the east side of large door of the railroad station directly under the south window. Elevation: 18.9 feet above mean low water; 16.55 feet above standard sea level. ~~s. 80~~  
also 37.75 feet from S.E. cor and 2 1/4 ft. above grd at Manhattan Beach and Corbin Place

Serial No. 674. B.M.(U.S.E.) is a ~~xxx~~"U" cut into the iron on the west side of base of holding cover of manhole and near north one of of two lugs in casting. Elevation: 10.8 feet above mean low water; 8.43 feet above standard sea level.

Serial No. 675. MANHATTAN BEACH: B.M.(U.S.E.) "Corbin ~~Place~~" is the north-east nut on the hydrant on the west side of Corbin Place, Ocean End. Elevation: 15.3 feet above mean low water; 12.97 feet above standard sea level.

~~Serial~~ Serial No. 676. Manhattan Beach: B.M.(U.S.E.) is an H scratched in top of brick under the west edge of middle window on the South side of Long Island R.R. passenger station building. Elev: 18.9 ft. above M.L.W; 16.55 ft. above standard sea level.

1/26/42-mlh

H6763

TIDAL BENCH MARKS

Floyd Bennett Field, Barren Island, New York

BENCH MARK 2 (1928), formerly a standard disk, is the highest point of the imprint of the disk in the northeast corner of the concrete abutment of the ruins of a building foundation about 33 feet south of Main Street, which terminates at this point. The imprint of the disk and the hole in which the shank originally was is clearly distinguishable. It was reported in June 1941 that this structure would soon be destroyed. Elevation: 10.92 feet above mean low water; 8.47 feet above half tide level; 6.02 feet above mean high water.

BENCH MARK 4 (1941) is a standard disk set in the top of a concrete bulkhead at the southeast corner of Floyd Bennett Field, 199 feet north of the northwest corner of the city dock and about 57 feet south of the southwest corner of the first plane ramp to the north of this dock. Elevation: 12.88 feet above mean low water; 10.43 feet above half tide level; 7.98 feet above mean high water.

BENCH MARK 5 (1941) is a standard disk set in the top of a concrete bulkhead at the southeast corner of the Floyd Bennett Field, about 180 feet south of the southwest corner of the city dock and about 21 feet north of the southeast corner of the bulkhead. Elevation: 12.86 feet above mean low water; 10.41 feet above half tide level; 7.96 feet above mean high water.

Elevations are based on 37 high waters and 37 low waters, September 28 - October 24, 1928, reduced to mean values.

Remarks

Decisions

1		405739 U.S.G.B
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GEOGRAPHIC NAMES

Survey No.

**H5763**

Name on Survey

On Chart No.  
 On previous survey No.  
 On U. S. quadrangle Maps  
 From local information  
 On local Maps  
 P. O. Guide or Map  
 Rand McNally Atlas  
 U. S. Light List

	A	B	C	D	E	F	G	H	K
<u>Gerritson Inlet</u> <sup>e</sup>									1
<u>New York Harbor</u>									2
<u>Rockaway Inlet</u>									3
<u>Pt. Breeze</u>									4
<u>Deep Creek</u>									5
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L Heck 11/20/42

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6263**

Records accompanying survey:

Boat sheets ~~one~~; sounding vols.(1)...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls .....;  
 special reports, etc. ....  
 .....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	286
Number of positions checked	.....	28
Number of positions revised	.....	1
Number of soundings recorded	.....	1369
Number of soundings revised (refers to depth only)	.....	6
Number of soundings erroneously spaced	.....	2
Number of signals erroneously plotted or transferred	.....	—
Topographic details	Time .....	
Junctions	Time .....	
Verification of soundings from graphic record	Time .....	

Verification by *R. J. Christman* Total time 25 Date *Nov. 16, 1943*

Review by *R. H. Carstens* Time 13 1/2 Date *Nov. 18, 1943*

A D D E N D U M

HYDROGRAPHIC SHEET NO. H - 6763 (1942)

All the triangulation stations shown on the smooth sheet were plotted from the geographic positions furnished by the Washington Office with the exception of BN. SHEEPSHEAD BAY, 1933, which was taken from the boat sheet. Since there were only 16 positions which used this station, and the smooth sheet showed no jumps in the lines involved, it was deemed advisable to use the boat sheet position of this station rather than hold the sheet here awaiting the location from the Washington Office.

*boat sheet position  
checks triangulation  
position*

The topographic stations were plotted from data furnished by the Washington Office.

Respectfully submitted,

*Isadore M. Zesland*

Isadore M. Zesland,  
Associate Cartographic Engineer

Norfolk, Va.  
July 16, 1943

Approved and Forwarded.

*Paul C. Whitney*

Paul C. Whitney,  
Supervisor, S. E. District.

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT  
~~PHOTOSTAT OF~~

No. H **H6763**  
~~No. H~~

received ?  
 registered Nov. 13, 1942  
 verified  
 reviewed  
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
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90			

RETURN TO

82	R. W. Knox
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*VRK*



DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6763

New York, Rockaway Inlet, Gerritsen Inlet  
Surveyed May 1942; Scale 1:10,000  
Instructions dated May 23, 1942

Soundings:

Control:

Hand lead

Three-point fix on shore signals

Chief of Party - I. E. Rittenburg  
Surveyed by - I. E. Rittenburg  
Protracted by - J. O. Phillips  
Soundings plotted by - J. O. Phillips  
Verified and inked by - R. J. Christman  
Reviewed by - R. H. Carstens  
Inspected by - H. R. Edmonston, November 19, 1943

1. Signals and Shoreline

The signals and shoreline originate with air photographic surveys T-5094, T-5334, and T-5335 of 1933-34 and with sextant fixes recorded in the sounding records of the present survey.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory.

4. Junctions with Contemporary Surveys

There are no contemporary surveys of this area.

5. Comparison with Prior Surveys

a. H- 59 (1841) 1:20,000  
H-1358 (1877) 1: 5,000  
H-1834 (1888) 1:10,000  
H-2605 (1902) 1:10,000  
H-3697 (1914) 1:10,000  
H-4864 (1928) 1:10,000

Dredging and shifting currents have caused such great changes in the bottom that a detailed comparison is of little value. The present survey should supersede these earlier surveys within the common area.

b. H-5734 (1934) 1:10,000

Dredging operations have created a 15-ft. channel in Lat.  $40^{\circ}34.7'$ , Long.  $73^{\circ}54.7'$  and have cut into small islets in the area of Lat.  $40^{\circ}35.1'$ , Long.  $73^{\circ}54.2'$ . Minor shifting of the shoals has also occurred. The present survey is adequate to supersede this prior survey within the common area.

6. Comparison with Chart 542 (Latest print date 5-17-43)

a. Hydrography

The hydrography charted within the limits of the present survey originates with the previously discussed surveys which need no further consideration and with surveys of the U. S. Engineers and dredging companies. Changes in the bottom have taken place since these latter surveys, shown on blueprints 35399 and 36257, were made as for example in Lat.  $40^{\circ}34.3'$ , Long.  $73^{\circ}55.5'$  where prior depths of 5-7 feet have washed to present depths of 9-12 feet. The present survey is adequate to supersede these miscellaneous surveys within the common area.

Differences between the charted shoreline and the shoreline shown on the present survey originate with correction sheets made for the Nautical Chart Branch from recent air photographs.

b. Aids to Navigation

The present survey positions of aids to navigation are in satisfactory agreement with the charted positions and satisfactorily mark the features intended. The nun buoys in Lat.  $40^{\circ}34.22'$ ; Long.  $73^{\circ}55.05'$ , Lat.  $40^{\circ}34.75'$ ; Long.  $73^{\circ}55.07'$ , and Lat.  $40^{\circ}34.78'$ ; Long.  $73^{\circ}54.55'$  are charted as flashing red buoys. No notice of a change in these buoys has been received since the survey was accomplished.

7. Condition of Survey

Satisfactory.

8. Compliance with Instructions for the Project

Satisfactory.

9. Additional Field Work Recommended

Should the opportunity avail itself it would be desirable to have the 4-ft. sounding in Lat.  $40^{\circ}34.5'$ ; Long.  $73^{\circ}55.0'$  verified by additional development and to have split lines run in Lat.  $40^{\circ}34.2'$ ; Long.  $73^{\circ}55.6'$  and Lat.  $40^{\circ}34.48'$ ; Long.  $73^{\circ}54.8'$ .

*4 ft. disproved  
See Chart Letter  
773(1945)*

10. Superseded Surveys

H- 59	(1841)	in part
H-1358	(1877)	" "
H-1834	(1888)	" "
H-2605	(1902)	" "
H-3697	(1914)	" "
H-4864	(1928)	" "
H-5734	(1934)	" "

Examined and approved:

*Robert W. Knopf*  
Chief, Surveys Branch

*J. S. Borden*  
Chief, Division of Charts

*Earl O. Heston*  
Chief, Section of Hydrography

*G. Hude*  
Chief, Division of  
Coastal Surveys

(Before verification + review)

Applied to Chart 542, Oct. 15, 1943 Q.

" " " 369 Oct. " " } Before Ver. + review.

" " " 1215 " " " " }

Applied " " 369 Feb. 4, 1944 I.M.A. after review

slight change only " " 542 " " " " " "