

5285

Form 504
Ed. June, 1928

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

U. S. COAST & GEODETIC SURVEY
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JUL 18 1933

State: New York

Acc. No. _____

DESCRIPTIVE REPORT
5285

Topographic } Sheet No.
Hydrographic } Field No. 4

LOCALITY

Hudson River

~~Peekskill waterfront, Jones Point~~

~~and Peekskill~~

Peekskill Bay and Vicinity

19 32

CHIEF OF PARTY

C. A. Egnor

5285

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5285

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.

Field No. 4

REGISTER NO. 5285

State New York

General locality Hudson River

Locality Peekskill Bay and Vicinity James Point

Scale 1:5,000 Date of survey October, 1932

Vessel M. V. NATOMA (Motor Launch)

Chief of Party C. A. Egner

Surveyed by Jack C. Sammons

Protracted by C. R. Bush

Soundings penciled by A. W. Green

Soundings in ~~fathoms~~ feet

Plane of reference Arbitrary Hudson River datum

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated Season of 1930, 19

Remarks: _____

*On each sheet under title.
Δ Station name - datum - Lat - Long.
Fill or adjusted computations*

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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.

Field No. 4

REGISTER NO. 5285 (ADDITIONAL-WORK)

State New York

General locality Hudson River

Locality Additional work south west of Peekskill

Scale 1:5,000 Date of survey Nov. 8. 1933 ~~XXXX~~

Vessel NATOMA-Launch

Chief of Party C. A. Egner

Surveyed by C. J. C. Sammons

Protracted by

Soundings penciled by

Soundings in ~~sections~~ feet

Plane of reference Hudson River Datum

Subdivision of wire dragged areas by

Inked by

Verified by

Additional work in accordance with
Instructions dated Paragraph #8 Review of H 5285, ~~XXXX~~

Remarks:

REG. NO. 5285 (ADDITIONAL-WORK)

R E P O R T T O A C C O M P A N Y

H Y D R O G R A P H I C S H E E T N O . 4 (F I E L D)

H U D S O N R I V E R P R O J E C T H T - 1 0 8

1 9 3 2

M . V . N A T O M A

C . A . E G N E R , C O M ' D G .

I N S T R U C T I O N S
A N D A U T H O R I T Y :

The work on this sheet was done as a part of the season's work on Combined operations by the Motor Vessel NATOMA in the Hudson River from June to November 1932. Since it was a continuation of the 1930 work and executed under similar conditions, the instructions for the previous work were considered to apply. Therefore, except in the case of Tidal Observations, the instructions for which were dated June 18, 1932, no definite instructions govern the area surveyed this year.

dated July 22, 1930

L I M I T S :

H-5284 H-5286
This sheet joins No. 3 and No. 5 near Jones Point, Hudson River opposite Peekskill.

Being essentially a sheet for waterfront development, including dredged channels leading to the wharves, it is done on a scale of 1:5,000, which permits closely spaced lines and soundings. Peek Kill was also sounded on this sheet, but the importance of that stream is negligible.

METHODS:

All work was done with the launch. In all the shoal area this was with the hand lead in the conventional manner, running lines normal to the shore line. Supplementing this, closely spaced lines parallel with the axis of the dredged channels gave more intensive development in those critical areas.

Where the water was too deep for the hand lead in the channel off Jones Point, a hand sounding machine was used. Lines here were run along the axis of the channel with the current. ✓

Buoys mark the dredged channels. ✓

TIDES:

The standard Automatic Tide Gage at Peekskill controlled this area. ✓

DANGERS:

None were encountered. ✓

CHANGES NOTED:

Peekskill waterfront has little importance. A dredged channel leading to the principal docks permits a daily freight line boat to stop, as well as providing for such minor barge transportation as may make this port to tie up. In fact, so poor is this waterfront from a commercial standpoint that efforts to find a suitable dock for headquarters for the NATOMA, drawing less than 6 feet, proved fruitless. Likewise, the bend in the river opposite the town turns this area into a pocket with little current to carry away sewage, which indeed has become quite a little problem here.

Future development is not promising. ✓

The old creek, Peeks Kill, was surveyed also. This now has no importance, having become a stagnant marshy area, and restricted to very small boats which can go under the N.Y. Central Railroad drawbridge which never is, if it can be, opened. ✓

lift bridge with clear clearance at MLW 5 1/2 feet (Vol. 2 p 56)

IN CHARGE:

Lieut. J. C. Sammons was in charge of the hydrography of this sheet.

CONTROL:

Control was more than adequate with a multitude of triangulation and topographic points located.

Stastics:

Statute miles of soundings	61.7
Number of soundings	2698
Number of positions	598

TIDAL DATA:

Tidal data was forwarded to the Office on Feb. 3-11, 1932.

Respectfully submitted,



C. A. Egnor
Hyd. & Geod. Engineer
Commanding M. V. NATOMA.

HYDROGRAPHIC STATISTICS

HUDSON RIVER, NEW YORK

SHEET NO. 4

DATE 1932	DAY	VOLUME	BOAT	STATUTE MILES SOUNDINGS	NUMBER OF SOUNDINGS	NUMBER OF POSITIONS
10/18	a	1	Launch	8.5	371	85
10/19	b	1	"	16.7	668	167
10/20	c	1	"	9.2	554	105
10/20	c	2	"	8.2	261	53
10/21	d	2	"	12.0	364	117
10/22	e	2	M/S	7.1	480	71
		TOTALS		61.7	2698	598

Section of Field Records

Report on H-5285

Surveyed in 1932.

Surveyed by - Jack C. Sammons

Chief of party - C. A. Egnor

Soundings plotted by - A. W. Green

Protractd by - C. R. Bush

No topography

Verified and inked by - Helen M. Strong

1. The descriptive report conforms to the general instructions except that no discrepancies were mentioned, no comparisons with previous surveys given, and no geographic names listed. Further it contained no descriptions of recoverable positions. No positions were checked. Turns were not, in general, definitely indicated, and no mention made of being back on course. The relation of soundings to the channel not given where it is needed to close depth curves. *20" time interval was too short for vertical casts in deep water on e-day west of "Vent" through "Post."*
2. The depth curves could be completely drawn except in the upper portion of Peeks Kill, where a note in the sounding volume indicating the relation of the soundings to the channel would have enabled us to complete the curves. This is especially true at O Wrek, and south of it. The 30' curve west of "Vent" to "Post" is unsatisfactory, but no discrepancies were noted here, and no adjustments made.
3. It was difficult to spot the exact locations of some of the positions, because no prick appeared. Soundings were given in half feet on the smooth sheet, even for some of the deep soundings - ex. 56½. Topographic names were not pencilled in by the field party. The shape of the dock at Sig as shown on both boat and smooth sheets differs from that given under e-day in Soundings Vol. 2, p. 57, when soundings were taken around it.
4. There were two duplications of signal names. "Strip" was duplicated on boat and smooth sheets, on T-4743 and its descriptive report. "Pipe" was duplicated on the boat sheet. "Pole", the signal name for "Flag Crossing" was omitted from the smooth sheet. Underlining was omitted from on the smooth sheet in signal names of "Flag Smith" and "Flat Rock".
A sunken boat was inserted on the smooth sheet between positions 29b and 48c and dock. It was not mentioned in the notes in the Sounding volume, but appears there in a diagram under e-day, Vol.2, p. 58, when soundings were taken around the docks. It also appears on the boat sheet, and on T-4743.
Trees were placed in northeast portion of Peeks Kill, as on T-4743.
Mud south of bridge across Peeks Kill was placed on smooth sheet, based on boat sheet and T-4743.
Notations of "Rock" in the soundings volumes not appearing on the smooth sheet were inserted, and others which had been drafted as "rky" were changed to "Rk" to agree with the sounding records.
Piles, remnants of decayed docks, shown by dots on the smooth sheet were changed to circles. They were taken from T-4743.
On stamp in right hand corner of the sheet, scale was given as 1 : 10,000 instead of correctly as 1 : 5,000.

H - 5285 cont.

5. Junctions.

With H- 5286, satisfactory except for pos. 1d, 47 feet, where proximity to signals may have given error in angle. ✓

With H - 5284 good except as follows:

At pos. 61B, 62 feet where the fixes were Crush (should be called "Stack") ^{Crush-Lent-Mann} Bell, Ty were used. Because of the distance of "Crush" the fix may be somewhat weak.

At pos. 150b, sounding 17 feet is close to deeper soundings both on E - E. H - 5285 and the overlap. The position has been checked carefully. Opposite Lents (Give the eastern edge of the channel) is irregular both according to H - 5285 and the overlap. It is believed that in some cases the soundings may not have been spaced in time exactly according to the sounding volume, because time intervals were the same for shallow and deep soundings, a small adjustment was made on this assumption in spacing of some of the soundings. However the irregularity of depth curves 18' and 30' is more apparent than real, because the adjacent soundings differ but a foot or two in most instances. ✓

6. None.

7. Quality of drafting fair.

Respectfully submitted,

Helen M. Strong.

July 29, 1933.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 5285

Locality Peekskill Bay and vicinity, Hudson River, N. Y.

Chief of Party: C. A. Egner in 1932

Plane of reference is Hudson River Datum (Mean low water during lowest
4.1 ft. on tide staff at Peekskill river stages)
11.5 ft. below B. M. 4

Mean high water above plane of reference is 3.0 feet.

Condition of records satisfactory except as noted below:

Carl P. Whitney
Chief, Division of Tides and Currents

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5285
Peekskill Bay and Vicinity, Hudson River, New York
Surveyed October 1932

Instructions dated July 22, 1930, May 25, 1932 (Natoma).

Chief of Party - G. A. Egner.
Surveyed by - J. C. Sammons.
Protracted by - C. R. Bush.
Soundings plotted by - A. W. Green, Jr.
Verified and inked by - Helen M. Strong.

1. The sounding records generally conform to the requirements of the Hydrographic Manual. The Descriptive Report was written by the Chief of Party instead of by the officer in charge of the launch and is somewhat meager in details.
2. The plan and extent of development conform to the general regulations and satisfy the specific instructions except that no cross lines were run other than the channel lines in the dredged waterways.
3. Soundings generally are consistent. A discrepancy exists in lat. $41^{\circ} - 16' .57''$ long. $73^{\circ} 56' .31''$ where two soundings 6, 5 between 103 and 104 b day are not supported by the channel lines. A depth of $1\frac{1}{2}$ feet just off the dock between signals Stone and Coal should also be investigated. Topo. sig. "Sig" off the dock at the northern end of the improvements at Peekskill is listed N. R. though its character is not stated, Probably it is a pile or stake.
4. Depth curves can be drawn satisfactorily.
5. Junction with H. 5286 is satisfactory.

Junction with H. 5284 is satisfactory except a 62 (61B of H. 5284) in lat. $41^{\circ} 17' .45''$ long. $73^{\circ} 56' .9''$ which appears too deep. It has been omitted in transferring the overlap to this sheet.
6. Comparison with H. 2564 (1903) and Chart 282 shows a number of changes along the shoreline. The "rock awash" charted near the northeast point of Lents Cove is not shown on the new survey. It was added to the chart from what was apparently a verbal report "JTW 9/10/14." The little island about 150 meters northeast of the rock awash is now a part of the mainland. Depths in general are in good agreement but the dredged channels have shoaled to a controlling depth of 9 feet.
7. Field drafting. The protracting and plotting of soundings was satisfactory. Buoys are not shown by the proper convention but the notes on the sheet are sufficiently descriptive otherwise.
8. Recommendations. This sheet (H. 5285) should supersede all previous surveys for charting purposes.

Additional investigations desirable.

(a) The two soundings 6 and 5 in the outer part of the south channel leading to the wharves at Peekskill. See par. 3.

H. 5285 - 2.

(b) The $1\frac{1}{2}$ foot sounding off the dock between sig' Stone and Coal.

(c) Verify or disprove the existence of the rock awash showing on Chart 282 near the northeast entrance point to Lents Cove. See par. 6.

See
Report on
Ad. WK. H. 5284

9. Review by - R. J. Christman, October 20, 1933.


Chief, Field Records Section.


Chief, Field Work Section.

Examined and approved:


Chief, Division of Charts.


Chief, Division of H. & T.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. H-5285

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

Number of positions on sheet598
Number of positions checked144
Number of positions revised10
Number of soundings recorded2698
Number of soundings revised24
Number of signals erroneously plotted or transferred0

Date: .. Sept. 27, 1933.
Sept. 27.
Cartographer: Helen M. Strong

Add'l Work
5285

Form 504
Ed. June, 1928

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

State: NEW YORK

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. 4 5285

LOCALITY

Hudson River

Additional work southwest of
Peekskill.

1933

CHIEF OF PARTY

C. A. Egner.

U. S. COAST & GEODETIC SURVEY
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Acc. No.

5285

REPORT ON ADDITIONAL FIELD
WORK DONE ON
HYDROGRAPHIC SHEET NO. 5285.

REPORT ON ADDITIONAL FIELD
WORK DONE ON
HYDROGRAPHIC SHEET NO. 5285.

This report covers the additional work done on hydrographic sheet No. 5285 (Field No. 4--1932 season's work). This work was done in accordance with the "Recommendations for additional investigations desirable" listed in Paragraph #8 of the review of the sheet.

The instructions for this work arrived near the close of the 1933 season's work on Project HT-147. Preparations were being made to discontinue work in this section and proceed south. All tide gages had been removed from the river. As the work called for in the review consisted mostly of verifying the previous work rather than further developing the work, it was not considered necessary to establish a tide staff and connect it by levels to bench marks. It will therefore be necessary to reduce the soundings obtained by predicted tides.

Item (a) of Paragraph #8 of the review calls for an investigation of shoal soundings in the South Channel leading up to the docks in Peekskill. These shoal soundings are on lines which cross the channel and as this is a dredged channel with very steep slopes on either side, it is very likely that the soundings are incorrectly spaced. Numerous sounding lines were run in the channel over this area and although there appears to be a slight protrusion of the shoal area at this point, the shoal soundings shown are apparently in error and the deeper soundings shown on the channel line should be accepted as correct. It will be noted that the position of red nun buoy #2 has been changed slightly from the position shown on the boat sheet.

Item (b) of the report calls for an investigation of a $1\frac{1}{2}$ ft. sounding at the end of the dock between \odot STONE and \odot COAL. The north side of this dock has fairly deep water but is seldom used. The south side and west end of the dock have shoal water and are never used. There is a large municipal sewer emptying into the river from the west

end of the dock, and this, no doubt, causes some shoaling off the end of the dock. Numerous sounding lines were run across the end of the dock, but no indication of the $1\frac{1}{2}$ ft. could be found. It is noted that this $1\frac{1}{2}$ ft. sounding does not appear on the boat sheet but does appear on the photostat of the smooth sheet in about the same location of the 6 ft. sounding shown on the boat sheet. For this reason it is thought that there might be a one-fathom error in the reduction of the sounding. It is very apparent that the sounding is about one fathom in error and it should not be charted.

See
addenda
to Review
this sheet
A.L.S.

The examination of the charted rock called for in Item (c) of the report was made on boat sheet #5285 and is covered by the report of that sheet.

An examination was made on this sheet of the 41-foot sounding transferred from sheet #5284. No indication of this sounding was obtained. It is very likely that this shoal sounding was incorrectly located as the fix locating it was at the end of the sheet and rather weak and does not agree with the records of the ship's course. It is therefore recommended that this position be rejected.

Both topographic signals Sig and Sap are dolphins wrapped with signal cloth and located by the topographer.

On all soundings where vertical casts were not obtained the sounding was called a "miss". At the edge of the shoal area to the west of signal VENT to signal POST, the bottom drops off very rapidly from the 6 ft. to the 30 ft. curve. The sounding intervals selected on the lines normal to the shore line were for the shoal area and as soon as deeper soundings were obtained, the lines were turned and run back inshore. A slight error in the time of a sounding on a line across this steep slope causes an appreciable error, and it is hard to get the time correctly due to the fact that the difference in time for the lead to sink in the shoal and in the deeper water is appreciable. In the shoal area the current is weak and the soundings are shallow so that there is no error due to bow in the lead line, but at the offshore end of the lines the soundings are deeper and the current is stronger at the edge of the channel so that there may be a slight error due to this cause. For these reasons it is recommended that the soundings taken on lines parallel to the channel be given more weight than the soundings taken on the lines normal to the channel.

There is attached to this report a list of the objects which may be used by the Lighthouse Service in locating the buoys which come on this sheet.

Respectfully submitted,

JACK C. SAMMONS
by *CE.*

Jack C. Sammons,
H. & G. E.
U.S.C. & G. Survey,

Approved and forwarded:

CE
C. A. Egner,
Chief of Party.


LIST OF OBJECTS WHICH MAY BE
USED BY THE LIGHTHOUSE SERVICE
IN LOCATING BUOYS IN PEEKSKILL
HARBOR.

All the buoys in South Channel may be located from the following objects:

- WEDGE -- Wedge-shaped church spire.
- FLY -- Tank at Fleischmanns Yeast Co.
- MAN -- Stack at Fleischmanns Yeast Co.
- PEEK -- Stack at Catholic Orphanage.
- SHARP -- Church spire.
- MARY -- Square cupola on St. Mary's School.
- SMITH, ▲ FLAG SMITH -- Flagpole at Camp Smith.

All the buoys in the North Channel may be located from the above signals with the addition of the following:

- ▲ CROSSING--approximately the west end of overhead railroad crossing.


C. A. Egnor,
Chief of Party,
Coast and Geodetic Survey.

Section of Field Records
additional work

Report on 245285
Chief of Party, C. A. Egner
Contracted by R. B. Krum

Surveyed by, J. C. Sammons
Soundings plotted by, R. B. Krum
Verified and inked by R. B. Krum

The additional work neither proved nor disproved the soundings 5 ft and 6 ft in the Peckskill channel as well as the 40 ft sounding further out in the Hudson River.

However the $1\frac{1}{2}$ ft sounding on line 45c to 46c was replotted very close to the dock, with the aid of notes and remarks from the original sounding records. A 2 ft sounding in the additional work fell very close to the new position of the $1\frac{1}{2}$ ft sounding, thereby verifying it. Also the additional work showed nothing smaller than a 6 ft sounding in the vicinity of the former position of the $1\frac{1}{2}$ ft sounding.

The day letters and position numbers for the additional work are in red ink and the soundings in black ink.

Respectfully submitted,

R. B. Krum

Addenda to Review H. 5285.

Covering Additional Work in 1933.

The additional work accomplished on this sheet covers investigations called for in paragraphs 8, a and 8, b of the review of this sheet and paragraph 7, of the review of H. 5284. They will be considered in the indicated order.

Paragraph 8, a.

The 5 and 6 foot soundings that were located on the original work in the outer part of the south channel leading to the wharves at Peekskill have been investigated and nothing less than 9 feet found. Since the shoal soundings were obtained on a line crossing the channel, there is a possibility (as suggested in the D. R.) that the soundings are incorrectly spaced, a slight error in the time of a sounding causing an appreciable difference in depth. However, it was not felt that this could account for the 6 foot sounding being displaced fully 50 meters into the dredged channel. An error of 25 meters was considered probable and the 5 and 6 foot soundings were therefore shifted westward by this amount.

Paragraph 8b.

The 1½ foot sounding shown on the original work of the dock between stone and coal was investigated and found not to exist. A re-examination of the original records (pos. 45 - 46c) and notes disclosed the fact that the 1½ should have been plotted very close to the face of the dock. This is verified by a 2 foot sounding between pos. 26 - 27b, on the additional work. The proper changes have been made on the sheet.

Paragraph 7, a (Review H. 5284)

The 40 foot sounding at pos. 22A (H. 5284) in lat. 41 - 16.85, long. 73 - 56.85 has been investigated by several lines run in the immediate vicinity without finding any such depth. The original record was re-examined and while position 22A does not check the indicated course, the fix is a strong fix and no reasonable change on either of the angles would make the course check better. Since no detailed development was made at the position of the 40 it will be retained on the sheet as originally plotted.

Reviewed by - A. L. Shalowitz, Jan. 1934.

L. O. Sobat
Chief, Section of Field Records.

F. S. Borden
Chief, Section of Field Work.

Examined and approved:

Carl Papeberg
Chief, Division of Charts.

G. Wade
Chief, Division of H. & T.

200

December 20, 1933

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
1 volume/s of sounding records for

HYDROGRAPHIC SHEET 5285 (Additional Work)

Locality Southwest of Peekskill, Hudson River, N. Y.

Chief of Party: C. A. Egner in 1933

Plane of reference is Hudson River Datum (mean low water during lowest
ft. on tide staff at (Used Predicted Tides) river Stages)
ft. below B. M.

Height of mean high water above plane of reference is 3.0 ft.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents

APPLIED TO ALUMINUM-MOUNTED DRAWING OF THE
RECONSTRUCTION OF CHART NO. 282

J. M. Albert

Dec. 1934