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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

H. Tittmann

Superintendent.

State: N. Y. & N. J.

## DESCRIPTIVE REPORT.

Charts and sheets Sheet Nos 1-6

LOCALITY:

Hudson River

19011

CHIEF OF PARTY:

N. H. Heck, Assistant

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Topo = 1743a  
" 2358a  
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1743a

Descriptive Report for sheets of Hudson River north

Ft. Washington to Yonkers, N. Y.

Important changes .

The New York Central R. R. has extended its outer line by filling for a width of 50 to 150 feet where it follows the river. This applies not only to this area but to a point near Croton on Hudson.

<sup>w</sup>  
The Glenwood Pierhouse extends out into the river and its two stacks are very prominent from both directions.

The fill shown between Glenwood and Yonkers was constructed for use as a yard and freight station.

The changes in the wharves are shown .

A city map of Yonkers is shown which gives the streets. An attempt was made to secure a map of the Bronx, but it has not yet been received. I understand that Mr. Ritter has secured such a map.

<sup>a</sup>  
From Spuyten Duyvil to Fort Washington the principal streets adjoining the water front as obtained from N. Y. City Dock Dept. map is shown . Where practicable this was checked by observations.

On the western shore there are practically no changes except for a filled area nearly opposite Ft. Washington. In some cases as indicated portions of the old wharves have been removed or the wharves have been destroyed. The area between the Palisades and the shore is included in the New York- New Jersey Interstate Park and is likely to remain practically unchanged hereafter.

Descriptive Report Chart 369-8

Chart revision by N. H. Heck, Assistant, Jan. March, 1911

This includes the revision of the western shore of the Hudson River and of the eastern shore north of 130th St., the portion south of this being included in Mr. Ritters work. (Assistant H. B. Ritter)

On the eastern side the changes in the immediate vicinity of the shore line have been very few but the general appearance of the City from the river has undoubtedly greatly changed as <sup>numerous</sup> ~~hundred of~~ large apartment houses averaging 15 stories have been built along the entire extent of Riverside drive, The portion of Riverside Drive not shown on the chart previously has been added, also the streets north of 130th not previously shown. These have been taken from city maps with points checked by observation where practicable.

It was necessary to determine a number of prominent objects on this chart by triangulation, in order to locate changes, first because old points have become inaccessible owing to changes, and the removal of old buildings, etc. used as points, and second because the high apartment houses above referred to rendered invisible <sup>n</sup> points formerly used. Only three points previously used were found to be available and from these sufficient new points were determined to carry on the revision.

The western shore was found to be unchanged north of Fort Lee. No maps of the town of Fort Lee were available except by purchase and these were not recent. As the only streets near the water's front are already charted no additional work was done.

South of Fort Lee to Weehawken changes are very extensive. The towns of Edgewater and Shadyside have become important manufacturing points as the comparative cheapness of the land in the immediate vicinity of New York has attracted a number of large companies. At Shadyside about three fourths of the land shown as swamp has been filled. Through the kindness of the Tax Assessor of the City of Edgewater I was permitted to make copies of their city map recently

completed on a scale of 50 ft. to the inch by a competent New York Engineer. From transit or sextant observations points were determined on every wharf and then each wharf was visited, the correctness of the city map was checked by frequent measurements by with tape line.

The new wharves at Gut'enberg principally belonging to the West Shore R. R were determined some of the details were taken from a blue print furnished by that company. Their charted wharves were found to be correct and unchanged. The Hudson Boulevard, a roadway similar to the Riverside Drive was determined from Weehawken to a point above Shadyside where it leaves the shore. It follows close to the edge of the Palisades throughout the spa. extent mentioned. No town maps were obtainable for the area back from this Boulevard;

An attempt was made to ascertain the depths at the various wharves. It was found that especially along the waterfront of Edgewater and Shadyside wherever dredging is necessary to maintain a depth of 10 ft. that the depth is constantly changing and dredging is necessary very frequently. It was stated that at each wharf an attempt was made to have a least depth of 12 feet, dredging to 15 to have a margin. In some cases an attempt is made to permit large vessels to land come to the wharf but with drafts greater than 15 feet great difficulty is encountered.

Attention is called to detailed changes as follows:

Ft. Lee south pier buildings gone

Note the changes in the main street opposite the railroad terminals at Shadyside. This was made so that the tracks could be crossed by a bridge near the tunnel.

All the original marsh land is filled except between the railroad south wharf and the New York Edison coal storage dock and a section near Bulls Ferry as indicated on the chart.

Many details of the West Shore terminals are omitted as not essential to the chart

Descriptive Report Chart 369-4

Submitted by  
N. H. Heck, Assistant

The West shore and Erie R. R. Docks were found to be unchanged.

The section from the Erie Docks to 14th St. Ferry Hoboken was the last work done and when the notes were examined in Washington a few discrepancies were found due to the conditions in Weehawken cove. As these could not be settled without return to the locality I have referred this section to Mr. H. P. Ritter who is working on the Eastern side of the Hudson River. The most prominent buildings and the covered wharfs and all changes are shown on the chart as far as the D. L. & W. R. R. Co. terminal.

The changes of the various R. R. terminals are shown on the chart. Additional details may be obtained from blue prints furnished by all of the roads except the Erie and which accompany the sheet.

Note that some of the streets shown on the charts north of the P. R. Sta. are no longer in existence the whole area being covered by tracks.

The depths as furnished in a blue print specially made by the Chief Engineer of the Central R. R. of N. J. shows the conditions at their terminal.

The work was carried to the sharp bend above Clearmont and Mr. Ritter has been so informed.



Objects of importance to Navigators and of use in setting buoys etc.

Hudson River-- Yonkers to Jersey City.

See attached list of Geographic Positions determined by triangulation. All objects in black

except those underscored, should be shown on the chart. A descriptive name for use

on the chart is given in red ink . or underscored in red.

In addition the following are determined by plane table methods.

Object	Latitude			Longitude			Description
Inner stack, Glenwood power ho.	40	57	142	73	53	1374	Tall yellow stack
Riverdale flagstaff	40	54	460	73	54	1240	Tall pole
Brick chimney	40	52	940	73	57	106	highest chy. large ho. on edge Palisades
Red cupola	40	51	345	73	56	610	on white house near Ft. Washington
Red Tower on edge Riverside Drive	40	49	<del>1653</del> 1653	73	57	<del>80</del> 30	Circular white tower with red cupola
Outer stack, Shadyside	40	48	948	73	59	393	Tall yellow stacks
Inner stack "	40	48	<del>280</del> (act)	73	59	480	
Black stack Gattenberg	40	47	666	73	59	1347	
<hr/> Weehawken stack							
D. L. & W. Clock Tower Hoboken	40	44	180	74	01	930	On Ferry house, high square black tower
C. R. R. of N. J. Clock Tower, Jersey City	40	42	795	74	02	159	Black tower on ferry house.

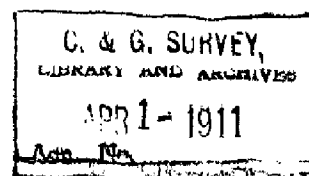
✓ ✓ *Blueprints # 13718-28 inclusive*  
List of Maps, blue prints furnished in connection with chart revision

of Hudson River.

- ✓ 1. City map of Yonkers. A red line shows the limit of built up City blocks.
- ✓ 2. & 3. Blue prints showing N. Y. Central from Spuyten Duyvil to Yonkers.
- ✓ 4. & 5. N. Y. City Dock Dept. maps from Spuyten Duyvil to Grant's Tomb.
- ✓ 5. D. L. & W. Railroad terminals, Hoboken, N. J.
- ✓ 6. Pa. R. R. Co's Terminals Jersey City, N. J.
- ✓ 7. Lehigh Valley R. R. " " " "
- ✓ 8. Central R. R. of N. J. 's " " " "
- ✓ 9. N. Y. West Shore & Buffalo " Weehawken, N. J.

The results of the season work appear on:

- ✓ 1.-3 Bromide copies of original Topographic sheets.
- ✓ 4. copy of chart 281, showing objects of importance to Navigators.
- ✓ 5. " " " 369-8
- ✓ 6. " " " 369-4



See Acc. No. 70674 for adjustment

positions

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY  
Form 28 a.

# GEOGRAPHIC

— Locality — Hudson River

Datum.

11-676

STATIONS.	LATITUDE.			Seconds in Meters.	LONGITUDE.			Seconds in Meters.
	°	'	"		°	'	"	

St. Vincent computed

40 54 49.30 1520.8 73 54 33.61 786.5

Polo, Closter's Landing

40 56 50.17 1547.6 73 55 07.38 172.6

Stone water Tower, Yokers

40 55 51.57 1590.9 73 53 06.71 157.0

Twin, outer stack Glenwood

40 57 04.82 148.7 73 54 00.17 3.7

power house.

Glenwood stacks

Otis, Otis-Elevator Cos. stack

40 56 12.77 394.0 73 54 02.28 53.4

Yonkers

Otis stack

City, Yokers City Hall Tower

40 55 55.69 1718.0 73 53 54.06 1246.8

Palisades computed

40 51 08.50 262.2 73 57 40.20 941.4

White shaft, near Spuyten

40 52 56.53 1743.0 73 55 07.37 175.7

Duyvil

Cupola, Inwood

40 51 41.74 1287.3 73 56 02.34 54.1

Flagstaff near cupola

40 51 48.67 1316.3 73 55 59.83

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CRD 6/17/19



# POSITIONS.

State New York & New Jersey

AZIMUTH.			BACK AZIMUTH.			TO STATIONS.	DISTANCE. Meters.	LOGARITHMS.
.	'	"	.	'	"			
202	23	33.5	22	24	17.8	Oak Hill water T.	4156.0	3.618679
18	49	44.4	198	49	00.7	Inwood Church	4738.5	3.675638
267	14	30.7	87	15	37.2	Oak Hill W. T.	2375.8	3.375814
348	01	58.0	168	02	20.1	St. Vincent	3811.3	3.581079
18	45	30.1	198	43	50.1	Palisades	11129.9	4.022858
46	38	19.2	226	37	22.3	Oak Hill W. T.	2757.2	3.446723
166	50	30.7	346	50	18.1	St. Vincent	1973.4	3.295815
10	36	04	190	35	48	St. Vincent	4252.8	3.628678
331	02	44	151	03	19	Stone W. T.	2583.5	3.412177
15	53	24	195	53	04	St. Vincent	2677.0	3.427645
127	09	40	307	08	57	Pole, Closters LDG.	1910.4	3.281120
24	19	28	204	19	02	St. Vincent	2247.4	3.351960
276	32	04	96	32	35	Stone W. T.	1115.0	3.047266
27	25	32.3	207	23	20.4	Highwood 2	10279.2	4.011960
198	43	50.1	18	45	30.1	Pole, Closters Ldg.	11129.9	4.046491
230	40	31.2	50	41	50.6	Inwood Church		3.564807
294	38	20.5	114	39	26.8	Highbridge	2611.9	3.416957
15	16	37	195	16	03	Highbridge	4585.5	3.661386
47	03	24	227	01	44	Palisades	4890.4	3.689342
65	54	33	245	53	27	Palisades	2510.6	3.399783
357	47	30	177	47	32	Highbridge	2116.1	3.325540
65	51	33	245	50	27	Palisades	2575.4	3.4108
359	23	37	179	23	38	Highbridge	2143.4	3.331

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\* See Acc. No. 70674 for adjusted  
positions

# GEOGRAPHIC

Locality Hudson River

Datum.

11-676

STATIONS.	LATITUDE.	Seconds in Meters.	LONGITUDE.	Seconds in Meters.
<u>Tank</u> *	40 49 10.30	317.6	73 57 32.33	757.7
<u>Metropolitan Life Bldg. (comp.)</u> (See N. Y. City Triangulation).	40 44 28.59	881.9	73 59 15.90	373.1
<u>Grants Tomb</u>	40 48 48.73	1502.8	73 57 48.21	1129.8
<u>Concrete Stack, Warner Sugar Co.</u> *	40 49 26.19	807.9	73 58 31.19	731.0
<u>Soldiers and Sailors Monument</u> *	40 47 31.71	978.1	73 58 45.31	1064.5
<u>Five, westernmost of five stacks</u>	40 46 18.92	583.6	73 59 34.30	804.4
<u>Times Bldg. Flag staff</u>	40 45 21.96	677.3	73 59 12.83	301.0

\* no check

The failure to check all of these points and to strengthen the last two positions  
(weak figures) was due to inability to occupy Castle Stevens which was closed

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# POSITIONS.

State ~~s~~ New York and New Jersey

AZIMUTH.	BACK AZIMUTH.	TO STATIONS.	DISTANCE. Meters.	LOGARITHMS.
177 06 27	357 06 22	Palisades	3650.9	3.562396
220 34 28	40 35 20	Highbridge	3367.0	3.527243
142 13 14.8	322 11 05.5	Highwood 2	4063.3	3.608877
202 18 45.0	22 20 53.7	Highbridge	12158.4	4.084879
182 29 27	2 29 32	Palisades	4315.6	3.635044
218 28 23	38 29 34	Highbridge	4117.6	3.614642
200 43 45	20 44 18	Palisades	3374.7	3.528237
239 54 45	59 56 25	Highbridge	4124.5	3.615368
52 46 11	232 44 42	Highwood 2	4028.7	3.605163
192 50 45	12 51 28	Palisades	6859.1	3.836271
84 39 19	264 38 22	Highwood 2	2067.6	3.315457
196 39 26	16 40 41	Palisades	9324.9	3.969441
121 24 53	301 23 42	Highwood 2	3002.4	3.477477
191 28 19	11 29 20	Palisades	10908.0	4.037754

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