Descriptive Report to Accompany Topographic Sheet No. 3768a 3768b

Tacoma Harbor, Wash., Tide Flats, Waterways, Etc.

Season December 23, 1918 to March 31, 1919

by

Land Party Using Borrowed Navy Launch No. 6312

Under Direction of

John W. Maupin, Chief of Party.

Instructions dated November 5, 1918.
SYSTEM OF CONTROL.

Only two old triangulation stations could be recovered which were intervisible, namely Gull and Bos. Using the line Gull - Bos as a base, the quadrilateral Gull, Bos, Mac, and Cliff was determined by tertiary triangulation methods. From this quadrilateral, a number of prominent objects and intersection triangulation stations were determined at points advantageous for the planstable work. One hundred and thirty-two topographic stations were determined along the waterfront and waterways for use in the hydrographic survey.

METHODS.

The usual planstable methods were used and the topographic sheet was done on a scale of 1-5000. Two blue prints are submitted herewith, having a number of points in common with the topographic sheet, for use in making additions by transfer to the finished chart. On the blue print obtained from the N. P. Railroad Co., the following points are common: -  
    △ Box, △ Span, △ Shed, △ City Hall, △ Smoke, and △ Stack. In placing these points on the blue print, each object was visited and the points accurately plotted from measurements taken on the ground. This blue print shows the tracks of all the railroads entering Tacoma. On the blue print obtained from the City Engineers, the following points are common: - △ Box, △ Span, △ Shed, △ City Hall, and △ Court House.

PROMINENT OBJECTS.

With reference to paragraph #7 of my instructions dated November 5, 1918, it is hereby recommended that the old points City Hall and Court House be shown on the finished chart. It is also recommended that △ Cupola (red cupola of schoolhouse) and △ Standpipe (large standpipe) be placed on the chart as they could be used as a back range with △ City Hall for a speed trial course or in swingingships for compass correction. The fixed red light (△ Box), described in my descriptive report of the hydrographic sheet, should, of course, be shown on the chart. I am informed that a description of this light has been furnished the Bureau of Lighthouses. The △ Chimney, which falls outside the limits of Chart #6451, is a brick structure, the top of which is 573 feet above its foundation and 725 feet above the water. This stack belongs to the Tacoma Smelter Co. and is claimed to be the tallest chimney in America. It is very prominent and should be shown on the smaller scale chart of this locality. An older chimney, about half as high, already shown on the chart, is located nearby.

REVISION SHEET.

A copy of hydrographic sheet scale 1-10000, registered No.2986, surveyed by R. B. Derickson in 1909, was used as a revision sheet for correcting the shoreline, etc., outside the limits of the sheets on which the present work was done. The changes on the revision sheet are shown in red ink, and are correct in relation to the old topography shown thereon, although the projection appears to be based on a different datum from that used in the present work.

MISCELLANEOUS REMARKS.

After a consultation with the City Engineers of Tacoma and a thorough reconnaissance of the entire locality, the work performed appeared to be that which was needed. In addition to the work actually done, the shore line was thoroughly examined, using registered
hydrographic sheet No. 2986, and the old hydrography, shown thereon, was tested by soundings in a number of different places. It is believed that the work performed is quite accurate and entirely sufficient for the construction of a new chart of Tacoma Harbor. It is respectfully suggested that a scale of 1:10000 be used for the new publication. The City Engineers of Tacoma called my attention to the fact that the words "Old Tacoma" are misplaced on chart No. 6451, and should be placed between the two ravines shown on this chart instead of to the westward of them.

Respectfully Submitted,

[Signature]

John W. Maupin,
H. & G. E., Chief of Party,
## PLANETABLE POSITIONS

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<td>Wat, Water Tank on Milw. Dock</td>
<td>47 16</td>
<td>88</td>
<td>122 25</td>
<td>359</td>
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<td>Stack, Smoke Stack Dempsey Lumber Co. Mill</td>
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<td>851</td>
<td>122 24</td>
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<td>Smoke, Smoke Stack on Tabor's Mill</td>
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<td>1306</td>
<td>122 25</td>
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<td>Flag, Flagstaff in Todd's Ship Yard</td>
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