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O. H. Tittmann

Superintendent.

State: Isthmus of Panama

DESCRIPTIVE REPORT.

Topographic Sheets Nos 12696

LOCALITY:

Limon Bay

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P. A. Welker, Assistant.

U.S. C. & G. SURVEY, LIBBARY AND ARCHIVES,

JUN 19 1905 Acc. No.

DESCRIPTIVE REPORT OF TOPOGRAPHIC SHEETS,

NUMBERS : 269642697.

LIMON BAY, ISTHMUS OF PANAMA.

U. S. C. & C. SURVEY, LIEBARY AND ARCHIVES, JUN 19 1905
Acc. No.

The topographic survey of Limon Bay and approaches was executed on two projections, both of 1:10.000 scale.

2. The outside sheet extends from Hala Remo Point to Colon Lighthouse on the east side of Limon Bay and includes the shore line of Manzanillo Bay and Boca Grande. On the west side of Limon Bay, it extends from Toro Lighthouse to a point about one mile west of Toro Point.

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- 3. The inside sheet includes all of the shore line of Limon Bay, from Colon Lighthouse on the east to Toro Lighthouse on the west.
- 4. The survey of the outside sheet was controlled by nine stations, located by triangulation, and, as far as possible, the position of the plane table was determined by the three point problem on these stations. East of Δ Ran and west of Toro Lighthouse, there was practically no control, the survey there being executed by the traverse method.
- 5. For control of the survey in Manzanillo Bay and Boca Grande, a plane table triangulation on buildings and



flags on prominent points was first carried out. The survey was then executed in the usual way wherever it was possible to set up the table.

- 6. Fourteen stations located by triangulation served to control the plane table work on the inside sheet. On this sheet every table position was determined by the three point method.
- 7. The shore line is generally low and sandy, with thick groves of Cocoa palms and bush extending down to high water mark. In Manzanillo Bay and at the head of bights, the shore line lays back of a narrow fringe of mangrove swamps.
- 8. Back from the shore the land rises to an elevation of a few hundred feet and is heavily wooded with gum and hard woods.
- 9. At the head of Limon Bay, the shore is sandy on the east side and muddy on the west and has the appearance of having been recently built out from the old shore line.
- 10. The points on which signals Mar and Ran are located are separated from the main land by mangrove swamps, with narrow boat channels, about twelve feet deep, extending from one bight to the next. There is a shallow lagoon of considerable extent lying back of Margarita Bay, surrounded by mangrove swamps.
- Bay and one, the Escondido enter Boca Grande. None of these

rivers are of any importance.

22. From Hala Remo Point to Mindi Point, except in Manzanillo Bay, and from Limon Point to the western limit of this work, all points and headlands are fringed with flat coral reefs. These reefs extend to one to three hundred metres from the high water line, are usually bare at low water, and terminate in vertical walls at the sea. Depths of three fathoms or more are found in some places at the face of these coral walls. There are numerous passages through the reefs to small there, affording safe anchorage for small boats.

13. Manzanillo Island, on which is situated the town of Colon, is now connected with the main land by railroad embankment.

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Department of Commerce and Labor coast and geodetic survey

Superintendent.

State: Dethomus Junami

DESCRIPTIVE REPORT.

Topo Sheet No. 269

LOCALITY:

Limon Bay

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CHIEF OF BARTY

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