

7143

Diag. Cht. No. 8201-2.

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	TOPOGRAPHIC Graphic Control Shoreline Mapping
Field No. PA-B-65	Office No. T-7143
LOCALITY	
State	ALASKA
General locality	Southeast Alaska
Locality	Castle Islands, Duncan Canal
19.65	
CHIEF OF PARTY	
James K. Richards	
LIBRARY & ARCHIVES	
DATE	JUL 1 1965

COMM-DC 61300

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No. T-7143

Field No. PA-B-65

Scale 1:10,000

State Alaska General locality Southeast Alaska

Specific locality Castle Islands, Duncan Canal

Dates: Survey began June 10, 1965 Completed June 13, 1965

Photography None, Supplemented by ground surveys to _____

Project No. SP. 6-65 Instructions dated May 18, 1965

Vessel } or USCGC PATTON Chief of party LCDR James K. Richards
Party }

Field work by J. K. Richards Office work by D. A. Moore

Final inking by Shoreline not inked

Ground elevations } in feet above { M. H. W.
Treetop elevations } or { _____

Contours } by { Planetable } Interval _____ ft.
Approximate contours } { Multiplex }
Form lines } { _____ }
REVIEW

REMARKS The shoreline from the present survey has been applied
to FE4 (1965). No important differences exist with the charted
shoreline on H-8201. No further review of this survey is considered
necessary.

G. K. Myers

July 8, 1966

JMD

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SURVEY PA-B-65
Scale 1:10,000

USC&GSS PATTON

J.K. Richards, Cmdg.

JUNE 1965

AUTHORITY

This survey is a part of SPECIAL PROJECT 6-65, DUNCAN CANAL, SOUTHEAST ALASKA. INSTRUCTIONS, dated 5-18-65, serve as the authority for this survey.

PURPOSE

The purpose of this planetable survey is twofold:

(1) To locate, by graphic intersection, the signals required for the control of the hydrographic survey. ✓

(2) To delineate the shoreline (mean high water line) in the project area.

AREA COVERED

The shoreline surveyed on this sheet includes (1) the southwest shores of the Castle Islands from a point about midway along the southwest side of Big Castle Island (at triangulation station CLIFF, 1965) to the southeast tip of the southerly island in the Castle Islands, and (2) the shores of Kupreanof Island from a point about 200 meters southeast of signal EVA west-northwest to triangulation station SLOUGH, 1965. ✓

DATE OF SURVEY

The work on this sheet was undertaken during the period June 10 - June 13, 1965. ✓

GRAPHIC CONTROL

Second-order triangulation was carried into the project area to serve as a basic framework from which graphic control could be extended. Six hydrographic signals were located on the planetable sheet by graphic intersection from triangulation stations, CHET 1959, CABIN, SLOUGH, MINE, CLIFF, and BARITE. The six signals thus located are EVA, FEW, KEY, TOY, END, and LOG. ✓

SHORELINE MAPPING

The shoreline was surveyed by alidade and stadia distances from planetable setups on or near the triangulation stations and topographic signals. In those cases where the planetable was not set up directly over a station, it was set up nearby, on range with a distant station, and the distance from the nearby station to the planetable was taped. In all cases -- both in the shoreline mapping and in the graphic control -- the planetable orientation was checked on three or more triangulation stations. ✓

The shoreline was located by holding the stadia rod at various points along the mean high water line. Along the southwest shores of the Castle Islands, it was relatively easy to distinguish the mean high water line; along Kupreanof Island, it was somewhat more difficult, as the foreshore slopes off very gradually. The stadia rod was always held on what appeared to be a mean high water line, in lieu of the extreme, or storm high water line that is noticable in most of the area. ✓

Graphic cuts and stadia distances were obtained on all significant "breaks" in the shoreline, and, in the areas where the shoreline is straight, at points spaced about 80 - 100 meters along the shoreline.

The total length of shoreline surveyed on this sheet is 3.0 statute miles.

DESCRIPTION OF AREA

The Castle Islands are tree-covered down to the high water line. The southwest shores are generally rocky, with cliffs about thirty feet high rising above the high water line in many places. The foreshores are primarily composed of gravel and mud beaches. The shoreline on the southwest side of the southerly island, from signal KEY to a point about 200 meters northwest, is composed of sheer rock cliffs that drop abruptly into the water. ✓

Kupreanof Island is wooded down to the high water line. The foreshore slopes off very gradually, and extensive mud flats bare several hundred meters offshore at low water. Between triangulation stations CABIN and SLOUGH, the mud flats are dotted with several large boulders close inshore. Northeast of triangulation station SLOUGH, a series of gravel ridges and rocky ledges extend almost half a mile offshore. ✓

A peninsula extends west-northwest from the main shoreline in the vicinity of station CABIN. This peninsula is formed by a slough, which enters Duncan Canal about 125 meters southwest of station CABIN. The high water line along the edges of this slough was not surveyed. ✓

PLANETABLE SHEET

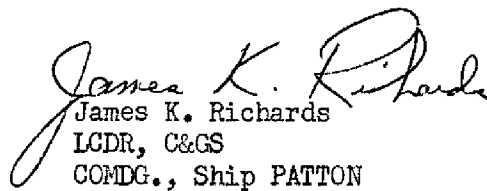
The projection and the triangulation stations were plotted and checked by personnel aboard the PATTON on June 9, 1965. ✓

After completion of the field work, the projection and the station names and symbols were inked. The shoreline was drawn in pencil in the field as the work progressed. The shoreline has purposely been left in pencil so as not to obliterate the alidade cuts and stadia-rod positions. *The shoreline was inked upon completion of review.* ✓

A mylar "manuscript" was made up for transferring the shoreline and topographic signals to the boat sheet. ✓

ADEQUACY OF SURVEY

This survey -- including the shoreline mapping as well as the graphic control -- is considered complete and adequate for the purpose intended. ✓


James K. Richards
LCDR, C&GS
COMDG., Ship PATTON

