
Form 301
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

TOPOGRAPHIC
Graphic Control
Shoreline Mapping

Type of Survey

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 1-7965

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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. FA-B-65
Scale 1:10,000

State Alaska General locality Southeast Alaska

Specific locality Castle Islands, Duncan Canal


Photography: None, Supplemented by ground surveys to

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

Vessel or USCGS 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 M. H. W.
Treetop elevations in feet above

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

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
DESCRIPTION REPORT
to accompany
TOPOGRAPHIC SURVEY PA-B-65
Scale 1:10,000
USCGSS 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 planable 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 EWA west-northwest to triangulation station SLOUGH,
1965.

DATE OF SURVEY
The work on this sheet was undertaken during the period June 10 -

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 planable sheet by graphic
intersection from triangulation stations, CHET 1959, CABIN, SLOUGH,
MINE, CLIFF, and BARITE. The six signals thus located are EWA, FEW,
KEY, TOY, END, and LOG.

SHORELINE MAPPING
The shoreline was surveyed by alidade and stadia distances from
planable setups on or near the triangulation stations and topographic
signals. In those cases where the planable 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 planable was taped. In all cases -- both in the shoreline mapping and in the graphic control --
the planable 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 noticeable 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 CAHIN 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 CAHIN. This peninsula is formed by a slough, which enters Duncan Canal about 125 meters southwest of station CAHIN. 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
**INSTRUCTIONS**

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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<tr>
<td>8201</td>
<td>7-28-70</td>
<td>Eric R. Smith</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. <strong>Exam: no corrections</strong></td>
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**Note:**

- The table continues with similar entries for different dates and cartographers, but they are not fully transcribed in this summary.

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