DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic Sheet No. 6632

Hydrographic

State: S.E. Alaska

Locality

Sitka Sound
Middle Channel

1938

Chief of Party

G. C. Jones

U.S. GOVERNMENT PRINTING OFFICE
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter

REGISTER NO. 6632 TGG32

State S.E. Alaska

General locality Sitka Sound

Locality Middle Channel

Scale 1:5,000 Date of survey July & August 1938

Vessel U.S.C. & G.S.S. EXPLORER

Chief of Party C. C. Jones

Surveyed by John C. Ellerbe

Inked by John C. Ellerbe

Heights in feet above M.W. to ground to tops of trees

Contour Approximate contour Form line interval 25 feet

Instructions dated March 7, 1938.

Remarks

U.S. COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET ACC. NO. 6632

U.S.C. & G.S.S. EXPLORER

PROJECT NO. HT-220

1938

- o -

G. C. Jones, Chief of Party, C. & G. S.
DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET ACC. NO. 6632

U.S.C. & G.S.S. EXPLORER

PROJECT NO. HT-220

AUTHORITY:

This survey was accomplished in accordance with Director's instructions for Project No. HT-220, dated March 7, 1938.

EXTENT:

This survey covers shoreline, rocks and elevations of the small group of islands to the southeast of Middle Channel, in Sitka Sound.

It was intended to cover only Kutkan Island, Breast Island, Rockwell Island, Beardslee Island, and Perebee Rock, on this sheet, but due to unexpected complications on sheet No. 6636, which lengthened considerably the time involved, it was found necessary to include Passage Islands, Kayak Islands, Whale Island, Bamdoroshni Island, Sheep Island, and Galankin Island, in the survey on this sheet. Since the projection was designed to cover only the first named features, the inclusion of the latter group makes the sheet appear somewhat lopsided, and gives the impression of a faulty lay-out. The only trouble encountered, however, was at the extreme southerly shoreline of the small islet at the south end of Kayak Islands, and since it was found impossible to cover the outside rim of the reef here, the entire islet is also included on Topographic Sheet No. 6636.

GENERAL DESCRIPTION:

All of these islands are comparatively low and heavily wooded. The trees average about sixty to seventy feet in height. The high water line is usually a small bluff, ten to twenty feet in height, with rocky reefs and shelves, extending a few meters offshore, at its base. The only sand encountered was on a narrow spit, below high water, between Whale Island and the McClellan Group.

Pritchard Rock and Rose Rock both break continuously, thus advertising their positions.
CONTROL:

Control for this survey is triangulation executed by G. C. Jones, in 1938.

SURVEY METHODS:

A combination of several methods was used to survey this area - traverses, cuts to marked points, and three-point fixes.

The table was set up at triangulation station "GER", and a traverse run, jumping to the north side of Breast Island, thence around the island to the south side, thence to the small islet on the north end of Galankin Island, via Pesebee Rock, closing on triangulation station "ROCK".

At triangulation station "ROCK", cuts were taken to marked points on Passage Island, Kayak Island, the McClellan Group, and Whale Island.

The table was then set up at triangulation station "OLD", and a traverse run both east and west from that point, closing on topographic station "HOT", with a three-point fix, on the south, and on topographic station "ROL", to which previous cuts had been taken, on the west. The position of "ROL", was checked by resection on triangulation stations "ROCK" and "NEPO".

From a previously occupied point on Pesebee Rock, a traverse was run down the west side of Galankin Island, via Sheep Island, closing on triangulation station "GALAN", and at the same time rodding in the northeast shoreline of Bamdoroshti Island.

From the same point, another traverse was carried through the McClellan Group, from whence one off-shoot was run around the west side of Whale Island, closing on triangulation station "WHALE", and another run around the east side of Whale Island, closing on triangulation station "WHALE", the west side of Bamdoroshti Island being rodded in during the course of this traverse.

Beginning at a point, previously occupied, on the small islet on the north end of Galankin Island, a traverse was run along the east side of the Island, closing on triangulation station "GALAN".

At each set-up, all possible cuts to whitewashes were taken and the points as located by intersection were used as checks along the courses of the traverses run.
All traverses closed well within the limits specified in the
Topographic Manual.

The low water line on the entire sheet was rodded in at times
of low water, using previously located points at which to set the
table. A comparison with the hydrographic sheets of this area
failed to show any appreciable difference in the location of the
low water line by the two methods.

COMPARISON WITH PREVIOUS SURVEYS:

A comparison with Chart No. 8244 (Scale of 1:10,000) showed
that the topography of Passage Island and Kayak Island was con-
siderably different from the old surveys. Since it is inconceiv-
able that the high water line altered during the years interven-
ing between the two surveys, it is only reasonable to assume that
very little care was taken with the former. Extreme caution was
exercised during the execution of this survey to locate each de-
tail accurately, and there is no question as to its correctness.
The fact that previous surveys were made on a scale of 1:10,000
may have some bearing on inaccuracies discovered.

Whale Island, Bamdoroshni Island, Galankin Island, Sheep
Island, Beardslee Island, Rockwell Island, and Perreee Rock,
were found much more nearly correct, only minor differences, not
worthy of particular note, being discovered.

The McClellan Group, however, instead of being three dis-

tinct and separate islets, as shown on Chart No. 8244, consists
of only two islets.

In any case of difference in surveys of this area, the
present survey should be taken as correct.

GEOGRAPHIC NAMES:

All names of geographic features on this sheet are old,
established names and have been previously charted. No new names
were established. It is recommended that these names be retained.

ELEVATIONS:- FORM LINES:

Elevations were determined wherever possible, and form lines
drawn, using a twenty-five foot interval. All elevations in the
interior of the islands were determined by intersections of cuts
and vertical angles. Heights of trees were estimated in each case
and the elevations shown are to the ground. Trees were estimated 
(by actual measurement in several cases) to vary between fifty 
and seventy feet.

ANCHORAGES, CHANNELS, ETC.: 

These features are treated in detail in descriptive reports 
of hydrographic surveys of this area, and are therefore not taken 
up in this report.

HYDROGRAPHIC STATIONS:

No marked hydrographic stations were established, as it was 
felt that there was sufficient triangulation to afford the pre-
scribed number of marked stations.

MAGNETICS:

Magnetic meridians were observed at triangulation station 
"ROCK", and triangulation station "OLD", but due to the fact that 
the plan table board was subsequently found to contain iron screws, 
no dependence can be placed in the two determinations. A compass 
declimeter survey, on which a separate report has been submitted, 
was made during the course of the survey of this area.

DISTORTION:

No distortion was observed on this sheet at any time while 
in the field.

JUNCTIONS:

A satisfactory junction was established with other sheets 
to the north, west and south of this sheet.

SIGNALS:

It will be noted that three topographic signals on the west 
side of Whale Island have two names each. In comparing the names 
of signals used on two or more hydrographic sheets, the use of 
different names on different sheets for these three signals was 
overlooked, and it was decided that, rather than change all the 
hydrographic records, both names should be shown on the topogra-
phic sheet. The names in large letters were used on Hydrographic 
Sheet Accession No. 6353, and those in parentheses on sheet Acc. 
No. 6352.
STATISTICS:

Statute miles of shoreline 7.3
Area, in square statute miles 0.8
Number of elevations 92

Respectfully submitted,

John C. Ellerbe,
Jr. H. & G. Engr.,

APPROVED AND FORWARDED:

[Signature]
G. C. Jones,
Chief of Party, C. & G. S.
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*Note: Underlined items are approved by L. Heck on 6/27/49*
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
NATIONAL MONUMENT
No. T-6632

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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Received April 29, 1939
Registered June 22, 1939
Verified
Reviewed
Approved
Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO 6632 (1938)

Middle Channel, Sitka Sound, S. E. Alaska
Surveyed in July-Aug., 1938, Scale 1:5,000
Instructions dated March 7, 1938 (EXPLORER)

Plane Table Survey

Chief of Party: G. C. Jones
Surveyed by: J. C. Ellerbe
Inked by: J. C. Ellerbe

Aluminum Mounted

1. Junctions with Contemporary Surveys.

The junction with T-6636 (1938) on the southwest is satisfactory. Reef detail on the present survey does not join very well with that on T-6633 (1938) on the eastern side of Kutkan Island. T-6633 shows the reef extending about 20 meters farther offshore than does the present survey.

2. Comparison with Prior Surveys.

a. H-1439 (1879), 1:15,000 (contains topography)

This is a fairly comprehensive reconnaissance survey covering the entire area of the present work. It is much inferior to the present survey and should be disregarded in future charting of the common area.

b. T-2150 (1893), 1:10,000; T-2290 (1893:97), 1:40,000

Both of the above surveys cover the entire area of the present survey but, in that area, T-2290 contains only information copied from T-2150. The descriptive report, page 3, discussed the major differences in shoreline between old and new surveys. Groups of islands such as the Kayaks agree fairly well as to total area but differ in the number and delineation of the individual islands. The old survey also exaggerates reefs and shows neither elevations nor formlines. The differences are undoubtedly due to generalization on the old survey rather than to changes or poor control. The present survey should supersede the old surveys in future charting of the common area.

3. Comparison with Chart 6244 (New Print date June 11, 1937)

Within the area of the present survey the chart is based on surveys discussed in the preceding paragraph.


a. The descriptive report is excellent.

b. The field drafting is satisfactory.
5. **Compliance with Instructions for the Project.**
   Satisfactory.

6. **Additional Field Work Recommended.**
   None.


8. Inspected by - H. R. Edmonston.

   **Examined & Approved:**

   

   T. B. Reed
   Chief, Section of Field Records.

   K. T. Adams
   Chief, Division of Charts.

   Fred L. Peacock
   Chief, Section of Field Work.

   Chief, Division of H. & T.