

6632

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. 6632

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 SURVEYU. S. COAST & GEODETIC SURVEY
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APR 29 1939

REG. NO.

Acc. No.

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 T6632

State S.E. AlaskaGeneral locality Sitka SoundLocality Middle ChannelScale 1:5,000 Date of survey July & August, 1938.Vessel U.S.C. & G.S.S. EXPLORERChief of Party G. C. JonesSurveyed by John C. EllerbeInked by John C. EllerbeHeights in feet above M.H.W. to ground ~~to tops of trees~~~~Contour~~ ~~Approximate contour~~ Form line interval 25 feetInstructions dated March 7,, 1938.

Remarks:

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET ACC. NO. 6632

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

PROJECT NO. HT-220

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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 Ferebee 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 "GEB", 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, ^{thence to Beardslee Id.} via Ferebee 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 Ferebee 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 Bamdoroshni 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 Bamdoroshni 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 rodged 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 Islands and Kayak Island was considerably different from the old surveys. Since it is inconceivable that the high water line altered during the years intervening 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 detail 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.

Topography
is from
T-2350 (1893).
See par. 26,
review.

Whale Island, Bamdoroshni Island, Galankih Island, Sheep Island, Beardslee Island, Rockwell Island, and Ferebee 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 distinct 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 prescribed number of marked stations. ✓

MAGNETICS:

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

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. ✓

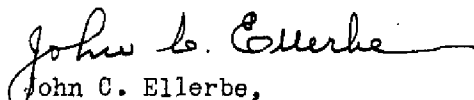
SIGNALS:

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 topographic 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.,
U.S.C. & G. Survey.

APPROVED AND FORWARDED:


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

Remarks

Decisions

1		570353
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GEOGRAPHIC NAMES

Survey No. T-6632

Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.
<u>Middle Channel</u>									1
<u>Passage Islands</u>									2
<u>Kayak Islands</u>									3
<u>Rose Rock</u>									4
<u>Beardslee Islands</u>									5
<u>Pritchard Rock</u>									6
<u>Whale Island</u>									7
<u>McClellan Group</u>									8
<u>Rockwell Island</u>									9
<u>Ferebee Rock</u>									10
<u>Bamdooroshni Island</u>									11
<u>Breast Island</u>									12
<u>Kutkan Island</u>									13
<u>Galankin Island</u>									14
<u>Sheep Island</u>									15
<u>Sitka Sound</u>									16
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Name underlined in red approved
by L. Heck on 6/27/39

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } ~~No. T -6632~~
~~PROPOSAL~~ } No. T -6632

{ received April 29, 1939
 { registered June 22, 1939
 { verified
 { reviewed
 { approved

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.

ROUTE		Initial	Attention called to
20			
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RETURN TO

82	T. B. Reed
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✓ *TBR*

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

Aluminum Mounted

Chief of Party $\frac{1}{2}$ G. C. Jones
Surveyed by - J. C. Ellerbe
Inked by - J. C. Ellerbe

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 8244 (New Print date June 11, 1937)

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

4. Condition of Survey.

- a. The descriptive report is excellent.
- b. The field drafting is satisfactory.

5. Compliance with Instructions for the Project.

Satisfactory.

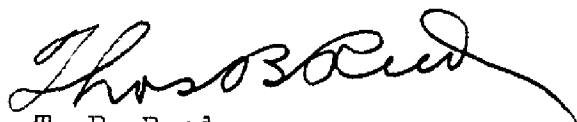
6. Additional Field Work Recommended.

None.

7. Reviewed by - J. A. McCormick, September 8, 1939.

8. Inspected by - H. R. Edmonston.

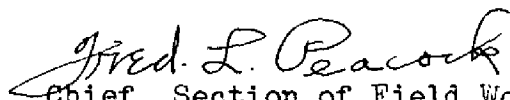
Examined & Approved:



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



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.