DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

State: Alaska

DESCRIPTIVE REPORT.

Localities:
Tlevak Strait and Sukkwan Island
Dunbar Inlet, McFarland Island
Central Part of Sukkwan Island

1927

Chief of Party:
H.A. Colton
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEETS NO. 4342a

(Field letter "D")

2 Sheets 4342a and 4342b

DUNBAR INLET AND APPROACHES

TLEVAK STRAIT

S. E. ALASKA

U. S. S. EXPLORER

SEASON 1927

SCALE 1:10,000.
AUTHORITY:

The topography on this sheet was executed under authority contained in instructions to Commanding Officer, U.S.C. & G.S. Ship EXPLORER, dated Feb. 18, 1927.

LIMITS:

This sheet includes DUNBAR INLET, beginning at KELLOG POINT on the north and joining on to sheet Register No. 3314 on the south. Those islands of the McFarland group which were not completed on sheet 3314 were completed on this sheet.

CONTROL:

Control was furnished by eight triangulation stations. A scheme of planetable triangulation was carried up DUNBAR INLET. This was done while the sheet was new—before any distortion had taken place. This scheme started off the base "LET - KELLOG".

ELEVATIONS:

The elevations on this sheet are to the tree tops, except those marked "Bare" and shown on the auxiliary sheet attached. Elevations of small islands and rocks not covered by high water are shown in parentheses.

METHODS:

The usual planetable methods were used in doing this work. Planetable positions were determined by intersection, resection and three point fixes. The high water and low water lines were rodded in. Offlying rocks and reefs were rodded in and checked by intersection. The control for the narrow part of DUNBAR INLET was planetable triangulation. No traverses were run except for single setups.

CHARACTER OF SHORELINE:

The shoreline of the McFarland Islands is rocky, steep-to in places, with outcropping bed rock covered in places with a thin layer of gravel.
and sand. This is true also for that section of the shoreline of SUGKWAN ISLAND from triangulation station DUN to the southern limits of the sheet. The shoreline in DUNBAR INLET proper is more or less flat, with sand and coarse gravel beaches and occasional outcrops of bed rock.

A lake is formed at low water back of the small island marked by signal SOP and behind the spit of land to the westward of it. It makes a very good anchorage for boats drawing less than four feet.

DESCRIPTION OF COUNTRY:

The shoreline is flat or only moderately steep, rising gradually to an average height of 1000 feet about one mile back from the shore. The country is thickly wooded with spruce and hemlock, with a fringe of small alder trees and underbrush near the water. A few trees have been cut here and there for fish trap logs.

McFARLAND ISLANDS were stocked once with blue foxes. The house and out-buildings fall just outside the limits of this sheet. The houses are uninhabited now and the whole project has been abandoned.

PROMINENT OBJECTS AND RECOVERABLE POINTS:

There are two planetable positions permanently marked, stations TUB and MLW [See Form 524 attached]. Other recoverable points are triangulation stations LAND, KELLOG, MACK, FAR, LET, DUN, MUL.

The only point of any particular prominence is a bare rocky peak at the head of DUNBAR INLET. This peak is shown on the auxiliary sheet attached to this one.

GEOGRAPHIC NAMES:

The names which appear on this sheet are established names and appear
on the charts now printed. No new local names were secured, as the area
covered by this sheet is not inhabited permanently.

BAYS AND ANCHORAGES:

The head of DUNBAR INLET offers some protection for fishing craft
during northerly and northwesterly weather. While working in the vicinity
the EXPLORER was anchored in the small bight between signals KIS and LON.
During the winter fishermen tie up their traps in the cove which has its
entrance between triangulation station DUN and signal LLM.

CHANGES AND DISCREPANCIES BETWEEN THIS AND PREVIOUS SURVEYS:

This area had not previously been surveyed, except for the western
side of the group of McFARLAND ISLANDS shown here.

This work was originally done on sheet Register No. 3314, scale
1:20,000 and to get control it was necessary to traverse around the largest
island of the group. Since the natural features were shown very well in
detail, but were out of position, it is assumed that the error was in the
traverse.

The shoreline shown here in pencil was enlarged from bromide of sheet
no. 3314 with pantograph no. H23. All of the old work would not go on
this sheet. The rest of the old work is shown in pencil on sheet no.
(Field Letter "C"). Hydrography in the main passage through the islands
had never been done, so it was necessary to locate signals there. These
signals were located by a scheme of planctable triangulation beginning
at triangulation station HARD.

The old survey was disregarded for those short sections of shoreline
on islands between latitude 55 04' and 55 05'. The changes made in the
old survey are as follows: (a) Island, grass covered, marked (12), near
signals WOR and TUF, was moved about 60 meters north. The area between
this small island and the larger one to the east of it is dry at low water.
(b) The reef located approximately in Latitude 55° 04' 23", Longitude
132° 54' 57" is not shown on the old survey. Neither is the rock, which
bears 1/2 tide, which lies between the reef and the island. (c) The island
designated by signal SEE was found in error about 20 meters in latitude.

Particular care was taken with positions in this area when it was found
that there was a discrepancy in the old work.
### STATISTICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Statute miles shoreline—high water</td>
<td>38</td>
</tr>
<tr>
<td>Statute miles shoreline—low water</td>
<td>22</td>
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<tr>
<td>Number of creeks, etc.</td>
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<tr>
<td>Area—square statute miles</td>
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<tr>
<td>Number of elevations</td>
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<tr>
<td>Number of elevations per square statute mile</td>
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<tr>
<td>Number of recoverable stations</td>
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<td>Number of triangulation stations</td>
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<td>(Recoverable)</td>
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<td>Number of planetary stations</td>
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<tr>
<td>(Recoverable)</td>
<td></td>
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<tr>
<td>Positions occupied</td>
<td>77</td>
</tr>
</tbody>
</table>

Examined, approved and forwarded.

Respectfully submitted.

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Harold A. Cotton,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

Ira T. Sanders,
Jr. H. & G. Engr.,
C. & G. Survey.
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
WASHINGTON    July 10, 1928.

SECTION OF FIELD RECORDS

Report on Topo. Sheets 4342a and 4342b  
Tlevak Strait, Sukkwan Island, Alaska

Surveyed in 1927

Instructions dated February 18, 1927

Chief of Party, H. A. Cotton.

Surveyed and inked by I. T. Sanders.

1. The plan and character of the surveys comply with the requirements of the General Instructions, and the plan and scope satisfy the specific instructions.

2. The elevations in the vicinity of Kellogg Pt. agree with those on T. 4329, but there is disagreement in the resulting form lines which should have been adjusted before sending in the sheets. It will be necessary for the cartographer to make an adjustment between them. There is a deficient area one-half mile wide in the form lines along the southern edge of the work.

3. There is no indication of Kasock Lake in the southeastern part of the survey. The lake is partially shown on T. 3313 and completely shown on charts 8147 and 8146.

4. The discrepancies in the form lines are not serious, but the lake should be shown on any additional work that may be done in the locality in the future.

5. The character and scope of the survey and field drafting are good.

6. Reviewed by E. P. Ellis, June, 1928.

Approved:

[Signature]

Chief, Section of Field Records (Charts)

[Signature]

Chief, Section of Field Work (H. & T.)
To: Director, U. S. Coast & Geodetic Survey, Washington, D. C.


Subject: Topographic Sheet No. 4342a.

19 September 1928.

There is being forwarded under separate cover a bromide copy of the above sheet together with photostat copies of portions of adjoining topographic sheets Nos. 4329, T3313 and T3314.

2. On the bromide copy of sheet 4342a adjustment has been made of the slight discrepancies in form lines between this sheet and the adjoining sheets. The adjusted position of the form lines has been shown in red ink and form lines which should be removed have been indicated thus: These form lines shown in red ink run from the lines on this sheet to a junction with the lines on the adjoining sheets.

3. Regarding the elevations, those of 940 feet 1095 feet should preferably be omitted from this sheet and the corresponding elevations shown on the adjoining sheets be substituted for the same. The conditions under which these elevations were secured by Lieut. Sanders (Topographer Sheet 4342a) were not as favorable as for the determination of the corresponding elevations on the other sheets.

4. Other discrepancies in heights are quite small and appear to be within reasonable limits and it is difficult to definitely state which should be accepted and which rejected. When determining the elevations of round top peaks there is sometimes a tendency to secure elevations some-
what too large due to taking an elevation angle as a tangent to a point near the top instead of the actual tip. For this reason I would suggest accepting the lower values where the elevations do not agree.

5. At either end of the sheet there are slight discrepancies in shoreline between this sheet and the adjoining sheets. At the north end the shoreline between topographic signals "TIL" and "AL" should be taken from sheet No. 4329. At the south end of the sheet the work on 4342a is very evidently done in more detail than the work on Sheet 3314 and should be accepted as correct.

6. The junction of the shorelines would then be at topographic signal "TMT" which position it is believed is well determined. To make this junction the shoreline on Sheet 3314 will have to be swung slightly in azimuth.

Harold A. Cotton,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

Received and forwarded Oct 3, 1928

Inspector
August 9, 1928.


To: Commanding Officer,
Coast and Geodetic Survey,
under Ship EXPLORER,
205 Burke Building,
Seattle, Washington.

Through: Inspector, Seattle Field Station.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Topographic sheet 4542a.

Under separate cover there is being forwarded to you a bromide copy of Topographic Sheet 4542a, surveyed by your party in 1927.

There are slight discrepancies in shoreline, elevations and form lines in the vicinity of Kellogg Point where this sheet joins topographic sheet 4529, also surveyed by your party. Such discrepancies should have been adjusted by the field party before forwarding the sheets to the office. It is requested that you make the necessary adjustments on the copies of the sheets forwarded to you.

To the southward, topographic sheet 4542a should join T 3313 and T 3314, copies of which are being forwarded to you. There is an area about 1/2 mile wide where no form lines are shown. Lake Hascox, which is partially shown on T 3313 and completely shown on Charts 8147 and 8148 covers part of the area where form lines are shown. It is requested that you furnish any information available which may assist in adjusting these discrepancies, indicating the changes which should be made on the copies of the sheets forwarded to you.

(Signed) R. L. Far

Acting Director.
Field Records Section
report on
Corrections to form lines on T-4342a

Form line corrections in red ink, drawn by the field party on a bromide print of T-4342a and returned to the office, have been applied by the writer and the print filed in the tabs with the original sheet.

A study of the corrected form lines and the lines on the related sheet, T-4329, T-3313 - T-3314, shows that good agreement now exists in the affected area.

The name "Kasock Falls" was added in the office from Chart 8147.

Feb. 14, 1933

J. Fleming

Imprint: E. C. Tew
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 No. "P"

REGISTER NO. 4342a

State: Alaska

General locality: St. B. Alaska, Flavak Strait, Sukkwan...

Locality: Dunbar Inlet & McFarland Islands

Scale: 1:10,000 Date of survey: June - July, 1927

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

Chief of Party: Harold A. Cotten

Surveyed by: Ira T. Sanders

Inked by: Ira T. Sanders

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

Contour: Approximate

Line interval: 100 feet

Instructions dated: February 18, 1927

Remarks: Descriptions covers 4342a and 4342b.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET
Prepared at Office

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

Field No. 04 (Auxiliary Sheet)
REGISTER NO. 4342b

State: Alaska
General locality: Sukkwan Island
Locality: Central Part of Sukkwan
Scale: 10,000 Date of survey: June-July, 1927
Vessel: Explorer
Chief of Party: H. A. Cotton
Surveyed by: T. T. Sanders
Inked by: 

Heights in feet above M. H. W. to ground to tops of trees
Contour: Approximate contour: Form line interval: 100 feet

Instructions dated: Feb. 10, 1927

Remarks: Desc. Report covers 4342a and 4342b