

6766

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

DESCRIPTIVE REPORT

Topographic } C-40
XXXXXXXXXX } Sheet No. T-6766
Hydrographic }

U. S. Coast & Geodetic Survey

Library and Archives

July 17, 1942

Acc. No. _____

State Southwest Alaska

LOCALITY

Deer Island

Buyan Islands & Vicinity

1940

CHIEF OF PARTY

L. D. Graham

U. S. GOVERNMENT PRINTING OFFICE

6766

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

T6766

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. C-40

REGISTER NO. **T6766**

State Southwest Alaska

General locality Deer Island

Locality Buyan Is. and Vicinity

Scale 1: 20,000 Date of survey May & June, 19 40

Vessel Steamer DISCOVERER

Chief of party L. B. Graham

Surveyed by Barla A. Daily

Inked by Barla A. Daily

Heights in feet above Mean high water to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated March 8, 1939; April 8, 1939; Feb. 8, 19 40

Remarks:

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET C-40

T6766

ISLANDS IMMEDIATELY EASTWARD OF DEER ISLAND

SANDMAN REEF

ALASKAN PENINSULA

PROJECT NO. HT-219

1940

1. Authority:-

The authority for the work embraced by this topographic sheet is embodied in the "Instructions" of the "Director," U. S. Coast and Geodetic Survey to the "Commanding Officer," U. S. S. DISCOVERER dated March 8, 1938 (and supplemental instructions dated April 6, 1939 and February 6, 1940.)

2. General Description of the Area:-

The area covered by this sheet includes the islands and rocks immediately Eastward of Deer Island, and lying between Latitudes $54^{\circ} 47'$ N. and $54^{\circ} 55'$ N. and between Longitudes $162^{\circ} 00'$ W. and $162^{\circ} 10'$ W. Aside from Midun Islands and it's surrounding rocks, which were surveyed in 1939, the remaining islets fall into 4 distinct groups which will be described immediately following. The first three might, however, be considered as belonging to one group under the name "Buyan Islands."

a. The group on which triangulation station PATTON, 1911-1936 is located consists of two large islets with a number of smaller rocky islets and detached rocks adjacent thereto and, in addition, a group of two large rocks surrounded by rocky ledges lying about 500 meters South-Southwestward of the main island. The Northwestern island of the entire group is the largest and slopes gently upward

from the rocky Western shore to the rock cliffs on the Eastern side. This gentle slope is grass-covered. The other rocks and islets are bare rock with steep sides. A continuous kelp patch, as indicated on the survey, surrounds the islet group. There is no beach, boulders fringe the shore and rock ledges extend to the low water line and then fall off steeply. No local name could be determined for this group.

b. The Buyan Islands are a group of islets and rocks which lie in Latitude $54^{\circ} 52.6'$ N. and extend about $1\frac{1}{2}$ miles in an East and West direction between Longitudes $162^{\circ} 05'$ W. and $162^{\circ} 07'$ W. A lone rock of small area lies about 0.8 mile South-Southwestward of the Western end of the Buyan Islands and should be considered a part of the group. This rock is surrounded by an extensive kelp patch which terminates some 250 meters Southward at a lone rock which bares 2 feet at mean lower low water and shows a continuous breaker.

The two larger islets, lying near the Western end of the Buyan Islands are flat-topped and grass-covered. Triangulation station BUYAN, 1936 is near the Eastern end of the Northerly islet. The remaining rocks are bare, the sides of the larger ones being almost vertical cliffs. There are numerous off-lying rocks and reefs. Kelp is much in evidence.

Buyan Island is a place name formerly charted and verified locally.

c. A group of 4 small rocks of low elevation and a number of off-lying rocks which bare at mean lower low water are located in Latitude $54^{\circ} 54.6'$ N., Longitude $162^{\circ} 02.2'$ W. Triangulation station ROCK 1911-1936 is located on the Easterly rock, elevation 16 feet. Kelp and foul ground extends for a considerable distance to the Eastward. An extensive kelp patch also extends Westward of the group.

There is no local name for this islet group.

d. A large rock islet of basalt formation is located in Latitude $54^{\circ} 47.9' N.$, Longitude $162^{\circ} 08.9' W.$ The ~~S~~outherly and ~~W~~esterly sides are almost vertical cliffs. The Northern side is also rocky at the water edge but slopes up gradually and succeeds to a grassy slope. The top of the islet is flat and grass-covered. From the Northward and Southward the island shows a large detached pinnacle at it's Eastern end (topographic signal OSCAR).

An arch of rock spans a narrow channel thru the islet near it's Eastern end and there is a cave, accessible only by boat, in the Western side. A rocky reef lies immediately Northward of the Eastern end of the islet. There are only two small spots which remain uncovered at high water. The Southern shore of the islet cannot be approached by boat due to the continuous surf beating on the out-lying rocks indicated on the sheet. A kelp patch extends some distance Westward of this islet and also surrounds the rocky reef to the Northeastward.

e. There is a reef, awash at high water, about 0.7 mile Northward of Basalt Rock (the islet just previously described) and lies in the direction of Midun Island. This reef, although within the area embraced by this sheet, was surveyed in 1939. T-6791 (1939)

3. Landmarks:-

The islands themselves are the only landmarks.

4. Character of Control:-

Control was furnished by the triangulation of 1936 supplemented by one station located in 1940. The datum used is Unalaska; the positions are derived from unadjusted field computations.

The three marked topographic stations NAY 1940, YAN 1940 and BIG 1940 were located by intersection and resection on triangulation stations.

5. Survey Methods:-

The usual topographic survey methods were used. No traverses were run. With the exception of the "rock bare 2 feet, mean lower low water" in Latitude $54^{\circ} 51.7' N.$, Longitude $162^{\circ} 07.2' W.$ which was located by intersection, all off-lying rocks and reefs were located by direct rod readings.

In inking the sheets the low water line is delineated by a dotted line. This should not be construed to indicate sand or pebbly beach. All of the islets and rocks are surrounded by rocky ledges. As that symbol used on a survey of this scale would have obliterated much of the essential topographic detail the dotted line was resorted to as an indication of the low water line and of the extent of the rocky ledge which is bare at mean lower low water.

6. Junctions:-

This sheet joins topographic sheet E-40 to the Southward; survey sheets J-39 (T-6701) and H-39 (T-6700) lie to the Westward.

A discrepancy was noted in the junction at topographic station BIG 1940, which was located in 1939 on sheet J-39 (T-6701), apparently by intersection. The 1939 position was transferred to this sheet. In 1940 the signal, which was standing from the previous year, was intersected from triangulation station BUYAN 1939 and when visited by the topographic party was located by resection on MIDUN 1936, BUYAN 1936, ROCK 1911-1936, and NIGRUD 1940. A permanent mark was placed in position. The 1940 position shows a difference of 21 meters from the 1939 position. The azimuth line shown on this sheet extends toward a

T-6765 (1940)

1940 location
of BIG accepted
as correct.
O BIG corrected
on T-6701 to
agree with
1940 position

ONIP (T-6701)

signal on a rock toward the Southwestward.

7. Declination:-

The magnetic declination was determined by means of declinoire
Declinoire was standardized at Green Lake mag. station
 No. 199 at the 6 stations listed below. Some difference was noted at topo-
 graphic station NAY and the declination was therefore re-measured on August
 5, 1940

a.	Triangulation station PATTON 1936	18° 22' E.	Charted Value 17° 30' E
b.	Triangulation station BUYAN 1936	18° 18' E.	
c.	Topographic station YAN 1940	18° 08' E.	
d.	Topographic station BIG 1940	18° 47' E.	
e.	Topographic station NAY 1940 (May)	21° 21' - <i>Rej.</i>	
	Topographic station NAY 1940 (Aug.)	19° 42'	
f.	Triangulation station ROCK 1936	19° 02'	

8. Place Names:-

Local residents were interviewed for place names but with little
 success.

Buyan Island is a locally known place name and has been formerly
 charted. It is recommended that the new charting be "Buyan Islands" as a
 number of islands comprise this group.

The large islet in Latitude 54° 47.9' N., Longitude 162° 08.9' W.
 has no well established local name although Father Hotoritsky of Belkofski
 thinks it is known by some of the native as "Perenoznoi." This islet
 is characterized by it's columnar basaltic formation; it is the only one of
 such definite formation in the area. "Basalt Rock" is a name recommended
 as suitable for this islet by the topographer.


9. Statistics:-

Area, square statute miles	0.2
Shore line, statute miles	5.0

Respectfully submitted,


Earle A. Deily
H. & G. Engr.

Approved & Forwarded


L. D. Graham
H. & G. Engr.
Commanding DISCOVERER

Respectfully submitted,

Earle A. Deily
H. & G. Engr.

Approved & Forwarded

L. D. Graham
H. & G. Engr.
Commanding DISCOVERER

T-6766

Remarks		Decisions
1	For title	USGB
2	" "	545620
3	" "	"
4		" USGB
5		"
6	Referred to USGB, but OK to apply pending its action	"
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GEOGRAPHIC NAMES

Survey No.
T-6766

GEOGRAPHIC NAMES										
Survey No. T-6766										
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>Alaska Peninsula</u>										1
<u>Deer Island</u>										2
<u>Sandman Reefs</u>										3
<u>Patton Island</u>										4
<u>Buyan Islands</u>										5
<u>Basalt Rock</u>										6
<u>Rock Island.</u>										7
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Names underlined in red corrected by L. Heck on 2/31/42

M 234

Names underlined in text
by L. Heck on 7/31/42

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-6766
FIELD NO. C-40

Southwest Alaska, Deer Island, Buyan Ids. & Vicinity
Surveyed May - June 1940 Scale 1:20,000
Instructions dated March 8, 1939 -
February 6, 1940

Plane Table Survey

Aluminum Mounted

Chief of Party - L. D. Graham
Surveyed by - E. A. Deily
Inked by - E. A. Deily
Reviewed by - R. H. Carstens, April 8, 1947
Inspected by - H. W. Murray

1. Adjoining Surveys

The present survey adjoins T-6700 (1939) and T-6701 (1939) on the west, T-6965 (1940) on the south and T-6896 (1942) on the east. There are no contemporary topographic surveys on the north. However, all island and rock detail shown here on the present survey is complete.

The topography consists of rocks and islands, none of which are in common with adjoining surveys.

2. Comparison with Prior Surveys

There are no prior surveys in the area by this Bureau.

3. Comparison with Chart 8703 (Latest print date 11/2/46)
8860 (Latest print date 11/17/45)

A. Topography

The present survey has been completely applied to these charts. No further comment is necessary.

3. (Continued)

B. Magnetic Variation

Observed values of the magnetic variation differed from the charted value by as much as $2^{\circ}12'$. The index correction of the declinoire was not determined.

4. Condition of Survey

The survey was inked neatly.

As stated in the Descriptive Report the dotted line delineating the low water line represents ledge and not sand or mud.

The Descriptive Report is clearly written and covers all matters of importance except an account of the standardization of declinoires.


5. Compliance with the Project Instructions

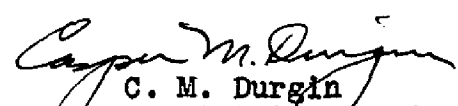
The present survey adequately complies with the Instructions.

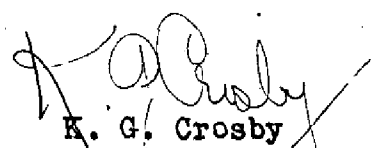
6. Additional Work Recommended

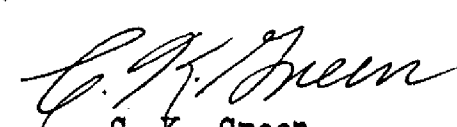
This is an excellent survey and no additional work is required.

Examined and Approved:


I. E. Rittenburg
Chief, Nautical Chart Branch


C. M. Durgin
Chief, Division of Charts


K. G. Crosby
Chief, Section of Hydrography


C. K. Green
Chief, Division of Coastal
Surveys