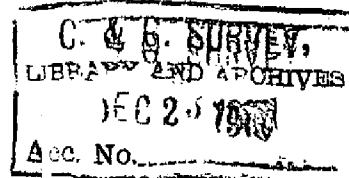
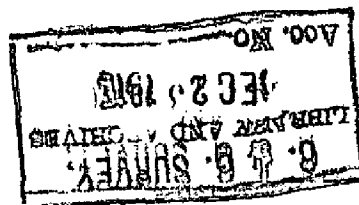




3471A



Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: <u>Alaska</u>
11-5813
DESCRIPTIVE REPORT.
<u>Topo</u> Sheet No. <u>3471A</u>
LOCALITY:
<u>Pryor Bay, Duke I.</u>
1915
CHIEF OF PARTY:
<u>C. G. Quillian</u>

3471^A

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET No. 3471^a

OF

? — RYUS BAY, DUKE ISLAND, ALASKA.

WORK DONE UNDER INSTRUCTIONS FROM THE SUPERINTENDENT,

DATED MARCH 24, and APRIL 30, 1915.

SEASON 1915.

PARTY OF STEAMER McARTHUR,

ASSISTANT, C. G. QUILLIAN,

Chief of Party.

Topography by Revce C. Briggs, Aid.

DESCRIPTIVE REPORT TO ACCOMPANY
TOPOGRAPHIC SHEET N. 3471, OF
RYUS BAY, DUKE ISLAND, ALASKA.

This sheet shows on a 1/10,000 scale the shoreline of Ryus Bay, with sufficient extension on each side to well overlap sheets #1 and #3741. It extends from latitude $54^{\circ} 57' 30''$ to latitude $54^{\circ} 59'$, and between meridians $131^{\circ} 23' 50''$ and $131^{\circ} 26' 30''$.

- GENERAL DESCRIPTION -

Ryus Bay is a symmetrical indentation in the north shore of Duke Island, and includes an area of about one quarter of a square mile. It provides good anchorage for ships the size of the McARTHUR and smaller.

The shoreline of this portion of Duke Island has a general ~~NE~~NE. trend and is much broken up by small bays and off-lying islands and rocks. The small islands are low and thickly wooded, as is Duke Island for a distance of one mile back from shore. Farther back than this are low rolling hills, also thickly covered with fir timber. The only one of these that is of importance in relation to Ryus Bay is the one named Range Hill, South (True) two miles, with an elevation of about 600 feet and shown on Sheet No. 1. In connection with Signal "HAY" it was used as a range by the McARTHUR in entering Ryus Bay.

Mr. Ryus, of Ketchikan, has taken up a homestead bordering on the S.W. shore of the bay. The buildings connected therewith are shown on the sheet.

- DETAILED DESCRIPTION -
SHORELINE, ISLANDS, and DANGERS.

In approaching Ryus Bay from the ship channel off the south end of Annette Island, Tamgas Reef is left on the port side. This is a five-headed rock, one head or point showing about three feet above ordinary high water, and the others covering varying amounts.

The entrance to Ryus Bay is South (True) from the western edge of Tamgass Reef. Emmet Island, the most prominent of the several in and around the bay, is

DESCRIPTIVE REPORT TO ACCOMPANY
TOPOGRAPHIC SHEET No. _____, OF
RYUS BAY, DUKE ISLAND, ALASKA.

seen a quarter of a mile to the east. Its elevation to tree tops is one hundred and twenty-five feet.

In the middle of the entrance to the bay are Goose-Tongue and Helen Islands, connected by a reef at very low tides. The elevations of these islands to the tree tops are seventy-five and one hundred feet, respectively. Just north of Goose-Tongue Island is an old pile or spar, and between it and the island are two rocks that bare at half-tide.

Drug Island is a small bare rock showing about three feet above ordinary high water, but of considerable area at low tide.

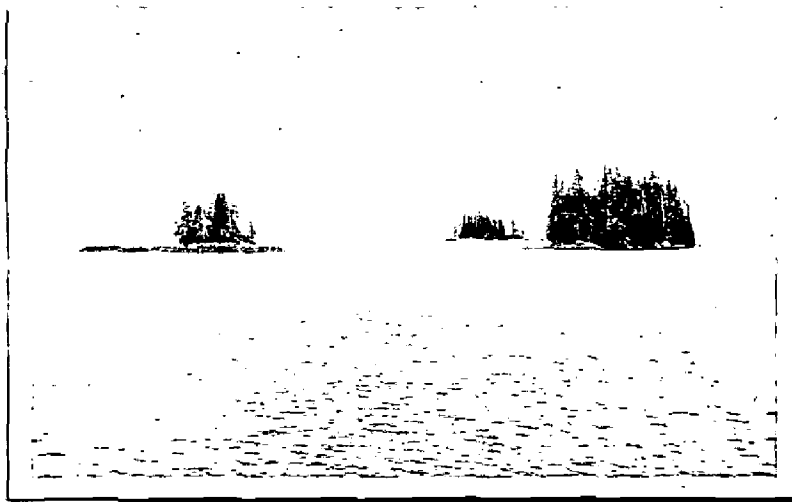
Ruth Island is a small tree-covered island in the S.E. part of the bay. Both it and Drug Island are connected with the S. shore of the bay at very low water. The elevation to tree tops is about sixty feet.

Roy Island is a very small one in the S.W. corner of the bay and sports one small stunted tree.

About midway between Drug and Helen Islands is a rock that was observed to bare about one foot at 7:20 a. m., on June 30, 1915. This is equivalent to a sounding of practically 0.

West of Ryus Bay is another smaller bay with its entrance blocked by reefs to a considerable degree. Of these, Julius Reef consists of a very uneven rocky area with numerous points, due West (True) 650 meters from Goose-Tongue Island. One peak is bare about two feet above ordinary high water, and the others bare at various stages of the falling tide. The chain of rocks shown as extending some 800 meters to the westward are no doubt a continuation of the same reef. These rocks were rodded in from "JOHN" at ordinary low tide and bare at about half-tide. It is possible that others show at minus tides.

One hundred meters N.W. of Form Point is a rock that bares at about half-tide.



Looking out (N. True) of Ryus Bay.
Left to right, the islands are:

Goose-Tongue, Emmet, and Helen.
Mt. Tamgas in the distance.

Photo taken at high tide.

DESCRIPTIVE REPORT TO ACCOMPANY
TOPOGRAPHIC SHEET No. , OF
RYUS BAY, DUKE ISLAND, ALASKA.

East of Ryus Bay is a cove blocked by a tree-covered island, and which bares at low tide. Back of it is a salt water lagoon.

Northeast of Emmet Island about 350 and 650 meters, respectively, and about 250 meters off shore are two rocks to be avoided by small boats skirting this shore. In the summer and fall at least, they carry a large amount of kelp.

All rocks shown on the sheet carry more or less kelp during the warm season.

- SURVEY METHODS -

Ryus Bay was surveyed on a 1/20,000 scale by the party of the McARTHUR during the 1914 season, the control being Triangulation Stations "FORM" and "JULY."

The present survey had the additional control furnished by stations "TAM," "JON," and "HAY," and was made on the 1/10,000 scale after finding that the bay offered good anchorage for small ships. These triangulation stations were plotted on the sheet before beginning the plane table survey.

Plane table outfit No. 24, with Alidade No. 137, were used, and the telemeter rods checked with a measured base. Very little traversing was done in this bay, most of the plane table positions being located by resection or three cuts. The longest rod reading was about 600 meters.

- NEW PLACE NAMES -

(a) Well established local names:

DESCRIPTIVE REPORT TO ACCOMPANY
TOPOGRAPHIC SHEET No. _____, OF
RYUS BAY, DUKE ISLAND, ALASKA.

(b) Names assigned by field officers.

7') Emmet Island.
Goose-Tongue Island.
Helen Island.
Ruth Island.
+ Roy Island.
Drug Island.
Julius Reef.

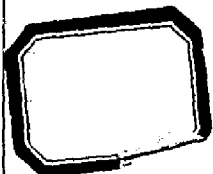
Respectfully submitted,

Rene C. Briggs,
Aid, C. & G. Survey.

RCB/MDG.

PLANE TABLE POSITIONS
TO ACCOMPANY DESCRIPTIVE REPORT OF
TOPOGRAPHIC SHEET NO. ____
RYUS BAY, SCALE 1/10,000

STATION	LAT. O	D.M. METERS	LONG. O	D.P. METERS	HEIGHT IN		REMARKS
					FT. ABOVE	H. W.	
Tide Gauge	54 - 57	1492 363	131 - 25	325 742	-		W. side Ryus Bay
Gan	54 - 58	12 1843	131 - 25	151 916	2		W.W. on Goose- Tongue Island.
Pig	54 - 58	30 1825	131 - 24	1023 44	2		W.W. on Helen Island.
Dra	54 - 57	1354 501	131 - 24	874 193	2		W.W. S. end of Ryus Bay.
Drug	54 - 57	1561 294	131 - 24	839 228	3		W.W. Copper bolt.
Ry	54 - 57	1474 381	131 - 24	593 474	3		W.W. Copper bolt
Us	54 - 58	169 1686	131 - 24	696 371	4		W.W., NE side Ryus Bay.
Aug	54 - 58	659 1196	131 - 24	878 189	3		W.W. on Emmet Island.
Dred	54 - 58	483 1372	131 - 24	507 560	8		W.W. Copper bolt.
E. Cor Ryus' House	54-57	729 1126	131 - 25	513 554	-		Unpainted. Largest building in Ryus Bay.



3471

C. & G. SURVEY,
LIBRARY AND ARCHIVES
DEC 23 1915
Acc. No. _____

There are 2 from 3471
& in 3471A

Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: _____ <small>11-5613</small>
DESCRIPTIVE REPORT.
<i>Top</i> Sheet No. <i>3471</i>
LOCALITY:
1915
CHIEF OF PARTY:
<i>C. G. Sullivan</i>

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LIBRARY AND ARCHIVES
JAN 20 1915
Acc. No. _____

There are 2 sheets of this number
and also a 3471 A

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. S. Tittman
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Top ³⁴⁷¹ Sheet No. *3471*

LOCALITY:

Annette I. S. Coast
in part of Duke I.

1914

CHIEF OF PARTY:

C. J. Quillian

11-4045

DESCRIPTIVE REPORT
AND
LIST OF PLANE TABLE POSITIONS
OF

PLANE TABLE SURVEY

OF A PART OF

ANNETTE ISLAND

S. E. ALASKA,

by

D. Karr - Aid and P. L. Schoppe-Aid.

1914

Sheet No. 1
No. of Sheets. 2

DESCRIPTIVE REPORT

To accompany
TOPOGRAPHIC SHEET NO. 5

Sheet NO. 5 covers a small stretch of shoreline of the S.E. part of Annette Id. and the shoreline of Byus Bay on the northern shore of Duke Id. The former part was done by D.Karr-Aid, and the latter by R.L.Scheppe-Aid.

The shoreline is rugged and very irregular and the few small beaches lying between the water line and the timber are of broken rock or boulders. The timber is fair along these shores. This part of the northern shore of Duke Id. is relatively flat even ground. The hills rise abruptly from the water's edge on Annette Island. A short distance inland the timber is scrubby and sparse and in many places the mountain is quite bare except for brush and tough grass. Mt. Tangass is very rugged. Its peak of bare rock (Elev. 3550) is steep and pointed - an easily distinguishable landmark. On its northern side near the summit snow often remains all summer. From Annette Point west the rocks and kelp lying close along shore make it advisable for even the small boats to run at least three hundred meters off high water line. A fish trap is located at Annette Point. The location is a valuable one for the purpose.

Sheet No. 2

No. of Sheets - 2

A few deer were seen on this section of the island (Annette) but the country is frequented too much by people to allow the deer to increase as they naturally would on such an otherwise favorable island.

The plane table parties consisted of the topographer and two or three men using a rowboat or a motor cutter. The Annette Island shoreline was done by traversing and was completed before the signals were located by triangulation.

Douglas Karr
Aid - C.&G.S.

DESCRIPTION OF SIGNALS

to accompany

TOPOGRAPHIC SHEET NO. 5

<u>Signal</u>	<u>Latitude</u>	<u>D.P.</u>	<u>Longitude</u>	<u>D.M.</u>	<u>Height</u>	<u>Mark</u>
Drug	54° 57'	1570 285	131° 24'	836 231	1'	White Wash Sk
Ferm	54 57	1741 114	131 25	439 628	3	" "
Ry	54 57	1480 375	131 24	578 489	2	" "
Us	54 58	168 1697	131 24	696 371	2	2 "

DESCRIPTIVE REPORT

TO

ACCOMPANY TOPOGRAPHIC SHEET No. 3471,

OF

NORTH SIDE OF DUKE ISLAND,
AND WESTERN SIDE OF MARY ISLAND.

Work done under Instructions from the
Superintendent, dated March 24, and April 30, 1915.

SEASON 1915.

Party of Steamer McARTHUR,
C. G. Quillian, Assistant, C. & G. Survey,
Chief of Party.

Topography by Revoe C. Briggs.

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET No. 3471,
NORTH SIDE OF DUKE ISLAND, WESTERN ENTRANCE OF CAT PASSAGE,
A PORTION OF THE WESTERN SIDE OF MARY ISLAND,
AND THE TWIN ISLANDS.

A portion of this sheet was completed in 1914. The present season's work began at "ET," just east of Ryus Bay, and continued eastward and northward, all shoreline beyond "ET," on the south and east sides of Felice Strait, being this season's work.

The sheet as a whole is limited by parallels $54^{\circ} 57'$, and $55^{\circ} 11'$; and meridians $131^{\circ} 12'$, and $131^{\circ} 26' 30''$.

The north shore of Duke Island, all of Cat Island, all of Mary Island, and the numerous small islands in the vicinity are heavily wooded and low.

The northern side of Duke Island is much broken up by bays and off-lying islands and rocks. The shore is steep-to at some of the points while others have reefs extending variable distances out into the strait. Most of the coves end in gravel or cobble stone beaches of slight slope, and the large bays have a proportionately larger low-water area of cobble or smaller stones. Rocky ledges are comparatively scarce.

All the shores in this vicinity are examples of a sunken coast. Cat Passage is an example of a sunken valley that isn't covered enough to make navigation safe, except for launches piloted by some one having local knowledge. The shores bordering on it are badly broken up, and rocky islets, reefs, and rocks are numerous.

For Mary Island, see description accompanying report of Sheet No.

The Twin Islands, lying north of Mary Island, are heavily wooded, the elevation to tops of trees being about one hundred and twenty-five feet. They possess no other special features worthy of mention.

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET No. 3471.

DETAILED DESCRIPTION IN SEQUENCE:
SHORELINE, ISLANDS, OFF-LYING ROCKS.

Id. The numerous indentations in the shoreline of Duke, between Ryus Bay and Pond's Bay furnish only two bays that deserve mention as anchorages for small boats.

The first of these is Niquette Harbor, its entrance being one and one-half miles northeast of the Ryus Bay entrance. It offers good protection for launches. In the cove on the east side are two piles, probably the remains of a fish trap.

The second is Dog Bay, one and one-half miles northeast of Niquette Harbor, which with Pond's Bay and the connecting passage, separates Dog Island from Duke Island. It offers protection from southeast blows for small craft. Neither shore near the entrance should be closely approached, as numerous rocks and reefs extend outwards. The passage leading into Pond's Bay bares two feet at low water. It is narrow and curved, but often is useful to launches and fishing boats at from half to high tide.

Dog Island is low and heavily wooded, like the adjacent shores of Duke Island, and possesses no special characteristics.

The most prominent feature in Cat Passage is the Double Islands. They are connected at low tide and at such times expose a considerable area of ledges and reefs on all sides. Cat Passage should not be attempted except by those possessing local knowledge.

The Fish Islands, two small wooded islands, are about two-fifths of a mile northwest of the Double Islands. They are connected by a reef at low water, but the outside shores are steep-to.

South of the Fish Islands and northwest of the Double Islands are two rocks, one baring only at extreme low tide, and the other baring three feet at M.L.L.W.

Southeast of a line connecting the Double Islands with Village Island are a number of rocks and reefs too numerous for individual mention.



Village Id. Totem Poles

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET No. 3471.

Village Island is low, with a sand beach on all sides. It is of considerable historic interest as it possesses the largest collection of genuine old totem poles in this vicinity. In the summer grass grows rankly over the ruins of the houses and around the totem poles. The highest totem pole was located with the plane table.

About 550 meters northwest of Village Island is a shallow bank over which a number of large boulders are scattered. The heads of a number of these bare at low water and their outside limits were cut in by tangents. There are without doubt others in the vicinity a short distance below the surface.

Triangulation Station "CAT" is on a small wooded island just off the west shore of Cat Island. It is surrounded by numerous rocks bearing various amounts, as indicated on the sheet. Ships should give it a wide berth.

The portion of the western part of Mary Island shown on this sheet, has what might be called a scalloped shoreline, consisting of a series of small coves. All these show a stony beach at low water. They are not suited for anchorages even for small boats.

There are two off-shore rocks to be noted, one just opposite the cove south of Beaver Creek being 350 meters W. (True) of high water mark, and the other about one hundred meters west of "BEAVER."

Beaver creek is a small stream and of little importance. At high tide no sign of it is visible from a boat passing close along the shore.

With the exception of a spit extending a short distance off the north end of the larger of the Twin Islands their shores are uniform and rather steep, bearing very little additional area at low tide.

- SURVEY METHODS -

The regular Coast Survey Plane Table equipment was used in executing this season's work, and consisted of Alidade No. , and Plane Table Outfit No. .

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET No. 3471.

With the exception of a few stations along the north shore of Duke Island, including those in Dog Bay, the triangulation stations used for control were plotted on the projection before the topography was started. The others were put on afterwards and the shoreline adjusted to fit, no changes of more than ten meters being necessary. Owing to the large number of triangulation stations very little traverse work was necessary. The longest line was from "TEL," through the passage into Pond's Bay, by which Stations "SUIT" and "LONG" were located when plane table triangulation was later carried down Pond's Bay to the same passage on sheet No. . The location of these stations differed from the other by seventy meters. The necessary adjustment was put in between station "SMILE" on the one sheet, and Station "DEEP," on the other. Stations "LONG" and "SUIT" are shown in their adjusted positions on each sheet.

It will be seen that a portion of Cat Island and Cat Passage is shown also on the 1/10,000 Sheet No. , which should, of course, be preferred. The work had progressed to the point shown, on Sheet No. 3471, when it was deemed necessary to have Cat Passage on the larger scale.

- NEW PLACE NAMES -

(a) Well established local names:

Niquette Harbor.

(b) Names assigned by field officers:

Cat Passage.
Tom Island.

Respectfully submitted,

Rene C. Briggs,
Aid, C. & G. Survey.

RCB/MDG.

PLANE TABLE POSITIONS
TO ACCOMPANY TOPOGRAPHIC SHEET No. 3471,
NORTH SIDE OF DUKE ISLAND,
ALASKA.

STATION	LAT. °	D.M. , METERS	LONG. °	D.P. , METERS	HEIGHT IN FT. ABOVE H. W.	REMARKS.
Flet	54 - 58	1661 194	131 - 20	901 166	8	Copper bolt.
Ge	54 - 58	1273 582	131 - 20	804 263	5	W.W. Copper bolt.
Smile	54 - 58	1282 573	131 - 20	430 637	1	W.W. Copper bolt.
Len	54 - 58	1449 406	131 - 19	1054 13	6	W.W. Copper bolt.
Suit	54 - 58	1047 808	131 - 20	625 443	1	W.W. Copper bolt.
Long	54 - 58	898 957	131 - 20	551 517	0	W.W. Copper bolt.
Ear	54 - 59	1304 551	131 - 19	1054 13	5	W.W. No permanent mark.
Tail	54 - 59	613 1242	131 - 17	974 93	10	W.W. Copper bolt.
Mound	54 - 59	1699 156	131 - 18	659 408	0	W.W. Copper bolt.
Al	55 - 04	159 1696	131 - 14	610 455	2	W.W. No permanent mark.
Gray	55 - 04	514 1341	131 - 14	751 314	2	W.W., Copper bolt.
Tim	55 - 04	1398 457	131 - 14	603 462	3	W.W. No permanent mark.