

10738

10738

FORM C&amp;GS-504

U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey SHORELINEField No. \_\_\_\_\_ Office No. T-10738

## LOCALITY

State ALASKAGeneral locality SUMNER STRAITLocality SPANISH ISLANDS & CORA POINT  
(Coronation Island)1955-61CHIEF OF PARTY  
E. W. Richards, Chief of Party  
William F. Deane, Baltimore District Officer  
Alfred C. Holmes, Director, A. M. C.

LIBRARY &amp; ARCHIVES

DATE \_\_\_\_\_

DESCRIPTIVE REPORT - DATA RECORD

- 2 -

T -10738 and T-10679

Project No. (II): Ph-5702

Quadrangle Name (IV):

Field Office (II): C&GS Ship HODGSON

Chief of Party: E. W. Richards

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: William F. Deane

Instructions dated (II) (III): 27 November 1957

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Air Photographic (multiplex)

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:10,000

Scale Factor (III): 1.000

Date received in Washington Office (IV): FEB 2 1958

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean sea level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): SPAN, 1923

Lat.: 55° 57' 50.561"

Long.: 134° 06' 20.281"

Adjusted  
~~Unadjusted~~

Plane Coordinates (IV): U. T. M.

State: Alaska

Zone: 8

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,  
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DESCRIPTIVE REPORT - DATA RECORD  
(Horizontal Control Identification only)

Field Inspection by (II): E. W. Richards  
J. P. Randall  
M. D. Christensen)

Date: 1957

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

21 September 1955, Air-photographic (multiple~~x~~) (date of photography)

Projection and Grids ruled by (IV): J. B. Phillips

Date: 22 Nov. 1957

Projection and Grids checked by (IV): I. Y. Fitzgerald

Date: 22 Nov. 1957

Control plotted by (III): B. Kurs

Date: 11 Dec. 1957

Control checked by (III): J. C. Cregan

Date: 11 Dec. 1957

Radial Plot or Stereoscopic Control extension by (III): D. M. Brant

Date: 19 Dec. 1957

Planimetry D. M. Brant  
Stereoscopic Instrument compilation (III):

Date: 20 Dec. 1957

~~XXXXXXXX~~

Date:

Manuscript delineated by (III): Jos. D. McEvoy  
Field edit applied: Judson Council

Date: 6 Feb. 1958  
21 Dec. 1961

Photogrammetric Office Review by (III): D. M. Brant  
Field Edit Review: R. Glaser

Date: 11 Feb. 1958  
22 Dec. 1961

Elevations on Manuscript checked by (II) (III):

Date: ----

DESCRIPTIVE REPORT - DATA RECORD

3  
- 5 -

Camera (kind or source) (III): U.S.C. & G. S. Type W, 6" focal length

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
55-W-9397	9/21/55	1404	1:25,000	0.5' below MHW
55-W-9398	"	1405	"	" " "
55-W-9399	"	1406	"	" " "
55-W-9400	"	1407	"	" " "
55-W-9400A	"	1408	"	" " "
55-W-9309	"	1305	"	1.9' " "
55-W-9310	"	1305	"	" " "

Tide (III)  
From Predicted Tables

Reference Station: Sitka, Alaska  
Subordinate Station: Port McArthur, Kuiu, I.  
Subordinate Station:

Diurnal		
Ratio of Ranges	Mean Range	Spring Range
--	7.7	9.9
1.1	8.4	10.6

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): \*  
Shoreline (More than 200 meters to opposite shore) (III): \*\*  
Shoreline (Less than 200 meters to opposite shore) (III): --  
Control Leveling - Miles (II):  
Number of Triangulation Stations searched for (II): 5  
Number of BMs searched for (II):  
Number of Recoverable Photo Stations established (III): None  
Number of Temporary Photo Hydro Stations established (III): None

Recovered: 5  
Identified: 5

Remarks:

\* T-10738 - 3  
T-10679 - 4  
\*\* T-10738 - 14  
T-10679 - 15

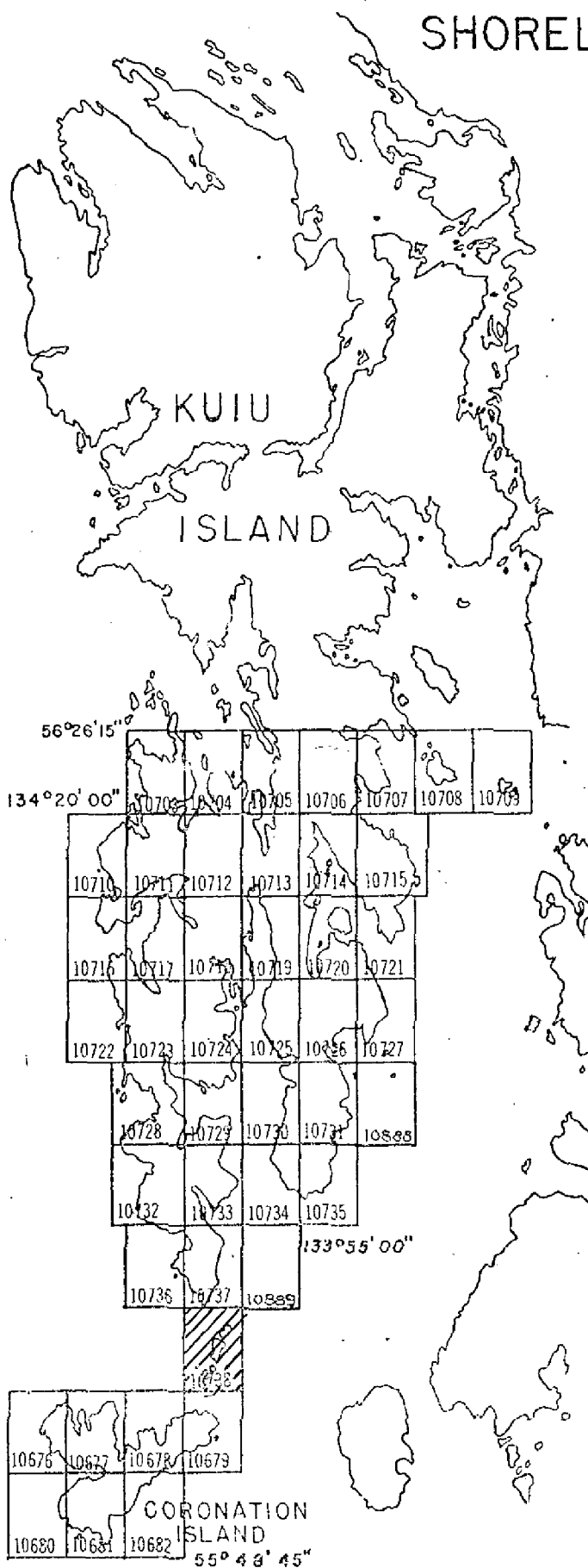


T-10738

COMPILATION RECORD	COMPILATION DATE	REMARKS
Field edit applied - east side only	Dec. 1961	Supersedes all previous copies
Final review	Dec. 1971	

## SHORELINE MAPPING PROJECT

Ph-5702

CORONATION and  
KUIU ISLANDS,  
ALASKAOfficial Release For Cost AccountsCHATHAM  
STRAIT

Sheet No.	Area Sq. Mi.	Lin. Mi. Shoreline
10676	2	3.4
10677	8	11.1
10678	6	7.7
10679	3	6.0
10680	1	1.5
10681	8	7.7
10682	2	2.6
10703	10	11.5
10704	6	12.8
10705	9	11.9
10706	14	2.6
10707	4	7.7
10708	2	9.4
10709	1	3.0
10710	5	6.8
10711	11	7.7
10712	14	9.9
10713	12	9.4
10714	5	8.5
10715	11	6.8
10716	4	5.1
10717	9	11.1
10718	13	6.0
10719	8	11.1
10720	9	8.5
10721	4	8.5
10722	2	4.3
10723	14	3.1
10724	11	10.2
10725	8	7.7
10726	11	4.3
10727	3	4.5
10728	10	11.5
10729	6	11.9
10730	5	4.3
10731	10	6.0
10732	10	6.0
10733	9	3.4
10734	3	3.4
10735	4	4.7
10736	1	4.7
10737	6	8.6
10738	1	6.6
<b>TOTAL</b>	<b>295</b>	<b>298.8</b>

## SUMMARY

## DESCRIPTIVE REPORT T-10738

This shoreline manuscript, scale 1:10,000, is one of 45 maps planned for Project PH-5702, which includes the south half of Kuiu Island, Spanish Islands, and Coronation Island, in Southeast Alaska. Only 33 maps were compiled. T-10738 covers the Spanish Islands.

Bridging was by multiplex, using single-lens photography taken near high water on September 21, 1955. The bridge was run between field identified control points. Detail points were dropped directly to the plastic sheets and compilation was done graphically, without the benefit of field inspection. Classification of this map is INCOMPLETE.

Field edit was performed on the east side of the islands on this manuscript in June 1961. Corrections by this edit include shoreline, rocks, and foul areas. No Form 567 was furnished for SPANISH ISLAND LIGHT. No Field Edit Report was available for inclusion with this Descriptive Report. The west side of the islands was not edited.

Final review was done at the Atlantic Marine Center in December 1971.

The compilation manuscript was an acetate sheet 3 minutes 45 seconds in latitude by 5 minutes in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.

PHOTOGRAMMETRIC PLOT REPORT  
Project Ph-5702

Field Inspection Report - None submitted. Report on horizontal control attached.

21. AREA COVERED

T-10738, T-10676, T-10677, T-10678, T-10679, T-10680, T-10681 and T-10682.

22. METHOD

Multiplex bridges were run between horizontal control points as shown on Sketch of Control attached. The 1:10,000 scale projections on plastic were used directly under the multiplex bar and detail points plotted for subsequent delineation, using ratio prints. It was endeavored to obtain a consistent set of points for this purpose and also for use by the hydrographer. In comparing shoreline points in overlapping flights, it was noted that identical points were very difficult to identify.

23. ADEQUACY OF CONTROL

Identification of horizontal control on the Spanish Islands was adequate. Identified control on Coronation Island is sparse. Three points, namely, LAST, 1922; HELM, 1922 and AATS, 1922 are poorly located with respect to the photography. As noted in correspondence, attached, between the Director and Chief of Party (field), the geographic position of TOP-, 1922 was in considerable error. No other control point in the area was provided. All other horizontal control points, where visible, were held within a probable error of 0.5 mm. Many of the points were not distinct enough to be pin-pointed. The field inspection party's choice of well-defined points was limited. Control is adequate for an allowable error of between 0.5 mm. and 1.0 mm.

The field party furnished two Sub. Pts. for most of the stations identified by this method. This was helpful as often only one point was discernible in the models. The following points were either not visible or identification was very doubtful:

WIT, 1922 - Sub. Pt. 1 - Not visible.  
WIND, 1922 - Sub. Pt. 1 - Not visible.  
TRE, 1922 - Sub. Pt. 2 - Not visible.  
POLE, 1922 - Sub. Pt. 2 - Doubtful.  
NO, 1922 - Sub. Pt. B - Doubtful.

Two points, LILE, 1922 and CORONATION ISLAND HIGHEST PEAK, 1916 2343 identified on the photographs with the notations "probable location".

They appeared to hold very well. In addition, office identification from published descriptions was attempted for several other points. Of these the following appeared reasonable with regard to our bridging solutions:

HI, 1922  
END, 1922  
PIN, 1922

24. SUPPLEMENTAL DATA

None.

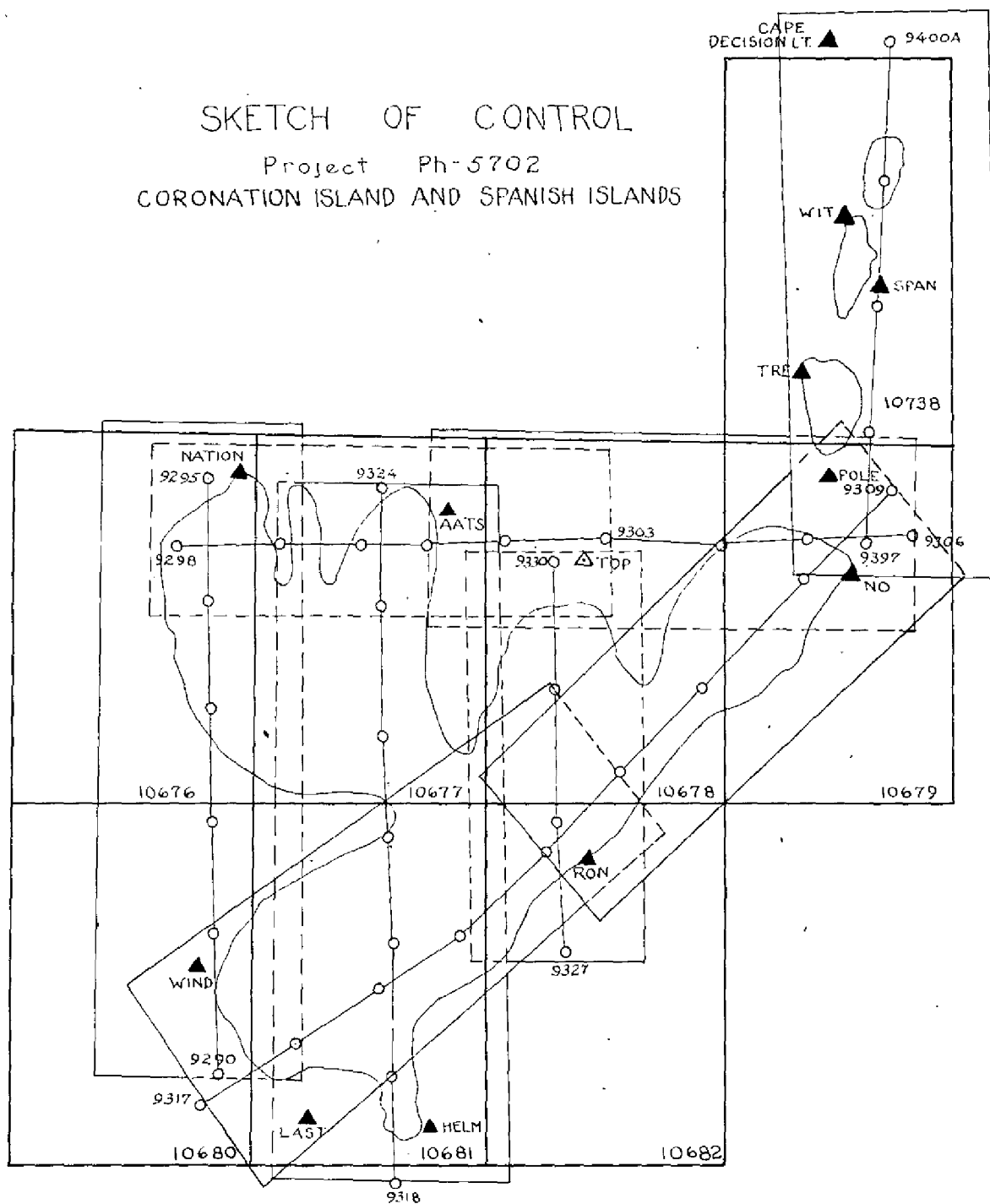
25. PHOTOGRAPHY

Coverage and overlap of photography was adequate. Diapositives were good.

Respectfully submitted  
3 February 1958

Henry P. Eichert  
Super. Carto. (Photo.)

# SKETCH OF CONTROL Project Ph-5702 CORONATION ISLAND AND SPANISH ISLANDS



## LEGEND

- ▲ Identified and held
- △ Identified and not held

HORIZONTAL CONTROL

Only control station identification was attempted on the Spanish Islands and Coronation Island. Receipt of instructions and field data for this project was received so late in the season that landing conditions were not ideal and in some cases impractical to attempt. The stations were visited on different dates until it was apparent that it was uneconomical to continue offshore operations at an expense to our inshore hydrography which still had a few holidays.

A total of 13 stations of the 15 requested were inspected. The discrepancy in position of station TOP was not resolved in the field as mentioned in the Director's letter of 20 Sept. 1957, File No. 731-lfs due to unfavorable weather. Possibly a position for the unstamped disk can be obtained from records of the previous hydrographic survey in 1922-23.

## Control Identification By

E. W. Richards

J. P. Randall

M. D. Christensen

Approved and forwarded:

E. W. Richards,  
LCDR, C&GS  
Comdg., Ship HODGSON

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: Ship HODGSON, Edna Bay, Alaska

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

SEP 15 10 11 AM

COAST & GEODETIC SURVEY

11 Sept. 1957

To: The Director  
Coast and Geodetic Survey  
Washington 25, D. C.

Att.: Chief, Photogrammetry Division

Subject: Instructions - Project PH-87.

There appears to be a discrepancy in the G. P. of station TOP 1922 on Coronation Island which was to have been photo-identified before the completion of this season.

An unstamped hydrographic disk was found on the point In Lat.  $55^{\circ} 54'15''$ , Long.  $134^{\circ} 13'15''$  W. and fits the description for the station. However, the G. P. Plots on a rock which is awash only at low water. A check of the records in your office may clear up this difference.

Identification of horizontal control is progressing as rapidly as weather and landing conditions permit, which is difficult on the open coast at this time of the year. To date, all of the identification is complete on Kuiu Island, Spanish Islands, and on the northern portion of Coronation Island.

*E. W. Richards*  
E. W. Richards,  
LCDR, C&GS  
Comdg., Ship HODGSON



731-lfs

20 September 1957

To: LCDR E. W. Richards  
USCGC Ship HODGSON  
Edna Bay, Alaska

Subject: Station TOP 1922, Project *5702* ~~PH-27~~

An observation was found in the 1922 records from station CORA to TOP. Using this observation and the one from AATS, a new position for TOP was computed, but it plots (Lat. 55-54-28.68, Long. 134-12-10.51) at the northeast end and not at the northwest end of the point as noted in your letter of 11 September.

The angles CHAN and CORA in the triangle TOP-CHAN-CORA sum to 135°, indicating one of the directions is in error. Since the discrepancy in positions cannot be resolved here, station TOP should be rejected, unless you can determine a new position for it. If the station is not re-located, please substitute station CHAN for photo-identification.

(Signed) Charles Flores

Assistant Director

cc: Seattle District Officer

60

MAP T- 10738

PROJECT NO. Ph-5702

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

[illegible]

1 FT - 2048006 METER

1 FT. 3048006 METER  
Henry P. Eichert  
COMPUTED BY.

DATE \_\_\_\_\_

12/2/57

**B. Kurs**  
**CHECKED BY:**

DATE 12/3/57

COMM-DC-5784

COMPILATION REPORT  
(Preliminary)  
T-10738 & T-10679

31. DELINEATION

Shoreline and all details were delineated by graphic methods using detail points established by the multiplex bridging. 1:10,000 ratio points were ordered to scale for this purpose and for subsequent use by the hydrographer.

32. CONTROL

Refer to Photogrammetric Plot Report bound with this report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline and details were delineated from office inspection without benefit of field inspection. Hence it is classified in the category "incomplete". Many offshore rocks and small islands were delineated by office interpretation. Other areas that may be rocks, ledge or kelp have been enclosed with a broken line and labeled foul. Some shoreline obscured by shadow, or overhang was delineated with the approximate shoreline symbol.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

There were no Recoverable Topographic points established. Detail points established along the shoreline will aid the hydrographic party in locating photo-hydro signals.

39. JUNCTIONS

Junction was made to the south of T-10738 with T-10679 and to the west of T-10679 with T-10678. There are no other junctions to be made.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report, item 23, attached.

41. through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

None available.

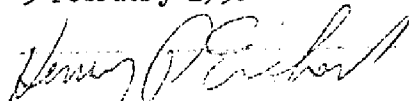
47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 8173, scale 1:40,000, published March 1939, 2nd edition, 10/22/51.

Items to be applied to nautical charts immediately: None.

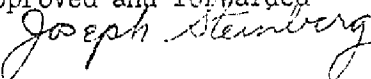
Items to be carried forward: None.

Respectfully submitted  
5 February 1958



Henry P. Eichert  
Super. Carto. (Photo.)

Approved and forwarded



For

William F. Deane

CER C&GS

Baltimore District Officer

October 26, 1971

GEOGRAPHIC NAMES  
FINAL NAME SHEET  
PH-5702 (Alaska)


T-10738

Decision Passage  
Spanish Islands  
Sumner Strait

Approved by:

  
A. Joseph Wraight  
Chief Geographer

Prepared by:

  
Frank W. Pickett  
Cartographic Technician

T-10738 and T-10679

49. NOTES FOR THE HYDROGRAPHER

A set of ratio prints at a scale of 1:10,000 has been prepared. Detail points along the shoreline have been established for use in locating hydrographic signal sites. They have been shown on the photographs.

## PHOTOGRAMMETRIC OFFICE REVIEW

T. 10738

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

## CONTROL STATIONS

4a. Classification label ☒5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☐ 7. Photo hydro stations ☐ 8. Bench marks ☐  
9. Plotting of sextant fixes ☐ 10. Photogrammetric plot report ☐ 11. Detail points ☐

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☐ 14. Rocks, shoals, etc. ☒ 15. Bridges ☐ 16. Aids to navigation ☒ 17. Landmarks ☐ 18. Other alongshore physical features ☐ 19. Other along-shore cultural features ☐

## PHYSICAL FEATURES

20. Water features ☐ 21. Natural ground cover ☒ 22. Planetable contours ☐ 23. Stereoscopic Instrument contours ☐ 24. Contours in general ☐ 25. Spot elevations ☐ 26. Other physical features ☐

## CULTURAL FEATURES

27. Roads ☐ 28. Buildings ☐ 29. Railroads ☐ 30. Other cultural features ☐

## BOUNDARIES

31. Boundary lines ☐ 32. Public land lines ☐

## MISCELLANEOUS

33. Geographic names ☐ 34. Junctions ☒ 35. Legibility of the manuscript ☐ 36. Discrepancy overlay ☐ 37. Descriptive Report ☒ 38. Field inspection photographs ☐ 39. Forms ☐40. Edw. M. Grant  
ReviewerHenry J. Richert  
Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

## FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Tudson Council  
CompilerHenry J. Richert  
Supervisor43. Remarks: 12-21-61  
Incomplete on West side of Islands

## REVIEW REPORT T-10738

## SHORELINE

December 15, 1971

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, pages 20 through 23, with differences noted in Items 62 through 65, is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with Survey No. 4054, scale 1:20,000, dated 1923. Differences between this map and T-10738 are shown in blue on the comparison print.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with U.S.G.S. Quadrangle CRAIG (D-7 and D-8), ALASKA, scale 1:63,360, dated 1948. Significant differences between the two maps are shown in brown on the comparison print.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with an unverified copy of the smooth sheet for H-8604, scale 1:20,000, dated 1961. The only differences between H-8604 and T-10738 are several rocks awash that were not visible on the photographs. These rocks are shown in purple on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 8173, scale 1:40,000, 5th edition, dated August 30, 1969. Differences between the chart and T-10738 are shown in red on the comparison print.



66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with Job Instructions and Bureau requirements. Control was adequate for mapping with a probable error of between 0.5 mm and 1.0mm. See Photogrammetric Plot Report. No accuracy tests were run in the field.

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer  
December 15, 1971

Approved for forwarding:

*Melvin J. Umbach*

Melvin J. Umbach, CDR, NOAA  
Chief, Photogrammetry Division, AMC

Approved:

*Alfred C. Holmes*

Alfred C. Holmes, RADM, NOAA  
Director, Atlantic Marine Center

Approved:

*Charles L. Tanner*

Chief, Photogrammetric Branch, <sup>208</sup>

*Jack E. Luth*

Chief, Coastal Mapping Division

07'

## COMPARISON PRINT

Blue = T-4054  
 Red = Chart 8173  
 Brown = U.S.G.S.  
 Purple = H-8604

P  
A  
S  
S  
A  
G  
E

59' 30"

55° 59' 30"

INCOMPLETE  
 ADVANCE

(2)\*

Foul

SPANISH  
 ISLAND LT  
 1936

Trees

Foul

(1)\*

55° 59'

Also on USGS

55 W 9400

Trees

Foul

Foul

Foul

(4)\*

AW MLW

WIT 1922

Foul

T-4054



134°06'  
55°50'30"

21

58'

57'30"

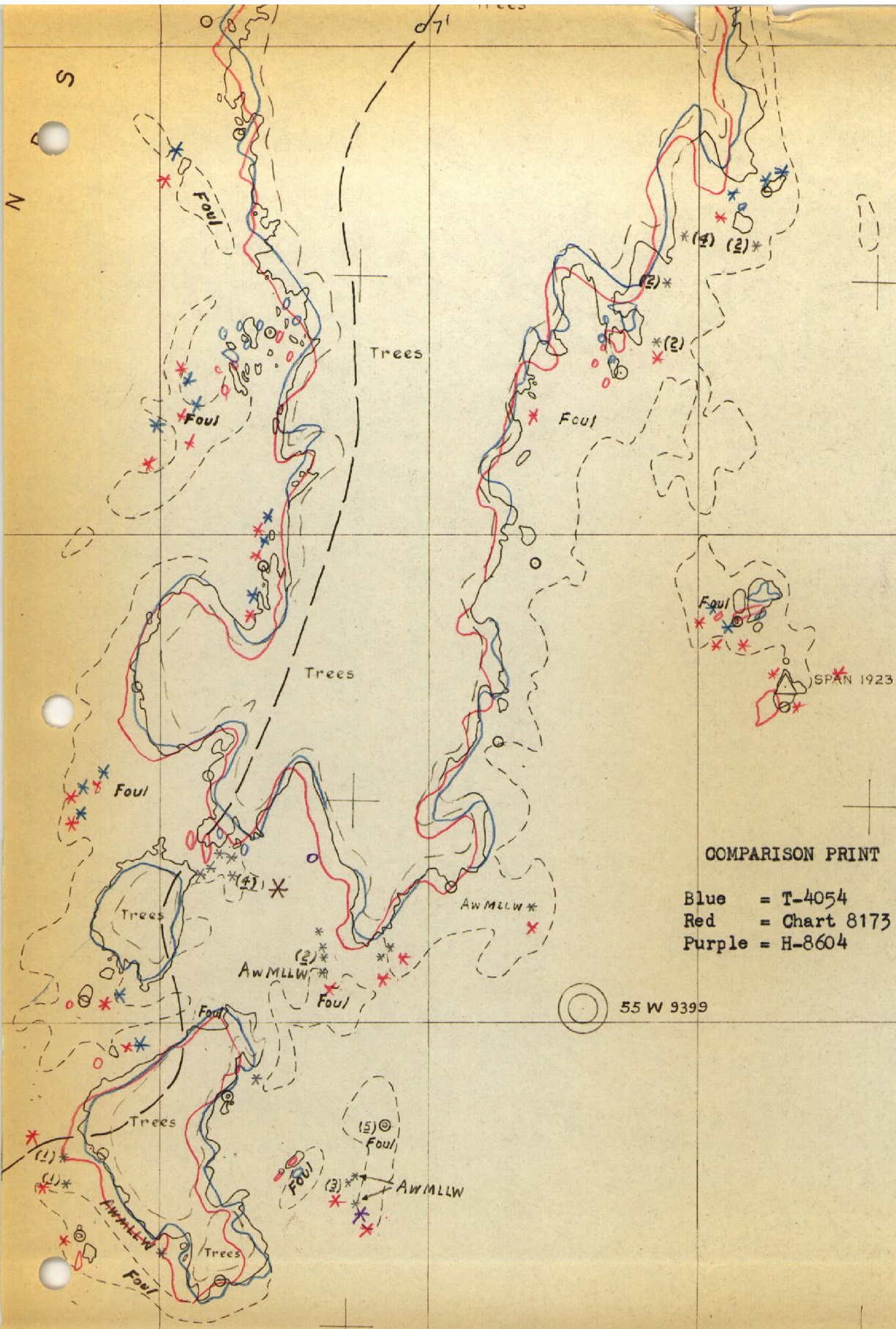
134°06'

COMPARISON PRINT

Blue = T-4054  
Red = Chart 8173  
Purple = H-8604

55 W 9399

07'





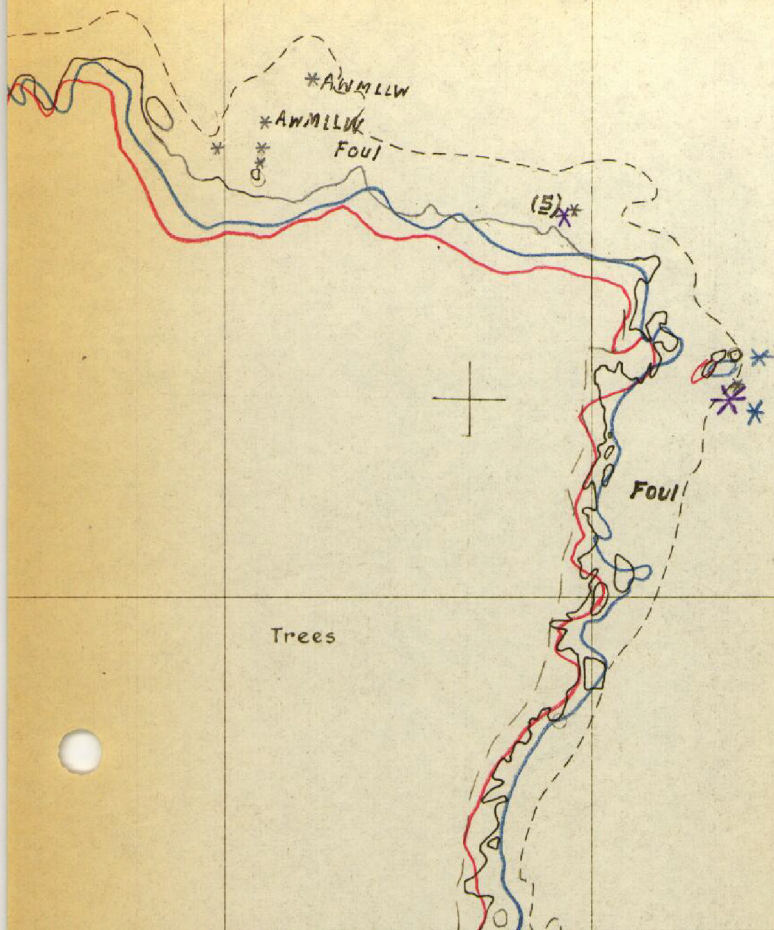
22

134° 06'

55° 57'

07'

LW



## COMPARISON PRINT

Blue = T-4054  
 Brown = U. S. G. S.  
 Purple = H-8604  
 Red = Chart 8173

56° 30"

Trees

VEY NO T-10679

56° 15"

134° 07'

9398

134° 06'

## INCOMPLETE MA

This manuscript is based on a final photogram control, but the delineation of details is not complete time primarily for use of the hydrographic parties. later, after which final copies of the manuscript will b



134°09'

H  
S  
A  
N  
I  
S  
D

THE 1922

Trees

Foul

9\*\* (6)

\* (2)

\* AWM

\* AWM

Trees

56'30"

Trees

55°56'15"

JOINS SUR

COMPARISON PRINT

- Blue = T-4054
- Brown = U. S. G. S.
- Purple = H-8604
- Red = Chart 8173

Also on  
U.S.G.S.

INCOMPLETE ← → ADVANCE

X=553,000 m

09

134°08'