

9538

Original

9538

FORM C&GS-504

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

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. _____ Office No. T-9538

LOCALITY

State ALASKA

General locality PRINCE WILLIAM SOUND

Locality CHENEGA POINT

1950-54

CHIEF OF PARTY
Field : G. A. Nelson
Office: L. W. Swanson

LIBRARY & ARCHIVES

DATE _____

DATA RECORD

T - 9538

Project No. (II): PH-152

Quadrangle Name (IV):

Field Office (II): Ship LESTER JONES

Chief of Party: George A. Nelson

Photogrammetric Office (III): Washington Office

Officer-in-Charge: L.W. Swanson

Instructions dated (II) (III): 16 March 1951

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.0

Date received in Washington Office (IV): ^{III} 18 1956

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 1927

Vertical Datum (III): MHW

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):

Lat.:

Long.:

Adjusted
Unadjusted

Plane Coordinates (IV):

State:

Zone:

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.

DATA RECORD

Field Inspection by (II): Ross A. Gilmore
David F. Romero Date: June-Sept.
1951

Planetable contouring by (II): Inapplicable Date:

Completion Surveys by (II): Inapplicable Date:

Mean High Water Location (III) (State date and method of location):
Identified in field on July 1954² photographs

Projection and Grids ruled by (IV): A. Riley Date: 4-30-56

Projection and Grids checked by (IV): A. Riley Date: 4-30-56

Control plotted by (III): Byron Hale Date: 5-9-56

Control checked by (III): Garnett S. Amburn Date: 5-10-56

Radial Plot or Stereoscopic
Control extension by (III): Robert L. Sugden Date: 18 May 1956

Stereoscopic Instrument compilation (III):
Planimetry Date:
Contours Inapplicable Date:

Manuscript delineated by (III): Garnett S. Amburn Date: 27 June 1956

Photogrammetric Office Review by (III): Everett H. Ramey Date: 28 June 1956
28 Nov 1957

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

Camera (kind or source) (III): C&GS W Single Lens and
US Air Force Single Lens
PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide (MLLW)
M324 38 VV & 37VV	17 July 1950		1:40000	
54W2289 thru 2291	26 July 1954	12:28	1:30,000	6.5

Tide (III)

Reference Station: Cordova, Alaska
Subordinate Station: Chenega I.
Subordinate Station:

Ratio of Ranges	Diurnal Mean Range	
	Range	Range
	10.0	12.4
.94	9.4	11.7

~~Washington~~ Review by (IV): C. H. Bishop

Date: 12-04-70

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

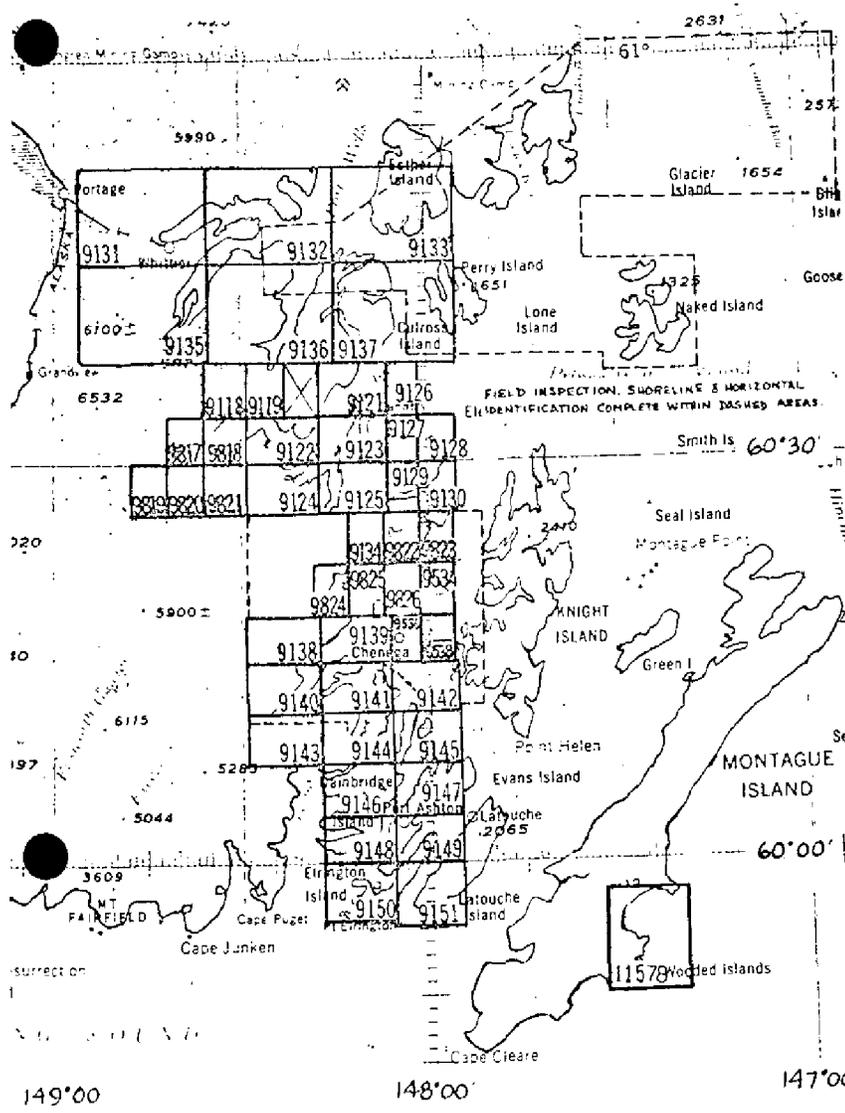
Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III): 4 mi.
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: Identified:
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III):
Number of Temporary Photo Hydro Stations established (III):

Remarks:

T-9538

COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline compiled	June 1956	Superseded
Shoreline revised	Nov. 1957	
Final review	Dec. 1970	

Prince William Sound, Alaska



OFFICIAL MILEAGE FOR COST ACCOUNT		
SHEET NO.	LN. MI. SHORELINE	AREA MI. MILE
9118	3	13
9119	9	11
9121	11	10
9122	23	7
9123	17	7
9124	7	5
9125	15	6
9126	5	3
9127	6	3
9128	5	3
9129	7	8
9130	14	6
9131	12	95
9132	48	50
9133	36	45
9134	5	11
9135	24	90
9136	26	85
9137	68	48
9138	10	7
9139	13	5
9140	12	8
9141	24	12
9142	10	3
9143	9	4
9144	26	9
9145	19	8
9146	18	8
9147	24	9
9148	25	9
9149	19	7
9150	24	8
9151	15	0
9534	6	4
9536	6	6
9538	4	1
9817	9	10
9818	11	6
9819	3	9
9820	7	5
9821	2	10
9822	9	9
9823	7	4
9824	9	10
9825	11	6
9826	10	8
11578	19	21

TOTALS 702 726

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-9538

Several years have elapsed between the compilation and final review of this map. The compilation record has been added by the final reviewer.

This shoreline manuscript, scale 1:10,000, is one of 43 maps that comprise Project PH-152, which is in the western part of Prince William Sound. T-9538 spans Knight Island Passage between Chenega Island and Squire Island.

Compilation was by radial plot, using ratio prints of 1:30,000 scale single-lens photographs taken in July 1954 and one ratio print of a 1:40,000 scale photograph taken by the Air Force in July 1950. Squire Island and adjacent areas were compiled with only one photograph and are approximate in position. Field inspection was done on ratio prints of 1:40,000 scale Air Force photography of July 1950.

There is no record of field edit of this map.

Final review was done at the Atlantic Marine Center in December 1970.

The compilation manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 5 minutes 37.5 seconds in longitude.

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

FIELD INSPECTION REPORT
PRINCE WILLIAM SOUND, ALASKA
Project Ph-39(48); CS-277, 1951 Season
Ship LESTER JONES, George A. Nelson, Commanding

2. Areal field inspection.---In general, the 1951 photogrammetric field surveys of the Ship LESTER JONES for Project Ph-39(48) consisted of all of item (a) and part of item (b) of paragraph 2. of the project instructions. A PROGRESS SKETCH showing the entire area of field inspection is attached to this report. In accordance with letter 71-jgh, dated 4 October 1951 (copy attached), the field data was compiled in the following order:

- Area 1.-- Area east of Unakwik Inlet (part of item 2. (a) of project instructions).
- Area 2.-- Remainder of item 2.(a).
- Area 3.-- Area in vicinity of Chenega Island.

This arrangement was maintained in compiling control, topographic and peak station data and the various areas are indicated on the attached print of the PROGRESS SKETCH. All data and photographs for Area 1 were transmitted to the Washington Office on 15 November 1951 and the remaining two areas are being submitted as of the date of this report.

Field inspection consisted of (1) recovery and identification on aerial photographs of alongshore triangulation stations; (2) approximate identification of existing interior stations and establishment of a few new interior stations in Area 3; (3) shoreline inspection; and (4) selection and identification of phototopographic and photohydro stations.

In general, the coastline inspected is mountainous with little or no beach except at the heads of bays and larger indentations (usually glacial moraines). In most all cases the shoreline is vertical with trees growing to the immediate cliff edge or high water line. The mountainsides are generally covered with a thick growth of coniferous trees interspersed with patches of moss and grass and berry bushes. Alder is found in the glacial valleys and in patches along some of the side slopes, mostly in Area 3. The rock in the area inspected is a very hard granite, oftentimes polished smooth from glacial action. Numerous extensive crevices and faults were noted during the inspection and are very evident on the photographs.

Photographic coverage consisted of nine-lines photographs taken in 1948 and 1949 at a scale of 1:20,000 and single-lens photographs taken by the Air Force in 1950 at an approximate scale of 1:40,000. Ratio prints of the Air Force photographs were furnished on a scale somewhat larger than 1:20,000. Most of the nine-lens photographs were cut to a folded size of 18" x 24" for convenience in handling in the field. Considerable of the nine-lens photographs had been sent to the field in 1948 and had already been cut up in 12" x 12" squares. It was found that better efficiency could be maintained in the field if these squares were rejoined by scotch tape and folded on the cuts to suit the area

being inspected rather than to use them as individual 12" x 12" squares. Cutting the nine-lens photographs to this small size also creates a difficulty in that shoreline detail is often cut at a disadvantageous place. It was found that by cutting the photographs to a 18" x 24" size and making use of the central portion of the photograph that better results were obtained. All of Areas 1 and 2 with the exception of the Naked Island group and the west side of Perry Island (where single-lens photographs were supplied) were adequately covered by nine-lens photographs except for the main part of Perry Island. Here, the nine-lens coverage was such that extreme wing portions had to be used. This presented a problem in control identification. In general, the definition of the nine-lens photographs was good and were easier to interpret than the single-lens. Here, due to having been enlarged to twice their original scale, the inherent only fair definition of the single-lens photographs was amplified causing considerable trouble and excessive eye strain in making accurate identification. However, the single-lens photographs were more convenient to handle and use in the field than the folded nine-lens photographs. Poor coverage was had in parts of Area 3 due to the excessive width of the flight lines. In some instances there was no overlap in flights in this area.

All shoreline inspection was accomplished using the ship's 20 foot dories fitted with a small "dog house" across the gunwales to protect the photographs and instrumental equipment. However, it was generally necessary to take the photograph out into the daylight for close inspection, thus exposing it to the weather. All notes were made directly on the photographs with a soft lead pencil with leaders to the points pricked or detail noted. No inking was attempted in the field. All control and topographic station data was inked on the photographs in the evening of the same day the field work was accomplished, leaving other data to be inked at a latter date. Consequently, a maximum of field work could be accomplished and certainty assured that control data was complete before advancing to a new area.

Photographs were clipped to a piece of light plywood to facilitate handling and at most times the inspector could stand up in the boat and by using the top of the "dog house" as a plotting table carry on his shoreline inspection quite readily. In general, it is believed that sufficient notes have been made to aid the compiler in interpreting the photographs. No attempt was made to use a stereoscope in the dory. This is an impracticability. All stereoscope work was done aboard ship.

3. Horizontal control.---Sufficient alongshore horizontal control stations were recovered and identified. No new stations were established except in Area 3. Here, 4 peak stations were established by occupying recovered triangulation stations (see Geographic Positions, Form 28 b, submitted 15 November 1951). In a good many instances there is a plethora of identified control stations, especially in the Naked Island group and parts of Area 3. However, due to the fuzziness of detail sometimes on the single-lens photographs and overhanging trees, etc., most stations were recovered with the idea of identification if possible as it would not be

known until arriving at the next station which would be the best to identify. In as much as an attempt was made to recover all along-shore stations anyways, not too much additional time was used in actual identification. It is believed that the plethora of identification was justified in taking all things into consideration.

Station ROCK, 1912 and FERRY ISLAND LIGHT, 1948 were recovered prior to receipt of the single-lens photographs covering this area and inspection and identification had to be made on the outer wing portion of Photo No. 29842. It is possible that better results would have resulted here had better coverage been available at the time of field inspection.

The three control stations identified on single-lens photograph M-383, 28 VV(2) fall outside of the reported 1951 field inspection area. The control data is attached to the photograph and is submitted to assist in controlling the radia plot of Area 3.

A breakdown of recovered and identified horizontal control stations was made for each area and have been listed alphabetically, showing the photograph on which identified and the method of identification. In most cases identification was made by the substitute station method. The above lists are attached to this report. A separate list has been attached showing control stations recovered but not identified, also indicating LOST stations. All alongshore control stations were searched for and have been reported on Form 526, RECOVERY NOTE, TRIANGULATION STATION. All control stations recovered and identified have been shown on the PROGRESS SKETCH for the project.

Peak stations were spot identified as outlined in paragraph 10. of the project instructions. Stations for which a horizontal position is available have been indicated by a large green triangle on the photographs and those without position but having only a single direction and vertical angle have been indicated by a large green circle. All peak stations identified have been listed by areas and are attached to this report. A concerted effort was made to identify as many of these inland stations as practicable depending upon the location of the ship while in an area and also weather conditions at the time. Additional inland stations were determined in Area 3 as called for in paragraph 11. of the project instructions. From necessity, the locations determined depended upon thin intersections. Cuts and vertical angles were taken to additional identified peaks in this area.

4. Vertical control.---Vertical control for contouring by stereoscopic instruments can be obtained from the identified alongshore and inland control stations for which elevations are available. No attempt was made to abstract all stations with elevations as this data is available on the geographic position lists. However, an abstract of new elevations determined was made and is attached to this report. The

vertical angles for stations for which no horizontal position has been determined can be obtained from the ABSTRACT OF ZENITH DISTANCES, Form 29, submitted with other triangulation data on 15 November 1951. Standard methods were used in locating additional peaks and obtaining elevations.

5. Contours and drainage.----

Inapplicable.

6. Woodland cover.----Woodland cover exists in almost the entire area of the project and in most cases is right to the waters' edge. See paragraph 2. of this report for further information regarding this subject.

7. Shoreline and alongshore features.----Shoreline inspection was accomplished in the entire area indicated by cross hatching on the attached PROGRESS SKETCH. The mean high-water line has been indicated on the photographs and no difficulty should be experienced by the compiler in its delineation. In a great many cases the high-water line is at the immediate bluff edge which is also the tree and grass or tundra line. In some cases the approximate low-water line is indicated on the photographs but generally only the limits of shoal or reef areas are shown. All shoreline inspection was done from a 20 foot dory by skirt-ing along the shore and also by actually going ashore at appropriate places where phototopographic stations were to be selected or horizontal control stations were being recovered and identified. It is believed that sufficient notes have been made to give the compiler a good idea of shoreline and alongshore features. However, it should be pointed out that a lot of shoreline information not specifically shown can be gleaned from reading the short descriptions of the photohydro stations inked directly on the face of the photographs. There are a few piers, landings and buildings alongshore in the area field inspected. These have been indicated on the photographs and all buildings considered worth delineating have been shown.

8. Offshore features.----An attempt was made to indicate all off-shore high-water rocks and rocks awash on the photographs. In some instances a 3 point sextant fix was taken on offshore rocks which could not be readily identified. These fixes have been shown directly on the photograph. In some cases where a spot of some nature appeared on the photograph but no actual feature was found a note was made (generally by the letters NE) indicating the feature or spot was not evident upon visiting the area. In a few instances notes were made requesting fur-

ther investigation by the hydrographer.

9. Landmarks and aids.---There are two buildings in the area inspected which have been submitted on Form 567 as LANDMARKS. Also, there are 3 fixed aids to navigation which have been submitted on Form 567, two having been previously located by triangulation and the third has been identified as a phototopographic station. Conditions at the time did not warrant locating the latter by triangulation. The above forms 567 accompany this report.

10. Boundaries, monuments and lines.---Generally speaking, this paragraph is inapplicable. However, a General Land Office marker was found on the most northerly extremity of Naked Island and was referenced to triangulation KELSO, 1949 and classified as topographic station USLM S2454 1939 (GLO). Form 524 has been submitted for this station.

11. Other control.---Recoverable topographic stations were established along the shoreline in accordance with paragraph 13. of the project instructions. In many parts of the project no topographic stations had to be established due to the plethora of triangulation stations. Practically all phototopographic stations established were marked stations. A complete listing of all phototopographic stations by areas is attached to this report indicating the photograph upon which the station was identified. Form 524 has been submitted for each station.

Photohydro stations were selected and identified for future hydrographic surveys. A particular effort was made to select stations that could be re-identified and used by the hydrographer. Each station was assigned a temporary field number and indicated on the photograph. From necessity, due to two inspectors working in close proximity to each other, oftentimes using the same photograph another day, or even parts of the same photograph the same day, the numbering system became somewhat jumbled but in no case is there a duplication of numbers on the same photograph. A short description of each photohydro station has been inked directly on the face of the photograph upon which it was pricked. In some instances where the shoreline was too badly shadowed by overhanging trees or bluff, photohydro stations could not be pricked; but generally, very good hydro station coverage is available. As a matter of fact in some cases where the shoreline is considerably broken there is almost a plethora of stations and it will be up to the discretion of the hydrographer which stations to eliminate.

Photohydro stations were selected for the entire area inspected. In the Naked Island group where graphic control had been executed in 1949 and hydrographic stations had been built but no hydrography done, an attempt was made to identify the same stations indicated on the copies of the graphic control surveys furnished. In a good many cases this was possible and they have been indicated on the photographs in the photohydro station descriptions. A number was assigned to the pricked photohydro station in the usual manner and then the graphic control survey station name was shown in parentheses to indicate that it was the same station originally located in 1949. In some cases the original whitewashes were still evident and in others a railroad spike was found driven into a crack in the rock approximately midway of where the whitewash had been.

12. Other interior features.---There are no bridges or known cable areas in the area field inspected, nor are there any airports or landing fields. Air transportation is all done by float planes in this area. The CAA station in the Dutch Group and the village at Chenega are the most outstanding habitations. Most of the other habitations indicated on the photographs are abandoned fox farms except for the one on the south side of Farry Island. Here the buildings are kept up and residence maintained the year around.

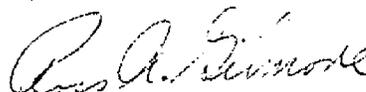
The village of Chenega has about 90 residents and has a Bureau of Indian Affairs school and post office (both in the same building). There is a Russian Orthodox Church here and a native store. There is a long narrow pier here which was in bad repair at the time of inspection. There are no marine facilities here but water can be obtained by hose at the end of the pier.

13. Geographic names.---A special report on geographic names has been prepared and was forwarded to the Washington Office on 14 November 1951.

14. Special reports and supplemental data.---In addition to the data contained in this report, the following data obtained during the 1951 season by the Ship LESTER JONES is pertinent to the photogrammetric work accomplished in Prince William Sound.

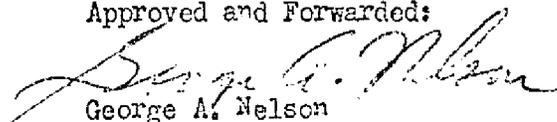
<u>TITLE</u>	<u>DATE FORWARDED TO WASHINGTON OFFICE</u>
SEASON'S REPORT	4 January 1952
BEACH REPORTS (3), Prince William Sound	18 August 1951

<u>TITLE</u>	<u>DATE FORWARDED TO WASHINGTON OFFICE</u>
BEACH REPORT (1), Prince William Sound	19 October 1951
COAST PILOT NOTES, Prince William Sound	10 October 1951
GEOGRAPHIC NAMES REPORT, Prince William Sound	14 November 1951
SKETCH to accompany GEOGRAPHIC NAMES REPORT	15 November 1951
TRIANGULATION RECORDS and SKETCH (see tran- smittal letter)	15 November 1951
AREA 1, Ph-39(49), FIELD DATA (see transmittal letter)	15 November 1951
AREAS 2 and 3, Ph-39(48), FIELD DATA (see transmittal letter)	15 January 1952
PROGRESS SKETCH, to accompany SEASON'S REPORT (tracing)	15 January 1952



Ross A. Gilmore
Commander, C&GS

Approved and Forwarded:



George A. Nelson
Cmdr., C&GS
Comdg., Ship LESTER JONES

PHOTGRAMMETRIC PLOT REPORT
Prince William Sound, Alaska
Project 6152
Surveys T-9536 and T-9538
May 1956

21. AREA COVERED

This report discusses the photogrammetric plot for shoreline surveys T-9536 and T-9538 which cover shoreline in Prince William Sound between latitudes $60^{\circ}15'$ and $60^{\circ}18'45''$ and longitude $147^{\circ}56'15''$ and $148^{\circ}06'30''$.

22. METHOD

Seven vinylite manuscripts with polyconic projections and grid lines were used in laying the plot. The grid lines were used in joining the manuscripts.

The photographs used were positve prints of C&GS single lens camera ratioed (3X) and USAF single lens ratioed (2X).

Vinylite hand templets were prepared adjusting to a master calibration templet to remove paper distortion.

The plot was begun in the south part of T-9536 where control was plentiful and where a junction was effected with a completed plot. The plot was extended conventionally to close on control to the northward on manuscripts T-9825, T-9826 and T-9534 (see control sketch).

23. ADEQUACY OF CONTROL

A tight plot was obtained for both maps. However, control in T-9538 fell near the single flight line on the east side of Chenega Island. Positions thus may not be accurate in a north-south direction above triangulation station Chenega 1907. All control within the surveys was held. Discrepancies outside the area of the surveys were not significant in affecting the accuracy of the surveys. See, also, Sub-heading 25.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

Another flight of photographs or a few nine-lens photographs would have strengthened the plot sufficiently to eliminate the weakness noted under Sub-heading 23, above. There was little overlap between flights. Otherwise, photography was adequate.

- 2 -

Positions in the southeast corner of T-9538 were obtained from rays of only two photographs.

SKETCH AND FORM N-2358-12, CONTROL STATIONS

Attached to this report.

Submitted by:

Robert L. Sugden
Robert L. Sugden
Cartographer

Approved:

Everett H. Ramey
Everett H. Ramey
Chief, Graphic Compilation Unit

PHOTODUPLICATION REPORT
 SURVEYS T-9536 and T-9538
 LIST OF CONTROL

T-9536

Village, 1933 - Sub. Station Held

T-9538

Squire, 1933 Held (one ray only)
 Chenega, 1907 (45?) - Sub. Station Held
 Czar, 1933 Held

T-9139 (West of Plot)

Shale, 1933 Held
 Nigger, 1933 0.5 mm, SE
 (two rays only)

T-9141 (Southwest of Plot)

Baron, 1933 - 0.3 mm, N (one ray
 only)
 Orion, 1933 - Sub. Station Held (one ray only)

T-9142 (South of Plot)

Sister Rock, 1907 0.3 mm, NW
 Pleiades, 1933 0.3 mm, N

T-9825 (Northwest of Plot)

Bend, 1933 - Sub. Station Held
 Scamp, 1933 - Sub. Station Held
 Grassy, 1933 - Sub. Station Held (one ray only)

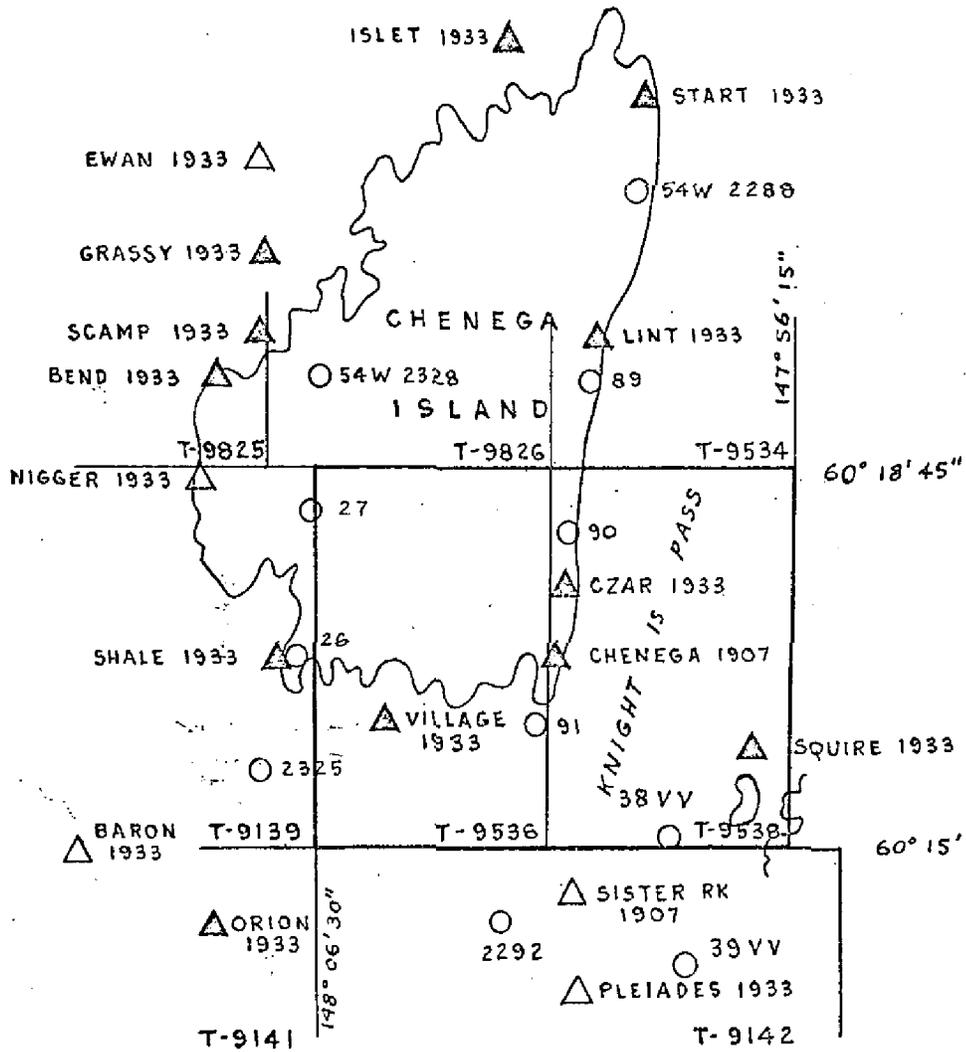
T-9826 (North of Plot)

Ewan, 1933* 1.4 mm, SW (one ray
 only)
 Islet, 1933 Held (one ray only)

T-9534 (North of Plot)

Lint, 1933 - Sub. Station Held
 Start, 1933 Held (one ray only)

*Very approximate identification on one photograph.



PHOTOGRAMMETRIC PLOT SKETCH
 PROJ. - G152 PRINCE WILLIAM SD.
 SCALE 1:10,000
 MAY 1956

- \triangle FIELD IDENTIFIED TRIANGULATION HELD
- \triangle FIELD IDENTIFIED TRIANGULATION NOT HELD
- \circ PHOTO CENTERS

COMPILATION REPORT (PRELIMINARY)

T-9538

This survey is classified as "Preliminary" because some features were not positioned accurately by the photogrammetric plot and one area was compiled with only one photograph (Sub-heading 31). Shoreline for these areas has been dashed on the manuscript.

31. DELINEATION:

Shoreline and foreshore features were delineated from stereoscopic interpretation and with the aid of field inspection photographs at 1:20,000 scale.

Features shown were first drawn on a piece of vinylite superimposed on the photograph with the most nearly true scale. Graphic methods were then used to compile and delineate the MHWL and to adjust the planimetry to manuscript scale by holding the compilation points of near-sea-level elevation.

Due to the dense wooded sections with overhanging trees along the shoreline, and shadows, it was necessary to dash (approximate MHWL) portions of the shoreline in the difficult areas.

NOTE:

Delineation of the Southeast section of manuscript T-9538 was compiled from (1) one photo, 38VV. The adjacent photos were sent to the field prior to compilation.* This portion of the manuscript, consequently, is weak.

** Only Photograph 38VV covered most of this area. etc*

32. CONTROL:

See Photogrammetric Plot Report which is filed as part of Descriptive Report T-9536.

33. SUPPLEMENTAL DATA: None.34. CONTOURS AND DRAINAGE:

Not applicable.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore features were delineated using field inspected photographs and office stereoscopic interpretation. Field inspection photographs were at 1:20000 scale which made identification more difficult and may have resulted in errors. See "NOTE" under Sub-heading 31.

- 2 -

36. OFFSHORE DETAILS:

Field inspection generalized some offshore rock areas. See "NOTE" under Sub-heading 31.

37. LANDMARKS AND AIDS: None.38. CONTROL FOR FUTURE SURVEYS:

There were thirty-seven (37) photo-hydro stations located on the manuscript from field inspected photographs by stereoscopic methods and descriptions furnished by the field party. Stations with accompanying descriptive notes are listed under Sub-heading 49.

^{One} ~~Two~~ recoverable topographic station^{was} ~~were~~ positioned by this survey and ^{is} ~~are~~ filed under T-number in the Photogrammetry Division. ~~They are~~ ^{It is} listed under Sub-heading 49.

39. JUNCTIONS:

North, T-9534; South, T-9142; East, no contemporary survey; West, T-9536.

40. HORIZONTAL AND VERTICAL ACCURACY:

See Photogrammetric Plot Report filed as part of Descriptive Report T-9536 and Sub-heading 31, above. Positions on survey are believed to be accurate within approximately one millimeter.

46. COMPARISON WITH EXISTING MAPS:

Seward (B-3) scale 1:63,360, Alaska 1952 USGS
T-2970, scale , 1909

47. COMPARISON WITH NAUTICAL CHARTS:

The manuscript was compared with Nautical Chart No. 8551, scale 1:200,000 published in 1909, corrected 5-31-54.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY: None.

ITEMS TO BE CARRIED FORWARD: See Sub-heading 40.

Approved by:

Everett H. Ramey
Everett H. Ramey

Submitted by:

Garnett S. Amburn
Garnett S. Amburn

SUPPLEMENT TO COMPILATION REPORT

T-9538

31. Delineation:

Reference: Compilation Instructions
Supp. 4 dated 23 October 1957

Because additional field inspection or new photography is not programmed for this area, the manuscript has been corrected to its final form. This involved corrections in the shoreline features on Chenega Island. Segments of shoreline shown as approximate have been revised to definite by analogy with similar areas.

The areas adjacent to Squire Island were compiled with only one photograph and remain as approximate on this final compilation.


Everett H. Ramey, Chief
Graphic Compilation Unit
14 November 1957

October 19, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9538

Chenega Island

Chenega Point

Kake Cove

Knight Island Passage

Point of Rocks

Squire Island

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

SHORELINE SURVEY - T-9538

49. NOTES TO THE HYDROGRAPHER:

Photo-hydro stations:

<u>No.</u>	<u>Description and Remarks</u>
381	White spotted islet (light colored rock) 12' with brush atop. Pricking questionable.
382	End of semi-detached grey rock point with single tree.
383	Outer part of semi-detached point with a tree and a bare top.
384	Flat white-topped (2') rock.
385	End of low ledge (4').
386	Blunt V corner point of rock bluff just south of low nose-like point.
387	(CRP) sign of rock shoreline anchor point for floating trap.
388	Projecting point of shoreline just north of slide area (station point has a projecting tree).
389	Knife-like point of rock with dead tree at top corner point.
390	Vertical face at spotty white covered point of bluff with several dead trees above.
391	South end of low white double ended point just out from bushy tree (there is a low ledge to south and a dead projecting snag to north).
392	Low point with several stumps. Field identification questionable.
393	Low ledge point with large stump to south.
394	Outermost point at HWL.
395	(5') Rock with large bleached overturned stump.
396	(5') Rock (highest of cluster of white tops off point).
397	Large dead tree, slightly projecting.
398	Corner point of shoreline with large dead stump.
399	End of islet at old snag.
400	Tree at corner point.

- 401 Tree in bight at HWL.
- 402 Flat corner of grey rock ledge and tree.
- 535 White snag.
- 539 Top of rock (1).
- 541 End of center hump (3).
- 544 Highest part of rock (6).
- 545 Overturned stump on top of rock (8)
- 546 Dead tree lying on point (3)
- 547 Highest part of rock (7)
- 554 Top center of rock (3)
- 555 Large white stump (6)
- 556 Highest part of rock (AW)
- 557 Seaward snag on top of rock (6)
- 558 Highest part of light-colored rock (5)
- 559 White snag on extremity of point (6)

Topographic Stations: LARD 1951

Notes to the Hydrographer for T-9536 and T-9538

Manuscripts for both T-9536 and T-9538 were corrected subsequent to the time of hydrographic surveys in 1957. This involved a few changes in shoreline features and no change in hydro station positions. After final office review, these surveys will be registered as shoreline surveys.

Corrections on manuscript T-9536 were added in red ink to the vinylite impression used by the field party. This red vinylite impression can be used in processing the hydrographic surveys.

Corrections on manuscript T-9538 were made only in the area of Chamega Island and involved small changes in shoreline. Much approximate shoreline was changed to definite shoreline. The area at Squire Island was compiled as approximate and must remain as such because no new photography is programmed for this area. A copy of this revised manuscript is to be used for processing hydrographic surveys.

Everett N. Ramey

Everett N. Ramey, Chief
Graphic Compilation Unit

FORM 1002(T-2) PHOTOGAMMETRIC OFFICE REVIEW

MAP T-

PROJECT PH-152

No Form 1002(T-2) was available at the time of final review and none is bound with this Descriptive Report.

FIELD EDIT REPORT

MAP T-

PROJECT PH-152

No record of field edit was available at the time of final review; therefore, no Field Edit Report is bound with this Descriptive Report.

REVIEW REPORT T-9538

SHORELINE

DECEMBER 4, 1970

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, (pages 27 through 29), 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 T-4810, scale 1:20,000, dated September-October 1933 (Chenega Island), and T-2970, scale 1:20,000, dated 1909 (Squire Island). Differences between these surveys and T-9538 are shown in blue on the comparison print.

Several rocks awash shown on Survey T-2970 in the area adjacent to Squire Island are not visible on the photograph.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with U.S.G.S. Quadrangle SEWARD (B-3), ALASKA, scale 1:63,360, dated 1950. Differences between this map and T-9538 are shown in brown on the comparison print.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with Survey H-8388, scale 1:12,500, dated 1956. The vicinity of Kake Cove and Chenega Point was the only part of T-9538 covered by H-8388. Only one difference was noted-- it is shown in purple on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8515, scale 1:80,000, 10th edition, dated October 28, 1969. Chart 8524, scale 1:20,000, 7th edition, dated July 11, 1960 and revised January 17, 1970, was projected onto the comparison print. Differences between these charts and T-9538 are shown in red on the comparison print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with Job Instructions, Bureau requirements, and the National Standards for Map Accuracy. No accuracy tests were run in the field.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer
December 4, 1970

Approved:

Allen L. Powell

Allen L. Powell, RADM, NOAA
Director, Atlantic Marine Center

Approved:

Charles Tharr

Chief, Photogrammetric Branch

Jack E. Guth

Chief, Photogrammetry Division

T-0238

60° 18' 45"

148° 01' 52.5"

148° 01' 30"

148° 01' 00"

λ = 440,000

60° 18' 45"

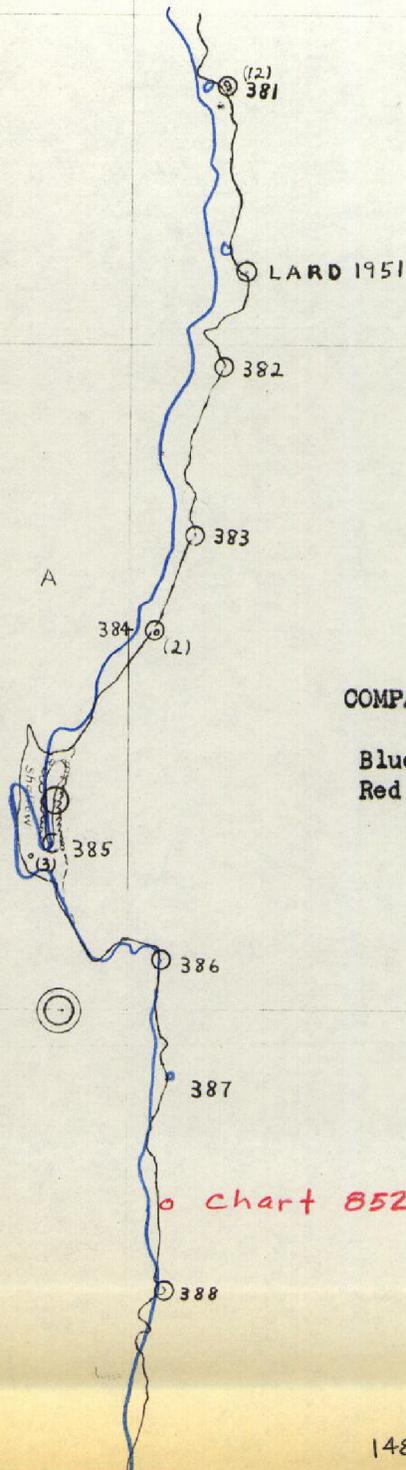
γ = 6,686,000

60° 18' 30"

18' 30"

C H E N E G A

I S L A N D



COMPARISON PRINT

Blue = T-4810
Red = Chart 8524

60° 18' 00"

54 W 2290

60° 18' 00"

148° 01' 30"

148° 00' 30"

148° 01' 30"

148° 00' 30"

17' 30"

60° 17' 00"

60° 17' 00"

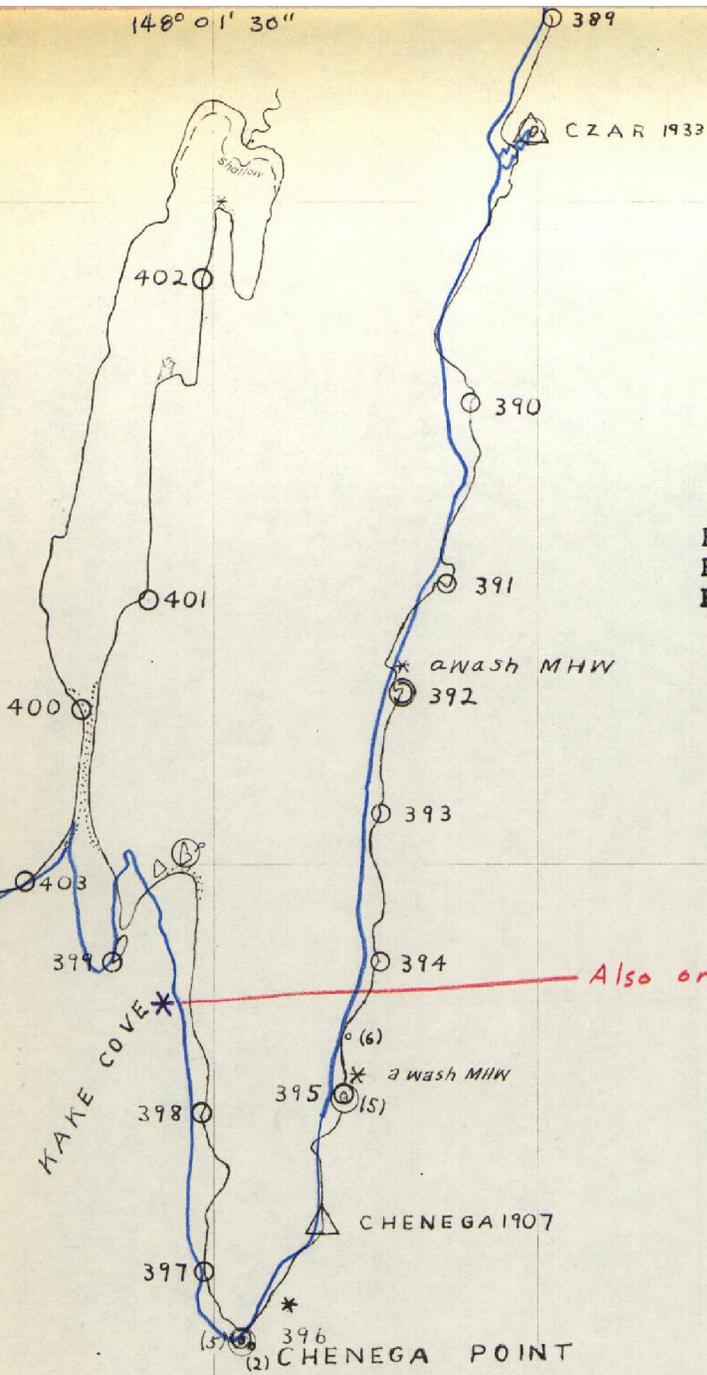
JOINS SURVEY NO. T-9536

KAKE COVE *

Also on Chart 8515

COMPARISON PRINT

- Blue = T-4810
- Red = Chart 8515
- Purple = H-8388



54 W 2291

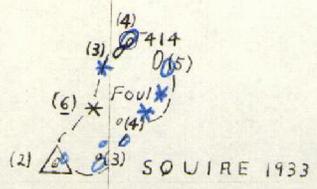
148° 01' 30"

148° 01' 00"

148° 00' 00"

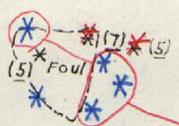
16' 30"

Also on SEWARD (B-3)
and Chart 8524



COMPARISON PRINT

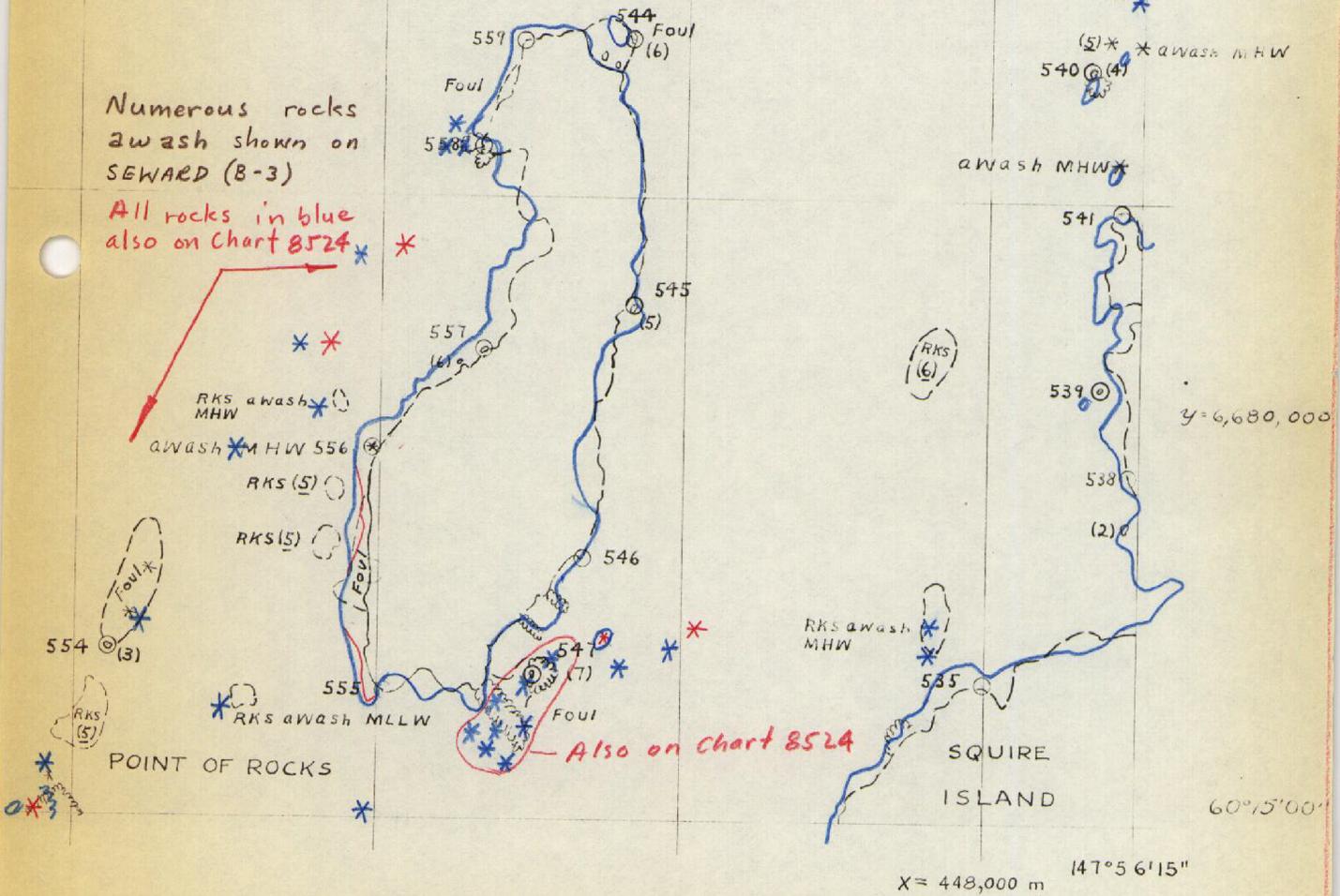
- Blue = T-2970
- Red = Chart 8524
- Brown = SEWARD (B-3)



Also on Chart 8524

Numerous rocks
awash shown on
SEWARD (B-3)

All rocks in blue
also on Chart 8524



station of third-order or higher accuracy
water line
approximate mean high water.
methods, from aerial photographs
July 1950 July 1954
ent 1951

SHORELINE MANUSCRIPT
T-9538
SCALE: 1:10,000
ALASKA
PRINCE WILLIAM SOUND