

9139

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-9139

## LOCALITY

State ALASKAGeneral locality PRINCE WILLIAM SOUNDLocality VERDANT ISLAND1950-57

## CHIEF OF PARTY

FIELD: G. A. Nelson

OFFICE: L. W. Swanson

## LIBRARY &amp; ARCHIVES

DATE \_\_\_\_\_

## DATA RECORD

T - 9139

Project No. (II): PH-152 (office) )  
 PH-39(48) )  
 CS-277 ) Field  
 Quadrangle Name (IV): VERDANT ISLAND

Field Office (II): Ship LESTER JONES Chief of Party: George A. Nelson

Photogrammetric Office (III): Washington, D. C. Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III):  
 16 March 1951 (field)  
 31 Dec. 1954 (office) 731 mkl  
 11 Feb. 1955 (office) 732 mkl

Copy filed in Division of  
 Photogrammetry (IV)  
 Office files

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): JUN 22 1955 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): BARON, 1933

Lat.: 60-14-52.717 1631.6m.  
(225.4)Long.: 148-10-51.671 794.9m.  
(128.2)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  
T-9139

Field Inspection by (II): Ross A. Gilmore  
David F. Romero

Date: 30 June 1951  
to 24 Sept. 1951

Planetable contouring by (II): —

Date:

Completion Surveys by (II): —

Date:

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

8-27-51; 8-29-51; 8-31-51; 9-11-51; 9-18-51; 9-21-51; 9-12-51  
Field inspection of photographs

Projection and Grids ruled by (IV): A. Riley

Date: 1-4-55

Projection and Grids checked by (IV): H. D. Wolfe

Date: 1-10-55

Control plotted by (III): G. S. Amburn  
B. Hale

Date: April 1955

Control checked by (III):

Date: April 1955

Radial Plot or Stereoscopic S. G. Blankenbaker and  
Control extension by (III): R. J. French

Date: May 1955

Planimetry  
Stereoscopic Instrument compilation (III): —  
Contours

Date:

Date:

Manuscript delineated by (III): G. Amburn

Date: June 1955  
Nov 1957

Photogrammetric Office Review by (III): R. J. French  
(Partial): E. H. Ramey

Date: June 1955  
Nov 1957

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

Date:

Camera (kind or source) (III):

USC&GS Single Lens "W" Camera, 6" focal length  
PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
54-W-2434 thru 2437	26 July 1954	14:14-14:16	1:10,000 (Ratio)	4.1' above MLLW
54-W-2386 thru 2390	"	13:37-13:39	1:10,000 (Ratio)	4.8' " "
54-W-2325 thru 2328	"	13:02-13:03	1:10,000 (Ratio)	5.4' " "

## Field Inspection:

23VV thru 25VV M383	11 Aug. 1950	1:40,000
76VV thru 78VV M383	11 Aug. 1950	1:40,000

Tide (III)

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

Atlantic Marine Center  
~~Washington Office~~ Review by (IV): C. H. Bishop

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): —

Shoreline (More than 200 meters to opposite shore) (III): 4

Shoreline (Less than 200 meters to opposite shore) (III): —

Control Leveling - Miles (II): —

Number of Triangulation Stations searched for (II): —

Recovered: — Identified: 3

Number of BMs searched for (II):

Recovered: Identified:

Number of Recoverable Photo Stations established (III): 5

Number of Temporary Photo Hydro Stations established (III): 68

Remarks:

\*.94 ratio of ranges suggested by Tides and Currents for sheets T-9138 thru T-9145 (excepting Hogg Bay Sub-Station ratio for T-9143).

Diurnal		
Ratio of Ranges	Mean Range	Spring Range
1.0	10	12.4
*.94	9.2	11.6

Date: 12-15-70

Date:

Date:

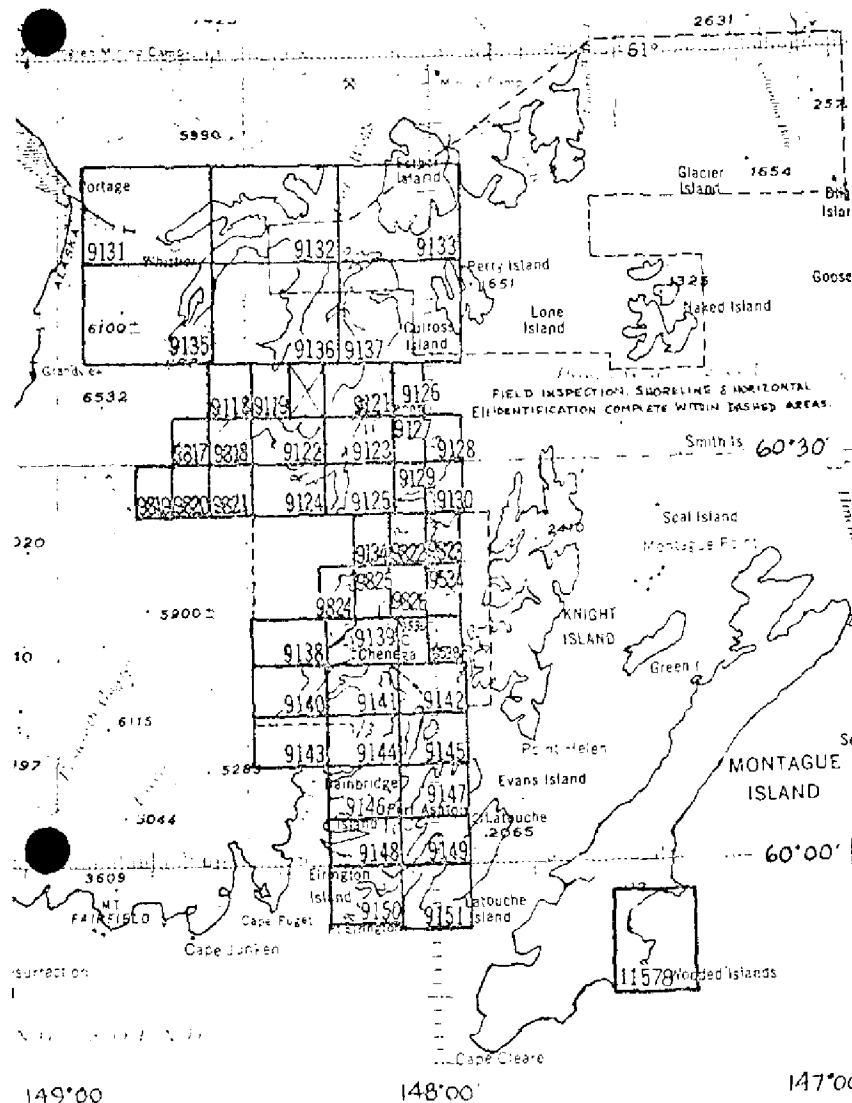
Date:



T-9139

COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline compiled	June 1955	Superseded
New radial plot, field edit applied, manuscript re-compiled	Nov. 1957	
Final review	Dec. 1970	

## Prince William Sound, Alaska



OFFICIAL MILEAGE FOR COST ACCOUNT  
 LIN. MI. AREA  
 SHEET NO. SHORELINE MILES

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	8
9534	6	4
9536	6	6
9538	4	1
9817	9	10
9818	11	5
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-9139

Several years have elapsed between the compilation and final review of this map. Only three of the compilation photographs were available at the review stage. The compilation record was 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-9139 contains the confluence of Icy Bay and Dangerous Passage.

Compilation was by radial plot, using ratio prints of 1:30,000 scale photographs taken in July, 1954. Field inspection was done on 1:20,000 scale ratio prints of 1:40,000 scale photography taken by the Air Force in August, 1950.

Field edit was performed in conjunction with hydrography in 1957. The mean high water line was corrected by planetable in some places and indicated on the photographs in others. In the fall of 1957 a new radial plot was run and the manuscript was re-compiled, using the additional data.

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 11 minutes 15 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-lens 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 PERRY 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 their 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 skirting 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 offshore 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 Parry 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*  
 Ross A. Gilmore  
 Commander, C&GS

Approved and Forwarded:

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

PH-152  
PHOTOCRASTIC PLOT REPORT  
PRINCE WILLIAM SOUND, ALASKA  
Scale 1:10,000

21. AREA COVERED:

The radial plot embraces eight sheets in the vicinity of Knight Island Passage, Whale Bay, Chenega Island, and Icy Bay on the west side of Prince William Sound:

T-9138, T-9139, T-9140, T-9141, T-9142, T-9143, T-9144 and T-9145

22. METHOD:

The radial plot was laid on vinylite manuscripts on which the polyconic projection and the UTM grid were ruled. The eight sheets and the adjoining tabs and manuscripts (T-9146 and T-9147) were joined together in one unit using the grids for junctioning. The attached sketch shows the layout and photographs used and the distribution and density of horizontal control. Ratio positope paper prints of 3X enlargement from the "W" camera were used on the western part of the plot, and Air Force photography of 4X enlargement (positope) were used on the eastern side where "W" coverage was not available.

The photographs were prepared in the conventional manner choosing shoreline pass points where possible at intervals of about 3 inches and points in the interior at a density of about 6 inches.

Vinylite templet stock was used throughout, and a calibration templet was used to correct for paper distortion errors.

Rays have been drawn on the photographs through those pass points that were used in the radial plot. Certain of the photo-hydro points were pricked as pass point control, and only those that have rays drawn through the point on the photographs were in the main radial plot, and were the points held to in raying in additional detail and photo-hydro points.

The compiler's judgement was used in locating a map position for all the remaining photo-hydros and detail points. A combination of (1) drawing the remaining rays on the templates and relaying them into the plot, (2) graphic manual intersection, and (3) scale check where expedient, were the techniques used to locate the remaining points. All points were located prior to compilation of the shoreline.

Inasmuch as the field identification of control was done on 1:20,000 by the USC&GS on Air Force photography, and on 1:40,000 by the 30th Engineers, a reasonable tolerance was expected in holding to control in the final closure and adjustment. The attached sketch and tabulated list of stations with the resultant tolerances show the relative accuracy obtained in the 1:10,000 plot.

In general, better closures were obtained where the sub-point method of recovery was used. Almost without exception, the 30th Engineers pricked the hole station direct, which allowed the radial plot considerable discretion in the closure and adjustment. Most of the stations held well within an accepted tolerance of not in excess of  $\pm 0.5$  mm. of true position. Manuscripts T-9139, T-9141 and T-9144 are perhaps the most accurate in position. T-9138, T-9140, T-9142 and T-9143 are next best in horizontal position, and T-9145 is considered the least accurate of the entire group.

The plot was drilled through the various thicknesses of templates through the manuscripts, and the points were circled in red ink where the position was determined by three or more cuts, green if by two cuts only.

This plot should be verified on the east and west sides upon receipt of further field identified control, and it is advisable to use the stereoplani-graph as the bridging instrument since bad tilts and crab in the flight pattern are noticeably evident.

#### 23. ADEQUACY OF CONTROL:

Horizontal control is adequate for those sheets in the middle of the plot, but more accurately identified control is needed on both the east and west sides, and a better plot is anticipated when the field identified control becomes available. Trouble was encountered in the extreme W and NW sides of the plot on T-9138 in Nassau Fiord and on T-9140 in Icy Bay.

It is suggested that topographic stations 418 (MIND, 1951), and 420 (SAND, 1951) in Nassau Fiord, and either 422 (IDOL, 1951) or 423 (JOWL, 1951) in Icy Bay be located by triangulation methods to give a comparison with the existing preliminary plot positions and thereby justify whether a new radial plot should be laid for smooth sheet plotting. No. 177 (Nassau, 1933) did not hold and the identification is considered to be in error. It is requested that it be re-identified for subsequent work.

#### 24. SUPPLEMENTAL DATA:

T-4308	1:20,000	1927
T-4810	1:20,000	1933
T-4808	1:20,000	1933
T-3093	1:20,000	1910

#### 25. PHOTOGRAPHY:

The W camera coverage is better in general as concerns definition and quality of detail than is the Air Force photography on the east side of sheets T-9142 and T-9145. Tree overhang and displacement, and resulting shadows are factors which hindered the accurate recovery of control alongshore,

and will necessitate compiling much shoreline with the dashed line approximate high water line symbol. Picking a control point direct is subject to inaccuracies under the circumstances this photography presents, and hence the plot is weak in the areas mentioned in 23 above. The scale was not good on the "W" 3X enlargements, but was surprisingly good on the 4X Air Force enlargements.

Flight lines should have followed the general NE-SW alignment of these islands in order to afford the radial plot stronger azimuth transfers across the more narrow straits, and thus avoid as many water azimuths as possible.

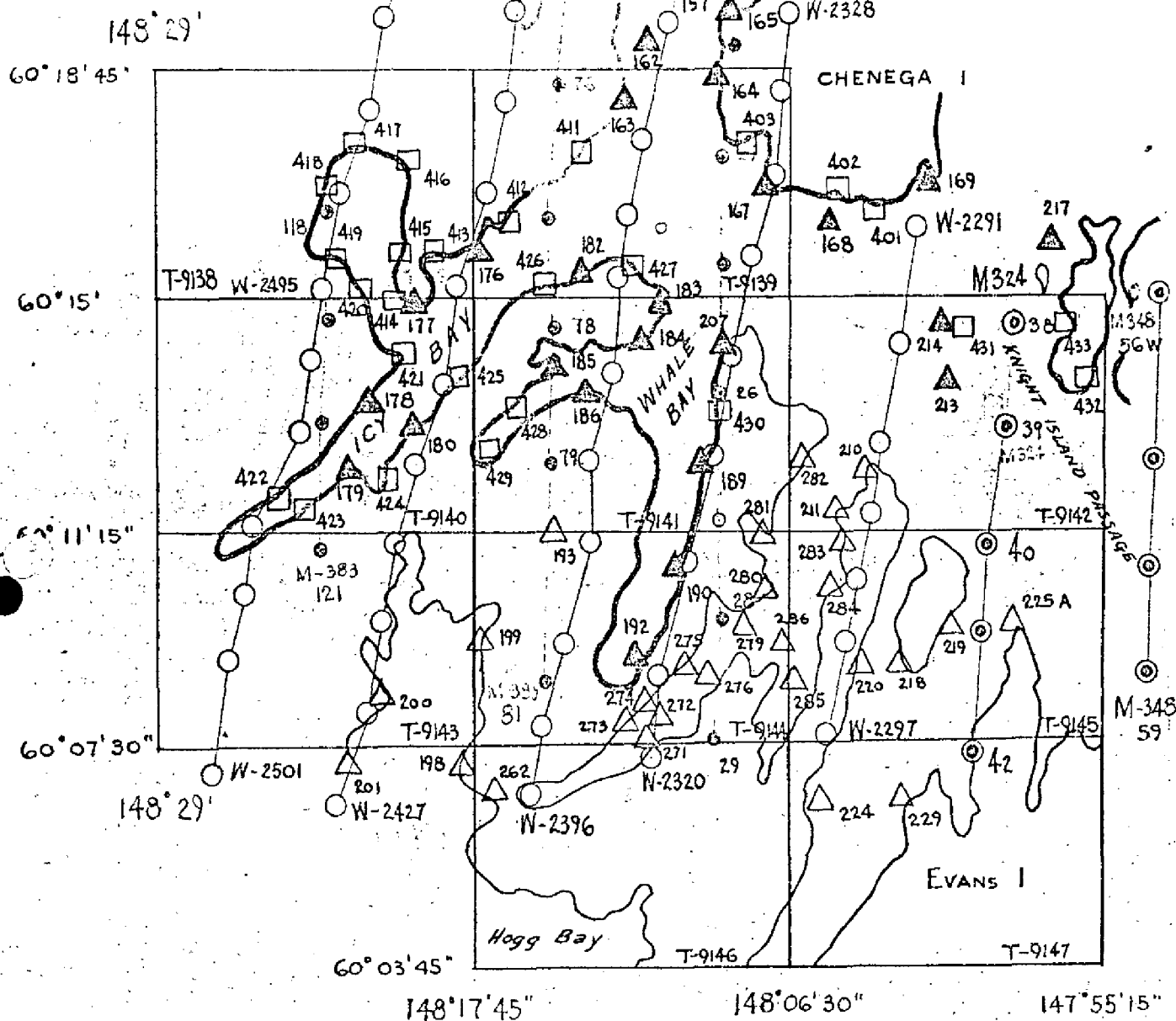
Approved by:

Respectfully submitted:

---

S. V Griffith  
Chief, Cartographic Branch

*Roscoe J. French*  
\_\_\_\_\_  
Roscoe J. French  
Supervisory Cartographer



RADIAL PLOT SKETCH PH 152

- 1954 W Ratio prints ( 3 x to 1 : 10,000 )
- ⊙ Air Force ( 4x )
- ⊙ Field Inspection Air Force photos 1 : 20,000
- ▲ Horizontal control field inspected by US CGCS 1 : 20,000
- △ Horizontal control field inspected by 30 th Egr. 1 : 40,000
- Topographic stations located by radial plot

Field inspected shoreline 1 : 20,000 Air Force photography photo hydr

Includes

Pg-152

HORIZONTAL CONTROL STATIONS IN RADIAL PLOT No. 2 (1:10,000)  
 T-9133, T-9139, T-9140, T-9141, T-9142, T-9143, T-9144, T-9145

157 Jackal, 1933 Sub. pt. 0.2mm.  
 160 Wagon, 1933 0.6mm.  
 161 Precip, 1933 Sub. pt. Held  
 162 Cener, 1933 0.6mm.  
 163 Icy, 1933 Sub. pt. Held  
 164 Nigger, 1933 Held  
 165 Bend, 1933 Sub. pt. Held  
 167 Shale, 1933 Held  
 168 Village, 1933 Sub. pt. Held  
 169 Chenega, 1907 Sub. pt. Held  
 176 Duke, 1933 Held  
 177 Nassau, 1933 1.0 mm.  
 178 Fiord, 1933 Sub. pt. A 0.2mm.  
 179 Thor, 1933 Held  
 180 Zeus, 1933 0.2mm.  
 183 Baron, 1933 0.2mm.  
 184 Belt, 1933 Sub. pt. Held  
 185 Olga, 1933 Held  
 186 Tina, 1933 Sub. pt. Held  
 189 Vega, 1933 Sub. pt. Held  
 190 Bebe, 1933 Sub. pt. Held  
 192 Kit, 1933 Sub. pt. 1.0mm. (Held to home Station)  
 198 Wat, 1927 Held  
 199 Goat, 1927 Held  
 200 Brid, 1927 Held  
 201 Glac, 1927 0.2mm.  
 207 Orion, 1933 Sub. pt. 0.2mm.  
 210 Bain, 1933 2.4mm.  
 211 Tate, 1948 0.3mm.  
 213 Pleiades, 1933 Held  
 214 Sister Rock, 1907 Held  
 215 South, 1907 Held  
 217 Squire, 1933 Held  
 218 Rot, 1910 0.4mm.  
 219 Ship, 1910 0.2mm.  
 220 Horn, 1910 0.8mm.  
 224 Dad, 1910 Held  
 225A Fas, 1910 Held  
 229 Guguak, 1910  
 262 Hydro, 1948  
 271 Plain, 1948 Held  
 272 Cross, 1948 0.2mm.

273 Clear, 1948 Held  
274 Half, 1948 0.2mm.  
275 Pass, 1948 Thin cuts  
276 Age, 1948 Held  
279 Ruth, 1948 Held  
280 Nub, 1948 Sub. pt. Held  
281 Low, 1948 Held  
282 Sage, 1948 Held  
283 Babe, 1948 0.3mm.  
284 Dana, 1948 Held  
285 Inner, 1948 0.2mm.  
286 Sip, 1948 Held

NOTE: All stations that have sub-pts. listed were field identified by USC&GS on 1:20,000 Air Force photography. All others were field identified direct by 30th Engineers on 1:40,000 photographs.



PB-152

TOPOGRAPHIC STATIONS LOCATED BY RADIAL PLOT No. 2 (1:10,000)  
Field identified on 1:20,000 Air Force photography

401 RICH, 1951	421 IBIS, 1951
402 NEAT, 1951	422 IDOL, 1951
403 OATH, 1951	423 JOWL, 1951
411 GARB, 1951	424 TRAM, 1951
412 PULL, 1951	425 DOLT, 1951
413 QUAD, 1951	426 NIPY, 1951
414 YANK, 1951	427 PAWN, 1951
415 WILL, 1951	428 KIVA, 1951
416 LULU, 1951	429 FINI, 1951
417 EDDY, 1951	430 WINE, 1951
418 MIND, 1951	431 PLEIADES I. LT., 1955
419 ULNA, 1951	432 NILE, 1951
420 SAND, 1951	433 ZEST, 1951

Project HJ-152  
Photogrammetric Plot Report  
(T-9138 through T-9147) Supplement I  
December 1957

21. Area Covered:

This radial plot covers three sheets T-9138, T-9139, T-9140 and the western limits of T-9137 and T-9141. The plot was originally laid in May 1955 and covered eight T-sheets. The sheets covered in this plot comprise the western end of the original plot. (See plot sketch)

22. Method:

Additional control was established and identified in 1957 by the field party in the above-mentioned area. This plot was begun in the area to the east (Whale Bay area), which was well-controlled originally. It was extended northwesterly into the area of the new control. The plot was laid on the original manuscripts utilizing the same templates with the additional control added.

The new control established a rigid plot for the area with good closures on control pass points and azimuths. In general there was a shift in datum of 1.0 mm N-W in this area because of the stronger fix in datum obtainable by the new control. (See item 23 - control below)

23. Adequacy of Control:

As noted under item 23 of the original plot report, trouble was encountered in the area of this plot. With the additional control established in 1957, an accurate fix in datum was obtained. Horizontal control stations used to control this plot are shown on the attached sketch.

Triangulation station "ZEUS 1933" was reported as held in the prior plot. The sub. station was identified on two photographs and erroneously held in the plot to the home station. The sub. station is 2.3 mm S of the home station, and was held in this plot. This will effect a shift in detail of approximately 2 mm in S direction.

Report as discussed below all control was held in this plot:

"1" 1957 -- Sub. Sta. 1 held. Sub. Sta. 2 was missed by 0.4 mm but was reported as missed by 0.2 mm in the original plot.

"1" 1957 -- Missed by 1.0 mm in original plot; missed by 0.5 mm in this plot. Only two radials on station. Other control held nearby.

ULNA 1951-1957 -- (topographic station - position established by theodolite directions) 0.5 mm S of plotted position, two radials only. Four triangulation stations held nearby.

JOWL 1951-1957 (topographic station - position established by short traverse) 0.6 mm NE of plotted position. A point on the photographs that fits the description falls 0.6<sup>mm</sup> S of the point used in the plot. This point would have held in the plot. Other triangulation stations held nearby.

24. Supplemental Data:

Inapplicable (see original report).

25. Photography:

See original plot report.

Submitted by:

*J. P. Battley Jr.*

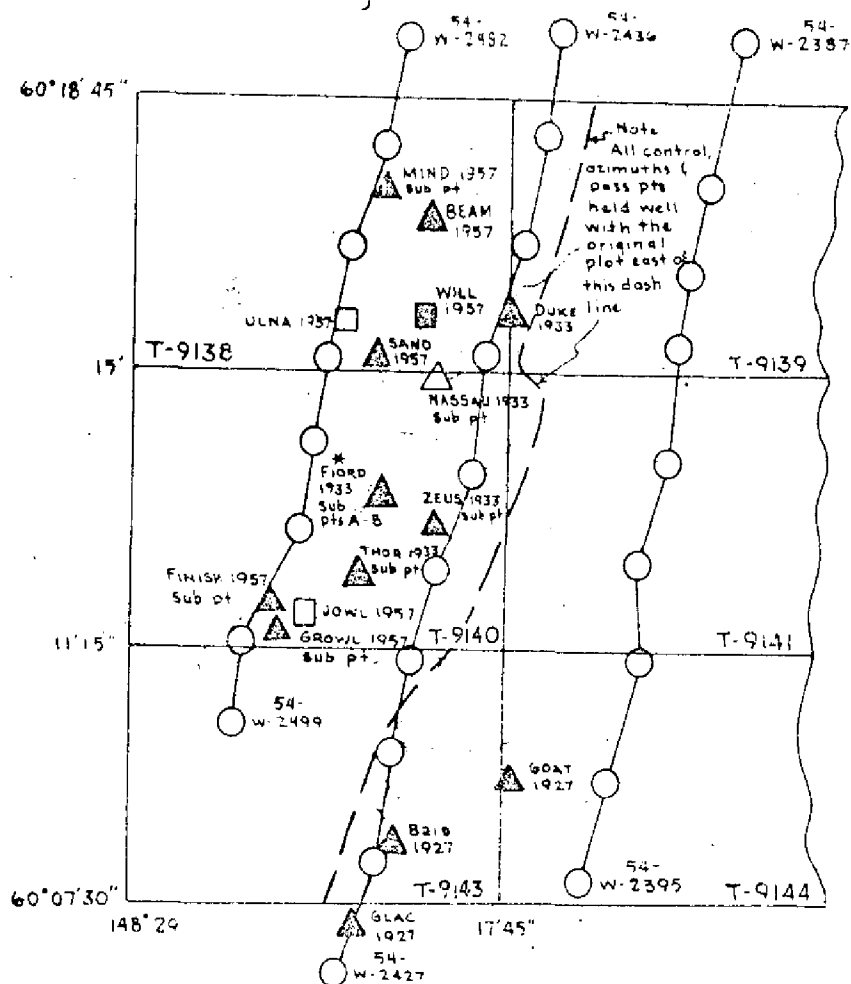
J. P. Battley, Jr.  
Cartographer

Approved by:

*E. H. Ramey*

E. H. Ramey, Chief  
Graphic Compilation

## Project Ph-152



November 1957

## Radial Plot Sketch

(Supplement #1 to original plot)

- ▲ ... indicates control held in the plot (topographic or triangulation)  
 □△ ... indicates control not held  
 \* Fiord sub pt B "Held", sub pt A fell 0.4 n.m S of the plotted position

MAP T- 9139

PROJECT NO. PH-152

SCALE OF MAP 1:10,000

SCALE FACTOR 1.0

[illegible]

1 FT. = 3048006 METERS

COMPUTED BY: C. O. DeMarr

DATE 18 March 1955

H. J. Rau  
CHECKED BY: S. G. Plankenbaker

May 11, 1955 M-2388-12  
DATE 7 April 1955

24

MAP T. 9139 PROJECT NO. PH-152 SCALE OF MAP 1:10,000 SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
Village, 1933	VI 154	N.A. 1927	60-16-11.863	E of T-9139			367.2	(1489.8)	
Village Sub.Sta.		"	148-04-58.794	E of T-9139			903.9	(18.5)	
			60-16				362.8		
			148-04				892.2		
Shale, 1933	VI 154	"	60-16-43.276				1339.4	(517.6)	
			148-07-29.666				456.0	(466.2)	
Bight, 1933	VI 154	"	60-17-45.468				1407.2	(449.8)	
			148-08-46.563				715.3	(206.5)	
Elev. 3 ft. Nigger, 1933	VI 155	"	60-18-24.639				762.6	(1094.4)	
			148-09-12.959				199.0	(722.4)	
Icy, 1933	VI 155	"	60-18-02.964				91.7	(1765.3)	
			148-12-26.312				404.2	(517.4)	
Icy Sub. Sta.		"	60-18				102.5		
			148-12				407.4		
Center, 1933	VI 155	"	60-19-14.985	N of T-9139			463.8	(1393.2)	
			148-11-25.726				394.9	(526.1)	
Arbor, 1933	VI 159	"	60-16-47.243				1462.2	(394.8)	
			148-14-51.664				794.1	(128.1)	
									2
									5

MAP T- 9139 PROJECT NO. PH-152 SCALE OF MAP 1:10,000 SCALE FACTOR 1.0

[illegible]



COMPILATION REPORT  
T-9139

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. *(These areas revised by 1957 field work and compilation) EHK*

32. CONTROL:

Three USC&GS control stations were recovered and held in the radial plot. Other control in the area (T-9139) was not recovered or office identified. (See photogrammetric plot for summary of control filed with T-9144.)

33. SUPPLEMENTAL DATA:

Planetable Topographic Survey sheet No. 4810 dated Sept. Oct. 1933.

The field inspection report is filed with T-9144.

34. CONTOURS AND DRAINAGE:

Not applicable.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore features were delineated from field inspected photographs and office stereoscopic interpretation. The field inspection is less than desired for 1:10,000 work, but there are no serious inadequacies apparent. The approximate low water symbol is used beyond the field inspection annotations, but is justified by analogy with similar field inspected areas. The shallow lines are largely from office interpretation.

36. OFFSHORE DETAILS:

No unusual problems were encountered in compiling offshore details.

37. LANDMARKS AND AIDS:

None.



- 2 -

38. CONTROL FOR FUTURE SURVEYS:

There were sixty-eight (68) photo-hydro stations located on the manuscript from field inspected photographs by stereoscopic methods and descriptions furnished by the field party.

Five (5) topographic stations established by the field party were located by the radial plot. Forms 524 are in Photogrammetry Office files.

39. JUNCTIONS:

North, ~~no contemporary survey~~ <sup>T-9825 CMB.</sup>; south, T-9141; east, no contemporary survey; west, T-9138.

40. HORIZONTAL AND VERTICAL ACCURACY:

The accuracy of this manuscript (T-9139) conforms with standard map accuracy and supersedes previous surveys of the area.

Vertical accuracy is inapplicable.

46. COMPARISON WITH EXISTING MAPS:

Seward (B-4), 1:63,360, Alaska 1952 USGS

This survey supersedes the USGS quadrangle.

47. COMPARISON WITH NAUTICAL CHARTS:

The manuscript was compared with Nautical Charts Nos.: 8551, scale 1:200,000, published in 1909, corrected 5-31-54; 8528, scale 1:81436, published 2-27-30, corrected 8-27-51; and 8515, scale 1:81436, published Nov. 1935, corrected 3-24-52.

This manuscript supersedes previously charted shoreline.

48. GEOGRAPHIC NAME LIST:

Dangerous Passage  
Icy Bay  
Verdant Island

Approved by:

Submitted by:

*E. N. Maki for R.J.F.*  
Roscoe J. French  
Supervisory Cartographer

*Garnett S. Amburn*  
Garnett S. Amburn  
Cartographic Photogrammetric Aid

## SUPPLEMENT TO COMPILATION REPORT

T-~~914~~3 9139  
November 1957

31. Delineation:

Reference: Compilation Instructions-Supp.4,  
Prince William Sound, Alaska,  
dated 23 October 1957

Manuscript T-9139 was revised in October-November 1957 to incorporate new planetable locations of segments of shoreline, a shift in datum in the area of Icy Bay and new hydrographic stations positions obtained by the 1957 radial plot.

The shift in datum is discussed in the Photogrammetric Plot Report Supp. 1, filed as part of the Descriptive Report for T-9144. This shift in detailing was effected by holding the pass points on the vinylite impression of the previous compilation to the new positions of the manuscript and tracing the detail.

New positions for photo-hydro stations which resulted from the shift in datum were added to the vinylite impression of the original manuscript for use in processing hydrographic surveys.

The manuscript is now in final form but subject to change by verification or final office review.

Garnett S. Amburn

*Garnett S. Amburn*

October 19, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9139

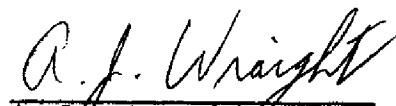
Chenega Island

Dangerous Passage

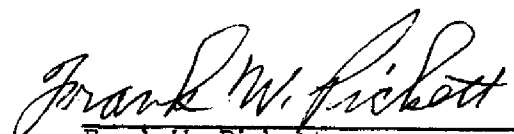
Icy Bay

Verdant Island

Approved by:

  
A. Joseph Wraight  
Chief Geographer

Prepared by:

  
Frank W. Pickett  
Cartographic Technician



49. NOTES TO THE HYDROGRAPHER: - T-9139

Sixty-eight (68) photo-hydro stations were located on the manuscript from descriptions and the 1951 field inspection on 1:20,000 scale photographs.

Many more photo hydros were identified in the field than are here located. The office compiler has located only those that can be most accurately located from the pricking and the description furnished and upon which the hydrographer can assume are most reliable in map position.

Those pass points and photo hydros that were located during the radial line plot have rays drawn through the points on the office photographs. The hydrographer can use them with confidence in the use of instructions No. 45 in raying in additional photo hydro control, or in holding scale where practical and dropping the points for additional control. An attempt was made to prick pass points of near sea level elevation for use in compilation and for the use of the hydrographer for holding scale.

007. Triangular pointed (4) black rock just off nob point.

008. High point of light-colored top (5) rock.

009. High point (dark green moss top) (5) rock.

010. Very small spruce at top of white spotted V corner.

012. Corner point of white spotted rock bluff with a (2) bench in front (there is a dead snag and stump just to south).

013. Northeasterly of two points (station has projecting half-dead tree).

167. (1) Rock off islet.

169. Large bleached snag on islet.

171. Two white rocks on top of black rock ledge point.

173. (7') Rock with light colored top.

331. White-topped (3) rock just north of immediate point at end of beach.

333. Top of (9) boulder.

335. Corner point of steep rock bluff (there are a few white spots on rock face).

336. Low triangular-shaped sloping point of light-colored rock with caves to north and south.

357. Outer high rock (5) (white-topped with lichen) there is a higher rock inshore (6) and some lower ones offshore.

360. Outer tree (half-dead) on low ledge point.

- 361. Light-colored rock point of shoreline with crooked tree and snag just north of bight.
- 362. Outer point at small overhanging tree. Rock bluff is very white here, and there is a small niche to north.
- 363. (3) Rock, highest part of ledge with light-colored top.
- 498. Corner point of vertical rock bluff with overhanging tree. (There is a niche here to east and west.)
- 502. Prom. overhanging large half-dead tree. (Shoreline at tree pricked)
- 503. Low rock point at stump and small spruce.
- 504. High point of (8) semi-detached smooth rock. (There is a lower similar point to west.
- 506. Top center of islet at two stumps.
- 507. Top center of prom. tufted (10) rock.
- 508. End of low point at two prom. stumps.
- 510. Top center of (2) rock.
- 512. Outer corner point of low rock bluff.
- 516. Corner point in from ledge with several short stumps.
- 520. South end of small islet at multi-branched half-dead trees.
- 521. Lone leaning tree on (7) islet.
- 522. Prom. large bleached stump where rock bluff begins.
- 526. Large boulder in water at base of slide.
- 530. Low, flat, white, rock, bench-like point.
- 532. Corner point at dead snag and projecting stunted tree.
- 534. White top of semi-detached nobby rock (5).
- 535. Prom. light-colored rock point with short bench (4).
- 536. Most southerly rock (3) (black top).
- 537. Outer end of low ledge (3) at HWL (there is a rock awash out from point and to east).
- 538. 15-foot vertical column of very light-colored rock at west end of small boulder beach.
- 539. Prom. V corner point with large stump and half-dead tree.

577. Scrub tree on islet (10)..  
579. Highest part of islet (17).  
580. Top of boulder rock (3).  
581. Top of prom. boulder (7).  
583. Top of rock (4).  
585. Top of rock (3).  
586. Highest part of chimney rock (20).  
589. Highest part of islet (19).  
828. Seaward end of Point (2).  
831. End of bare point (2).  
832. Top of boulder (aw).  
834. Northerly side of bare dual point (2).  
835. Top of rock (2).  
837. Top of semi-detached hump on east end of point (3).  
838. Top of moss-topped boulder (13).  
840. Cone peak of center rock (4).  
842. Bare sloping face of point (3).  
843. Extremity of corner point (5).  
844. Top end of point (4).  
845. Seaward face of blunted point. A tree leans over about 5 meters to north (2).  
846. Final hump on most westerly rock arm (4).  
847. End of point (4).  
848. Face of boulder-like point (5).  
849. Top of largest semi-detached rock (5).  
852. Bare white top of rock (9).  
853. White snag overleaning point.

1957 HYDROS.

SIS	DOT
ORE	EGO
LOG	ROC
DUZ	MET
TRI	
FUG	
COO	

854. Bare end of point at HWL.

Recoverable Topographic Stations

Pull 1951

Garb 1951

Pawn 1951

Nipy 1951

OATH 1951

Approved by:

Submitted by:

*R.J.F.*

Roscoe J. French  
Supervisory Cartographer

Garnett S. Amburn  
Cartographic Photogrammetric Aid



19. Notes to the Hydrographer:

Manuscripts for these surveys were revised in December 1957 to incorporate a shift in datum for segments of shoreline and photo-hydro stations as determined by radial plot. Also segments of shoreline were redelineated to show 1957 plane table locations and to change approximate areas to definite.

New photo-hydro positions have been added to the vinylite impressions of the preliminary manuscripts to facilitate processing hydrography. The manuscripts are now in final form subject to correction by final office review.

The photogrammetric plot report for these surveys is filed as part of the Descriptive Report for T-9144.

Everett H. Ramey, Chief  
Graphic Compilation Unit  
9 December 1957



FORM 1002(T-2) PHOTOGAMMETRIC OFFICE REVIEW

MAP T-9139

PROJECT PH-152

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

FINAL TIDE REPORT  
Project W-152  
Prince William Sound

The shoreline for all hydrography accomplished during the 1957 field season is derived from shoreline manuscripts compiled at a 1:10,000 scale from aerial photographs. Signals for visual hydrography were derived by radial plot in the field, by recovery of previously selected photo-hydro stations when available, by intersection from triangulation, by plane-table, and by sextant cuts and fixes. All signals located by radial plot in the field are indicated on the manuscripts by a red circle with the signal name alongside. A few signals located by plane-table and by triangulation cuts are indicated in the same manner. In a few instances, sextant cuts and fixes were plotted on the manuscripts and the signal locations were indicated by blue circles with the name alongside.

Shoreline revisions and unusual methods of hydrographic signal location are summarized below:

PRELIMINARY SHORELINE MANUSCRIPT T-9145

The north shore of Fleming Island appeared on this manuscript as a dashed line labeled "APPROXIMATE MHL". Five signals, VAL, VAD, VAN, ZAG and ACE, were located by theodolite cuts from triangulation stations. These five signals and nearby triangulation stations were used as control to locate the MHL by plane-table and stadia distances. The approximate MHL was removed from the black line impression of the manuscript and the correct shoreline was applied. One rock wash between ACE and ZAG and a small islet between PUT and ACE were located during the plane-table work.

Since this is a preliminary manuscript, this portion of the shoreline, the rock wash and the small islet should be held fixed when the rest of the shoreline is adjusted to the correct datum.

The approximate MHL in the vicinity of BIM 1948, BUM and on around the small island was located by plane-table. Station BUM was located by plane-table and stadia distance. For this portion of the work, photo-hydro points were used exclusively for control. When the rest of the shoreline in the vicinity is adjusted to the correct datum this portion of shoreline and signal BUM should receive the same adjustment.

ADVANCE SHORELINE MANUSCRIPT T-9141

The approximate MHL between topographic signal NON and triangulation station OFION 1933 was located by plane-table. The plane table was set up on NON, oriented on OFION 1933, and the MHL was located by stadia distances to several points. The approximate MHL was removed from the black line impression and the correct MHL added.

The same method was used to obtain the true MHWL between ELY and SOB and between GAF and DUE. ELY is on the highest point of an islet which was originally indicated by a reef's MHWL. The black line impression was corrected, on the basis of stadia distances by plane-table.

PRELIMINARY SHORELINE MANUSCRIPT T-9132

On Verland Island the approximate MHWL between GAF and WAX was resolved by plane-table, using the manuscript as the field sheet. Stations COB, BOB and TGO were located by plane-table fixes on photo-hydro points, and all shoreline was controlled by photo-hydro points.

The approximate MHWL between TIP and ELY 1951 was resolved by plane-table, using photo-hydro stations in the vicinity for control and the black-line impression as the field sheet. The same method was used between LOB and FUG, near GAF, between WOP and LIX and between TIP and PAS. Stations MET and ROC were located by plane-table.

In all the above work only photogrammetric control was used. When the rest of the shoreline is adjusted to the correct datum the newly located shoreline should receive the same adjustment, also the signals located by plane-table.

The approximate MHWL at latitude  $60^{\circ} 15'19''$ , longitude  $148^{\circ} 17'16''$  was carefully field inspected and the true MHWL is indicated on photographs 54W2433 and 54W2434. The true MHWL in the small bay at latitude  $60^{\circ} 16'13''$  and longitude  $148^{\circ} 17'15''$ , and in the vicinity of topographic station PULL 1951 is indicated on photograph 54W2434. The true MHWL between stations LOW and NIPY 1951 is indicated on photographs 54W2390 and 54W2391. The true MHWL between stations NIPY 1951 and AID is indicated on photograph 54W2391.

PRELIMINARY SHORELINE MANUSCRIPT T-9144

The approximate MHWL between JOB and NOD (T-9146), in the vicinity of stations EMD, FBY, and in the vicinity of LAX and PLAIN 1943 was resolved by plane-table, using photogrammetric control. Stations EMD, FRY and FOG were located by plane-table. Station ACT was located by plane-table. All this work should be adjusted to the correct datum on the final manuscript.

Stations WAX and MOO were located by plane-table cuts using photogrammetric control. They should be adjusted to the correct datum on the final manuscript.

ADVANCE SHORELINE MANUSCRIPT T-9138

The approximate MHWL in the vicinity of signal BAR was field inspected and the true MHWL is indicated on photograph 54W2433.

The approximate MHWL northwest of photo point 316 was resolved by plane-table. The correct MHWL is now shown on the black-line impression.

ADVANCE SHEET FOR MANUSCRIPT 1-0112

The approximate MLL at the following locations was verified by plane-table and the correct MLL is now shown on the black-line impression:

1. Vicinity of stations SAT and SAE.
2. Vicinity of station TLE, Latitude  $30^{\circ} 12' 10''$ , Longitude  $146^{\circ} 01' 17''$ .
3. Vicinity of STWS 1923 and AOT.

The approximate MLL in the vicinity of topographic station DOLT 1951 was field inspected and the true MLL is indicated on photograph 54W2432.

No additional shoreline discrepancies were noted during hydrography and signal building. All signals appear to plot in their correct location with respect to the MLL.

Special sheets were not prepared for any of the plane-table work. Some of the field work was done directly on the black-line impressions. In the remaining cases the field work was done on tracings of the black-line impressions. In each case, a tracing was used in the field only one day, and results transferred to the black-line impressions the same evening. There was no detectable distortion.

The following triangulation stations were identified this year:

<u>NAME</u>	<u>PHOTOGRAPH</u>
GROND 1957	54W2493
FINISH 1957	54W2493
BEAN 1957	54W2494
WIND 1957	54W2494
PLAIN 1948 (210)	54W2320
TRIF 1948 (204)	54W2396
FLAT 1948 (200)	54W2396
GLAC 1927 (201)	54W2427
FRID 1927 (200)	54W2428
VAT 1927 (205)	54W2396
GOAT 1927 (199)	54W2395

In addition, the following topographic stations marked in 1951 and located by radial plot, were re-located by triangulation cuts or short traverse from triangulation stations: WILL 1957, WEA 1957, JOWL 1957, SAND 1957.

*Lorin F. Woodcock*  
Lorin F. Woodcock  
LCDR, USN

Approved and forwarded:

*Fred Matella*  
Fred Matella  
CIR, USN  
Commanding Ship COMIE

## REVIEW REPORT T-9139

## SHORELINE

DECEMBER 15, 1970

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print (pages 37 through 44), with differences noted in Items 62 through 65, is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison has been made with Survey T-4808, scale 1:20,000, dated May - June 1933 and Survey T-4810, scale 1:20,000, dated September - October 1933. Differences between these surveys and T-9139 are shown in blue on the comparison print.

The general trend of the shoreline compares favorably but placement of the mean high water line varies considerably. Differences as much as 50mm were noted in several places.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangles SEWARD (B-3) and SEWARD (B-4), ALASKA, both 1:63,360 scale, and dated 1950 and 1951 respectively. Differences between these surveys and T-9139 are shown in brown on the comparison print.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with Survey H-8389, scale 1:10,000, dated 1957. All of the differences noted are in the vicinity of the southeast end of Chenega Island. These are 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 25, 1969. One difference at Latitude  $60^{\circ}17.0'$ , Longitude  $148^{\circ}07.5'$  is noted 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 15, 1970

Approved:

*Allen L. Powell*

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

Approved:

*Charles H. Hannon*

Chief, Photogrammetric Branch

*Jack E. Luth*

Chief, Photogrammetry Division

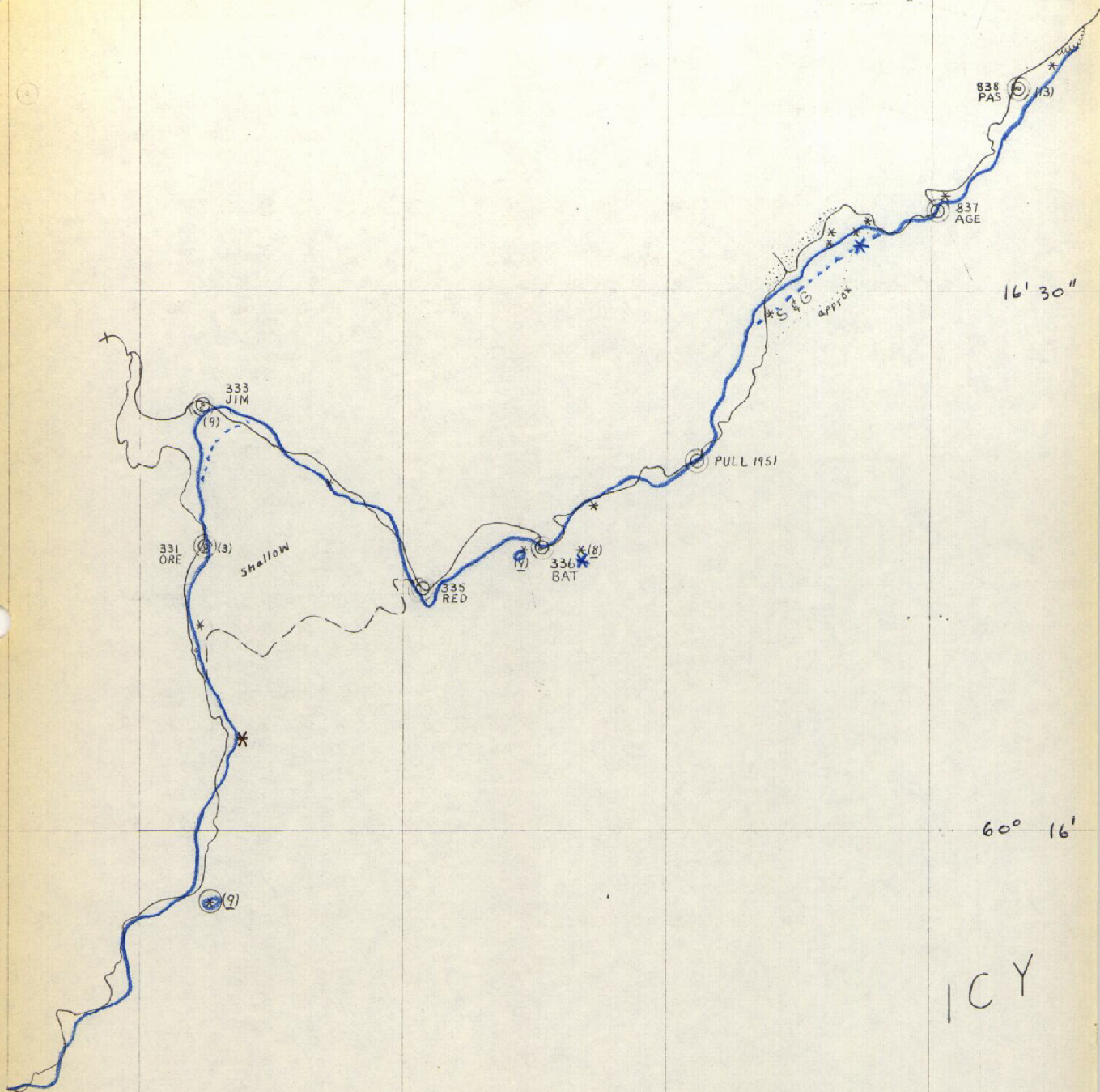


11138

148° 17'

148° 16'

37





38

148° 15'

148° 14'

GARB 1951

Shallow

845  
NOR

846  
MIX

60° 17'

844  
PIN

843  
RAT

ARBOR 1933

842  
SIT

Shallow

840  
TIP

838  
PAS

16' 30"

148° 14'

148° 15'

1  
E



14'

13'

363  
DUB (3)

39

JOINS T-982

Not visible  
on photos362  
EGG

361

360  
FUS

(8)

T-4808

60°18'30"

T-4810

357  
GAD (5)Not visible  
on photos

(5)

ICY 1933

854

18'

853

852  
HIS849  
TAX

(5)

848  
KOP\* — Also on SEWARD (B-4);  
Not visible on photos

60°17'30"

148°13'

847  
LUX



148° 09' 09'

148° 08'

40

60° 18' 45"

18' 30"

18'

60° 17' 30"

148° 09'

148° 09'

○ FUG

TRI

(3)

(2)

Shallow

NIGGER 1933

167

DUZ

(6)

(7)

LOG

Shl

Islet

Shallow

169

EAT

171

FAT

(7)

173

GAY

\*

OBE

△

BIGHT, 1933

OATH 1951

539

HAG

(2)

538

JAP

534

MAN

(15)

535

(4)

536

LAD

(3)

537

KID

(3)

(7)

Shallow

532

NAT

T-4808

T-4810

C

H

E

I

S

L

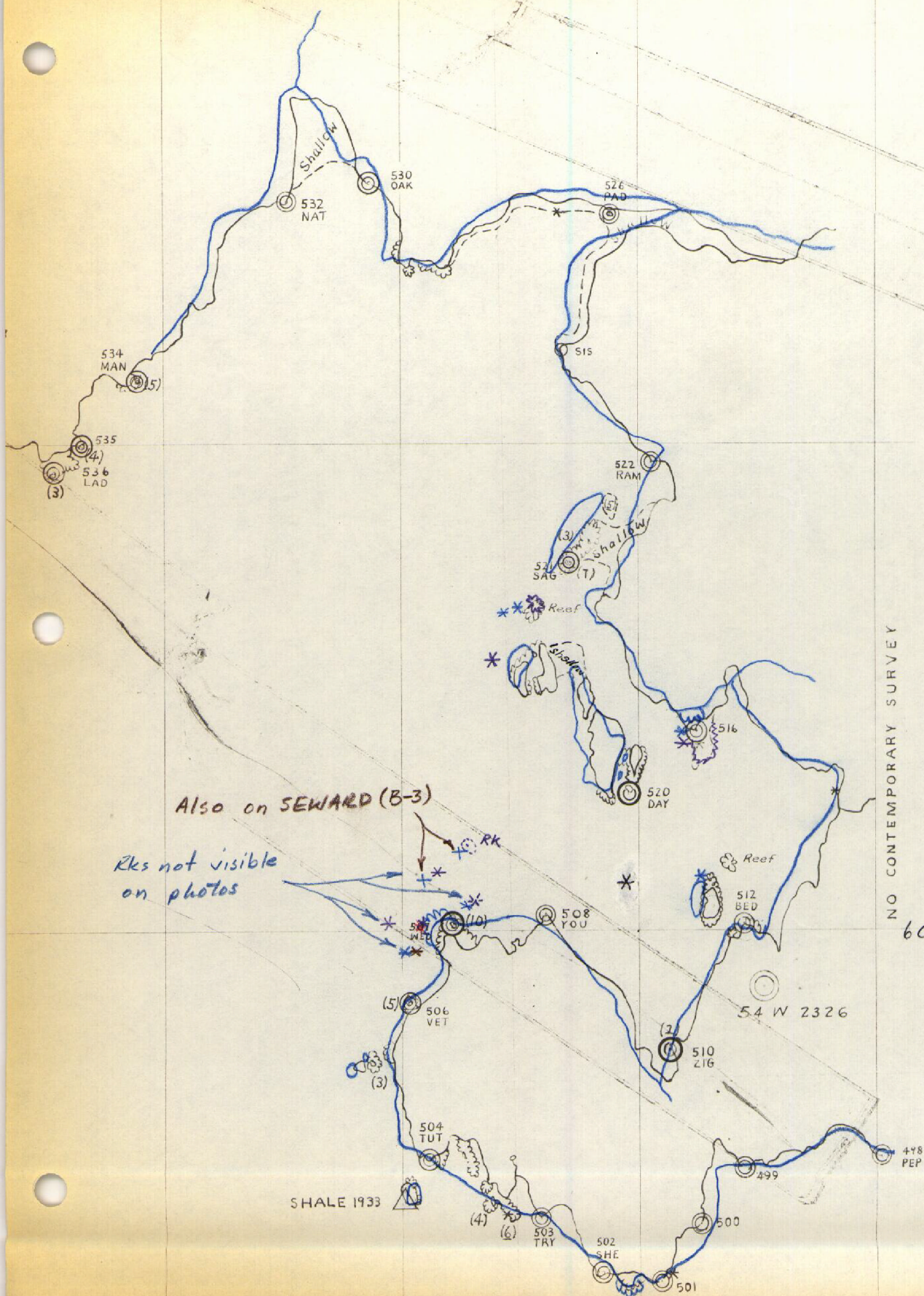


148° 02'

148° 07'

60° 18'

41





148° 16'

148° 15'

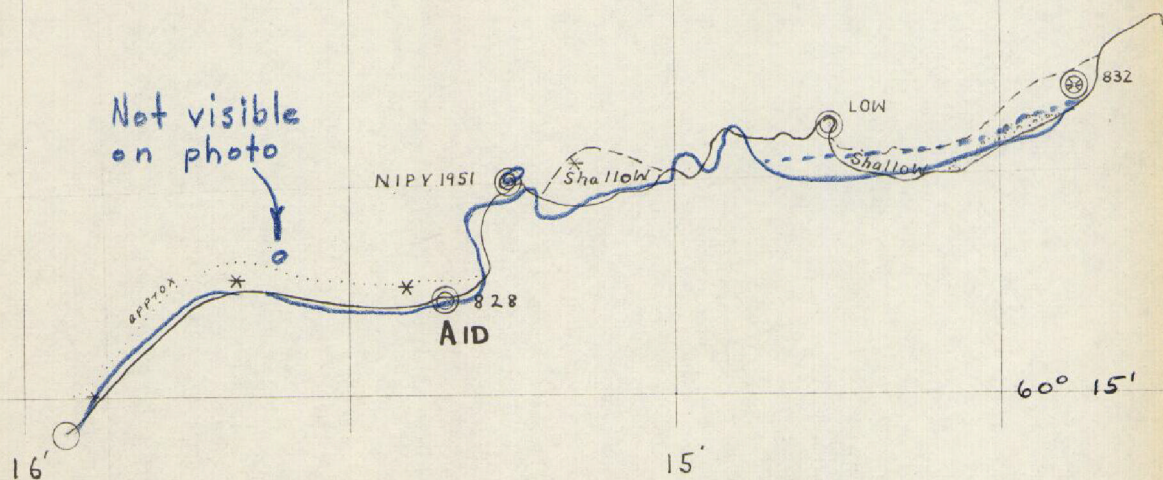
BAY

42

60° 16'

ICY

Not visible  
on photo





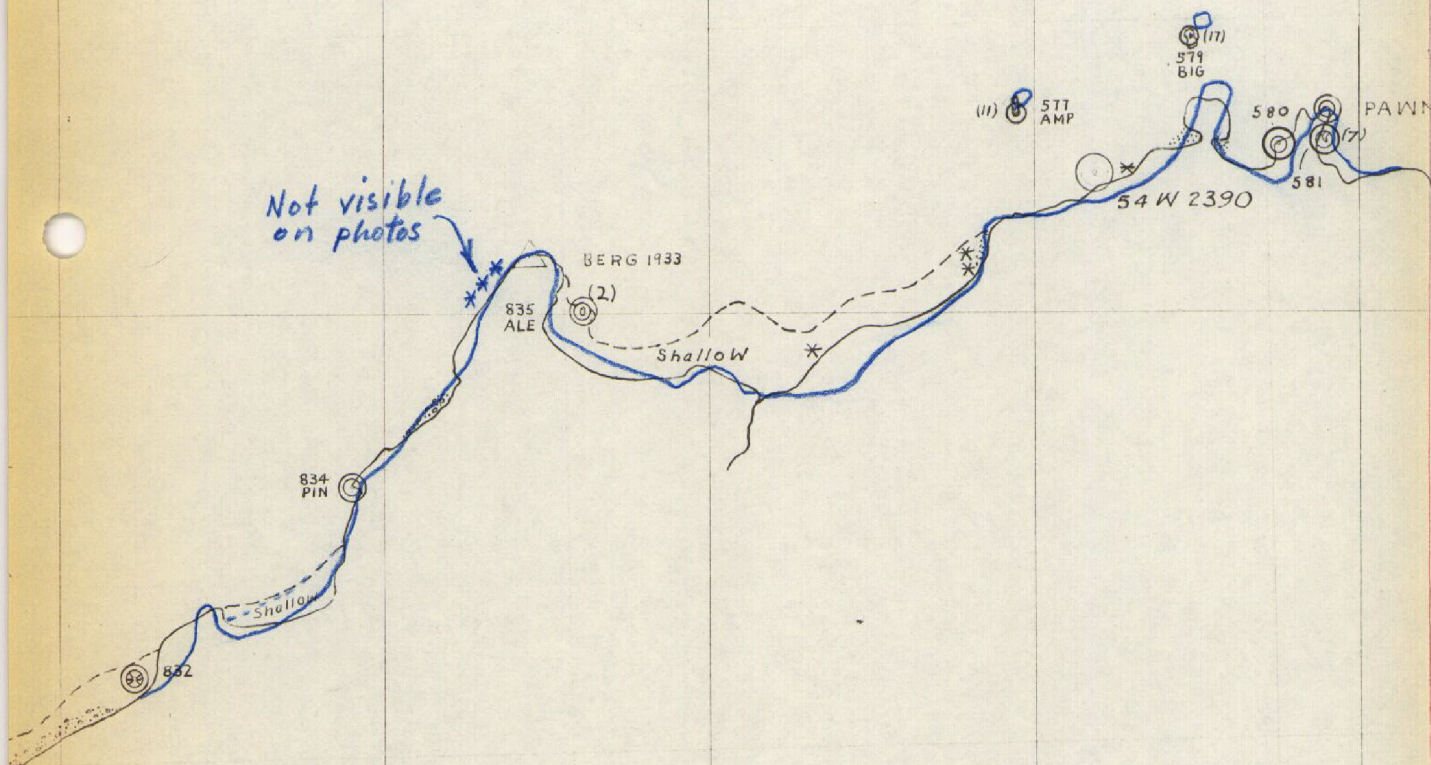
148° 14'

148° 13'

43

60° 16'

Not visible  
on photos



148° 14'

148° 13'

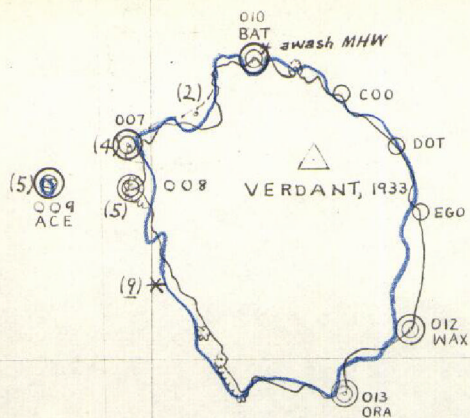
60° 15'



148° 12'

148° 13'

44



VERDANT

60° 16'

(17)  
579  
516

580  
581

PAWN 1951

W 2390

583  
HUB

(4)

585  
MAR

(3)

586  
SIX

(20)

Shallow  
Falls  
MET

Not visible on photos

(6)  
ROC

589  
UTE

(19)

60° 15'

JOINS SURVEY NO. T-9141

148° 12'

148° 11'

T-9139

[illegible]

M.2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.