

9141

Original

9141

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-9141

## LOCALITY

State ALASKAGeneral locality PRINCE WILLIAM SOUNDLocality WHALE BAY1950-57

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

LIBRARY &amp; ARCHIVES

DATE \_\_\_\_\_

## DATA RECORD

T-9141

Project No. (II): PH-152 (Office) Quadrangle Name (IV): Whale Bay  
 PH-39(48) )  
 CS-277 ) Field  
 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) Copy filed in Division of  
 31 Dec. 1954 (office) 731 mkl Photogrammetry (IV)  
 11 Feb. 1955 (office) 732 mkl 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 27 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): TINA, 1933

Lat.: 60-13-31.098 962.5 m Long.: 148-13-26.464 407.4 m. Adjusted  
 (894.5 m) (516.3 m.) ~~Unclassified~~

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-9141

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): (1) Date of photography - Office interpretation of photographs (only east of Station Sober, 1933); (2) 8-29-51, 8-31-51, 9-18-51, 9-21-51, 9-24-51 - field inspection of 1:20,000 photos.

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

Date: 1-5-55

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

Date: 1-10-55

Control plotted by (III): B. Hale

Date: April 1955

Control checked by (III): G. S. Amburn

Date: April 1955

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

Date: 5-31-55

Planimetry —

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): C. H. Baldwin - Work Sheets }  
G. A. Walker, Jr. - Inking }  
R. L. Sugden " ————

Date: June 1955  
Nov. 1957

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

Date: 6-24-55  
Nov 1957

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

Date:

Camera (kind or source) (III): USC&GS Single Lens "W" Camera, 6" focal length

Number	Date	Time	Scale	Stage of Tide
54-W-2390 thru 2393	26 July 1954	13:39-13:41	1:10000 (Ratio)	4.6' above MLLW
54-W-2322 thru 2324	26 July 1954	13:00-13:01	1:10000 (Ratio)	5.4' above MLLW

\*\*

25 VV thru 27VV M383	11 Aug. 1950	1:40,000 (Contact)
78 VV & 79VV M383	11 Aug. 1950	1:40,000 (Contact)

## 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

Date: 1-15-71

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): 24

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 6 Recovered: 6 Identified: 6

Number of BMs searched for (II): Recovered: Identified:

Number of Recoverable Photo Stations established (III): 3

Number of Temporary Photo Hydro Stations established (III): 97

Remarks: \*.94 Ratio of ranges suggested by Tides & Currents for Sheets  
 T-9138 thru T-9145 (Excepting Hogg Bay Sub. Sta. ratio for T-9143).

\*\* Air Force photographs with 1951 field inspection.

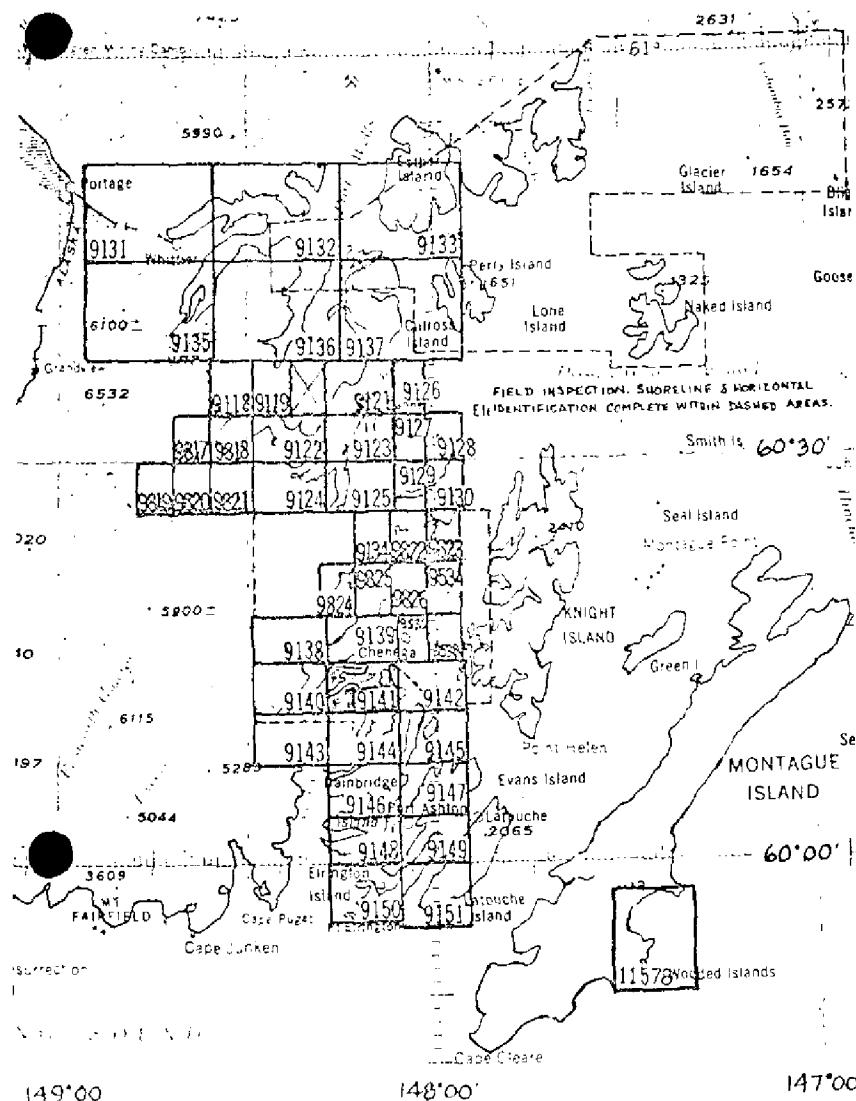
Ratio of Ranges	Diurnal Mean Spring Range	
	Mean Range	Spring Range
1.0	10.0	12.4
* .94	9.2	11.6



T-9141

COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline compiled	June 1955	Superseded
New radial plot, field edit applied, manuscript recompiled	Nov. 1957	
Final review	Jan. 1971	

## Prince William Sound, Alaska



OFFICIAL MILEAGE FOR COST ACCOUNTING  
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	9
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-9141

Several years have elapsed between the compilation and final review of this map. None of the compilation photographs were available at the final 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-9141 covers the south end of Whale Bay.

Compilation was by radial plot in 1955, using ratio prints of 1:30,000 scale photographs taken in July 1954. Field inspection was done in 1951 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 by the Ship BOWIE in 1957. Two sections of the mean high water line were corrected by plane table. In the fall of 1957 a new radial plot was run and the manuscript was re-compiled, using the additional data collected in the 1957 field season.

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

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 picked 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 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 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 KELS0, 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 Perry Island. Here the buildings are kept up and residence maintained the year around.

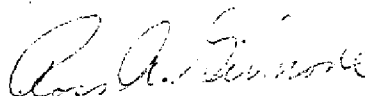
The village of Chenega has about 90 residents and has a Bureau of Indian Affairs school and post office (both in the same building). There is a Russian Orthodox Church here and a native store. There is a long narrow pier here which was in bad repair at the time of inspection. There are no marine facilities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

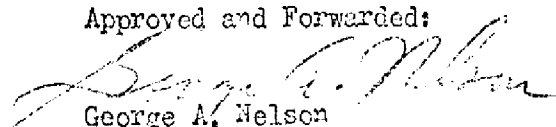
14. Special reports and supplemental data.---In addition to the data contained in this report, the following data obtained during the 1951 season by the Ship LESTER JONES is pertinent to the photogrammetric work accomplished in Prince William Sound.

<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

PH-132  
 PHOTOGRAPHIC 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 picked the home 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-9131, T-9141 and T-9144 are perhaps the most accurate in position. T-9133, 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,

- 3 -

and will necessitate compiling such shoreline with the dashed line approximate high water line symbol. Fixing 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 "A" 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:

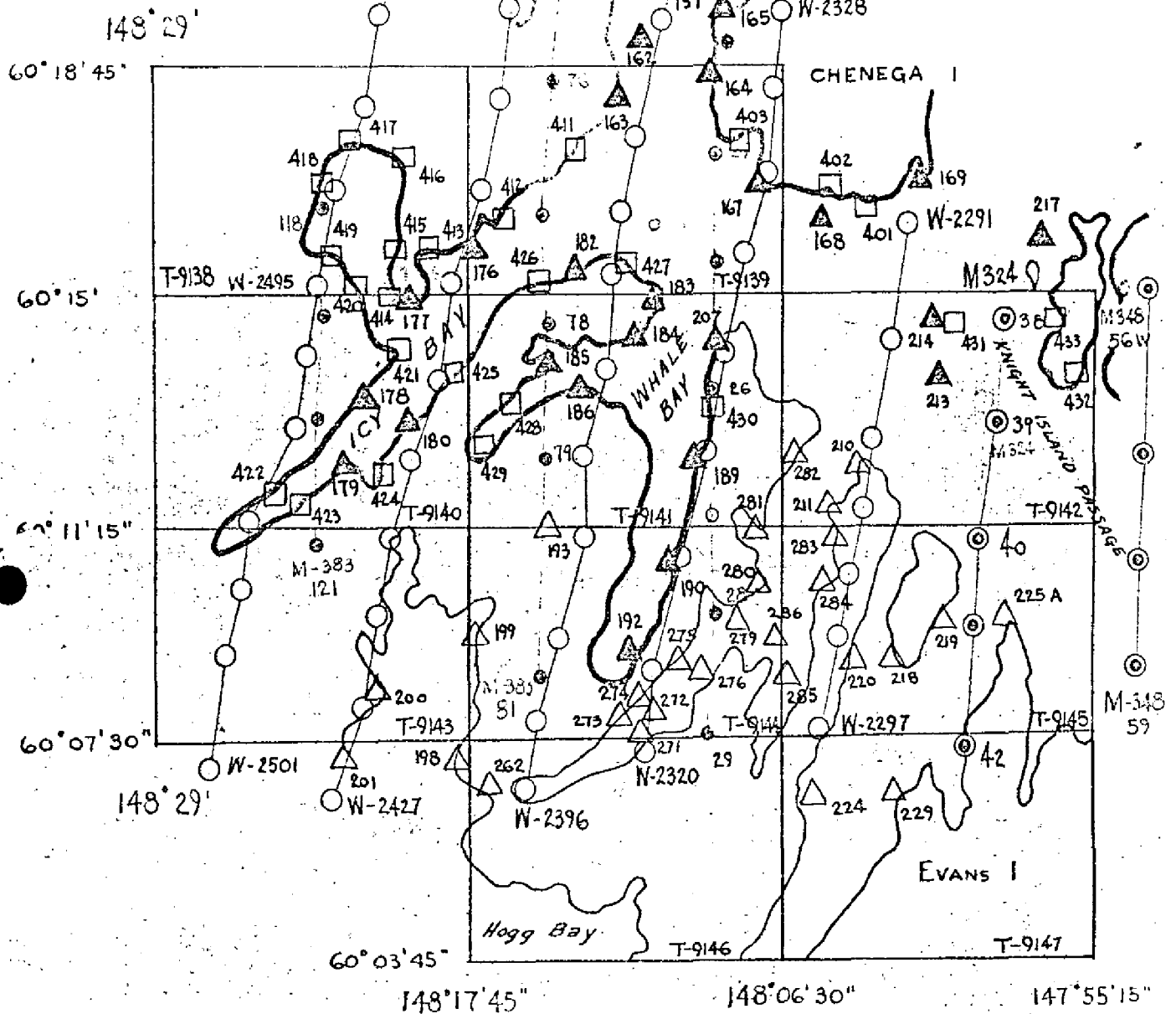
Respectfully submitted:

---

S. V Griffith  
Chief, Cartographic Branch

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*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

Includes  
photo hydr

Ph-152

HORIZONTAL CONTROL STATIONS IN RADIAL PLOT No. 2 (1:10,000)  
 T-9138, 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 Pas, 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.



Ph-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 20152  
 Photo, available plot record  
 (1-2117) (1-2117) (1-2117)  
 number 1957

21. Area Covered:

This revised plot covers three sheets T-6121, T-6122, T-6123 and the western limits of T-6120 and T-6124. 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 areas. 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-NW 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 SW of the home station, and was held in this plot. This will effect a shift in detail of approximately 2 mm in SW direction.

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

"1950 1957" -- Sta. 34, 3 held. Sta. 1 was missed by 0.5 mm but was reported as missed by 0.2 mm in the original plot.

"1950 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.

UNA 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.*

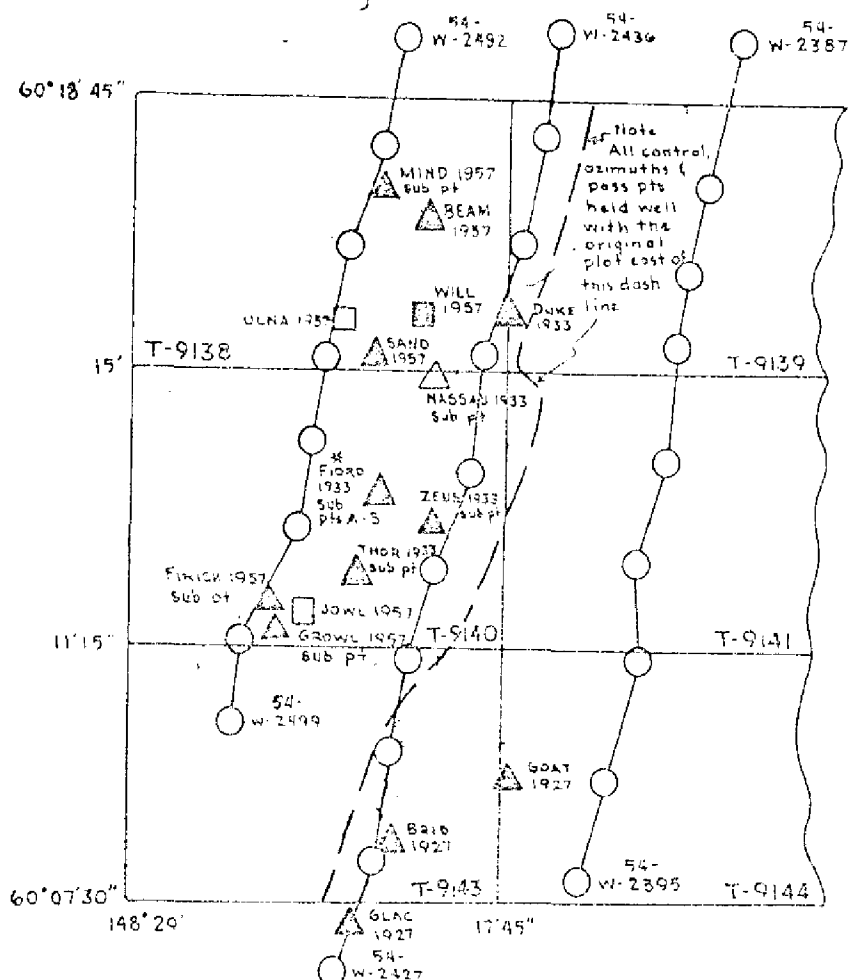
J. P. Battley, Jr.  
Cartographer

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 mm S of the plotted position

MAP T. 9141 PROJECT NO. PH-152 SCALE OF MAP 1:10,000 SCALE FACTOR

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)	
Topo Kiva			60-13 148-16				228.5 (1627.5)		
Topo Fini			60-12 148-17				1137.5 (721.2)		
Olga, 1933	VI 159	N.A. 1927	60-13-43.324 148-14-43.853				391.5		
Tina, 1933	"	"	60-13-31.098 148-13-26.464				1340.9 ( 516.1)		
Tina Sub. Sta.		"	60-13 148-13				675.0 ( 248.6)		
Elev. 2493 ft. Claw Pk., 1907	VI 259	"	60-12-31.40 148-14-12.67				962.5 ( 894.5)		
Divide, 1933	VI 158	"	60-12-09.605 148-11-07.537				407.4 ( 516.3)		
Vega, 1933	"	"	60-12-13.856 148-09-44.651				963.5		
Vega Sub. Sta.		"	60-12 148-09				394.0		
Elev. 1398 Ft. Peak C., 1948	VI 283	"	60-12-48.13 148-07-48.33				971.8 ( 885.2)		
Elev. 1306 Ft. Peak D., 1948	"	"	60-13-51.66 148-08-06.42				195.2 ( 728.9)		
Sober, 1933	VI 154	"	60-14-24.623 148-08-02.641				297.3 (1559.7)		
							116.1 ( 808.2)		
							428.8 (1428.2)		
							687.8 ( 236.5)		
							429.7		
							685.1		
							1489.6 ( 367.4)		
							744.3 ( 179.7)		
							1598.9 ( 258.1)		
							98.8 ( 824.8)		
							762.1 (1094.9)		2
							40.6 ( 882.7)		4

1 FT. = 3048006 METER

COMPUTED BY C. O. DeMarr

DATE 18 March 1955

CHECKED BY S.G. Blankenbaker

DATE 7 April 1955

M. 2388-12

MAP T.	PROJECT NO.	SCALE OF MAP	SCALE FACTOR
9141	PH-152	1:10,000	

[illegible]

1 FT. = 3048006 METER COMPUTED BY: C. O. DeMarr	DATE 18 March 1955 CHECKED BY: S.C. Blankenbaker	DATE 7 April 1955 M. 2388-12
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## COMPILATION REPORT, T-9141

31. DELINEATION

Shoreline and all detail adjacent to the MHWL was compiled by the work sheet method. A small piece of transparent vinylite material was placed over the photograph of most nearly true scale, and shoreline detail was drawn while viewing the stereoscopic model. Graphic methods were then used to adjust the detail into the manuscript, and where scale was beyond using a graphic adjustment, the work sheet detail was projected with the small electric projector.

Field inspection notes from 1:20,000 photographs was applied in all of Whale Bay and Icy Bay, and around Dual Head to the north. No field inspection is available for the shoreline beyond triangulation station Sober, 1933 toward Point Countess, or in Bainbridge Passage.

The shoreline is complete and the photographs are adequate except for a few small areas where the dashed shoreline (approximate high water) symbol is used. Shadows and tree overhang made viewing those areas impossible.

32. CONTROL

Horizontal control is adequate both for density and placement, and no difficulties were experienced in holding to those stations that were field identified by the sub. pt. method. The radial plot report is filed with the descriptive report for T-9144.

33. SUPPLEMENTAL DATA

T-4810    1/20,000    1933

The planetable survey was used as an aid to interpret the photographs and to supplement the field inspection.

34. CONTOURS AND DRAINAGE

Only the larger drainage has been shown back from the shoreline a short distance as an aid to the hydrographer in identifying his position.

35. SHORELINE AND ALONGSHORE DETAILS

Field inspection in Whale Bay was supplemented by office interpretation of the shoreline and foreshore features to include detailing the low water line as close as is possible since the office photographs were at about 1/2 tide. The photographs were quite clear, and stereoscopic study easily revealed the shallow and shoal areas and alongshore details.

- 2 -

Detail in Whale Bay is adequate and complete, and supersedes previous surveys of the area.

Areas aside from those mentioned were detailed from stereoscopic interpretation only, and should have field verification before charting.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

Three recoverable topographic stations were identified on the 1:20,000 field inspection photos and are located on the manuscript. Positions were scaled and the form 524's were sent to Photogrammetry files.

Ninety-seven photo-hydro stations were field inspected on 1:20,000 field inspection photos and are located on the manuscript for future hydrographic surveys.

Many more photo-hydros were field inspected than are located on the manuscript. The compiler has shown only those that could be reliably identified by description and stereoscopic study, and were considered to be worthy of location. The compiler assumed the liberty to exclude those stations that appeared doubtful of exact transfer from the 1:20,000 to 1:10,000 scale photographs.

39. JUNCTIONS

Junctions were made with T-9139 on the north, and T-9144 on the south and are in agreement. Junctions with T-9140 on the west and with T-9142 on the east are in agreement, but may be subject to slight change when the final plot in those areas is made with the field recovery of horizontal control that is on request.

40. HORIZONTAL AND VERTICAL ACCURACY

Vertical accuracy is inapplicable.

Except as mentioned elsewhere in this and the radial plot report, the horizontal accuracy is adequate and meets standard mapping accuracy.

41 thru 45. - Inapplicable.

46. COMPARISON WITH EXISTING MAPS

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

This manuscript supersedes the quadrangle in all shoreline and alongshore detail.



- 3 -

47. COMPARISON WITH NAUTICAL CHARTS

8551 1:200,00 10th edition 1952 54-5/31  
8528 1:81436 1st edition 1930 51-8/27

This manuscript supersedes present charted information for shoreline and alongshore features.

48. GEOGRAPHIC NAME LIST

WHALE BAY  
DUAL HEAD  
ICY BAY  
BAINBRIDGE PASSAGE

Approved by:

Submitted by:

---

S. V Griffith  
Chief, Cartographic Branch

*Roscoe J. French*  
Roscoe J. French  
Supervisory Cartographer *R.J.F.*

Prince William Sound  
Project 6152  
May 1956

Supplement to Compilation Report  
for T-9141, T-9142, T-9144 through T-9147

New triangulation stations were established and additional previously-established stations were recovered and identified on field photographs during the 1955 field season. These stations are listed as follows:

T-9142

Bain, 1933  
Pisa, 1948  
Sage, 1948  
Tate, 1948, sub. pt.

T-9144

Ruth, 1948, sub. pt.  
Low, 1948, " "

T-9145

Bear, 1907  
Inner, 1948, sub. pt.

T-9146

Hard, 1955, sub. pt.

T-9147


Iktua Rock, 1955  
Rain, 1955, sub. pt.  
Moon, 1955, sub. pt.  
Ned, 1955 (White wash No. 1)

New bases, at scale 1:10,000, corresponding to the original manuscripts were ruled and stereoplanigraph bridging accomplished the location of photo centers and pass points used in the original radial plot. The general shift in datum between the radial-plot-located pass points and the stereo-instrument-located pass points was relatively small (0.5 mm to 1.0 mm). Differences were localized in small areas and were due to the additional horizontal control available to the stereo instrument plotter.

- 2 -

The shoreline on the original subject map manuscripts was readjusted by graphic methods to the instrument-located points where differences in datum occurred. Shoreline, where necessary, was redelineated. Shifts in shoreline due to datum change and corrective redelineation were done in red plastic ink. A considerable amount of indefinite dash-line shoreline was changed to a definite solid-line shoreline. This was done as a fill-in of the dash line in black plastic ink. Any change in position or conformation was shown in red plastic ink.

Submitted:



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K. N. Maki

## SUPPLEMENT TO COMPILATION REPORT

T-9141

November 1957

31. Delineation:

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

The manuscript for T-9141 was revised in Oct.-Nov. 1957 to incorporate new planetable location of segments of shoreline, a shift in datum in the area of Icy Bay and new hydrographic station positions obtained by the 1957 radial plot.

The shift in datum in Icy Bay is discussed in the Photogrammetric Plot Report (T-9138 through T-9147) 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 old compilation to the new positions on the manuscript and tracing the detail. Photo-hydro stations in this area were likewise shifted.

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. Positions of hydrographic stations shown on the vinylite impression which were not changed by this revision have not been added to the manuscript.

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

*Robert L. Sugden*  
Robert L. Sugden  
Cartographer

October 19, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9141


Bainbridge Passage

Dual Head


Icy Bay

Whale Bay

Approved by:

  
A. Joseph Wright  
Chief Geographer

Prepared by:

  
Frank W. Pickett  
Cartographic Technician

49. NOTES TO THE HYDROGRAPHER - T-9141 - Photo-hydro signals.

Three (3) recoverable topographic stations were located on T-9141:

Wine, 1951

Fini, 1951

Kiva, 1951

The following photo-hydro stations were field identified, and are located on the manuscript for the use of the hydrographer.

- 015. Projecting corner point of rock with small spruce at top and bight and gully to north.
- 019. Grey boulder on shoreline. (There is a light-colored top boulder (larger) closer to shoreline, to south.)
- 021. Lone dark green spruce on beach line at turning point of shoreline.
- 022. North corner of prominent low rock point with white spots.
- 025. Short dead snag on outer point of semi-detached islet.
- 030. Outer high point of (12) islet where are several small dead moss-covered trees.
- 031. North corner of islet (projecting point with white spots).
- 032. Two half-dead trees on (10) islet.
- 033. Top of (5) rock.
- 035. Flat light-colored top of (4) rock.
- 036. Most easterly large tree on islet.
- 037. Green moss-topped (5) rock.
- 038. High point on point of rock ledge.
- 039. High point of vertical rock at beginning of bluff at north end of LW beach.
- 042. High point of dark green moss (5) rock.
- 043. Corner point of broken rock bluff.
- 045. (4) White spotted low point of projecting point (there is a rock awash just off here).
- 046. Outer high point (5) of long rock.
- 047. Prominent large mossed overhanging tree.
- 049. Outer point at small snag and large half-dead tree.  
(Distinctive white spots on bluff here)

- 051. Green moss and white-topped nob on islet with very small spruce.
- 053. Center of brush and small tree-topped islet.
- 055. Low flat (3) projecting rock ledge.
- 056. Center of flat faced rock point.
- 057. Triangular shaped boulder just south of waterfall.
- 058. Prominent rounded buttress-like point (center face has small stunted spruce).
- 059. Prominent white-topped (4) boulder on boulder point.
- 060. Easterly face of rock bluff (white spots on it).
- 061. Largest outer (4) rock at delta.
- 122. Highest (4) rock of group.
- 128. (7') rock with few grass tufts atop.
- 131. Bare corner point of rock bluff at broken rock beach.
- 591. Highest part of most seaward rock (4).
- 592. Pointed top of rock (8).
- 593. Highest part of south hump (8).
- 594. Top of nob on end of point (4).
- 597. Top of rock (3).
- 600. Grass clump on top of rock (4).
- 601. HWL at end of nose.
- 602. Top of white boulder (2).
- 603. Rounded extremity of westerly point (3).
- 604. Top of semi-detached rock (3).
- 605. High ridge on point (5).
- 607. Top of jagged white rock (3).
- 608. Highest part of kelp-covered arm (AW).
- 609. Corner of cliff (5).

- 610. Base of large tree leaning over point (6).
- 611. Highest part of rock (AW).
- 612. West extremity of islet (5).
- 613. White western extremity of islet (5).
- 614. Nob on eastern extremity of islet (3).
- 615. White-topped rock (5).
- 616. Highest point of kelp-covered arm (AW).
- 617. Small stump on overhanging bluff (5).
- 618. Hump on extremity of rock arm (4).
- 619. Dead tree on eastern most point of islet (7).
- 620. Highest part of bare hump (5).
- 622. Hump on end of point (5).
- 624. End of dead tree leaning horizontal over water (7).
- 625. Hump at end of point (2).
- 628. Highest part (center) of most southerly rock (3).
- 630. End of semi-detached ledge on point (3)..
- 632. Top of ridge hump on point (5).
- 633. Prominent south tree overhanging extremity of point (15).
- 635. Top of semi-detached rock (4).
- 637. Highest part of grassy projection (2).
- 638. Top of grassy mound.
- 639. Top of largest projecting boulder on grassy beach.
- 641. Projecting boulder just back of shoal (4).
- 643. End of rock arm (1).
- 644. Bare north point of islet (5).
- 645. Top of small grassy nob (5).




- 646. End of nose point (3).
- 647. Flat top of largest boulder at base of slide (2).
- 648. Top of boulder (5).
- 649. Top center of flat, mossy-topped point (7).
- 651. Highest part of rock (4).
- 653. Top of detached rock about 10 meters SW of stream outlet (2).
- 654. Final hump on projecting rock arm (3).
- 656. Vertical portion of tree growing out from point.
- 657. Detached inshore rock (5).
- 658. Highest part of narrow jagged rock (5).
- 660. Highest hump on point (5).
- 662. End of high finger point (5).
- 663. Top of semi-detached hump (5).
- 665. Highest part of semi-detached rock (3).
- 667. Highest part of rock (6).
- 668. Top of detached rock (3).
- 669. Face of dark projecting bedrock point (3).
- 671. Top of mid-channel rock (AW).
- 672. North extremity of point (5).
- 675. More westerly hump of rock.
- 822. Final small boulders at base of slide (5).
- 823. Top of rock (5).
- 824. Seaward face of semi-detached projection (5).
- 825. Just below grassy patch on point (5).
- 826. Large detached boulder (14).

49. NOTES TO THE HYDROGRAPHER FOR T-9138, T-9140 and T-9141

The manuscripts for these surveys were revised to incorporate changes in positions of features and photo-hydro stations as determined by additional field work in 1957 and a new photogrammetric plot in 1957. Because of a datum shift, completely new manuscripts were delineated for T-9138 and T-9140.

The manuscripts are now in final form, subject to correction by final office review. Copies of these manuscripts will be available for the processing of hydrographic surveys. In addition the vinylite impression of the original manuscript for T-9141 has been corrected to show new positions for photo-hydro stations.

The Photogrammetric Plot Report for these surveys is filed as part of the Descriptive Report for T-9144.

  
Everett H. Ramsey

Chief, Graphic Compilation Unit

FORM 1002(T-2) PHOTOGRAMMETRIC OFFICE REVIEW

MAP T-9141

PROJECT PH-152

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

DISCREPANT EVIDENCE  
Project PM-152  
Prince William Sound

The shoreline for all hydrography accomplished during the 1957 field season is derived from shoreline manuscripts compiled on 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 table and plane-table, and by sextant cuts and fires. 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 fires 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-9149

The north shore of Fleming Island appeared on this manuscript as a dashed line labeled "APPROXIMATE WML". Five signals, VAL, VAD, VAM, ZAG and ACZ, were located by theodolite cuts from triangulation stations. These five signals and nearby triangulation stations were used as control to locate the WML by plane-table and stadia distances. The approximate WML was removed from the black line impression of the manuscript and the correct shoreline was applied. One rock wash between ACZ and ZAG and a small islet between BUT and ACZ 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 WML in the vicinity of PM 1942, PM and on around the small island was located by plane-table. Station PM 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 PM should receive the same adjustment.

ADVANCE SHORELINE MANUSCRIPT T-9141

The approximate WML between topographic signal WM and triangulation station CP16V 1923 was located by plane-table. The plane table was set up on WM, oriented on CP16V 1923, and the WML was located by stadia distances to several points. The approximate WML was removed from the black line impression and the correct WML added.

The same method was used to obtain the true MHL between IIV and SOB and between TAF and PNB. TAF is on the highest point of an islet which was originally indicated by a reef of 1.7. The black-line impression was corrected, on the basis of stadia distances by plane-table.

PRELIMINARY SHORELINE MANUSCRIPT T-9122

On Verdant Island the approximate MHL between PAF and VAX was resolved by plane-table, using the manuscript as the field sheet. Stations COD, EOT and TGO were located by plane-table lines on photo-tyro prints, and all shorelines were controlled by photo-tyro points.

The approximate MHL between IIV and PAV 1951 was resolved by plane-table, using photo-tyro stations in the vicinity for control and the black-line impression as the field sheet. The same method was used between LOG and PUG, near GAD, between KOP and IIX and between IIP 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 MHL at latitude  $60^{\circ} 15'19''$ , longitude  $148^{\circ} 17'16''$  was carefully field inspected and the true MHL is indicated on photographs 54W2433 and 54W2434. The true MHL 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 MHL between stations LOW and NIPY 1951 is indicated on photographs 54W2390 and 54W2391. The true MHL between stations NIPY 1951 and AID is indicated on photograph 54W2391.

PRELIMINARY SHORELINE MANUSCRIPT T-9144

The approximate MHL between JON and NOD (T-9146), in the vicinity of stations EMD, FRY, 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 MHL in the vicinity of signal BAR was field inspected and the true MHL is indicated on photograph 54W2433.

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

ATLANTIC SHORELINE TRIANGULATION T-2141

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

1. Vicinity of stations FAT and GAF.
2. Vicinity of station WIL, latitude  $60^{\circ} 12' 10''$ , longitude  $140^{\circ} 21' 17''$ .
3. Vicinity of STNS 1923 and AOT.

The approximate LWB in the vicinity of topographic station BOAT 1951 was field inspected and the true LWB 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 MEWL.

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>
GROW 1957	54W2493
TIMISH 1957	54W2493
STAN 1957	54W2494
WIND 1957	54W2494
PLAIN 1948 (210)	54W2320
TEET 1948 (214)	54W2396
PLAT 1948 (260)	54W2396
GLAC 1927 (201)	54W2427
TRID 1927 (200)	54W2428
FAT 1927 (185)	54W2396
BOAT 1927 (194)	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: WIL 1957, WIL 1957, JOWL 1957, SAND 1957.

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

Approved and forwarded:

*Fred Natella*  
Fred Natella  
CPR, USN  
Commanding Ship EOWIE

## REVIEW REPORT T-9141

## SHORELINE

JANUARY 15, 1971

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print (pages 39 through 46), with differences noted in Items 62 and 64 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 Sept.-Oct. 1933. Differences between this survey and T-9141 are shown in blue on the comparison print. T-4810 covers only the western part of T-9141; there is no comparison east of longitude 148°11'.

The general trend of shoreline compared favorably. Many differences in placement were noted, the greatest being at the head of Whale Bay at the west edge of T-9141.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangles SEWARD (A-3) and SEWARD (A-4), both 1:63,360 scale, and both dated 1952. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with copies of the boat sheets for H-8311 and H-8388, both 1:12,500 scale, and both dated 1956. Rocks located by the hydrographer, but not compiled on T-9141 are shown on the comparison print in purple. No effort was made to locate these rocks on the photographs; they were not available at the time of final review.

No shoreline discrepancies were noted, as T-9141 was the origin of the shoreline on the sections of H-8311 and H-8388 that are involved with this comparison.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8528, 1:80,000 scale, 4th edition, dated Nov. 25, 1968, and Chart 8551, 1:200,000 scale, 13th edition, dated Dec. 30, 1968. No significant differences were noted on either chart.

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  
January 15, 1971

Approved:

*Allen L. Powell*

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

Approved:

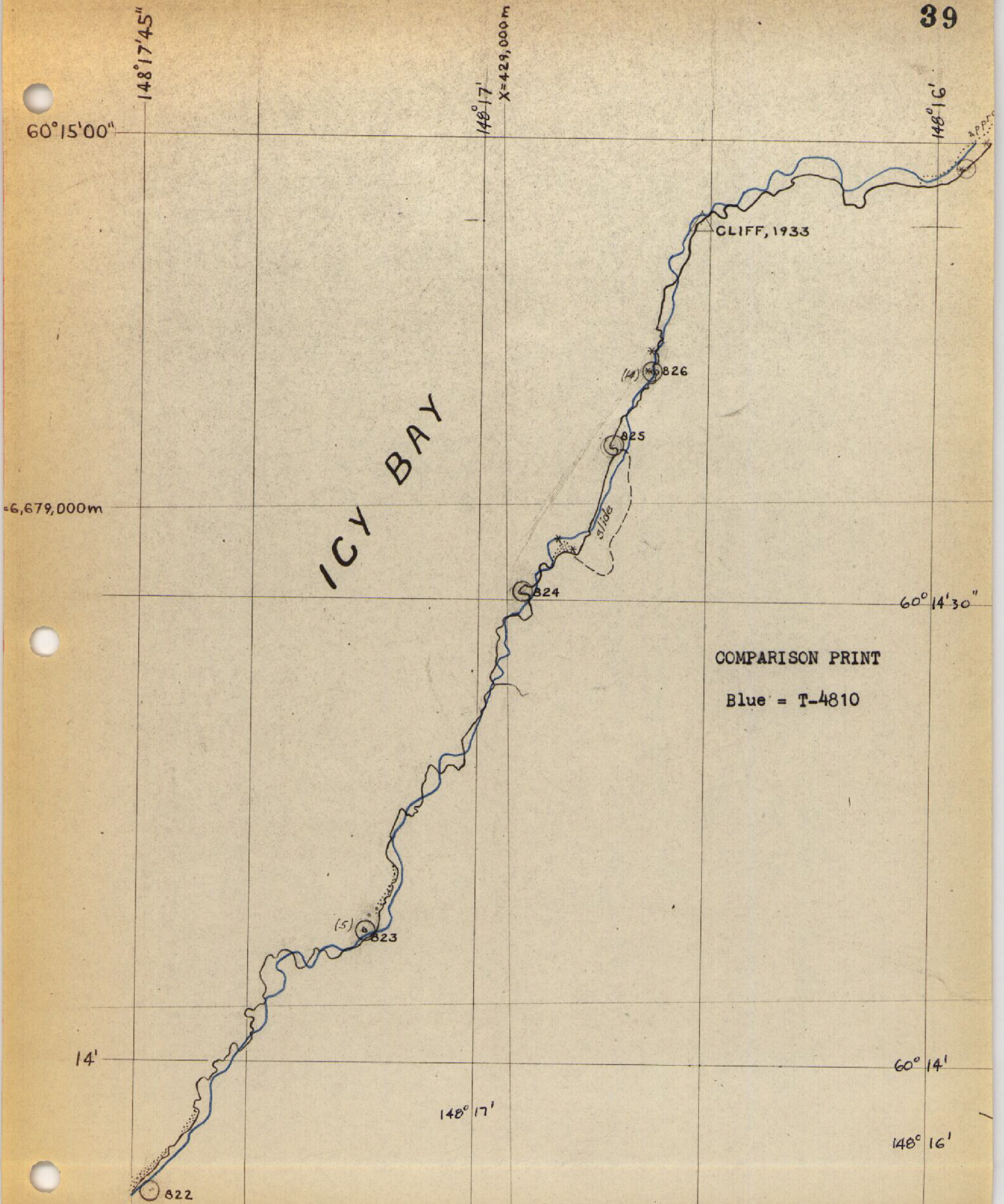
*Charles Shann*

Chief, Photogrammetric Branch

*Jack E. Luth*

Chief, Photogrammetry Division





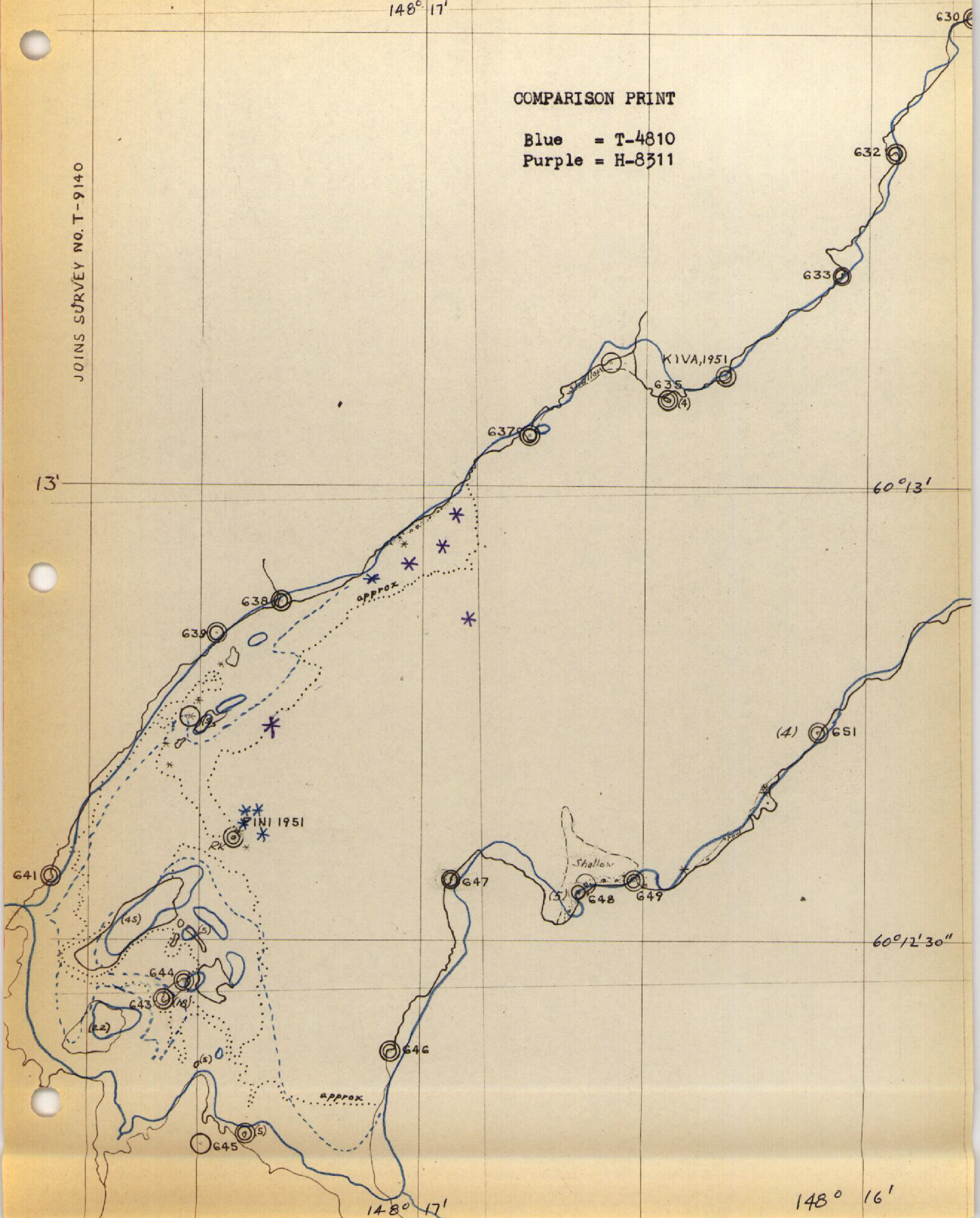


JOINS SURVEY NO. T-9140

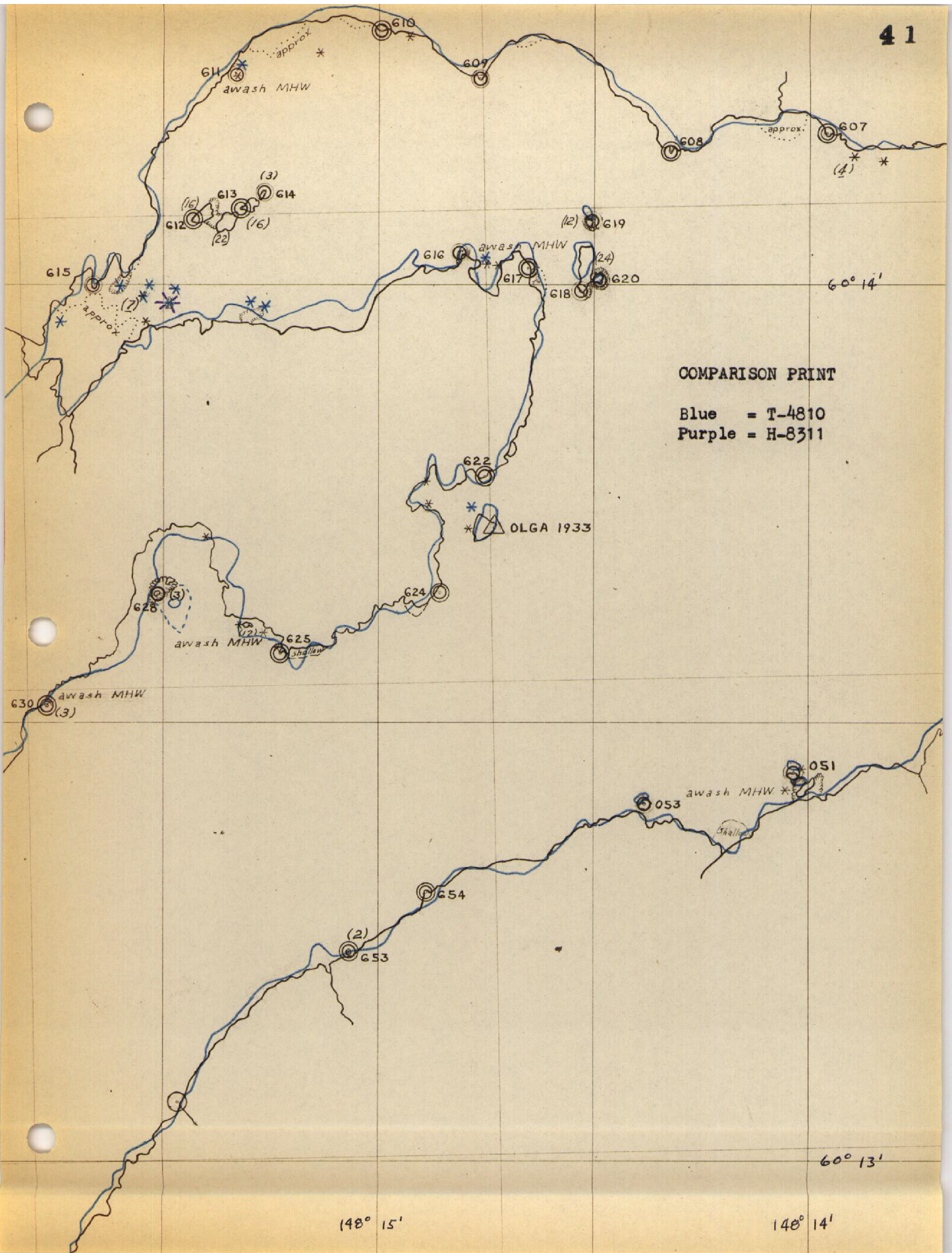
COMPARISON PRINT

Blue = T-4810

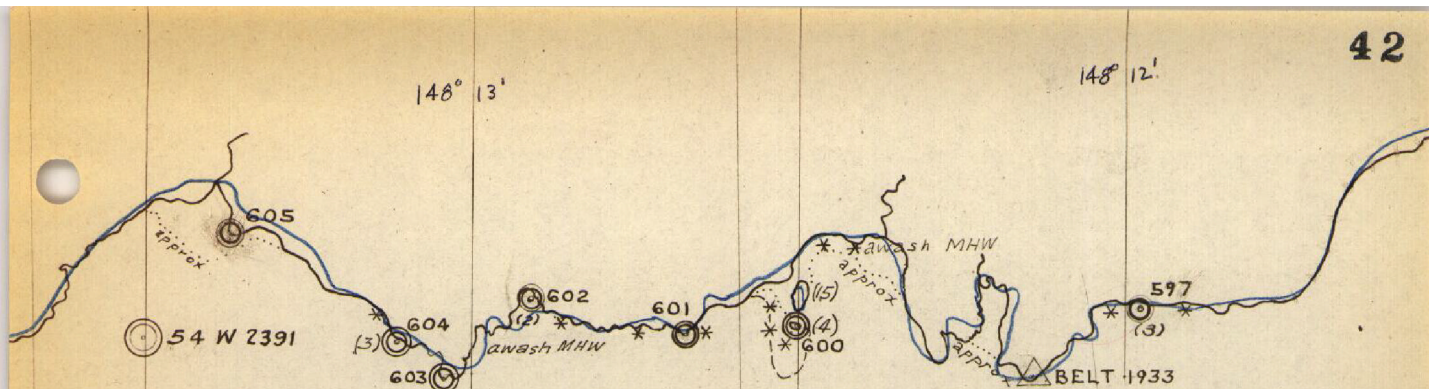
Purple = H-8311







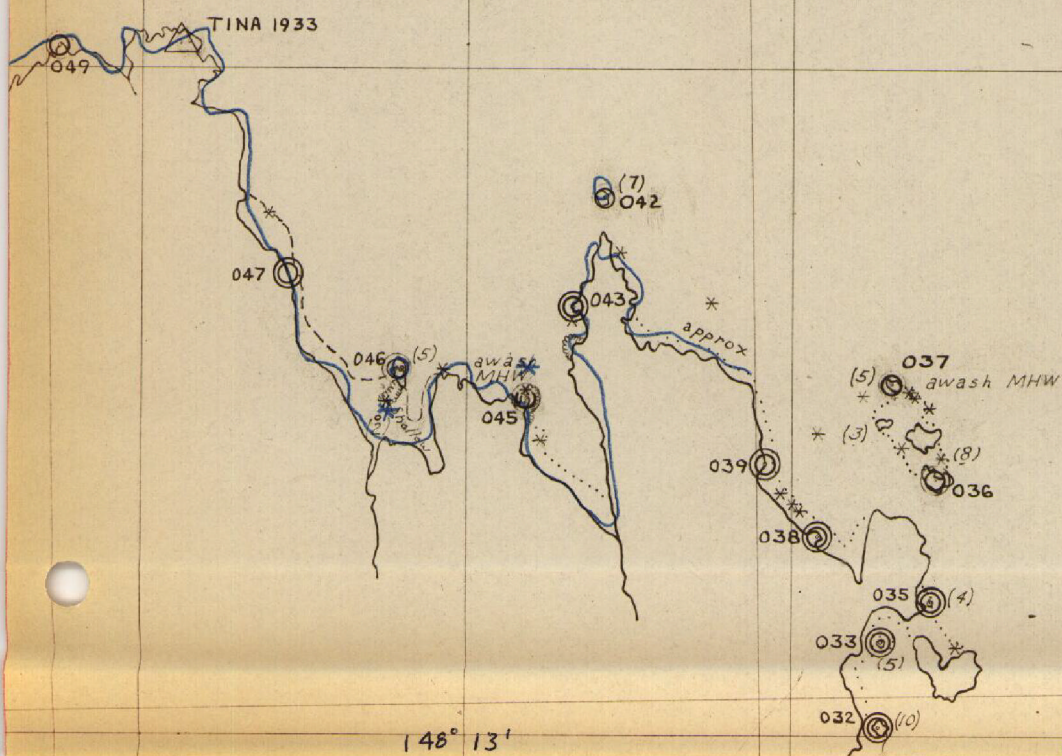




COMPARISON PRINT

Blue = T-4810

WHALE





9139

12'

60° 15'

DUAL HEAD

BARON 1933

COMPARISON PRINT

Blue = T-4810

592 (d)

593 (d)

Kawash MHW

594

Kawash MHW

597

(3)

BELT 1933

60° 14'

148° 12'

148° 11'

WHALE

BAY



148° 09'

148° 08'

ORION, 1933

656

54 V  
60° 14'

\*

(5) 657

PEAK D, 1948

COMPARISON PRINT

Purple = H-8311

(5) 658

(3)

(3)

660

13' 30"

\*

663

WINE 1951

662

(3) 665

60° 13'

148° 08'



ORION, 1933

 $148^{\circ}08'$  $148^{\circ}07'$ 

656

54 W 2324

(6)

(12)

 $60^{\circ}14'$ 

657

PEAK D, 1948

COMPARISON PRINT

Purple = H-8388

658

 $13'30''$  $60^{\circ}13'$  $148^{\circ}08'$  $148^{\circ}07'$



669

148° 08'

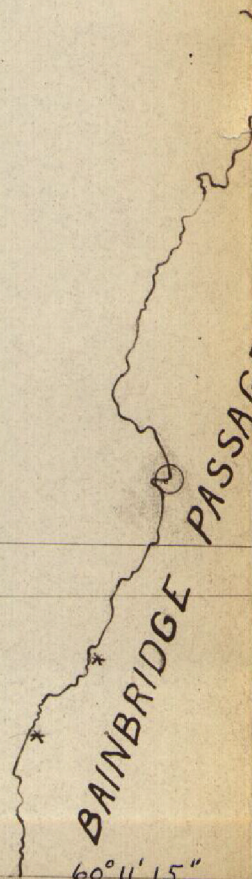
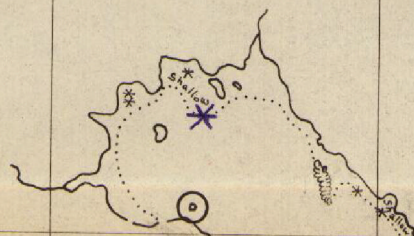
148° 07'

46

COMPARISON PRINT

Purple = H-8388

60° 12'



60° 11' 15"

148° 08'

148° 07'

48000m



## NAUTICAL CHARTS BRANCH

SURVEY NO. T-9141

### Record of Application to Charts

[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.

ORION, 1933

656

148° 08'

148° 07'

54 W 2324

(6)

(12)

60° 14'

657

△ PEAK D, 1948

COMPARISON PRINT

Purple = H-8388

58

\*

13' 30"

60° 13'

148° 08'

148° 07'

669

148° 08'

148° 07'

COMPARISON PRINT

Purple = H-8388

60° 12'

BAINBRIDGE PASSAGE

60° 11' 15"

148° 08'

148° 07'

38,000m

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-9141

## Record of Application to Charts

[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.