

9144

9144

FORM C&GS-504

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

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. _____ Office No. T-9144

LOCALITY

State ALASKA

General locality PRINCE WILLIAM SOUND

Locality BAINBRIDGE PASSAGE

1950-57

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

LIBRARY & ARCHIVES

DATE _____

DATA RECORD

T - 9144

Project No. (II): PH-152 (office)
 PH-39(48) } Field
 CS-277 }

Quadrangle Name (IV):

Bainbridge Passage

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):

Preliminary plot laid on
 N.A. 1927 field identified
 control (from 1:20,000
 and 1:40,000 scale photographs)

Vertical Datum (III):

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

Reference Station (III): Bebe, 1933

Lat.: 60-10-37.372 1156.6
 (700.4)

Long.: 148-10-41.479 639.5
 (285.6)

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-9144

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		
(2)	9-24-51 - Field inspection of photographs - only in the unnamed Bay N. of Bainbridge Passage		
Projection and Grids ruled by (IV):	A. Riley	Date:	1-7-55
Projection and Grids checked by (IV):	H. D. Wolfe	Date:	1-10-55
Control plotted by (III):	J. Hundley	Date:	March 1955
Control checked by (III):	J. Amburn	Date:	March 1955
Radial Plot or Stereoscopic Control extension by (III):	S. G. Blankenbaker R. J. French	Date:	May 1955
Stereoscopic Instrument compilation (III):	Planimetry	Date:	
	Contours	Date:	
Manuscript delineated by (III):	J. P. Battley	Date:	June 1955
Photogrammetric Office Review by (III):	K. Maki	Date:	June 1955
Elevations on Manuscript checked by (II) (III):	--	Date:	

T-9144

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-2393 thru 2396	26 July 1954	13:41-13:42	1:10,000 (Ratio)	4.6' above MLLW
54-W-2320 thru 2322	26 July 1954	12:59-13:00	1:10,000 (Ratio) 3X	5.4' " "

Air Force M383

27 VV thru 29 VV 11 Aug. 1950
 81 VV 11 Aug. 1950

1:20,000 (Ratio)
"

Tide (III)

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

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

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

Date: 1-26-71

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): 26

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

Control Leveling - Miles (II): - 2-USC&GS

Number of Triangulation Stations searched for (II): 9-30th Recovered: 2 Identified: 2

Number of BMs searched for (II): Engrs. Recovered: 9 Identified: 9

Number of Recoverable Photo Stations established (III): -

Number of Temporary Photo Hydro Stations established (III): 34

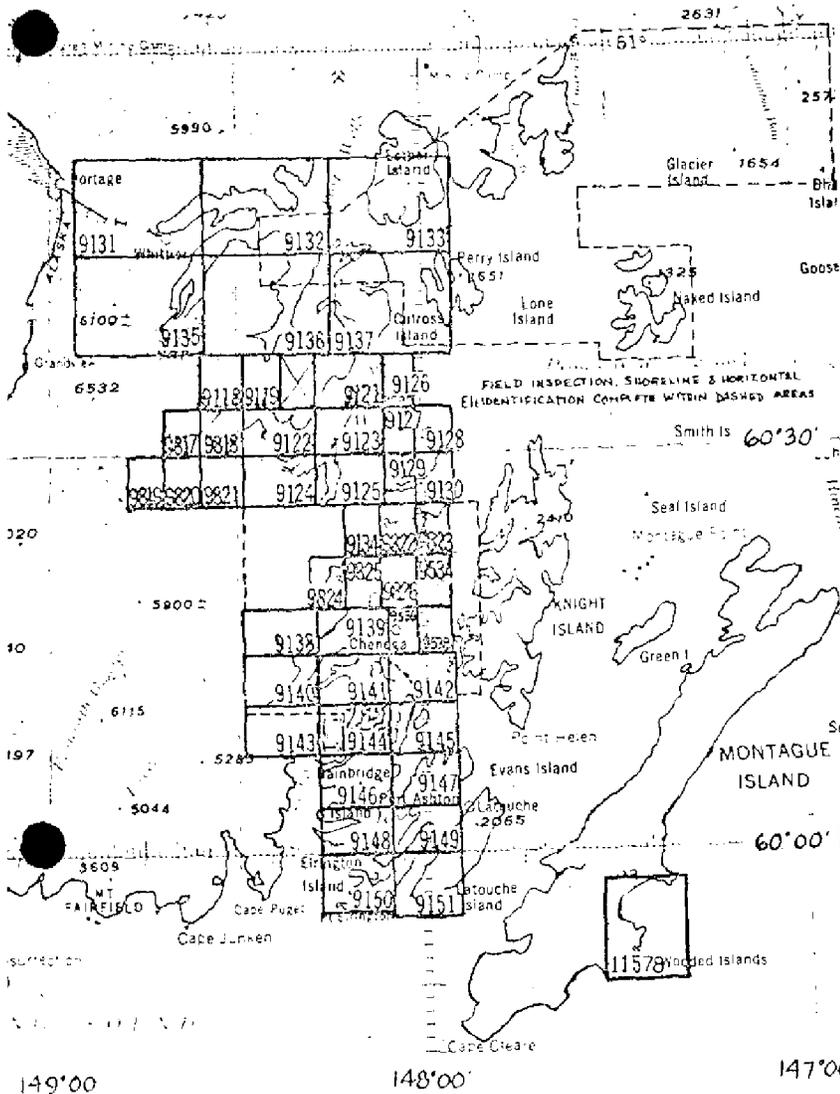
Remarks:

* .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).

T-9144

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

Prince William Sound, Alaska



OFFICIAL RELEASE FOR COST ACCOUNTING
 SHEET NO. LIN. MI. SHORELINE AREA MI²

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	2
9128	5	2
9129	7	6
9130	14	6
9131	12	95
9132	48	50
9133	36	45
9134	5	11
9135	24	90
9136	26	85
9137	68	48
9138	10	7
9139	13	5
9140	12	8
9141	24	12
9142	10	3
9143	9	4
9144	26	9
9145	19	8
9146	18	8
9147	24	9
9148	25	9
9149	19	7
9150	24	8
9151	15	0
9534	6	4
9536	6	6
9538	4	1
9817	9	10
9818	11	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-9144

Several years have elapsed between the compilation and final review of this map. None of the compilation photographs were available at the time of final review. The compilation record was added at this stage.

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. The center section of Bainbridge Passage and the south end of Whale Bay are within the limits of T-9144.

Compilation was by radial plot in 1955, using ratio prints of 1:30,000 scale photographs taken in July 1954. Field inspection accomplished in 1951 on 1:20,000 ratio prints of Air Force photography taken in Aug. 1950 was available for Whale Bay only.

Field edit was accomplished in the summer of 1957. In the fall of 1957 a new radial plot was laid, using additional control established and identified since the original compilation, and the manuscript was revised.

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. Arcal 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 FERRY ISLAND LIGHT, 1948 were recovered prior to receipt of the single-lens photographs covering this area and inspection and identification had to be made on the outer with 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 radio 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 KBLSO, 1949 and classified as topographic station USIM 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 LISTER 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
PHOTOGRAMMETRIC 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 positype 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 (positype) 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.

- 2 -

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 ± 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 templets 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 much shoreline with the dashed line approximate high water line symbol. Pricking 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 Force enlargements.

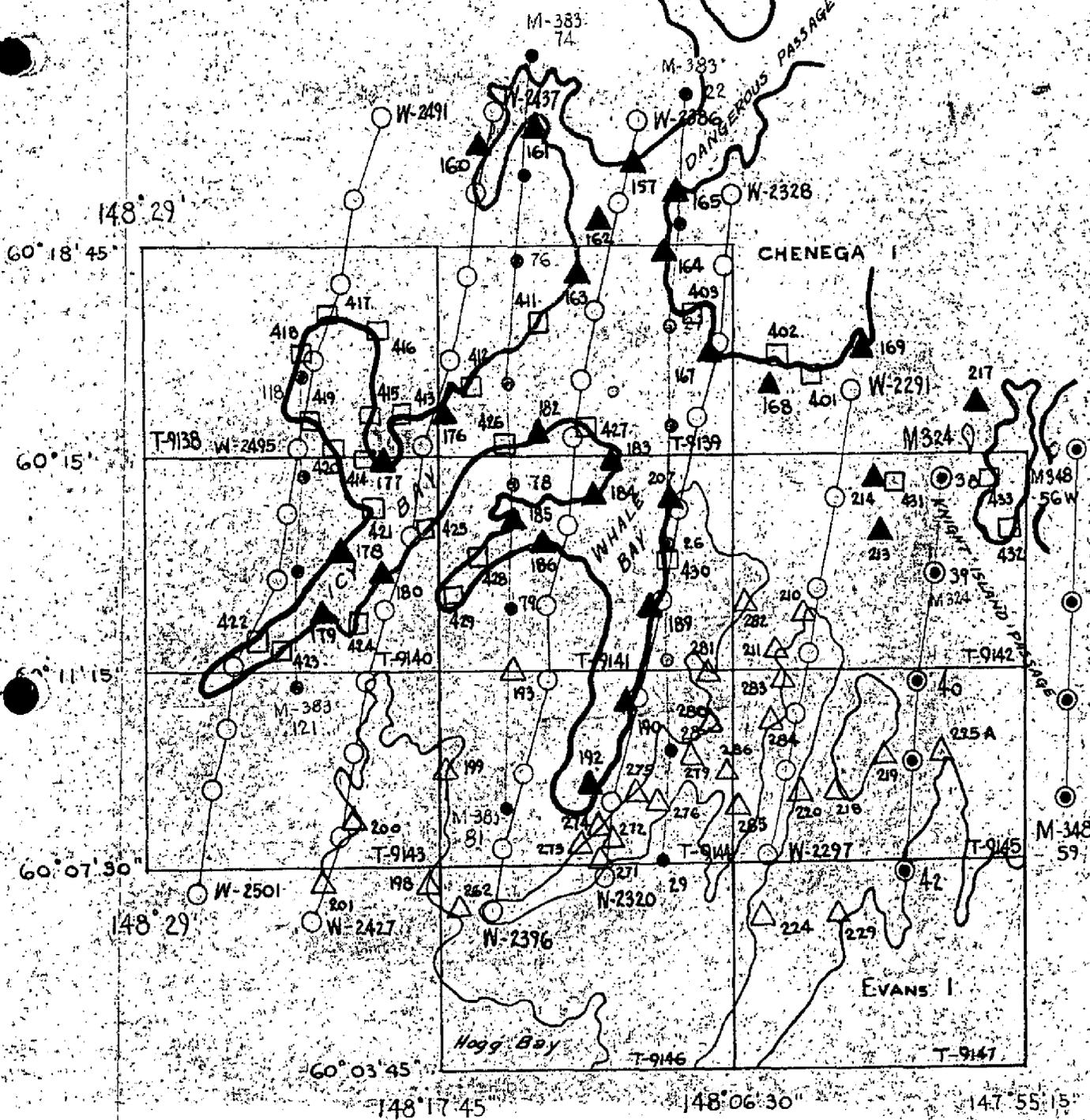
Flight lines should have followed the general NE-SW alignment of these islands in order to afford the radial plot stronger azimuth transfers across the more narrow straits, and thus avoid as many water azimuths as possible.

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)
- Field inspection Air Force photos 1 : 20,000
- ▲ Horizontal control field inspected by US C&GS 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 hydro

Includes
74

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 Ded, 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	} East of T-9139 in plot sketch	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 PH-152
 PHOTOGRAMMETRIC PLOT REPORT
 (T-9138 through T-9147) Supplement 2
 (Including Portions of T-9148 and T-9149)

Revised 1957

21. AREA COVERED

This radial plot covers the area comprising manuscripts T-9142, T-9144 and T-9145, T-9146 and T-9147, T-9148 and T-9149. Sheets T-9148 and T-9149 were included to effect a junction with previous overlapping plots.

22. METHOD

This plot was laid on the original manuscripts with original templates. Control identified in 1955, 1956, and 1957 was added to the manuscripts and photographs to strengthen positions obtained by former radial plots and stereoplanigraph bridging.

The plot was begun on T-9145 where the templates were well-controlled. (see plot sketch) This area was very rigidly fixed and tied into original positions on T-9142 and T-9144. From here the plot was extended on control stations until a satisfactory junction was made with previous work on T-9148 and T-9149. Areas of position change occurred mainly on T-9147 and in local areas on T-9145, T-9146 and T-9149.

23. ADEQUACY OF CONTROL

Control was adequate for most of the plot and most of the stations were held. Another station in the eastern half of T-9147 would have helped as this area is considered weak due to lack of control and photography.

Except as discussed below all stations held (within 0.2 mm):

Stations missed by 0.3 mm are as follows:

(283)	(279)	(273)
BABE 1948,	RAFT 1956,	RUTH 1948,
HARD 1955(Sub Pt),	IKTUA 1955,	ROCK 2 1927(2 Rays)

(249)	(238)	
OFF 1927,	EVANS 1905 (Sub Pt).	

These differences are not regarded as significant because the original templates had distorted some and both manuscripts and templates were slightly mutilated by use.

- (211) TATE 1948 - Missed 0.4 mm. 2 cuts. Identification one photograph was poor.
- (218) ROT 1910 - Missed 0.6 mm. (Same as former plot) Identification doubtful.
- (220) HORN 1910 - Missed 0.6 mm. (Same as former plot) Identification doubtful.
- (192) KIT 1933 Sub. Sta. - Missed 0.6 mm.- Probably mis-identified. Another small point appears about 0.6 mm to the south would have fit position. Home station was held.
- (258) HOGG 1927 - Missed 0.8 mm.- Station listed as pricked within 1 mm on photos - not very clear.
- EVANS BAY LT 1955 - Missed 0.6 mm. - 2 Rays - Photos not clear, field pricking doubtful.

24. SUPPLEMENTAL DATA

See original report.

25. PHOTOGRAPHY

See original report.

SKETCH AND FORM M-2388-12 CONTROL STATION DATA

A sketch appended. Forms M-2388-12 are filed with respective descriptive reports.

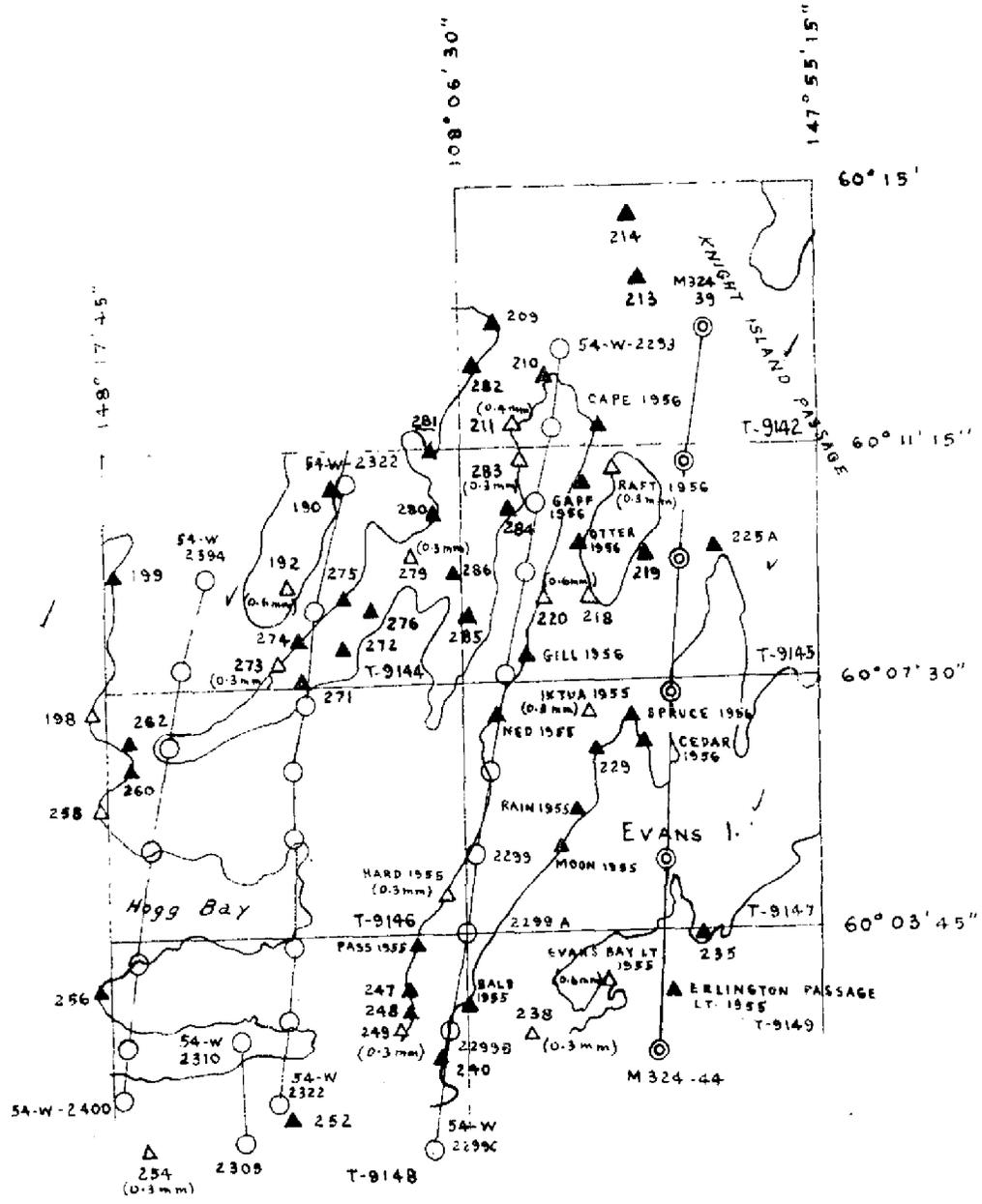
Submitted by
R. L. Sugden

R. L. Sugden

Approved:

Everett H. Ramsey

Everett H. Ramsey
Chief, Graphic Compilation Unit



PHOTOGRAMMETRIC PLOT SKETCH
 PROJ-6152 PRINCE WM. SD.

SCALE 1:10,000
 DEC 1957

KEY TO NUMBERED STATIONS

- 209 - PISA 1948
 - 260 - FLAT 1948
 - 258 - HOGG 1927
 - 235 - SHUN 1927
 - 238 - EVANS 1905
 - 240 - ISLE 1910
 - 247 - SAND 1910
 - 248 - PED 1910
 - 249 - DFF 1910
 - 252 - TOP Z 1927
 - 284 - ROCK (ROCK 2) 1927
 - 286 - SWAN 1927
- or names of other numbered stations see original report.

- ▲ STATION HELD
- △ STATION NOT HELD
- U.S.C. & G.S. "W" CAMERA PHOTOGRAPHS
- ⊙ AIR FORCE PHOTOGRAPHS - Series M-324

MAP T. 9144 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		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
Sip. 1948	VI 282	N.A. 1927	60-09-17.511 148-06-46.831				541.9 (1315.1) 722.5 (203.2)		
Outer, 1948	"	"	60-09-13.926 148-06-39.583				431.0 (1126.0) 610.7 (315.0)		
Nub, 1948	VI 273	"	60-10-02.242 148-07-18.985				69.4 (1787.6) 292.8 (632.6)		
Nub Sub. Sta.		"	60-10 148-07				46.5 (1810.5) 336.7 (588.7)		
Elev. 4± Ft. Low, 1948	VI 273	"	60-11-06.390 148-07-05.427				197.8 (1659.2) 83.7 (811.2)		
Elev. 10± Ft. Ruth, 1948	"	"	60-09-23.019 148-07-53.075				712.4 (1114.6) 818.8 (106.8)		
Ruth Sub. Sta.		"	60-09 148-07				711.1 (1145.9) 815.8 (109.8)		
Elev. 2461 Ft. Peak, A, 1927	VI 280	"	60-08-50.90 148-15-37.68				1575.3 (281.7) 581.4 (344.5)		
Elev. 1886 Ft. Peak S, 1948	VI 284	"	60-07-52.98 148-08-03.46				1639.7 (217.3) 53.4 (872.9)		
Elev. 8 ± Ft. Bend, 1948	VI 273	"	60-09-11.024 148-09-08.850				341.2 (1515.8) 136.5 (789.2)		
Elev. 11± Ft. Age, 1948	VI 272	"	60-08-42.969 148-09-05.337				1329.8 (527.2) 82.4 (813.6)		

1 FT. = 3048006 METER
 COMPUTED BY: C. O. DeMarr
 DATE: 16 March 1955
 CHECKED BY: Hundley
 DATE: 23 March 1955
 M-2388-12

20
4

MAP T. 91111 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)	
Elev. 8± Ft. Pass, 1948	VI 272	N.A. 1927	60-08-49.632 148-09-50.422				1536.1 (320.9) 778.1 (147.8)		
Half, 1948	"	"	60-08-31.435 148-10-30.897				972.9 (884.1) 476.9 (449.1)		
Clear, 1948	"	"	60-07-55.638 148-11-55.007				1721.9 (135.1) 849.3 (77.0)		
Cross, 1948	"	"	60-08-14.743 148-10-15.080				456.3 (1400.7) 232.8 (639.4)		
Plain, 1948	"	"	60-07-47.382 148-11-37.269				1466.4 (390.6) 575.4 (351.0)		
Bebe, 1933	VI 158	"	60-10-37.372 148-10-41.479				1156.6 (700.4) 639.5 (285.6)		
Bebe Sub. Sta.	"	"	60-10 148-10				1143.6 (713.4) 646.6 (278.5)		
Alex, 1933	VI 158	"	60-10-30.560 148-11-56.982				945.8 (911.2) 878.6 (46.5)		
Kit, 1933	"	"	60-09-03.639 148-11-53.273				112.6 (1744.4) 822.0 (103.8)		
Kit Sub. Sta.	"	"	60-09 148-11				102.8 (1754.2) 824.0 (101.8)		
Black Pk. No. 1	VI 259	"	60-10-30.52 148-12-27.86				944.6 (912.4) 429.6 (495.5)		
Black Pk. No. 2	VI 259	"	60-11-08.75 148-11-03.69				270.8 (1586.2) 56.9 (867.9)		N U

This position obviously incorrect. cftB.

Ph-152
Compilation Report
T-9144

31. DELINEATION:

Shoreline and foreshore features were delineated on the manuscripts from office stereoscopic interpretation, except in WHALE BAY, which was delineated with the aid of shoreline field inspection.

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 to compilation points of near-sea-level elevation.

The wooded nature of these islands and the three and four-time enlargement of the photographs are factors which prevent a complete symbolization of the MHWL and offshore features. The displacement of the trees causes overhang, and shadows are also a deterrent in properly identifying horizontal control alongshore. Consequently, more use is made of the dashed approximate shoreline symbol than is desired.

On the extreme southern edge of the manuscript the shoreline was delineated without benefit of stereoscopic comparison. This was due to the scheduling of the work in that it was necessary to send the office photographs of the first radial plot (south of T-9144) to the field along with the manuscripts.

32. CONTROL:

The radial plot report is filed with this report for T-9144.

There are two U.S.C.&G.S. field-identified triangulation stations, and nine triangulation stations identified by the 30th Engineers.

In WHALE BAY control is considered adequate. In the PORT BAINBRIDGE and BAINBRIDGE PASSAGE area control was pricked from 30th Engineers, 1:40,000 field photography direct, and is therefore considered inadequate. Field control at 1:10,000 scale has been requested in this area.

In WHALE BAY 34 photo-hydro stations were identified and have been added to the manuscript. (See Paragraph 49, Notes to the Hydrographer, for the tabulation.)

33. SUPPLEMENTAL DATA:

None.

The field inspection report (1951) is filed with T-9144.

34. CONTOURS AND DRAINAGE:

Not applicable.

35. SHORELINE AND ALONGSHORE DETAILS:

Field inspection of shoreline was limited to WHALE BAY. The shoreline inspection was adequate in this area.

On the western edge of the manuscript in PORT BAINBRIDGE, most of the shoreline was shown as approximate. This was due to overhanging trees and no shoreline inspection.

It is noted that the photographs were taken at approximately half-tide with a range of tide of 12 feet. For that reason many of the small offshore rocks may be incorrectly symbolized in PORT BAINBRIDGE and BAINBRIDGE PASSAGE for lack of reference data.

The MHWL shown with the approximate MHWL symbol is thought to be fairly accurate in relation to the other details on the manuscript as regards horizontal position and general configuration.

Field inspection is particularly needed in these areas, and is requested for smooth sheet plotting.

36. OFFSHORE FEATURES:

Office interpretation of offshore details is subject to field verification by the hydrographic party.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Junctions were effected on all sides of the manuscript - T-9141, T-9143-T-9145, T-9146.

40. HORIZONTAL AND VERTICAL ACCURACY:

Vertical accuracy is inapplicable. In WHALE BAY the horizontal accuracy is believed to comply with standard map accuracy requirements. A new plot will be laid in the PORT BAINBRIDGE and BAINBRIDGE PASSAGE area for smooth sheet plotting.

46. COMPARISON WITH EXISTING MAPS:

None.

47. COMPARISON WITH EXISTING MAPS:

A comparison was made with Nautical Chart 8551 (1:200,000).

Approved by:

K. N. Maki for R. J. F.
R. J. French
Supervisory Cartographer

Submitted by:

J. P. Battley, Jr.
J. P. Battley, Jr.
Cartographic Photo. Aid

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

Iktun 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:



K. N. Maki

October 19, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9144

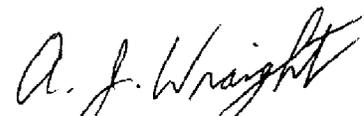
Bainbridge Island

Bainbridge Passage

Port Bainbridge

Whale Bay

Approved by:



A. Joseph Wraight
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

49. NOTES TO THE HYDROGRAPHER:

The field inspection identified many more stations than are here located. In view of the 1:20,000 identification, the compiler located only those that appeared most reliable in identification and position. Refer to the radial plot report for the method by which these stations were located.

DescriptionPhoto-hydros:

- 063 - Center cut stump on projecting whitish rock bluff
- 065 - Outer north corner of point with fall in niche behind
- 067 - White topped smooth rock top of ledge on projecting point
- 069 - Outer southerly corner point (Rk under trees here is white spotted)
- 071 - Outcropping grey bluff just north of trash and slide area
- 072 - Southerly corner point of rock bluff (There is a slightly overhanging tree here)
- 076 - Prominent (25') bleached stump at small slide
- 077 - Easterly, bush, medium size spruce in middle of islet
- 078 - Outer spruce at grass point
- 080 - High point (5') of low grassy rock ledge
- 082 - Small projecting rocky point at HWL
- 084 - 3 small dead snags back of low rock ledge point
- 085 - Small bleached snag and mossed dead tree at point
- 087 - Outer corner of prominent "V" rocky point
- 089 - Medium size spruce at stream and HWL. (There is a crooked mossed tree to east.)
- 092 - Leaning snag at corner point south of stream
- 094 - Two leaning mossed dead trees on east corner of point
- 097 - Outer edge of rounding point at small older bush and slightly leaning spruce

- 099 - Projecting low bluff point with small stunted spruce and bleached root snag
- 100 - Outer of 3 spindly dead mossed trees. (There is a live spruce here, also.)
- 101 - NW nose-like V corner of rock bluff
- 103 - Tall half-dead tree in small lone patch of trees in grass area

Hydros:

- 104 - Lone mossy spruce just back of low, white-topped boulder in grass
- 105 - Rocky corner point of small bushy overhanging spruce
- 106 - High point (3') rock of point
- 107 - Projecting sloping rock point with 2 dead mossed trees and snag
- 111 - Exposed root at point and in front of clump of mossed trees
- 113 - Old roots and trees at HWL at base of small slide area
- 114 - Southerly of twin corner points of low rock bluff
- 115 - Short bushy spruce at corner point
- 116 - Slightly leaning spruce at very edge of low rock bluff
- 117 - Corner point of low rock bluff with 3 moss-covered trees
- 118 - Outer sloping low rock point at HWL
- 119 - Tall slender bleached dead tree on semi-detached islet

49. Notes for the Hydrographer

1957 Photo-hydro stations (no descriptions available at time of compilation)

EGG	VEX	ZIG
TOM	VET	SUE
GUS	PET	HAG
RAT	GAL	HAT
FAR	JOY	FEW
LUX	OLD	VET
NIG	TUB	MUD
LAD	FUG	HOP
JOE	KIN	MOO
EGO	DIM	KID
WAR		

*

(GEM was omitted on manuscript because a discrepancy was indicated in transferring the point on the field photographs)

The manuscript was revised in December 1957 to incorporate changes in position which resulted from a new radial plot in this area. The manuscript is now in final form but subject to change by final office review. All photo-hydro stations shown on the vinylite impression were transferred or relocated on the manuscript.

* In a letter to this office from Capt. Mast dated 13 April, 1959 a request was made for the position of GEM. Using field print # 2298 the field identification was transferred to the manuscript by holding common detail (i.e. hydro stations) A copy was forwarded to the Seattle processing office with GEM added. AKA.

FORM 1002(T-2) PHOTOGAMMETRIC OFFICE REVIEW

MAP T-9144

PROJECT PH-152

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

DESCRIPTIVE REPORT
Project PE-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 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 Flemming Island appeared on this manuscript as a dashed line labeled "APPROXIMATE MHWL". Five signals, VAL, WAD, YAM, 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 MHWL by plane-table and stadia distances. The approximate MHWL was removed from the black line impression of the manuscript and the correct shoreline was applied. One rock awash 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 awash and the small islet should be held fixed when the rest of the shoreline is adjusted to the correct datum.

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

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

PRELIMINARY SHORELINE MANUSCRIPT T-9139

On Verdant Island the approximate MHWL between BAT and WAX was resolved by plane-table, using the manuscript as the field sheet. Stations COD, DOT and EGO were located by plane-table fixes on photo-hydro points, and all shoreline was controlled by photo-hydro points.

The approximate MHWL between UTE and PAWN 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 LOG and FUG, near GAD, between KOP and LUX 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 $60^{\circ} 15'9$, longitude $148^{\circ} 17'6$ was carefully field inspected and the true MHWL is indicated on photographs 54W2433 and 54W2434. The true MHWL in the small bay at latitude $60^{\circ} 16'3$ and longitude $148^{\circ} 17'5$, 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 JOE and NOD (T-9146), in the vicinity of stations END, FRY, and in the vicinity of LAX and PLAIN 1948 was resolved by plane-table, using photogrammetric control. Stations END, 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 SHORELINE MANUSCRIPT T-9140

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

1. Vicinity of stations HAT and GAB.
2. Vicinity of station EEL, latitude 60° 12'10", longitude 148° 21'17".
3. Vicinity of ZEUS 1933 and AGE.

The approximate MHWL in the vicinity of topographic station DOLT 1951 was field inspected and the true MHWL 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 MHWL.

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>
GROWL 1957	54W2498 T-9143
FINISH 1957	54W2498 - 9143
← BEAM 1957	54W2494 - 9138
← MIND 1957	54W2494 - 9138
- PLAIN 1948 (211)	54W2320 - 9144
- TUFF 1948 (264)	54W2396 - 9146
- FLAT 1948 (260)	54W2396 - 9146
- GLAC 1927 (201)	54W2427 - 90 of 9143
- BRID 1927 (200)	54W2428 - 9143
- WAT 1927 (198)	54W2396 - 9146
- GOAT 1927 (199)	54W2395 - 9144

Kept to index

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, UEMA 1957, JOWL 1957, SAND 1957.

Lorin F. Woodcock
 Lorin F. Woodcock
 LCDR, C&GS

Approved and forwarded:

Fred Natella
 Fred Natella
 CDR, C&GS
 Commanding Ship BOWIE

REVIEW REPORT T-9144

SHORELINE

JANUARY 26, 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 through 65 is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with Survey No. T-4803, scale 1:20,000, dated July-Aug. 1927. This comparison was for Port Bainbridge only. Differences between T-4803 and T-9144 are shown in blue on the comparison print.

There is no comparison with registered surveys east of longitude 148°16'30"; none were available.

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), ALASKA, both scale 1:63,360 and both dated 1952.

No significant differences with SEWARD (A-3) were noted.

Differences between SEWARD (A-4) and T-9144 are shown in brown on the comparison print. A rock awash at approximate latitude 60°09.5', longitude 148°07.8' is particularly noted. It is not visible on the photographs and is not shown on Chart 8523.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with Survey H-8205, scale 1:10,000, dated 1955, and with Survey H-8311, scale 1:12,500, dated 1956. There were no differences between

H-8205 and T-9144. The only differences between H-8311 and T-9144 were rocks, not visible on the photographs, that were located by the hydrographer. These are shown in purple on the comparison print. The most significant one of these is at latitude $60^{\circ}10.5'$, longitude $148^{\circ}10.7'$.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison of the Port Bainbridge area was made with Chart 8528, scale 1:40,000, 4th edition, dated Nov. 25, 1968. No significant differences were noted in this area.

A visual comparison of the remainder of the map was made with Chart 8523, scale 1:80,000, 4th edition, dated Oct. 10, 1966. Several rocks not visible on the photographs, but shown on Chart 8523, are indicated 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
January 26, 1971

Approved for forwarding:

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

Approved:

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

Approved:

Charles L. ... *Jack E. Luth*
Chief, Photogrammetric Branch Chief, Photogrammetry Division

148° 17'

16' 30"

39

60° 10'

60° 10'

JOINS SURVEY NO. T-9143

COMPARISON PRINT

Brown = SEWARD (A-4)
Blue = T-4308

shallow

Also on SEWARD (A-4)

60° 09'

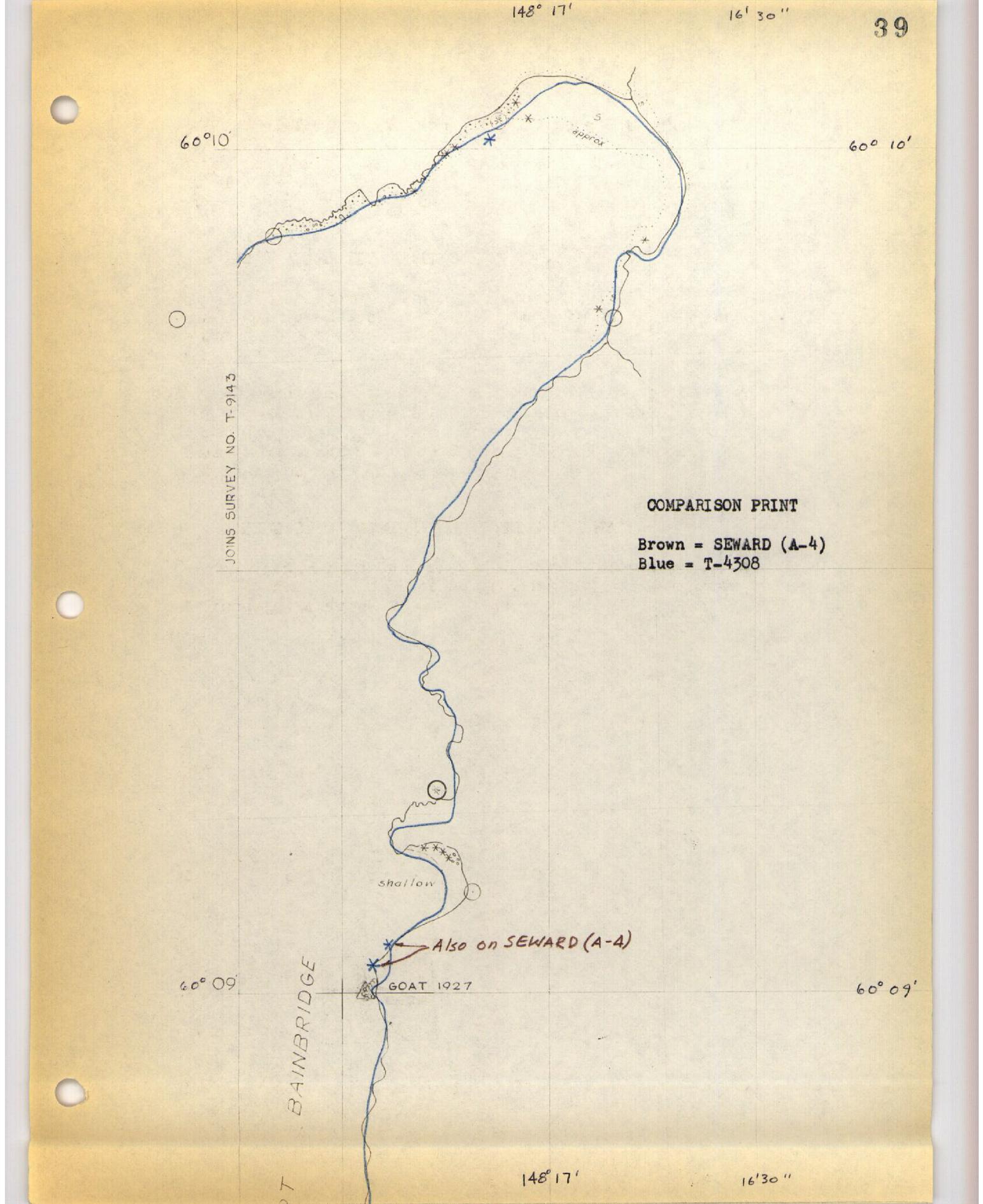
60° 09'

GOAT 1927

BAINBRIDGE

148° 17'

16' 30"



148° 17'

POA

08' 30"

COMPARISON PRINT

Brown = SEWARD (A-4)

Blue = T-4308

Bare rock on SEWARD (A-4)

08'

60° 08'

$r = 6,666,000 \text{ m.}$

60° 07' 30"

60° 07' 30"

148° 17' 45"

148° 17'

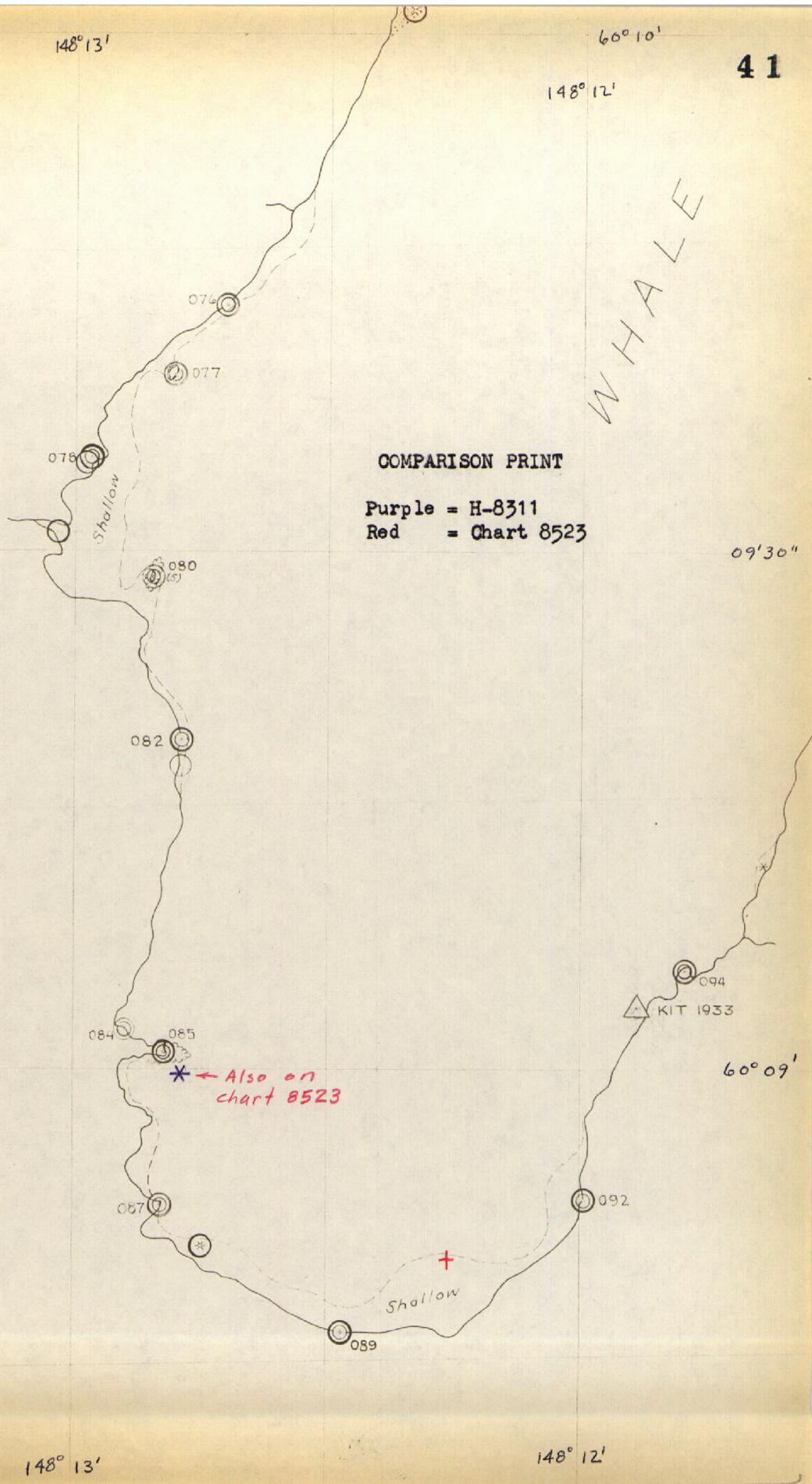
$r = 428,000 \text{ m.}$



WHALE

COMPARISON PRINT

Purple = H-8311
Red = Chart 8523



148° 10'

60° 11'

COMPARISON PRINT

Purple = H-8311
Red = Chart 8523

Also on Chart 8523

*

**

(9)

107

(3)

106

105

104

103

*

101

Foul *

100

099

148° 11'

148° 10'

60° 10'

54 W

BEBE 1933

Shallow

(B)

115

116

117

118

113

114

111

(C)

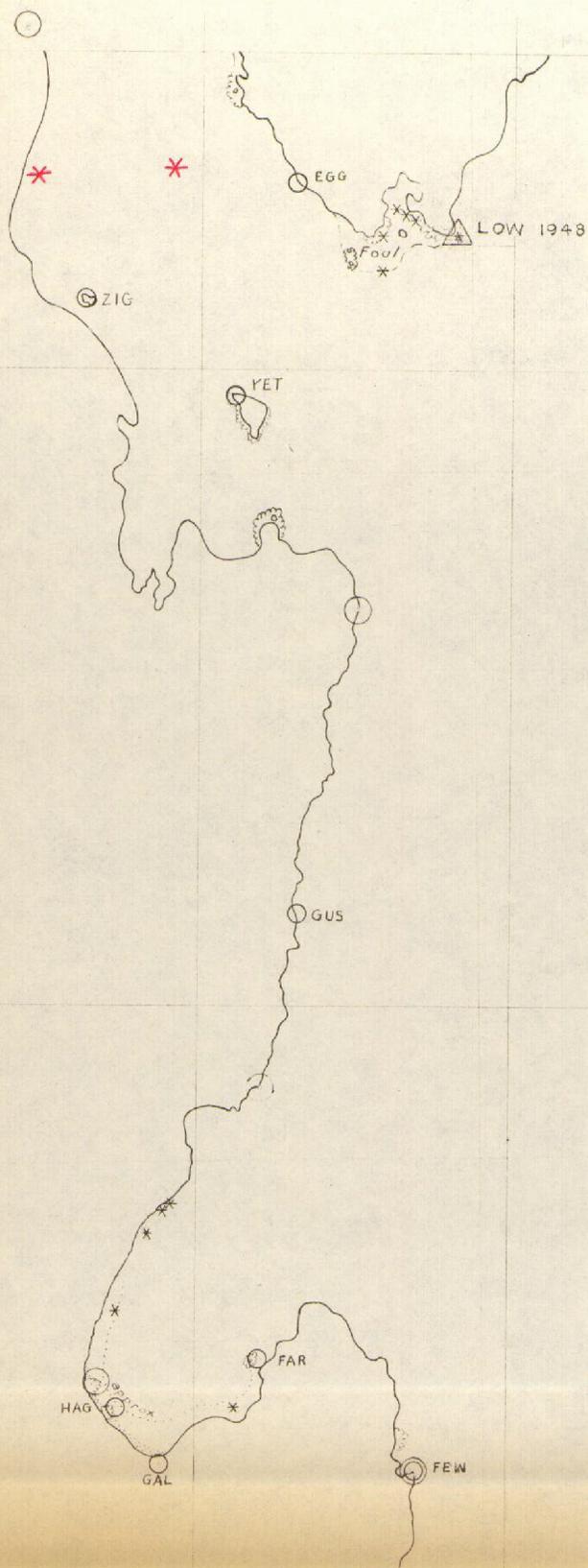
08'

x=438,000 m.

07'

148° 06' 30"

60° 11' 15"



y=6,672,000 m.

COMPARISON PRINT

Red = Chart 8523

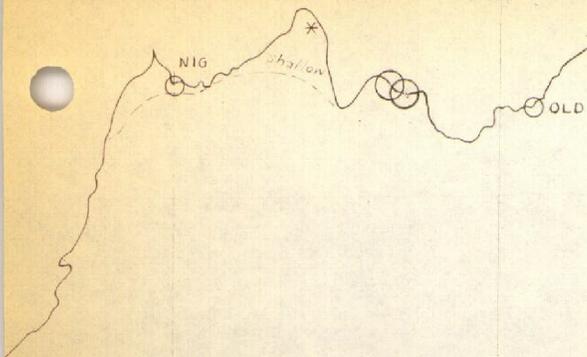
148° 08'

NUB 1948

148° 07'

60° 10'

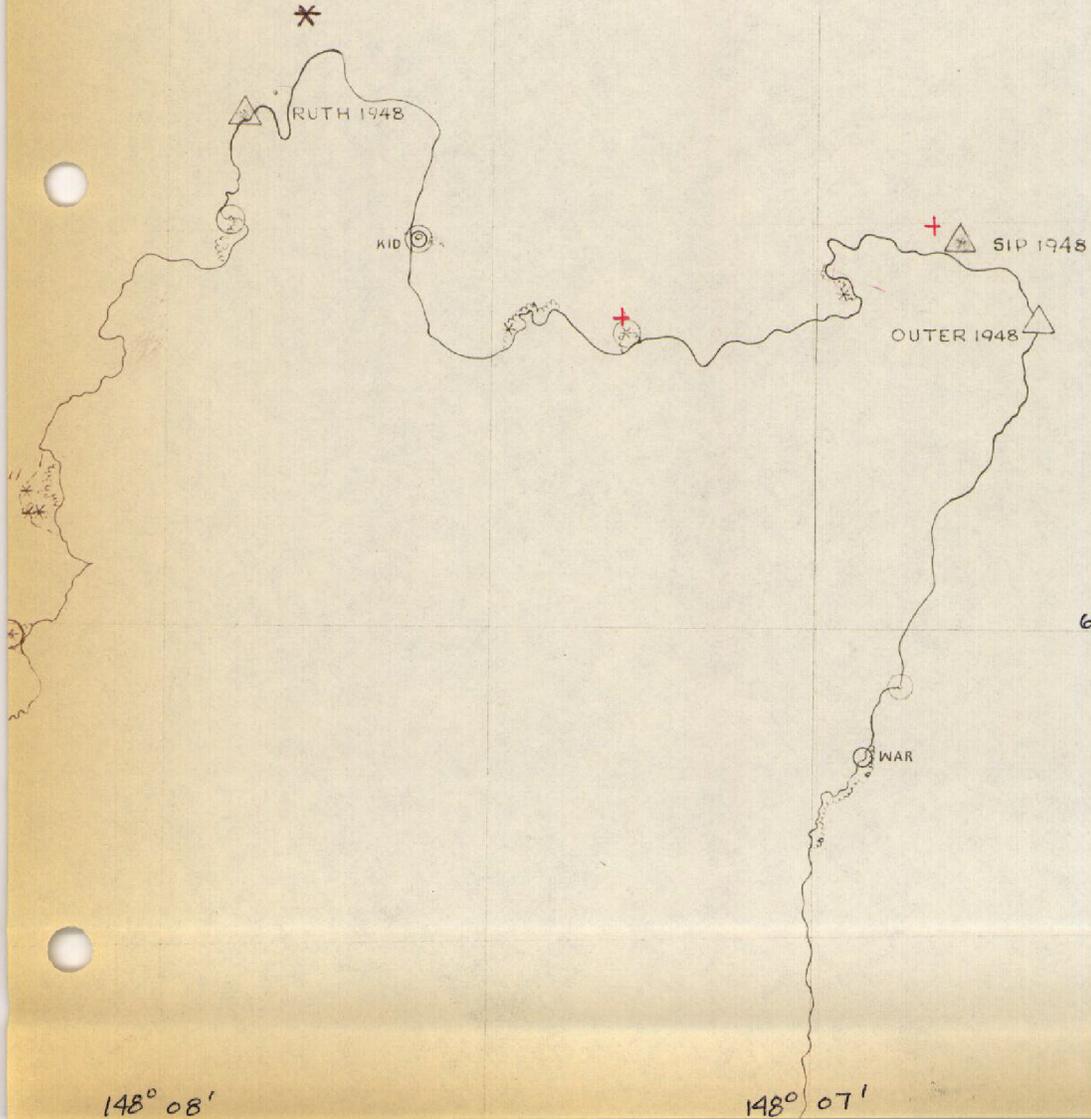
44



COMPARISON PRINT

Brown = SEWARD (A-4)
Red = Chart 8523

JOINS SURVEY NO T-9145



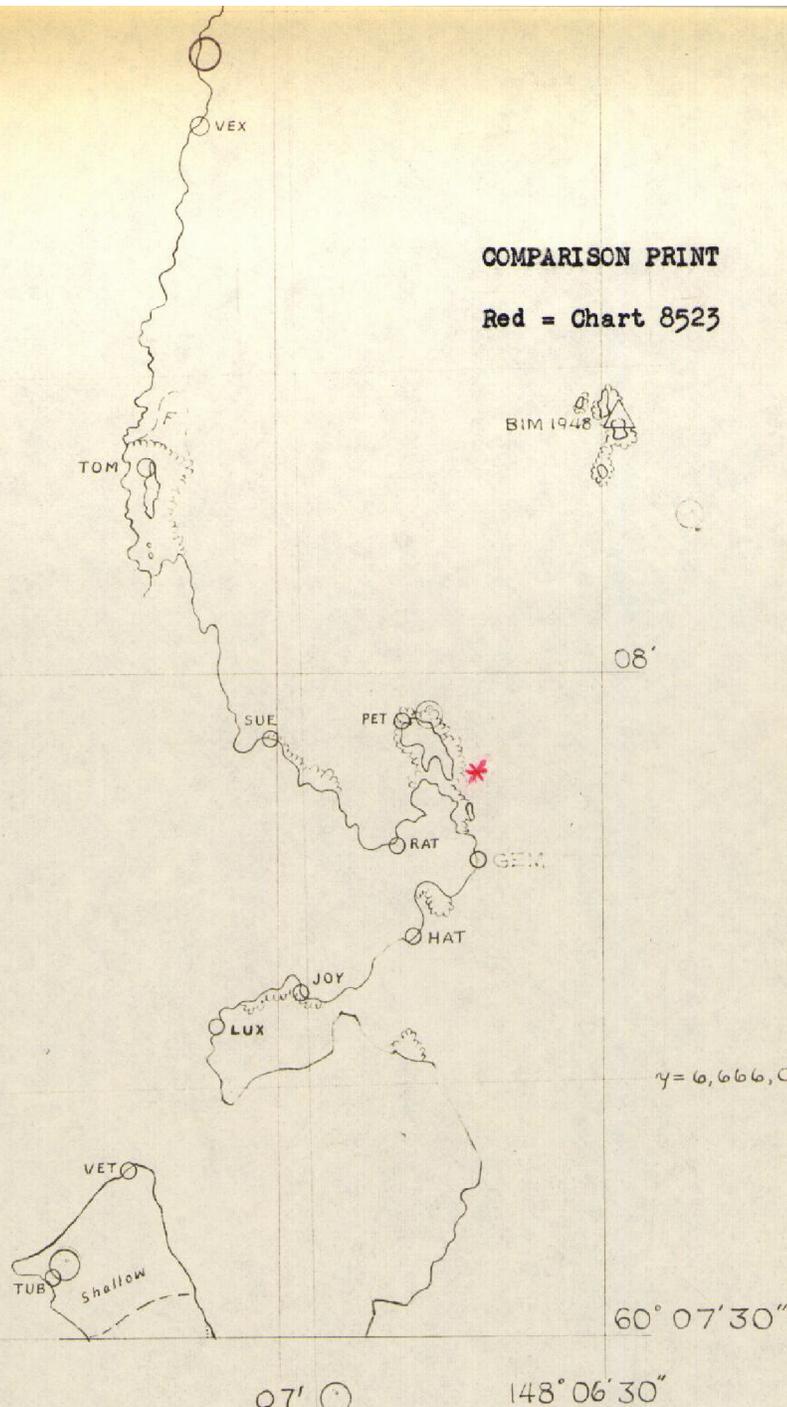
60° 09'

148° 08'

148° 07'

COMPARISON PRINT

Red = Chart 8523



SHORELINE MANUSCRIPT
 T-9144
 SCALE: 1:10,000
 ALASKA
 PRINCE WILLIAM SOUND
 BAINBRIDGE PASSAGE
 POLYCONIC PROJECTION
 U. T. M. GRID ZONE 6
 HORIZONTAL DATUM N. A. 1927

T-9144

1:437,000 m.

1:6,666,000 m.

948

148° 12'

148° 11'

HALF 1948

46
BAINBRIDGE

Also on
chart 8523

CROSS 1948

COMPARISON PRINT

Purple = H-8311
Red = Chart 8523

60° 08'

CLEAR 1948

KING

LAX

PLAIN 1948

(3)
shallow

*(8) +

o(2)

* QW MHW

*

+

60° 07' 30"

JOINS SURVEY NO T-9146

148° 12'

148° 11'

NOTE: Unlabeled circles are photo
plot points; not map features

ADVANCE MANUS

This manuscript is based on field identified control and fi
however, subject to correction after final office review.

