

9147

9147

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-9147
LOCALITY	
State	ALASKA
General locality	PRINCE WILLIAM SOUND
Locality	CRAB BAY
1950-55	
CHIEF OF PARTY Cartographic Branch, Photogrammetry Division Washington, D. C.	
LIBRARY & ARCHIVES	
DATE	

## DESCRIPTIVE REPORT - DATA RECORD

T- 9147

1

PROJECT NO. (II): PH-152		
FIELD OFFICE (III):		CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III): Washington, D. C.		OFFICER-IN-CHARGE L. W. Swanson
INSTRUCTIONS DATED (II) (III): 31 December 1954 - 731-MKL 11 February 1955 - 732-MKL 14 March 1956 - Supplement 2, Project 6152		
METHOD OF COMPILATION (III): Graphic		
MANUSCRIPT SCALE (III): 1:10,000		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III): N. A. 1927		VERTICAL DATUM (III): M. H. W. MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>
REFERENCE STATION (III):		
LAT.:	LONG.:	<input type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): Y = X =		STATE ZONE
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

2

Field Inspection by (II):

See Photogrammetric plot report

Date:

Planetable contouring by (II):

--

Date:

Completion Surveys by (II):

--

Date:

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

Date of Photography

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

Date: 1-7-55

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

Date: 1-12-55

Control plotted by (III): G. Amburn

Date: 16-18 Mar. 1955

Control checked by (III): J. Hundley

Date: 21-22 Mar. 1955

Radial Plot or Stereoscopic

Control extension by (III): S. G. Blankenbaker

J. E. Hundley

Planimetry

Date: 13 April 1955

Stereoscopic Instrument compilation (III):

Contours

Date:

Date:

Manuscript delineated by (III): 9146 - Charles Baldwin

9147 - J. E. Hundley

9148 - S. G. Blankenbaker

9149, 9150, 9151 - J. P. Battley, Jr.

Photogrammetric Office Review by (III): R. J. French

Date: April 1955

Date: April 1955

Elevations on Manuscript

checked by (II) (III):

--

Date:

Camera (kind or source) (III): "W" USC&GS, Single lens and Air Force  
Single lens

3

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
54W-2296-2303	26 July 1954	12:29-12:33	1:10,000 (Ratio)	5.9 above MLLW
54W-2306-2311	" " "	12:40-12:43	"	5.7 " "
54W-2315-2322	" " "	12:56-12:59	"	4.7 " "
54W-2393-2401	" " "	13:42-13:45	"	4.0 " "
91RTS, M324, 91SRW, 41VV-45VV-17 July '50 - <del>11:30</del>			"	<del>5.3</del> " "
91RTS, M348, 91SRW, 59VV-64VV-2 Aug. '50 - <del>12:30</del>			"	<del>6.0</del> " "
		UNKNOWN		Near HW

Tide (III)

Diurnal

Reference Station: CORDOVA, ALASKA, pp. 122 & 181  
Subordinate Station: \*CULROSS BAY, WELLS PASSAGE  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	10.0	12.4
1.0	9.7	12.1

Atlantic Marine Center  
~~XXXXXXXXXXXXXXXXXXXX~~ by (IV): C. H. Bishop

Date: 2-4-71

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):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

The following data also applies to this project (Ph-152):

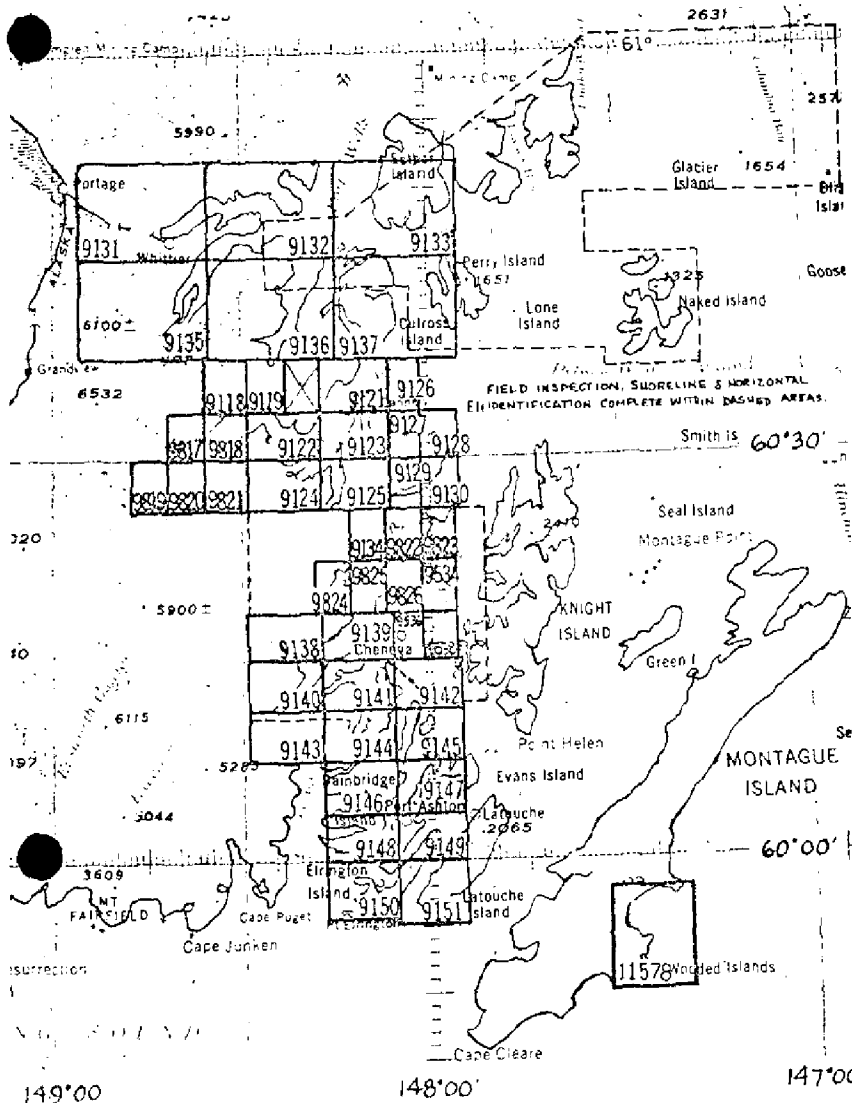
* Subordinate Station	Time of Tide	Ratio of Ranges	Mean Range	Diurnal Range
Hogg Bay, Port Bainbridge	-05'	0.8	8.3	10.6
Latouche, Latouche I.	00	0.9	9.1	11.5
Sawmill Bay, Evans I.	00	0.9	8.9	11.3
Eshamy Bay, Knight I. Passage	+05'	1.0	9.5	11.9
Chenega I., Dangerous Passage	+05'	0.9	9.2	11.6



T-9147

COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline compiled	April 1955	Superseded
Manuscript revised	May 1956	Superseded
New radial plot, manuscript revised	Dec. 1957	
Final review	Feb. 1971	

## Prince William Sound, Alaska



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

9118	3	13
9119	9	11
9121	11	10
9122	23	7
9123	17	7
9124	7	5
9125	15	6
9126	5	3
9127	6	3
9128	5	2
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-9147

Several years have elapsed between the compilation and final review of this map. None of the C&GS compilation photographs were available at the time of final review. Two Air Force photographs were available. 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-9147 includes part of Prince of Wales Passage and the north side of Sawmill Bay.

Compilation was by radial plot in 1955, using ratio prints of 1:30,000 scale photography taken in July 1954, supplemented by ratio prints of 1:40,000 scale Air Force photographs taken in July 1950. There was no field inspection before the original compilation.

Previously established horizontal control and new triangulation stations were identified during the field season of 1955. Using these additional stations, new positions for photo centers and pass points used in the original compilation were established by stereoplanigraph bridging and the manuscript was revised in 1956. It was redelineated in 1957 to incorporate changes in position resulting from a new radial plot.

The Field Inspection Report by Kenneth A. MacDonald in 1955, which is bound with this Descriptive Report in place of the Field Edit Report, indicates that little, if any, field edit was accomplished, other than the recovery and identification of additional horizontal control and the establishment and identification of new control, where needed.

Final review was done at the Atlantic Marine Center in February 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.

PHOTOGRAMMETRIC PLOT REPORT NO. 1  
PRINCE WILLIAM SOUND, ALASKA  
Project PH-152

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21. AREA COVERED

Shoreline manuscripts (preliminary) included in this report are the following: T-9146, T-9147, T-9148, T-9149, T-9150 and T-9151.

22. METHOD

Polyconic projection and grid lines were ruled at 1:10,000 scale on the manuscripts. The grid lines were used in joining the manuscripts for the radial plot. Manuscripts T-9144 and T-9145 were included with those previously listed for one laydown. A tab was made to extend to control stations LATOUCHE COMM. CLUB, FLAG POLE, 1927, SUMMIT, 1905, and LATOUCHE HIGH PEAK, 1905 on the east.

The calibration templates were used, for all photographs involved, in the preparation of the vinylite hand templates.

The photographs were positype paper prints with enlargement of three and four diameters. All photographs used are listed in the data record of this report.

The results obtained from the radial plot most probably meet the requirements of mapping accuracy in the areas covered by manuscripts T-9146, T-9148, T-9150 and are less accurate in the areas covered by manuscripts T-9147, T-9149 and T-9151. These conditions are the results of a combination of factors, such as:  
1. Flight line coverage of single-lens photography, and 2. scarcity of identifiable control, especially on the north end of ELRINGTON ISLAND and west central coast of LATOUCHE ISLAND. Note: Metal templates were prepared and used in an attempted laydown of the plot but the results were questionable and the method abandoned.

Some difficulty was encountered in transferring control from 1:40,000 scale prints to 1:10,000 scale prints. (See paragraph 24 of this report.)

23. ADEQUACY OF CONTROL

An attached sketch indicates the density and distribution of control within the area covered by this report. The majority of control stations were office identified, and only seventy-two percent held in the plot. Control is inadequate/void at or near north end of Elrington Island and on west central coast of Latouche Island.

Map position is believed to be least accurate in the eastern half of manuscripts T-9147, T-9149 and T-9151.

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24. SUPPLEMENTAL DATA

The following planetable sheets were aids in identifying control and in the delineation of shoreline and foreshore features:

2770 - scale 1:40,000, 1906  
3093 - scale 1:20,000, 1910  
4285 - scale 1:10,000, 1927  
4308 - scale 1:20,000, 1927  
4316 - scale 1:10,000, 1927

Photo-identification data of horizontal control, on 1:40,000-scale prints by the 30th Engineer Battalion in 1951, was used in conjunction with office identification of control on 1:10,000-scale prints.

25. PHOTOGRAPHY

The photography was adequate as to coverage and overlaps, but inadequate as to placement of flight lines and definition on outer edges.

Although the higher altitude photography minimized relief displacement of trees along the shoreline, it did not alleviate the problem of pricking control and pass points in those areas.

SKETCH AND GEOGRAPHIC POSITIONS

A sketch and list of geographic positions are attached.

Approved:

Respectfully submitted

Roscoe J. French

Roscoe J. French  
Supervisory Cartographer

James E. Hundley

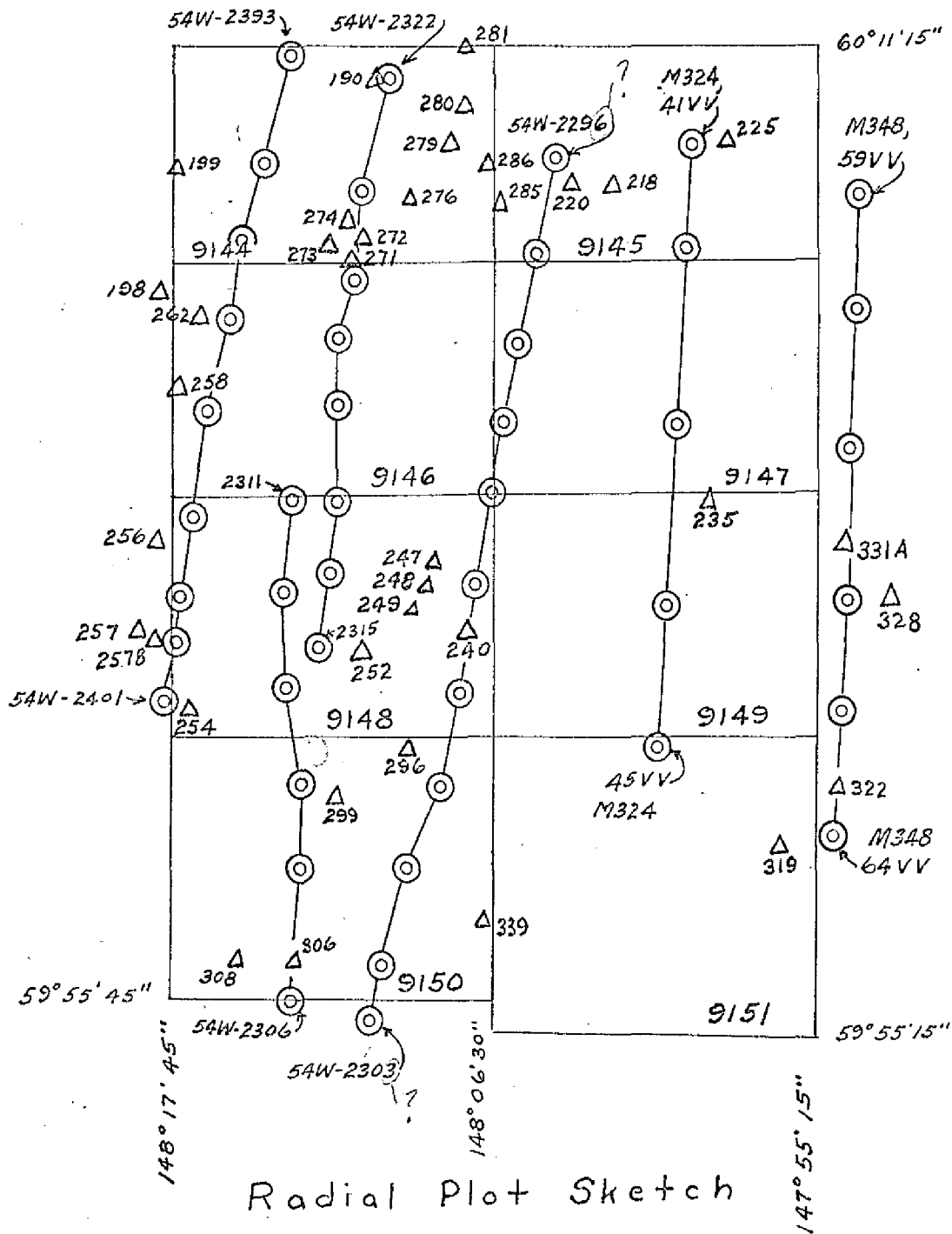
James E. Hundley  
Cartographer

HORIZONTAL CONTROL STATIONS HELD IN RADIAL PLOT NO. 1  
T-9146, T-9147, T-9148, T-9149, T-9150, T-9151

190. BEBE, 1933 (Sub. Sta.)*	272. CROSS, 1948
198. WAT, 1927, r-48	273. CLEAR, 1948
199. GOAT, 1927	274. HALF, 1948
218. ROT, 1910	276. AGE, 1948
220. HCRN, 1910	279. RUTH, 1948
225. BEAR, 1907, r-09	280. NUB, 1948 (Sub. Sta.)*
F 235. SHUN, 1927	281. LCM, 1948
F 240. ISLE, 1910, r-27	285. INNER, 1948
F 247. SAND, 1910	286. SIP, 1948
F 248. PED, 1910	F 296. ISLAND, 1927
249. OFF, 1910	F 299. LONE TREE PT. LT., 1927
F 252. TOP 2, 1927	306. NOB, 1927
254. ROCK (ROCK 2), 1927	F 308. ELRINGTON LT., 1927
F 256. SWAN, 1927	319. KNOB, N. of Fairview, 1905
F 257. PYKE, 1927	322. LATOUCHE HIGH PK., 1905
257B. HEN, 1927	328. SUMMIT, 1905, r-07
258. HOGG, 1927	331A. LATOUCHE, COMMUNITY CLUB, FLAG POLE, 1927
262. HYDRO, 1948	339. ELRINGTON, HIGHEST PK., 1905
271. PLAIN, 1948	

\*Field identified.

PH-152



PROJECT PH-152  
 PHOTODIAGNOSTIC PLOT REPORT  
 (T-9133 through T-9147) Supplement 2  
 (Including Portions of T-9148 and T-9149)  
 December 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.

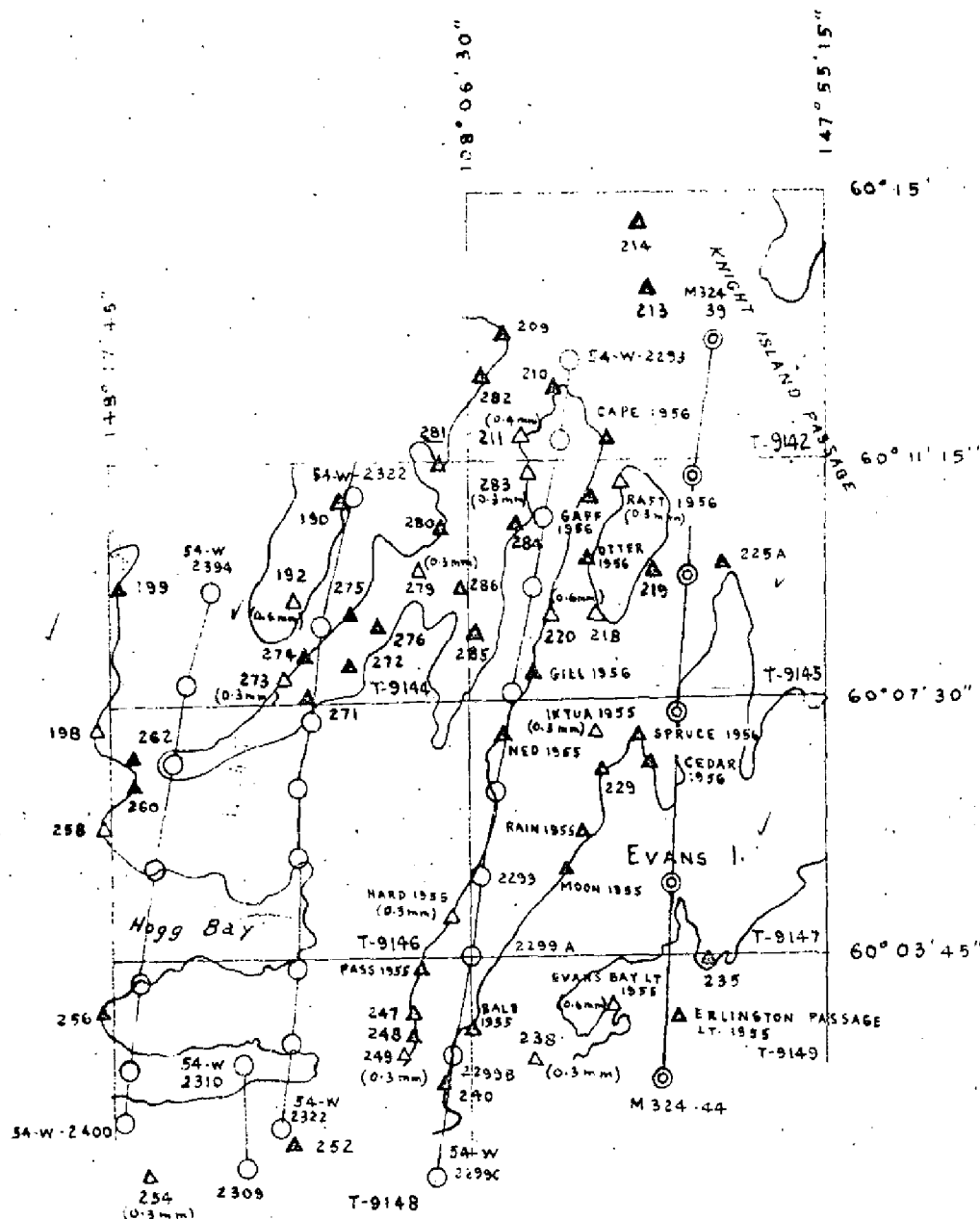
Submitted by  
R. L. Sugden

*R. L. Sugden*

Approved:

*Everett H. Ramey*

Everett H. Ramey  
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 - OFF 1910
- 252 - TOP Z 1927
- 254 - 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. 9147 PROJECT NO. Ph-152 SCALE OF MAP 1:10,000 SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\nu$ -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)	FORWARD	(BACK)
Ben, 1927	VI 98	1927	60-03-49.81				1541.6	(315.3)		
			148-00-58.02				897.6	(30.7)		
Wood, 1910	VI 275	"	60-05-00.491				15.2	(1841.7)		
			148-06-21.920				338.9	(588.8)		
Lap, 1910	VI 275	"	60-07-16.551				512.2	(1344.7)		
			148-02-00.924				14.3	(912.4)		
Cube, 1910	VI 276	"	60-07-22.20				687.1	(1169.8)		
			148-05-23.69				365.8	(560.8)		
Bad, 1910	VI 275	"	60-05-27.249				843.3	(1013.6)		
			148-06-05.912				91.4	(836.1)		
Ded, 1910	VI 274	"	60-06-38.732				1198.7	(658.2)		
			148-04-58.630				905.8	(21.2)		
Elev. 1 $\pm$ ft. Guguak, 1910	VI 269	"	60-06-42.696				1321.4	(535.5)		
			148-02-14.746				227.8	(699.1)		
Pik, 1910	VI 276	"	60-05-36.89				1141.7	(715.2)		
			148-04-23.39				361.5	(565.9)		
Vi, 1910	VI 276	"	60-05-03.95				122.2	(1734.7)		
			148-04-02.40				37.1	(890.6)		
Elev. 739 ft. Whale, 1910	VI 269	"	60-04-46.659				1444.0	(412.9)		
			148-03-39.182				605.9	(321.9)		
Jut, 1910	VI 276	"	60-05-45.36				1403.8	(453.1)		
			148-04-02.15				33.2	(894.1)		
Eat, 1910	VI 276	"	60-04-07.61				235.5	(1621.4)	1	
			148-05-53.47				827.1	(101.1)	4	

1 FT. = 3048006 METER

COMPUTED BY: C. O. DeMarr

DATE 15 March 1955

CHECKED BY: G. Amburn

DATE 16 March 1955

M-2388-12



MAP T-91117...

[illegible]

## COMPILATION REPORT (PRELIMINARY)

T-9146, T-9147, T-9148

T-9149, T-9150, T-9151

31. DELINEATION:

Shoreline and foreshore features were delineated on the manuscripts from office stereoscopic interpretation only.

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. Due to the fact that the photography was flown at nearly half-tide with the W-camera coverage, much of the shallow areas alongshore show as being close to the approximate Low Water line and have been so symbolized in preference to the dashed shallow line symbol. It should be verified before charting.

32. CONTROL:

Only two field-identified control stations were held. All other control was office identified (see radial plot report). The two field identified stations fall outside (north of) the manuscripts covered by this report.

33. SUPPLEMENTAL DATA:

See radial plot report for planetable topographic surveys which were used as an aid in office identifying control and delineating the shoreline and foreshore features.

34. CONTOURS AND DRAINAGE:

Not applicable.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore features were delineated from office interpretation of the photographs. In regard to the interpretation of the MHWL, it should be noted that the photographs were taken at approximately half tide, the range of tide being 12 feet. Several fairly definite lines alongshore are visible on the photographs. The line judged most likely to be the MHWL was chosen and the compilers made a consistent effort to delineate this line on the manuscripts.

Wider use was made of the low-water line symbol than is generally the case on preliminary manuscripts. The horizontal position of the low-water line is questionable due to the range of tide and time of photography. For the same reason, many of the small offshore rocks may be incorrectly symbolized for lack of reference data.

There is probably ambiguity in the use of the ledge and boulder beach symbol. However, an attempt was made to reserve the ledge symbol for the sheet rock ledge-type formation.

The MHWL shown with the approximate MHWL symbol is thought to be fairly accurate in relation to the other details on the manuscripts as regard to horizontal position and general configuration. Because of the tree overhang and heavy shadow, field inspection is particularly needed in these areas.

36. OFFSHORE FEATURES:

T-9146

Office interpretation of offshore details is subject to field verification by the hydrographic party. All visible rocks have been shown, and reference to old topographic surveys and to the nautical charts were an aid in the attempt to identify and locate isolated rocks. Not all of them could be seen on this photography, and the compiler has tried to locate only those with a definite image.

37. LANDMARKS AND AIDS:

T-9149

Two lights shown on Nautical Chart 8523 were searched for. Evans Bay Light on the north end of the peninsula, south side of Sawmill Bay, could not be identified. Elrington Passage Light on the island west of Bettles Island was identified and pricked on two photos. As the two cuts were strong and scale excellent the position of the light is believed to be good. G.P.: 60° 02' (1492m)  
148° 00' (500m).

In the area of San Juan and Port Ashton tanks of possible landmark value were delineated. The tank delineated at San Juan agrees favorably with landmark position shown on Chart 8523. At Port Ashton the tanks, as shown on the manuscript, do not agree with the position on the chart.

T-9150

Evans Island Light on the southeast shore of Evans Island was searched for but could not be identified on the photos.

38. CONTROL FOR FUTURE SURVEYS:

A set of office prints were prepared for the use of the hydrographic party in establishing photo-hydro stations in accordance with Photogrammetry Instructions No. 45.

39. JUNCTIONS:

Junctions were effected on all sides of these manuscripts, except on the north of T-9146 and T-9147 where the junction may not agree with the Advance Manuscripts which are in progress on T-9144 and T-9145.

#### 40. HORIZONTAL AND VERTICAL ACCURACY:

See Paragraph 22, Method, of the radial plot report.

Note: Control stations Slide, 1927 (T-8148) and Con, 1927 (T-9150) were not used in controlling the radial plot. During compilation it was noted that their plotted positions fall on the delineated positions of small offshore rocks, affording a good field horizontal accuracy check in the event the stations are recoverable.

Inasmuch as the time and date of the Air Force photography was unknown, a comparison was made with the adjoining photography and it was concluded that the stage of tide was near high water. It is, therefore, possible that the shoreline is of less accuracy where these photographs were used for delineation.

#### 46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS Quadrangles Blying Sound D-3, Blying Sound D-4, Seward A-3, and Seward A-4, during compilation. Due to scale, these manuscripts are of better detail and will supersede the quadrangles when the horizontal accuracy is verified by forthcoming field inspection in 1955.

#### 47. COMPARISON WITH NAUTICAL CHARTS:

All manuscripts were compared with Nautical Chart No. 8523, scale 1:40,000, published January 1935, corrected to July 1951.

##### T-9146

Chart 8523 shows a rock awash at  $60^{\circ} 04' / 148^{\circ} 15.5'$  which could not be found on the photographs. All other charted rocks within the limits of this manuscript were located.

##### T-9147

Not all of the offshore rocks could be located between the small islands just south of Guquak Bay. The foul ground symbol is shown to indicate the danger area.

Several rocks offshore from the peninsula on Evans Island, northeast of Iktua Rocks, were not visible on these photographs and are not located.

##### T-2149

Numerous offshore rocks awash shown on Chart 8523 around Bettles Island, in Sawmill Bay, were searched for and could not be identified. The bridge and road shown on the chart at Horseshoe Bay, on the west side of Latouche Island, is non-existent.

##### T-9150

The rock awash just offshore on the south side of North Twin Bay cannot be seen on this photography.



- 4 -

48. GEOGRAPHIC NAMEST-9146

PT. WATERS  
 BAINBRIDGE PASSAGE  
 HOGG PT.  
 HOGG BAY  
 BAINBRIDGE ISLAND  
 PRINCE OF WALES PASSAGE

T-9147

BAINBRIDGE ISLAND  
 PRINCE OF WALES PASSAGE  
 GUGUAK BAY  
 IKTEA ROCKS  
 SHELTER BAY  
 EVANS ISLAND  
 CRAB BAY  
 JOHNSON COVE  
 LATOUCHE PASSAGE  
 CRAB BAY (SETTLEMENT)  
 PORT BENNY "  
 PIKUKWILUK PT.  
 GUGUAK PT.

T-9148

BAINBRIDGE ISLAND  
 PRINCE OF WALES PASSAGE  
 EVANS ISLAND  
 ALUKLIK BAY  
 SQUIRREL BAY  
 SWANSON BAY  
 SWANSON PT. ) TAB  
 PT. PYKE ) (T-9148  
 PORT BAINBRIDGE) EXTENDED)  
 PROCESSION ROCKS  
 HOGG BAY  
 AMERK PT.

T-9149

EVANS ISLAND  
 ELRINGTON PASSAGE  
 SAWMILL BAY  
 PRINCE OF WALES PASSAGE  
 LATOUCHE PASSAGE  
 LATOUCHE ISLAND  
 HORSESHOE BAY  
 BETTLES ISLAND  
 SAN JUAN  
 PORT ASHTON  
 ELRINGTON ISLAND

T-9150

ELRINGTON ISLAND  
 ELRINGTON PASSAGE  
 EVANS ISLAND  
 PORT BAINBRIDGE  
 NORTH TWIN BAY  
 SOUTH TWIN BAY  
 PT. ELRINGTON  
 LONGTREE PT.  
 SQUIRREL BAY

T-9151

ELRINGTON ISLAND  
 ELRINGTON PASSAGE  
 EVANS ISLAND

Approved by:

Submitted by:

*Roscoe J. French*

Roscoe J. French  
 Supervisory Cartographer

*Samuel G. Blankenhiser*

Samuel G. Blankenhiser  
 Cartographer

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. Differences were localized in small areas and were due to the additional horizontal control available to the stereo instrument plotter.

(0.5 mm to 1.0 mm)

- 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

SUPPLEMENT TO COMPILATION REPORT T-9147  
December 1957

31. DELINEATION

Reference: Compilation Instructions-Supplement 4  
Prince William Sound, Alaska  
Dated 23 October 1957

The manuscript for T-9147 was redelineated to incorporate a shift in datum which resulted from a new radial plot. All areas of the map except Bainbridge Island were effected by this shift.

Photo-hydro stations were added to the manuscript by radial plot methods using the field photographs as reference. No descriptions of these stations were given.

The areas of Shelter Bay and the northeastern part of Evans Island are considered weak due to a lack of control (See Photogrammetric Plot Report filed as part of the Descriptive Report for T-9144).

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

*Henri Lucas*  
Henri Lucas

October 19, 1970

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-152 (Alaska)

T-9147

Bainbridge Island

Crab Bay

Crab Bay (locality)

Evans Island

Guguak Bay

Guguak Point

Iktua Rocks

Johnson Cove

Latouche Passage

Pikukwiluk Point

Port Benney (locality)

Prince of Wales Passage

Sawmill Bay

Shelter Bay

Approved by:

*A. J. Wraight*  
A. Joseph Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician



## 49 Notes for the Hydrographer

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

SIP	TIP	FAR
AIR	OX	GEM
NUT	COW	MOO
WIN	JOY	HUT
RAY	GAS	RAG
GAL	VAL	RIP
ZOO	PAN	OLD
LUX	CRY	JAP
PAL	PAT	MAL
TAX	CAP	ICE
ABE	MAN	MOP
HAT	JAY	DAM
EGG	EEL	TAN
DOG	SIS	BOX
ANT	JOE	IDA

The manuscript was redelineated in December 1957 to incorporate changes in position which resulted from a new radial plot for this area. The manuscript is now in final form but subject to change by a final office review.

IN A LETTER FROM CAPT. MAST OF THE SEATTLE PROCESSING OFFICE DATED 13 APRIL 1959 A REQUEST WAS MADE FOR THE LOCATION OF ADDITIONAL HYDROS MISSING FROM THE MANUSCRIPT. THESE STATIONS WERE ADDED HOLDING COMMON DETAIL (i.e. HYDROS) AND A COPY WITH THE ADDITIONAL HYDROS FORWARDED TO SEATTLE. ALL STATIONS ADDED ARE SHOWN IN RED. AND ARE AS FOLLOWS:

ACT, DAD, EYE, NAT. THEY WERE IDENTIFIED ON FIELD ALBOS 2298, 9146.

ACT  
4/29/59

## FORM 1002(T-2) PHOTOGRAMMETRIC OFFICE REVIEW

MAP T-9147

PROJECT PH-152

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



FIELD INSPECTION REPORT  
PRINCE WILLIAM SOUND, WESTERN PART

PROJECT 1277  
Ship BOWIE

H.C. Applequist  
Chief of Party

2. A REAL FIELD INSPECTION:

The area is mountainous and is heavily wooded on the lower slopes. Quality of the photographs was good.

2. HORIZONTAL CONTROL:

The following supplemental control stations were established by triangulation:

BALD 1955	IKTVA ROCK 1955	BETTE 1955
PASS 1955	STUMP 1955	MILL 1955
CRAB 1955	SHIP I. TREE 1955	ADD 1955
HARD 1955	DONALD 1955	NOD 1955
SIMPLE 1955	RINGTON 1955	EVANS IS. LT. 1955
MOON 1955	NAVE 1955	ELRINGTON IS. DAY
MAYBE 1955	PIRING 1955	BEACON 1955
RAIN 1955	SCRUB 1955	ELRINGTON PASSAGE
NED 1955		LT. 1955
		EVANS BAY LT. 1955

The following stations are reported lost on form 526.

CUBE 1910	HORN 1910	BEN 1927
DED 1910	HEX 1910	PRIEST 1906
JUT 1910	CUT 1910	TANG 1906
PIK 1910	PAS 1910	TEN 1927
VI 1910	ROT 1910	GOOD 1906
SHIP 1910	BIG 1910	GREEN 1910
SIR 1910	SPOT 1927	LAP 1910
EAT 1910	SLIDE 1927	BEAR 1907
WOOD 1910	SAM 1927	PORT 1917
BAD 1910	PEN 1927	SAID 1948
KIXX		

Stations BEAR, 1907 and PORT, 1917 are reported lost but were identified for photo control. BEAR, 1907 is a tree which has fallen, the station mark at PORT, 1917 was found but the rock it was set in had been moved, however the station was pricked with sufficient accuracy for photo control.

The triangulation in the northern part of Prince of Wales Passage could not be recovered, supplemental control was established and identified as substitutes. Supplemental control was also established and identified in place of RED, 1927 and CLEARING, 1906.

4, 5, & 6 Inapplicable.



7. SHORELINE AND ALONGSHORE FEATURES:

Time did not permit a detailed inspection of the shoreline, however notes on the field photos were made wherever possible.

8, 9 & 10 Inapplicable.

11. OTHER CONTROL:

Photo Hydro control was established using the preliminary manuscript. These stations are shown as red circles on the office photos.

Two topo disks, HANK, 1955 and BLUE 1955 were set in the vicinity of Mc Clure Bay, these are to be located by the photogrammetric office.

12 & 13 Inapplicable.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA:

Control station identification cards are submitted for all control identified on the photos.

Recovery notes for triangulation will be submitted direct to the Washington Office.

Triangulation data for Supplemental Control established will be submitted to the Washington Office.

Descriptions of Recoverable topo. Stations, HANK, 1955 and BLUE, 1955 are submitted with this report.

Respectfully submitted

*Kenneth A. Mac Donald*  
Kenneth A. Mac Donald  
Ensign, C&GS

APPROVED:

*Allen L. Powell*  
Allen L. Powell, LCDR., C&GS  
for H.C. Applequist,  
Commander, C&GS  
Chief of Party

## REVIEW REPORT T-9147

## SHORELINE

FEBRUARY 4, 1971

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, (pages 31 through 41), with differences noted in Items 62 thru 65 is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with Survey No. T-3093, scale 1:20,000, dated 1910 and with Survey No. T-4316, scale 1:10,000, dated May and July 1927. Differences between these surveys and T-9147 are shown in blue on the comparison print.

T-3093 covers the Prince of Wales Passage area. There are large differences in placement of shoreline in many instances. Rocks shown in blue on the comparison print, that do not represent a rock mapped on T-9147, were not visible on the photographs.

T-4316 covers the Sawmill Bay area. Shoreline in this area compares well -- much better than the shoreline on T-3093. The largest differences are in Port Benney and at the head of Crab Bay. Rocks in Johnson Cove were not visible on the photographs.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle SEWARD (A-4), scale 1:63,360, dated 1952. Differences between this map and T-9147 are shown in brown on the comparison print. All of the differences noted are rocks which were not visible on the photographs.

#### 64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with an <sup>unverified</sup> copy of the ~~boat~~ <sup>smooth</sup> sheet for Survey No. H-8205, scale 1:10,000, dated 1955, and with a verified copy of the smooth sheet for Survey No. H-8913, scale 1:5,000, dated 1966. Differences between these Surveys and T-9147 are shown in purple on the comparison print. CHKD.

On both of these surveys numerous rocks that were not visible on the photographs and not mapped on T-9147 were located by the hydrographer.

Shoreline for the area of H-8205 included in this comparison was from T-9147; therefore, there were no discrepancies. Shoreline for H-8913 was taken from a 1966 photogrammetric survey -- Project 6414, SAWMILL BAY, ALASKA, sheets T-12802 and 12803. There are shoreline discrepancies - the H-8913 shoreline is offshore from the T-9147 shoreline. This probably is due to the fact that this shoreline was mapped from photographs taken after the 1964 earthquake, which caused uplift in the Sawmill Bay area.

#### 65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8523, scale 1:40,000, 4th edition, dated Oct. 10, 1966. Differences between this chart and T-9147 are shown in red on the comparison print.

The Bainbridge Island shoreline on the west side of Prince of Wales Passage compares well with the chart. For the remaining area of T-9147, the same shoreline differences exist between Chart 8523 and T-9147 that exist between the registered topographic surveys and T-9147, inasmuch as the chart topography apparently was taken from the registered surveys. This also is true for many of the rocks.

Rocks noted on the comparison print were not visible on the photographs.

#### 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  
February 4, 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

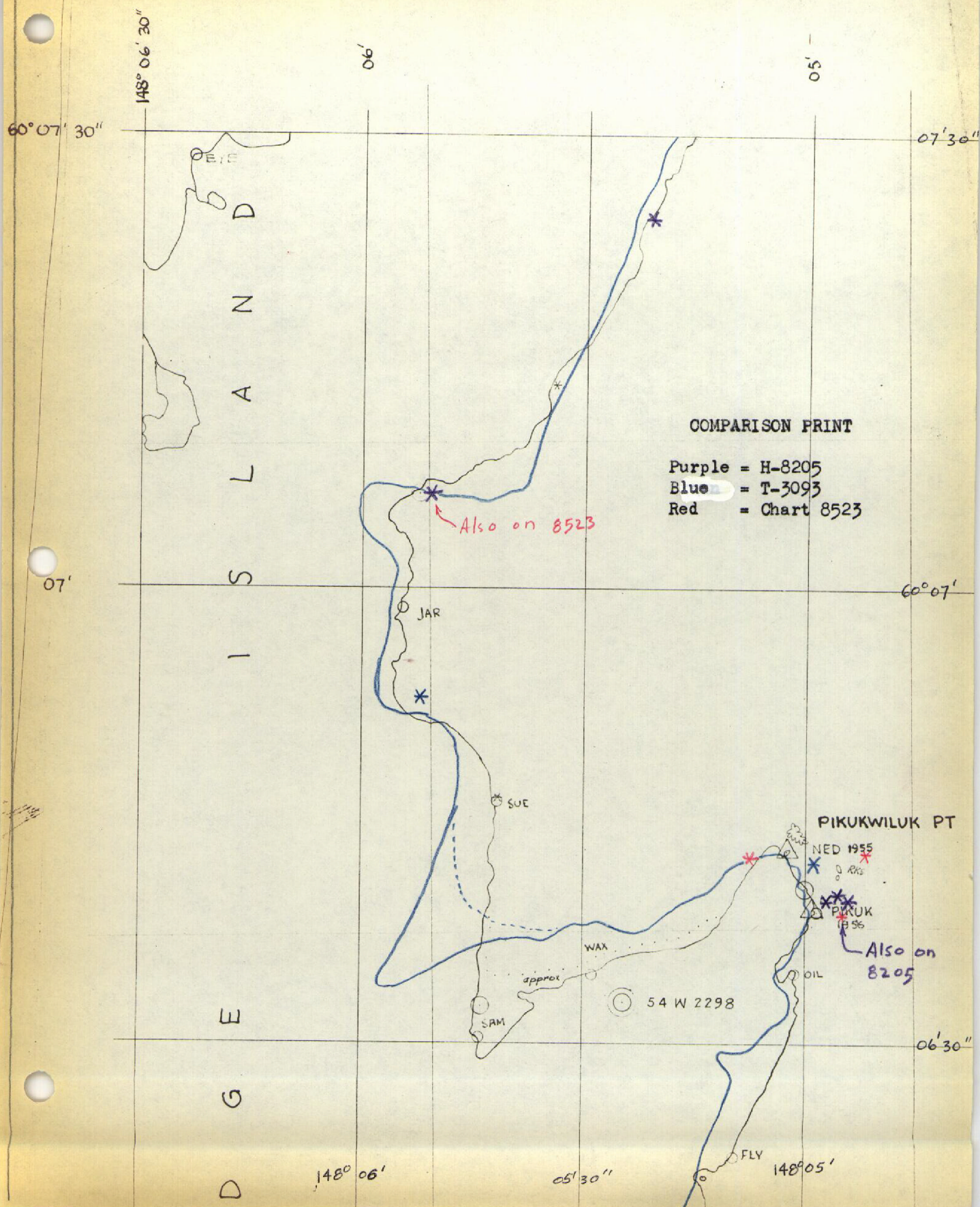
Approved:

*Charles L. Lauer*

Chief, Photogrammetric Branch

*Jack E. Luth*

Chief, Photogrammetry Division





06' 30"

148° 06'

05' 30"

32

Also on 8523

approx

RAY

GREEN 1910

MOO

MAYBE  
1955

JOINS SURVEY NO T-9146

B  
A  
I  
N  
R  
I

COMPARISON PRINT

Purple = H-8205

Blue = T-3093

GEM

54 W 2299

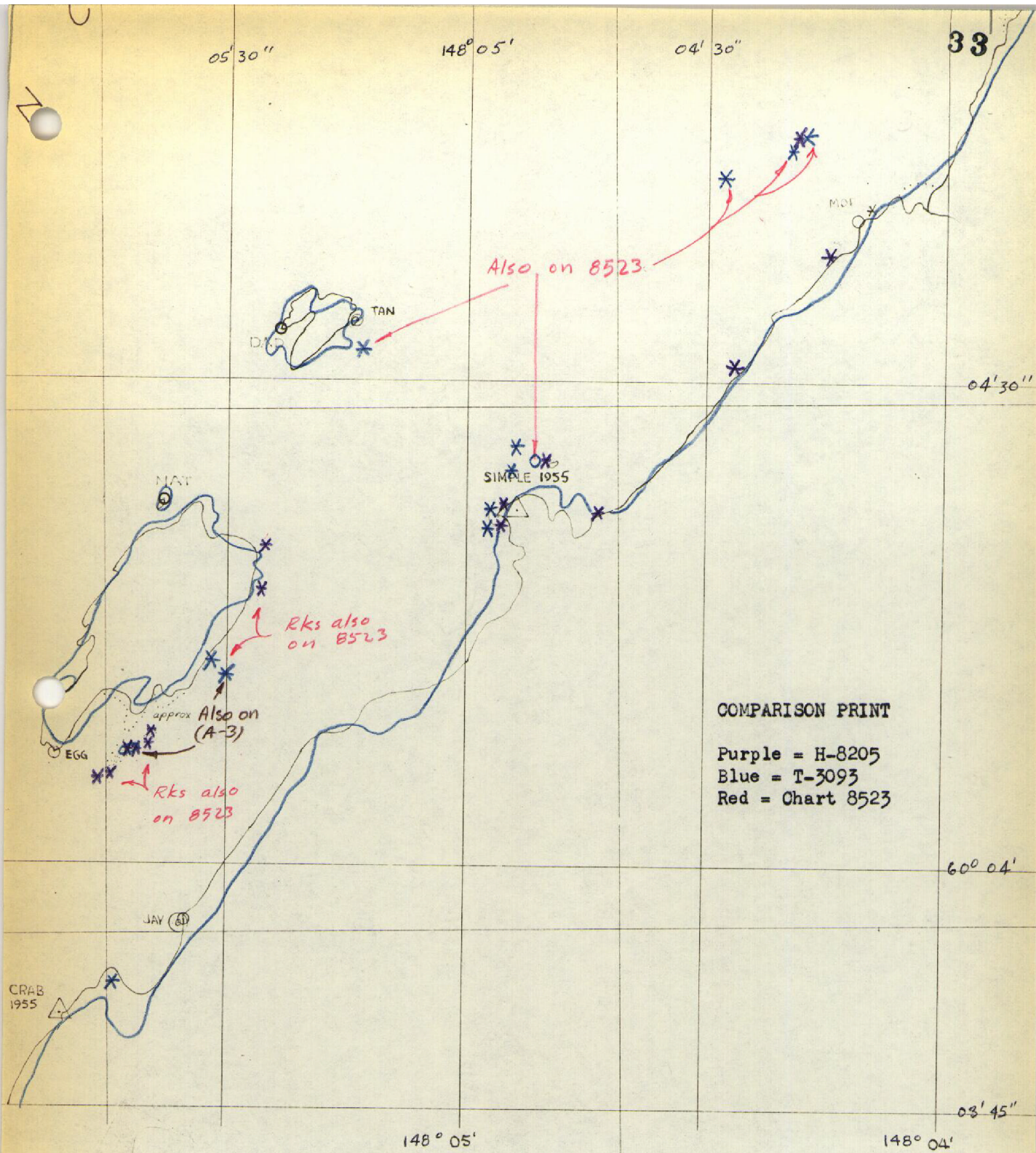
05'

FAR  
IDA

148° 06'

05' 30"



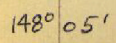


X=439,000 m



V

Red = Chart 8523





148° 03'

148° 02'

35

GUGUAK PT

GUGUAK  
1910

ICE

TAX

06'30"

## COMPARISON PRINT

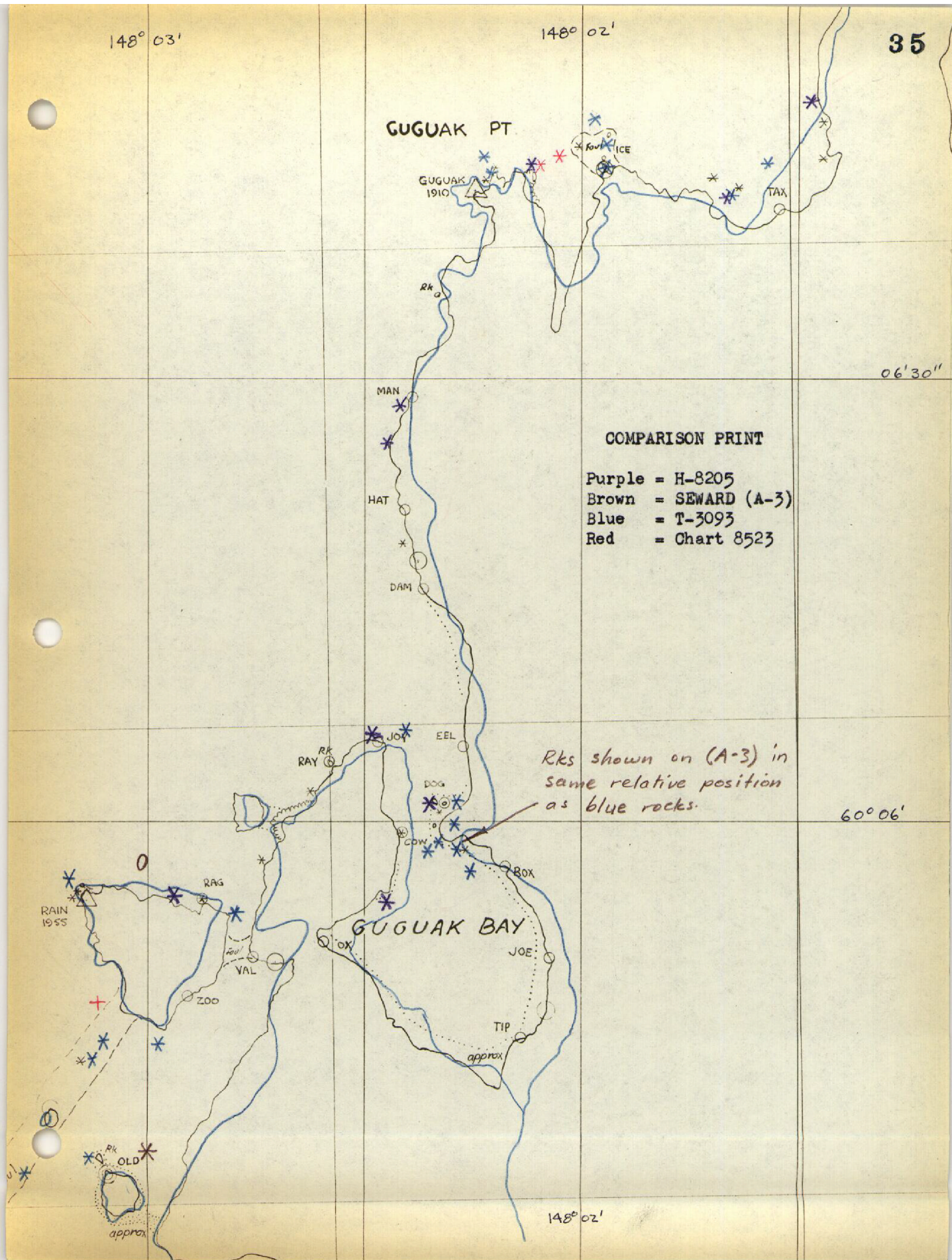
Purple = H-8205  
 Brown = SEWARD (A-3)  
 Blue = T-3093  
 Red = Chart 8523

*Rks shown on (A-3) in  
 same relative position  
 as blue rocks.*

60° 06'

GUGUAK BAY

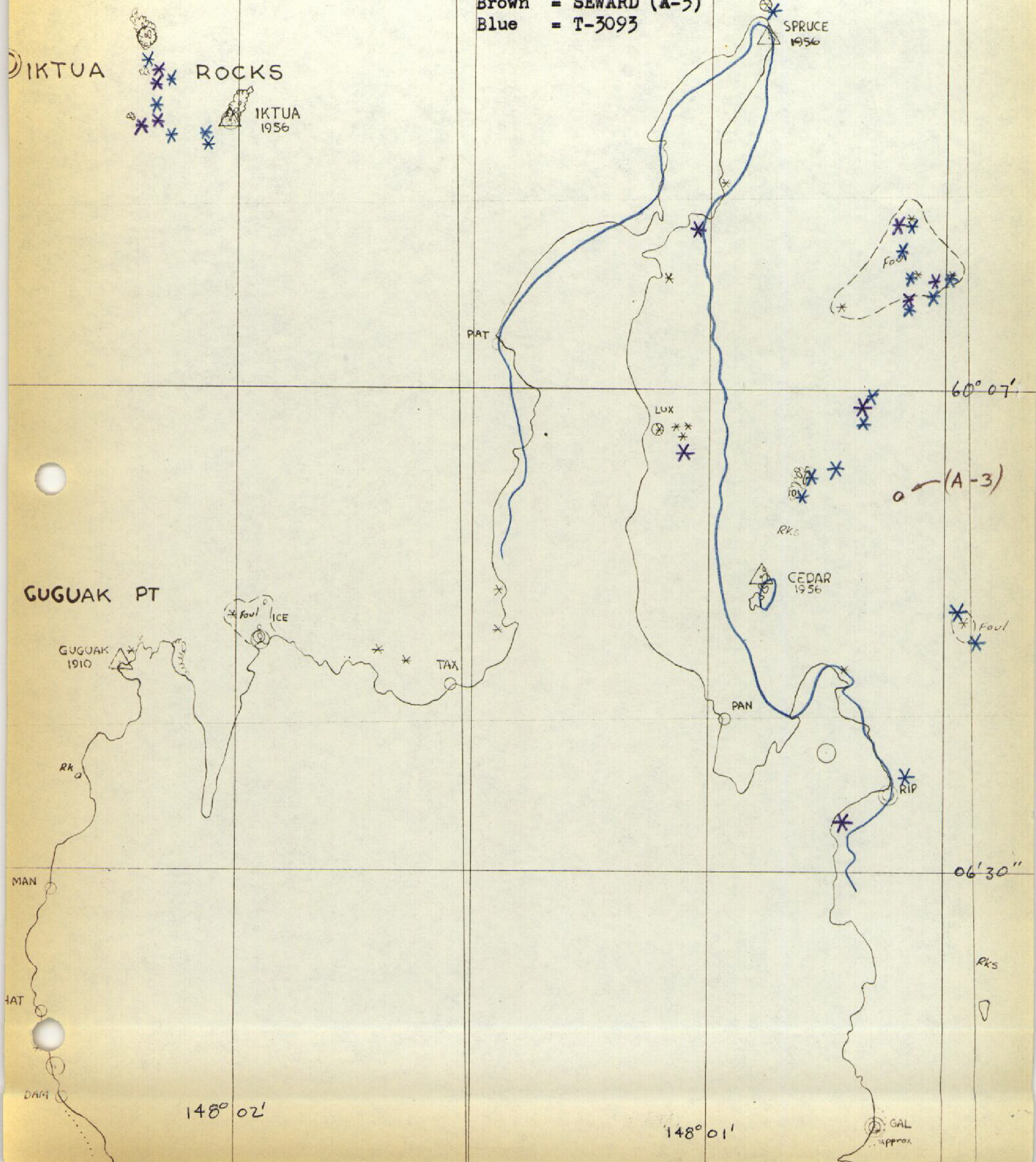
148° 02'





## COMPARISON PRINT

Purple = H-8205  
Brown = SEWARD (A-3)  
Blue = T-3093





148° 00'

147° 59'

37



SIP

approx

AIR

60° 07'

EDAR  
956

(\*) Foul

NUT

## COMPARISON PRINT

Purple = H-8205  
 Brown = SEWARD (A-3)  
 Blue = T-3093  
 Red = Chart 8523

06' 30"

Rks 0\*

Also on 8523,  
 H-8205 & (A-3)

approx

WIN

HUT

TEEL  
1956

42VV M324

3 rks also on  
 (A-3), H-8205 &  
 8523

GAS

147° 59'

60° 06'



58'

57'

38

07'30"

SHELTER  
BAY

66°07'

COMPARISON PRINT

Blue = T-3093

06'30"

147°58'

147° 57'





148° 02'

01' 30''

148° 01'

00' 30''

COMPARISON PRINT

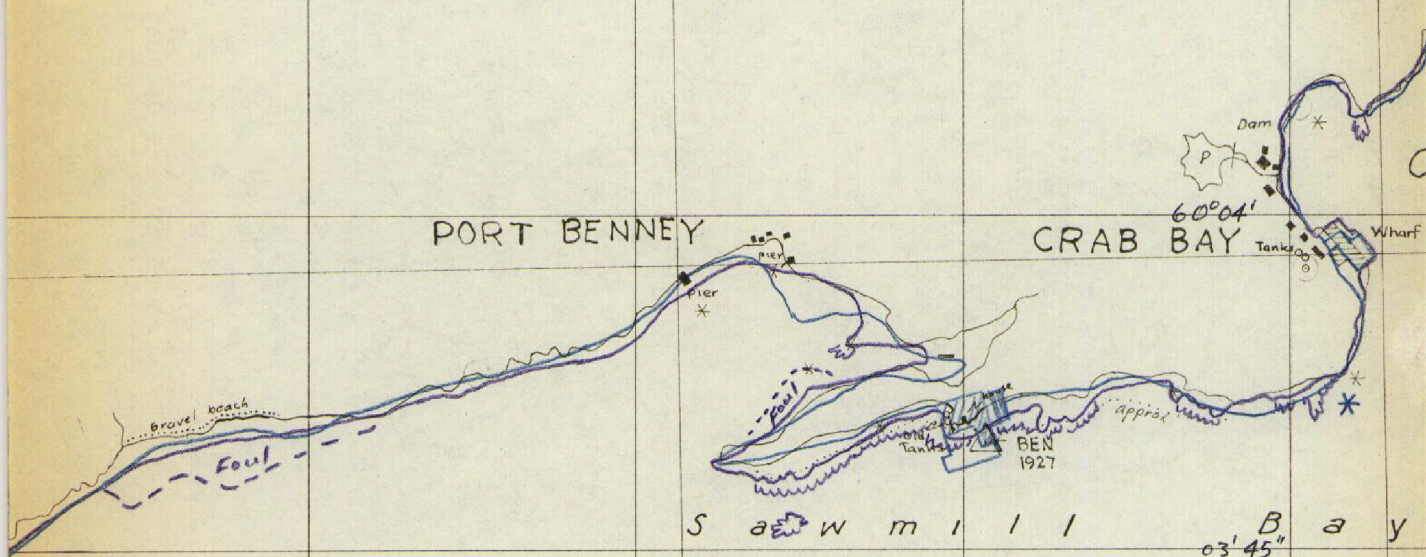
Purple = H-8913

Blue = T-4316

04' 30''

PORT BENNEY

CRAB BAY



148° 02'

JOINS SURVEY NO T-9149  
148° 01'

03' 45" B a y

NOTE: U  
plot poi



148°00'

147°59'

40

## COMPARISON PRINT

Purple = H-8913  
 Brown = SEWARD (A-3)  
 Blue = T-4316  
 Red = Chart 8523

60°04'30"



148°00'

147°59'

03'45"

Unlabeled circles are photogrammetric  
 points, not map features

△ Recoverable horizontal control station of third-order or higher accuracy

..... Approximate mean lower low water line

The heavy shoreline defines the approximate mean high water line

Compiled by photogrammetric methods from aerial photographs

Date of Photography July 1950 July 1954 Sept. 1955

Date of Field Inspection None

Date of Compilation April 1955



57°30"

147°57"

56°30"

41

56'

S

A

P

60°04'30"

\* Also on 8523

E

H

C

U

O

T

A

L

58'

147°57'

SHORELINE MANUSCRIPT

T-9147

SCALE 1:10,000

PRINCE WILLIAM SOUND

CRAB BAY

POLYCONIC PROJECTION  
ALASKA UTM GRID - ZONE 6  
HORIZONTAL DATUM - N.A. 1927

147°56'

03'45"



## NAUTICAL CHARTS BRANCH

SURVEY NO. T-9147

### 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.