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-9145

LOCALITY

State

ALASKA

General locality PRINCE WILLIAM SOUND

Locality PLEMMING ISLAND

19 50-57

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

LIBRARY & ARCHIVES

USCOMM-DC 37022-P66

DATA RECORD

T - 9145 (Preliminary)

.6152

Project No. (II): (PH-152)(office)uadrangle Name (IV):

Flemming Island

Field Office (II):

Chief of Party:

Photogrammetric Office (III): Washington, D. C.

Officer-in-Charge:

L. W. Swanson

Instructions dated (II) (III):

31 Dec. 1954 (office) 731 mkl 11 Feb. 1955 (office) 731 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):

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 control field identified by 30th Engrs. on 1/40,000 scale photography.

Vertical Datum (III):

Mean sea level except as follows: Elevations shown as (25) refer to mean high water Elevations shown as (5) refer to sounding datum i.e., mean low water or mean lower low water

Reference Station (III): Dana, 1948

Lat.: 60-10-00.989

30.6m. Long.:

(1826.4)

148-05-14.570

224.7m. (700.7)

Adjusted

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.

85

1951

DATA RECORD

Field Inspection by (II): Date:

30th Engrs. (horizontal control only - pricked direct)

Planetable contouring by (II): — Date:

Completion Surveys by (II):

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

Date of photography

Office interpretation
(No field inspection)

Projection and Grids ruled by (IV): Austin Riley Date: 1-10-55

Projection and Grids checked by (IV): H. D. Wolfe Date: 1-12-55

Control plotted by (III): J. Hundley Date: March 1955

Control checked by (III): G. Amburn Date: March 1955

Radial Plot or Stereoscopic S. G. Blankenbaker Date: May 1955

Control extension by (III): R. J. French

Planimetry Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): R. L. Sugden Date: June 1955

Photogrammetric Office Review by (III): R. J. French Date: June 1955

Elevations on Manuscript Date:

checked by (II) (III):

Camera (kind or source) (III):

USC&GS Single Lens "W" Camera, 6" Focal Length and U. S. Air Force

camera

PHOTOGRAPHS (III)

Number

Date

Scale

Stage of Tide

54-W-2295 thru 2597 55-W-9142 and 9143

12:27-12:28 1:10,000 (Ratio)

6.01 above MLLW

Diurnal

26 July 1954 20 Sept 1955

S. Army Photos M324

40VV thru 42VV

17 July 1950

Unknown

1:10,000 (Ratio) Near High Tide

Tide (III)

Reference Station:

Cordova, Alaska

Subordinate Station:

Chenega I., Dangerous Passage

Subordinate Station:

Atlantic Marine Center

C. H. Bishop

1.0 10.0 12.4

Ratio of Mean psouties Ranges | Range | Range

> Date: 1-28-71

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Date:

Date:

Proof Edit by (IV):

Date:

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

Number of BMs searched for (II):

Shoreline (More than 200 meters to opposite shore) (III): 19

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): ₹#8

Recovered: ₩#7

Identified:

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

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).

**30th Engrs.' 1:40,000 Air Force photographs.

M-2618-12(4)

T-9145

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

Prince William Sound, Alaska

				•
See M. 17 Comp. 41 14 14 14 14 14 14 14 14 14 14 14 14	2631	CITCON NO	EAGE FOR COST LIN.MI. SHORELINE	ACCOUNT. AREA CO MILES
Super Cityon Gipard	Glacier 1654	9118 9119	3 9	13 11
6532 91189119 9126 Elli 6532 91189119 9121 9126 Elli 937 9318 9122 9123 9129 938 939 939 9221 9124 9125 9130 938 9138 9139 939 939 939 939 939 939 939 939 93	Smith Is 60°30' Notice For Market Stand Notice For Market Stand Notice For Market Stand Smith Is 60°30' Seal Island Montague For Market Stand Montagu	9121 9122 9123 9124 9125 9126 9127 9128 9130 9131 9131 9132 9133 9134 9136 9137 9138 9139 9141 9141 9141 9142 9144 9145 9147	11377755657428654680324096984594566491372979109	1077567878650510587582349889978046106950940681
		TOTALS	7 02	726

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-9145

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. 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. The junction of Prince of Wales Passage and Knight Island Passage is within the area of T-9145.

Compilation was by radial plot in 1955, using ratio prints of 1:30,000 scale photographs taken in July 1954. Two ratio prints of 1:40,000 scale Air Force photographs were used in the area of Prince of Wales Passage. There was no field inspection previous to the original compilation.

A new radial plot was run in the fall of 1957, using additional control that was identified in the summers of 1955, 1956, and 1957. The manuscript was revised, using the new positions obtained, and field edit accomplished in the summer of 1957 was applied.

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

MAP T-9145

PROJECT PH-152

There was no field inspection prior to compilation of this map and no Field Inspection Report is bound with this Descriptive Report.

FH-152 PHOTOGRAMMETRIC PLOT REPORT FRINCE 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 Frince William Sound:

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

22. <u>METHOD</u>:

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 3% enlargement from the "W" camera were used on the western part of the plot, and Air Force photography of 4% 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 templets and relaying them into the plot, (2) graphic manual intersection, and (3) scale check where expedient, were the techniques used to locate the remaining points. All points were located prior to compilation of the shoreline.

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

In general, better closures were obtained where the sub-point method of recovery was used. Almost without exception, the 30th Engineers pricked the 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 stereoplanigraph 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 Tey Bay.

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

24. SUPPLEMENTAL DATA:

T-4308	1:20,000	1927
T-4810	1:20,000	1933
T-4808	1:20,000	1933
T-3093	1:20.000	1910

25. PHOTOGRAPHY:

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

and will necessitate compiling much shoreline with the dashed line exproximate high water line symbol. Fricking 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 "N" 3X enlargements, but was surprisingly good on the 4X Air Force enlargements.

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

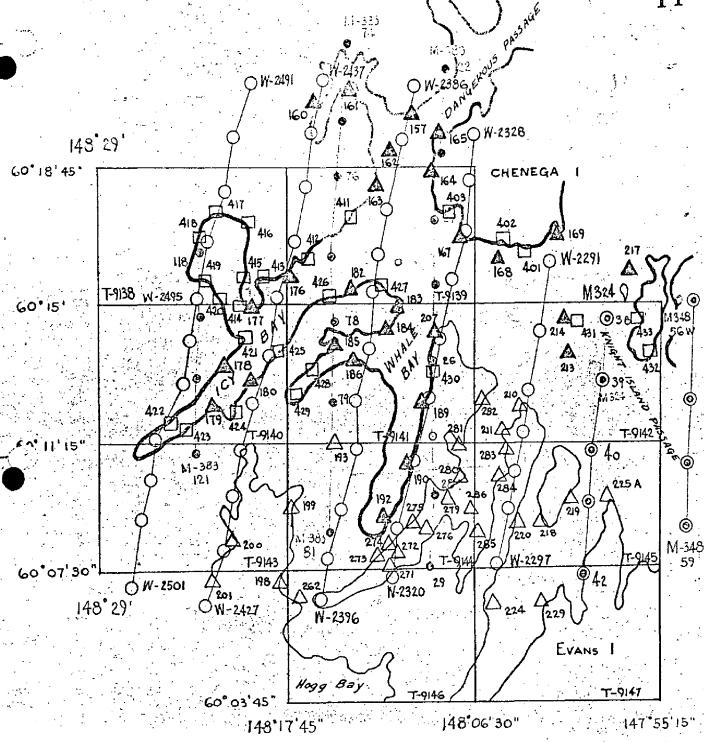
Approved by:

Respectfully submitted:

S. V Griffith Chief, Cartographic Branch

Roscoe J. French Supervisory Cartographer





RADIAL PLOT SKETCH PH 152

- O 1954 W Ratio prints (3 x to 1:10,000) @ Air Force (4x)
- Field inspection Air Force photos 1: 20,000
- A Horizontal control field inspected by US CAGS 1: 20,000
- \triangle Horizontal control field inspected by 30 th Egr. 1: 40,000
- Topographic stations located by radial plot

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

Pa-152

HCRIZONTAL CONTROL STATIONS IN HADIAL FLOT 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 O.6mm.
161 Frecip, 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.
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.
     Belt, 1933 Sub. pt. Held
184
     Olga, 1933 Held
185
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.
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273 Clear, 1948 Held Half, 1948 0.2mm. 274 275 Fass, 1948 Thin cuts 276 Age, 1948 Held 279 Ruth, 1948 Held 280 Nub, 1948 Sub. pt. Held 281 Low, 1948 Held 282 Sage, 1948 Held 283 Babe, 1948 0.3mm. 284 Dana, 1948 Held 285 Inner, 1948 0.2mm. 286 Sip, 1948 Held

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

Ph-152

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

401	RICH, 1951	421 IBIS, 1951 ·
402	RICH, 1951 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	MDD, 1951	431 PLEIADES I. LT., 1955
419	ULNA, 1951	432 NILE, 1951
420	SAND, 1951	433 ZEST, 1951

PROJECT PH-152 - PHOTOGRAPMETRIC PLOT REPORT (T-9135 through T-9147) Supplement 2 (Including Portions of T-9148 and T-9149) December 1554

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 templets. Control identified in 1955, 1956, and 1957 was added to the manuscripts and photographs to strengthon positions obtained by former radial plots and stereoplanigraph bridging.

The plot was begun on T-9145 where the templets 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, CLEAR 1948, HARD 1955 (Sub Pt), IKTUA 1955, ROCK 2 1927(2 Rays) BABE 1948, RAFT 1956,

(249)(238)

OFF 1927, EVANS 1905 (Sub Pt). These differences are not regarded as significant because the original templets man had distorted some and both manuscripts and templets were slightly mutilated by use.

- (211) TATE 1948 Missed O.4 mm. 2 cuts. Identification one photograph was poor.
- (218) FOT 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 misidentified. 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.

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Submitted by R. L. Sugden

Control Mide and Control of Part

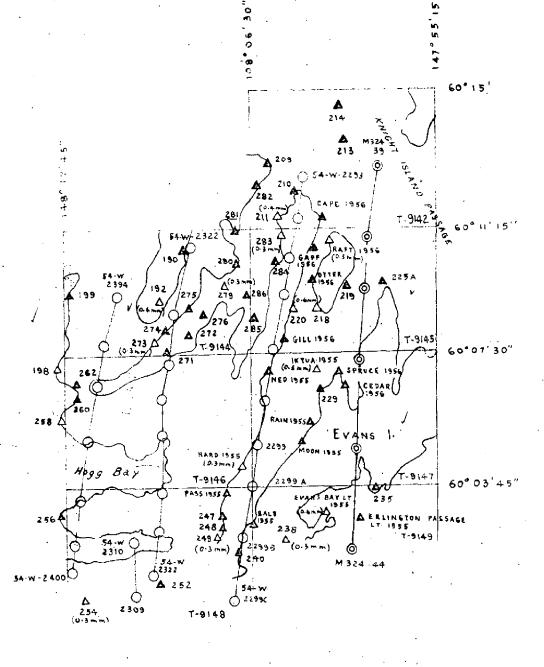
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Everett H. Ramoy

Everett H. Ramoy Chief, Graphic Compilation Unit



PHOTOGRAMMETRIC PLOT SKETCH PROJ-6152 PRINCE WM SD.

KEY TO NUMBERED STATIONS

209 - PISA 1948

260 - FLAT 1948

258 - HOGG 1927

235- SRUN 1927

238 - EVANS 1905

240-1\$LE 1910 247 - SAUD 1910

248 - PED 1910

249 - OFF 1910

252 - TOP 2 1927 .

254 - ROCK (ROCK 2) 1927

286 - SWAN 1927

or pames of other numbered stations see original report.

SCALE 1:10,000

DEC 1957

A STATION HELD

A STATION NOT HELD

- O U.S.C. & G.S "W", CAMERA PHOTOGRAPHS
- AIR FORCE PHOTOGRAPHS Series M-324

STATION SOURCE OF MACCORDINATE OR MACCORDINATE OR COMPONIATE OR COMPONIA	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK) East of Sheet	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN WETERS FORWARD (BACK) 1835.0 (22.0) 664.4 (261.9) 1127.2 (729.8) 258.7 (666.9) 1238.3 (618.7) 464.0 (461.6) 469.9 (1387.1)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE 3N METERS
(INDEX) VI VI VI VI VI 1910 VI VI 1910 VI VI 1910 VI VI 1910 VI VI VI VI VI VI VI VI VI V		FORWARD (BACK) 1835.0 (22.0) 664.4 (261.9) 1127.2 (729.8) 258.7 (666.9) 1238.3 (618.7) 464.0 (461.6)	IN METERS
1910 VI N.A. 60-07-59.290 1910 VI " 60-09-36.420 1910 276 14.7-58-16.773 1910 276 14.7-58-30.08 1910 VI " 60-09-15.182 1910 VI " 60-09-15.182 1910 VI " 60-09-30.672 1910 VI " 60-09-30.672 1910 VI " 60-09-30.672 1910 VI " 60-08-55.046 1910 VI " 60-09-30.672 1910 VI " 60-08-56.823 1910 VI D. 14.8-03-36.114 1907 VI NI 14.8-03-05.421	Jo	(22. (261. (729. (666. (461. (1387.	FORWARD (BACK)
1910 274 1927 1 1910		(261. (729. (666. (618. (461. (1387.	
. 1907 VI " " 1910 . 341 Ft. VI " 1910 1910 VI 275 " 1 . 1910 VI 275 " 1			
. 1907			
1910 "276 " 1 341 Ft. VI " 1 1910 275 " 1 , 1910 VI NI " 1			
1910		l l	
. 341 Ft. VI " 1910 VI " 1 1910 VI 275 UI 275 UI 275 VI 275 UI 2			*
1910 "269 " 1910 "275 " , 1910 " 1542 Ft. VI , 1907 VI , 1908			
1910 VI " 1 1910 VI " 1 1910 VI " 1 1910 VI " 1 1542 Ft VI 90 " 1		151.1 (774.6)	
1910 VI " 1910 VI 1910 VI 275 " 1 1910 1915 " 1542 Ft. VI 90 " 1907		1641.7 (215.3)	
1910 VI " 1 1910 VI " 1 1542 Ft. VI " 1		242.9 (682.9)	
1910 VI " 1910 1542 Ft. VI 90 " 1		949.3 (907.7)	
1910 NI " 1 1542 Ft. VI " 1		394.6 (531.0)	
1910 V1 275 1 1542 Ft. VI " 90 " 1		1758,6 (98.4)	
1542 Ft. VI " 90 " 1		557,2 (368,6)	
1907	·	79.5 (1777.5)	
		83.6 (811.3)	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		1344.5 (512.5)	
Babe, 1948 273 " 148-04-45,460		700.9 (224.1)	
Elev. 7± Ft. VI 60-10-00.989		30.6 (1826.4)	
1948 282 7 1		224.7 (700.7)	
		1134.7 (722.3)	
282 " 1		89.7 (836.3)	
			1
			8

STATION SOU						and the second s	
5	SOURCE OF INFORMATION (INDEX)	ратим	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
G111, 1956 F	Field Pos.	N.A. 1927	60-08-18,863 148-04-22,922			583.8 (1273.1)	
Martin. 1956	=	±	60-08-52.117		ş-4	$ \downarrow $	
956	=	E	60-08-06.875 147-59-35.060				
1956	±	E	60-09-30,689			8 (9	
ed, 1956	=======================================	E	60-09-39.685			- -	
Pan Hat. 1956	.	=	60-08-56.880 148-02-40.187	,		1760:1 (305:7)	
n. 1956	ŧ.	t	60-09-00.098 148-03-34.273			l _l .	
, 1956	-	=	60-09-42-785		7	-	
1956		=	60-10-26,87h			(1025	
Dory, 1956	11.	и	60-10-08,915			= ~	
Raft, 1956	- 13	и.	60-10-58.330				
NI Bim, 1948	1 .282		60-08-11.56 118-06-28.10			🗗 ~	19
COMPUTED BY. G. Amburn	nan	DA	рате 7 October 1957	снескер ву. Е. Ватеу	lamey	i I	M.2388-12

COMPILATION REPORT (Preliminary) T-9145

31. DELINEATION:

Shoreline and foreshore features were delineated on the manuscript from office stereoscopic interpretation. No field inspection is available.

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 adjust the planimetry to manuscript scale by holding to the compilation points of near-sea-level elevation.

Most of the MHWL on the western half of the manuscript, including the western half of Flemming Island, is well defined inasmuch as the photography taken with the "W" camera was good. The small portions of approximate MHWL are due to tree overhang. In the eastern half of the manuscript it was necessary to show more approximate MHWL than was desirable due to lack of good definition and pass point control. (See photogrammetric plot report filed with T-9144.)

No stereoscopic coverage was available for delineation of the shoreline at the junction on the southern extremities of the manuscript as the work schedule necessitated transmitting the ratio office prints to the field. The shoreline on Evans Island southeast of station Pas, 1910, was not completed in consideration of the weakness of the plot and the lack of adequate coverage in the area.

32. CONTROL:

(a) Identification

The control was identified in 1951 by the 30th Engineers on 1:40,000 photographs. It is not adequate for transfer to the 1:10,000 photos used in the plot. It has been requested that the control be field identified on 1:10,000 prints for a plot to be laid later for smooth sheet plotting.

In addition, two stations (Ship, 1910 and Pas, 1910) were office identified and held.

(b) Density and Placement

The density and placement of control is adequate in the western half but is inadequate in the southeastern portion. An index requesting further recovery of control was forwarded to the field earlier in the season.

33. SUPPLEMENTAL DATA:

T-3093	1:20,000	1910			
Chart 8523	1:40,000	1935,	revised	to	1951

These were used as an aid in location and interpretation of the MHWL and other alongshore features.

34. CONTOURS AND DRAINAGE:

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS:

The MHWL, shallow areas, and other alongshore detail were office interpreted from C&GS photos taken at approximately half tide, and others at high tide. Not all of the low water rocks shown on planetable survey T-3093 were visible on the photography.

There is no previous survey covering the shoreline on the west side of Bainbridge Island. Because of poor definition, overhang of trees in heavily wooded areas, and deep shadows on the Air Force photography, definition of shoreline detail was poor.

The tower shown on Chart T-3093 and Seward (A-3) Alaska quad could not be seen on the photos. Two buildings in this area are the only cultural detail on the map. A log image shown on the Eastern shore of Bainbridge Island, north of Panhat Point, could be a pier and should be investigated before charting.

36. OFFSHORE DETAIL:

No unusual problems occurred.

37. LANDMARKS AND AIDS:

Inapplicable.

38. CONTROL FOR FUTURE SURVEYS:

There are no recoverable topographic stations or photo-hydro control in the area of this survey. (See 49, Notes to the Hydrographer.)

39. JUNCTIONS:

Junctions were effected with T-9142 and T-9144. There is no contemporary survey to the east. Since this is a "preliminary" manuscript of poor control and coverage in the southeast, no junction was made with T-9147 pending a new radial plot for both sheets.

40. HORIZONTAL AND VERTICAL ACCURACY:

Vertical accuracy is inapplicable.

As stated in Paragraph 32, the horizontal position of detail on Evans Island, south of Pas, 1910, is of subnormal accuracy due to the weakness of

the plot.

The rest of the sheet is considered of less than the standard accuracy desired, but is thought to be within 1.0mm of true position. A new plot will be laid when the recovery of control is submitted on 1:10,000 photography.

41-45. Inapplicable.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS SEWARD (A-3) ALASKA, 1:63,360, 1952, and is of better detail due to its larger scale, and will supersede it when horizontal accuracy is verified by forthcoming field inspection in 1955.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Nautical Chart 8523 - 1:40,000, 1935 edition, Rev. to 1951. As much of the photography is at high water, numerous low water rocks along the entire shoreline were not visible for delineation. A rock awash midway between station Horn, 1910, and Rot, 1910, and others in the vicinity of Rot, 1910, were not visible.

On that portion of Evans Island shoreline that is shown, there are a couple of large rocks which are connected with the mainland on Chart 8523. According to the photographs they are detached.

- (a) Inapplicable.
- (b) Items to be applied to Nautical Charts immediately None.
- (c) Items to be carried forward—there is a Tower on Flemming Island shown on Chart 8523 which is believed to exist but cannot be substantiated without field inspection.
 - (d) Inapplicable.

48. GEOGRAPHIC NAME LIST:

Names obtained from Chart 8523:

BAINBRIDGE ISLAND
BAINBRIDGE PASSAGE
EVANS ISLAND
FLEMMING ISLAND
KNIGHT ISLAND PASSAGE
PANHAT POINT
PRINCE OF WALES PASSAGE
SHIP ISLAND

Approved by:

Submitted by:

R. L. Sugden

Roscoe J. French

Supervisory Cartographer

Cartographic Photogrammetric 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, " "

<u>1-9145</u>

Bear, 1907 Inner, 1948, sub. pt.

T-9146

Hard, 1955, sub. pt.

T-9147

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

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

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. Makd

SUPPLEMENT TO COMPILATION REPORT T-9145 December 1957

31. Delineation

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

Manuscript T-9145 was revised to incorporate changes in positions of shoreline features and photo-hydro stations resulting from additional field work in 1957 and a new radial plot.

The shift in datum is discussed in the Photogrammetric Plot Report Supplement 2, filed as part of the descriptive report for T-9144. The shift in detailing at the southeast shore of Fleming Island was effected by holding the pass points on the vinylite impression of the previous compilation to the new manuscript positions and tracing the detail.

Shoreline on the eastern portion of Evans Island was not delineated on the preliminary manuscript due to a scarcity of control and poor definition of the air force photographs. It was delineated on this "advance" manuscript from C.&G.S. "W" camera field photographs ratioed 3X and adjusted to the new radial plot positions with the addition of new pass points common to both sets of photographs. This area is considered weak due to lack of control (see plot report), overhang, and and shadow on photographs.

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

Robert L. Sugden Robert L. Sugden Cartographer

October 19, 1970

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-152 (Alaska)

T-9145

Bainbridge Island

Bainbridge Passage

Evans Island

Flemming Island

Knight Island Passage

Panhat Point

Prince of Wales Passage

Shelter Bay

Ship Island

Approved by:

A. Joseph Wraight Chief Geographer Prepared by:

Frank W. Pickett

Cartographic Technician

49. NOTES TO THE HYDROGRAPHER - T-9145

In the area of "W" camera coverage, the hydrographer may be able to use the photographs to some advantage in locating photo hydro control. Those pass points, that were used in the radial plot, have rays drawn through them on the photographs, and can be used with confidence in raying in additional points selected in accordance with Photographetry Instructions No. 45. The manuscript position of the "W" coverage is probably adequate for boat sheet work, but the Air Forces' photography will doubtless be of little use since the definition is poor, and overhang and shadows are deterrents to proper and reliable identification of photo hydro control. More field identification of horizontal control on 1:10,000 photography is necessary before reliable position can be extended for smooth sheet plotting.

The dashed line approximate MHWL symbol has been used extensively, and verification by the hydrographic party is desired before charting.

Submitted by:

Roscoe J. French

Supervisory Cartographer

MANUSCRIPT T-9145

49. NOTES FOR THE HYDROGRAPHER

Hydrographic stations were added to manuscript T-9145 (advance manuscript) which was revised in December 1957. Positions were adjusted to the datum established by the December 1957 radial plot.

The majority of hydrographic stations were located on the manuscript by photogrammetric methods. Those on the north shore of Fleming Island between VAL and ACE were plotted from unadjusted field positions and station BUH was located by planetable from photo hydro positions.

The finel manuscript should be used for adjusting hydrography in this area.

Below is a list of 1956 hydro stations located on manuscript T-9145.

BAR	DUD	PUP	ACE
RUT	SAG	SKY	ZAG
TAP	TAP	JUG	MAY
VAN	NEL	DOT	WAD
WHY	BED	AMP	VAL
YEN	LOG	FOX	KIT
ARK	PIE	Mán	JAY
OAK	CAT	nut	IDA
BUM ,	HER	' NUB	CAB
Z00	DAY	OBE	LIP
COM	BAB	PUT	BAG

FORM 1002(T-2) PHOTOGRAMMETRIC OFFICE REVIEW

MAP T- 9145

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
MAYEE 1955	FIRTMG 1955	BEACON 1955
RAIN 1955	SCHUB 1955	ELRINGTON PASSAGE
NED 1955		LT. 1 955
•		EVANS BAY LT. 1955

The following stations are reported lost on form 526.

CUBE 1910	HORN 1910	BEN 1927
DED 1910	HEK 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 19 27	LAP 1910
EAT 1910	SLIDE 1927	BEAR 1907
WOOD 1910	SAM 1927	PORT 1917
BAD 1910	PEN 1927	SAID 1948
ਦਵਾਸ਼ ਟ	•	

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.

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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 PLUE 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 \sim 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 \leftarrow and BLUE, 1955 are submitted with this report.

Respectfully submitted

Kenneth A. Mac Donald.

English Cocs

Ensign, C&GS

APPROVED:

allen J. Poucell

Allen L. Powell, LCDR., C&GS

for H.C. Applequist, Commander, C&GS Chief of Party DYSORIPTIVE REPORT
Project FM-152
Frince William Sound

The shoreline for all hydrography accomplished during the 1957 field season is derived from shoreline ranuscripts compiled on a 1:10,000 scale from aerial photographs. Signals for visual hydrography were derived by radial phot 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 fives. 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, sextanf cuts and fixes were plotted on the manuscripts and the signal locations were indicated by blue circles with the name alongside.

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

PURLICITARY SPORTINIU PAUTISORIPE 149145

The north shore of Flewring Island appeared on this manuscript as a dashed line labeled "APPROXIMATE HYTH". Five signals, VAL, TAD, VAM, 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 NFML by plane-table and stadia distances. The approximate TAME was removed from the black line impression of the rangeorist and the correct shoreline was a plied. One rock awash between ACM and ZAG and a small islet between PMT and ACE were located (uring 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 NFID in the vicinity of RIM 1948, DIM 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, whoto-hydro points were used exclusively for control. When the rest of the shoreline in the vicinity is adjusted to the correct datum this nortion of shoreline and signal FIM should receive the same adjustment.

ADVANCE SPORTLITT INTUSOFIRE C49141

The approximate IFVE between topographic signal NOW and triangulation station OFICE 1933 was located by plane-table. The plane table was set up on NOW, oriented on PARON 1933, and the IFVE was located by stadia distances to several points. The approximate NYME was removed from the black line impression and the correct NYME added. The same method was used to obtain the true LTML between FLY and SOB and between TAP and RUB. TAR is on the highest moint 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.

PARTIMITARY SYCHTIME HANDSORIET 9-9139

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

The approximate NHVE between UTE and PAVN 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 NOP and LUX and between TIP and PAS. Stations MET and ROG 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 connect datum the newly located shoreline should receive the same adjustment; also the signals located by plane-table.

The approximate FFTD at latitude 60° 1519, longitude 148° 1716 was carefully field inspected and the true 1775 is indicated on photographs 5547423 and 5547434. The true MYMD in the small bay at latitude 60° 1613 and longitude 148° 1715, and in the vicinity of tonographic station PULL 1951 is indicated on photograph 5547234. The true MYMD between stations LOW and MIPY 1951 is indicated on photographs 55472390 and 55472391. The true LHVD between stations MIPY 1951 and AID is indicated on photograph 5472391.

PFYLIMMAPY SPORFLOW MANUSCRIPE C-9144

The approximate 197% between JOH and NOD (T-9146), in the vicinity of stations FVD, YFY, and in the vicinity of LAX and PLAIN 1968 was resolved by plane-table, using photogrammetric control. Stations VVD, FFY 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 SHOP LINE MANUSCRIPT T-9138

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

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

ADVANCE STORTLEY MANUSCRIPT T-9140

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

1. Vicinity of stations HAT and GAB.

- 2. Vicinity of station FEL, latitude 60° 1210, longitude 146° 2117.
- 3. Vicinity of 2VUS 1933 and AGE.

The approximate IHML in the vicinity of topographic station DOLT 1951 was field inspected and the true FHWL is indicated on photograph 56W2E32.

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

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:

NT 4 5 700	PHOACADYDH
08010 1957	5kingligg Traiter.
FIFTSE 1957	5602493
9"AN 1957	543249b
- TIND 1957	Slanghah an ter
PIAIN 1968(M)	5432320
हें ' लाल्प १०४३ (गर्ल)	5472396 R v
7145 1948 (200) , 1946 - GIAO 1927 (201) , 1944	54712396 total
-GIAC 1927 (201)	54512427 Sovet 11143
- PRID 1927 (200)	51/31/21/23
(- TRID 1987 (200 - TAT 1987 (200)	5472396 9116
N-90AT 1927 (197)	5442395

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: WIIL 1957, UNA 1957, JONE 1957; SAND 1957.

Movin F. Woodbook MODR, CAGS

Amproved and forwarded:

Tred Catella

ODE, CAGS

Commanding Ship BOVIS

REVIEW REPORT T-9145

SHORELINE

JANUARY 28, 1971

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, (pages 34 through 43), with differences noted in Items 62 through 65, is bound with the original of this report.

Shoreline on the east side of Evans Island was corrected at latitude 60°08.9', longitude 147°57.7' and latitude 60°09.1', longitude 147°57.8', after comparison with Air Force Photo 41 VV M324.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with Survey No. 3093, scale 1:20,000, dated 1910. Differences between T-3093 and T-9145 are shown in blue on the comparison print.

There was not enough control to hold this map for a good comparison. There appear to be many differences.

Because mapping photography for T-9145 was taken near half tide, or higher, many of the rocks shown on T-3093 are not visible on the photographs and are not mapped on T-9145.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle SEWARD (A-4), ALASKA, scale 1:63,360, dated 1952. Differences between this map and T-9145 are shown in brown on the comparison print.

It is noted that the name Ship Island appears on the quadrangle by the northerly of two small islands off the east side of Flemming Island between latitudes 60°09'30" and 60°10'00". This name appears by the southerly island on Chart 8523 and T-3093. It was approved at the southerly location by the Geographic Names Section and is shown by that island on T-9144.

There was no registered topographic survey available for comparison of the west side of Bainbridge Island.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with Survey No. H-8388, scale 1:12,500, dated 1956, and with Survey No. H-8205, scale 1:10,000, dated 1955. Differences between these surveys and T-9145 are shown in purple on the comparison print.

No differences in shoreline were noted; T-9145 was the base map for the shoreline compared.

Numerous rocks that were not visible on the photographs but were located by the hydrographer are indicated on the comparison print.

There was no contemporary hydrographic survey available for comparison of the east side of Evans Island.

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-9145 are shown in red on the comparison print.

Numerous rocks awash and submerged rocks are noted. These were not visible on the photographs and are not mapped on **T-9145**.

The shoreline of Evans Island and adjacent rocks appear to agree with T-3093, the old survey, rather than T-9145.

ADEQUACY OF RESULTS AND FUTURE SURVEYS: 66.

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 28, 1971

Approved for forwarding:

Melvin J. Umbach, CDR, NOAA

/Chief, Photogrammetry Division, AMC

Approved:

3

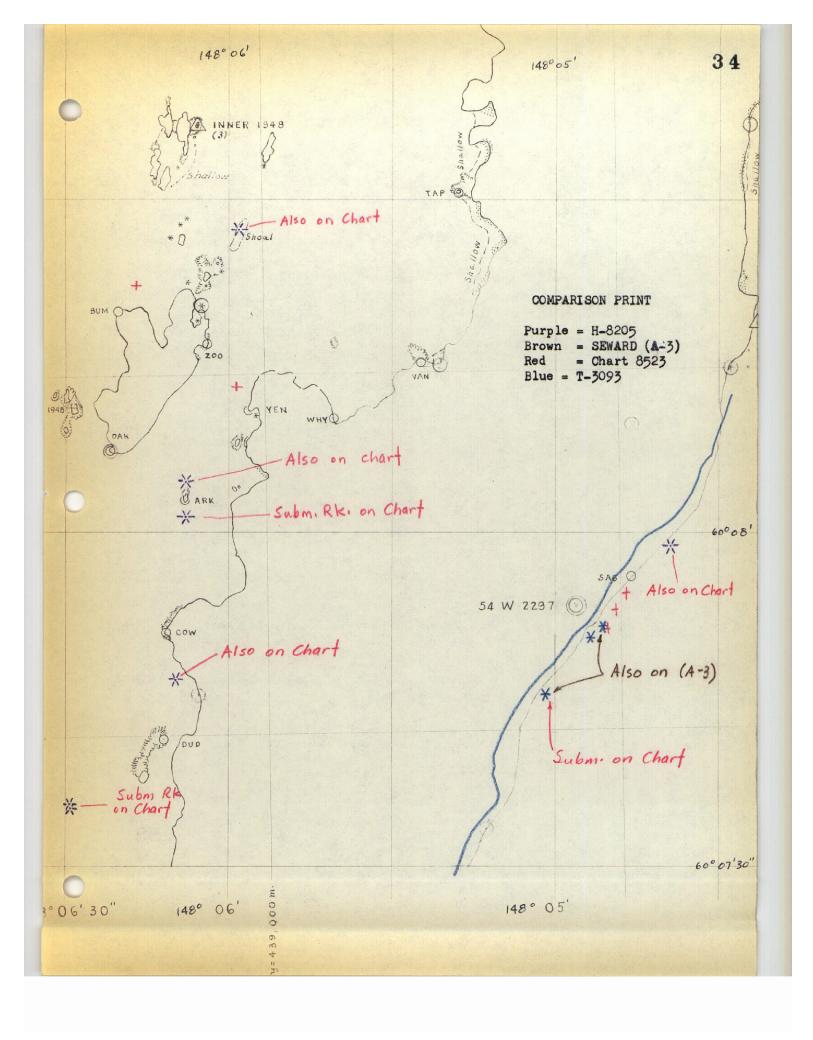
Allen L. Powell, RADM, NOAA

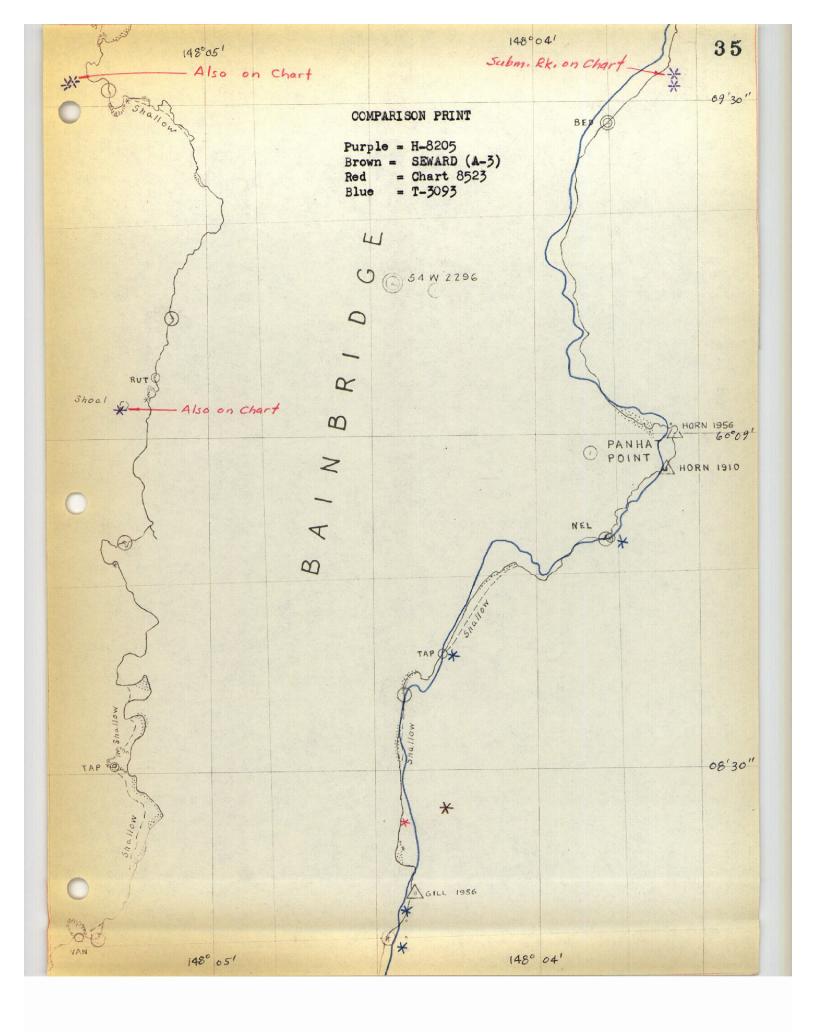
Director, Atlantic Marine Center

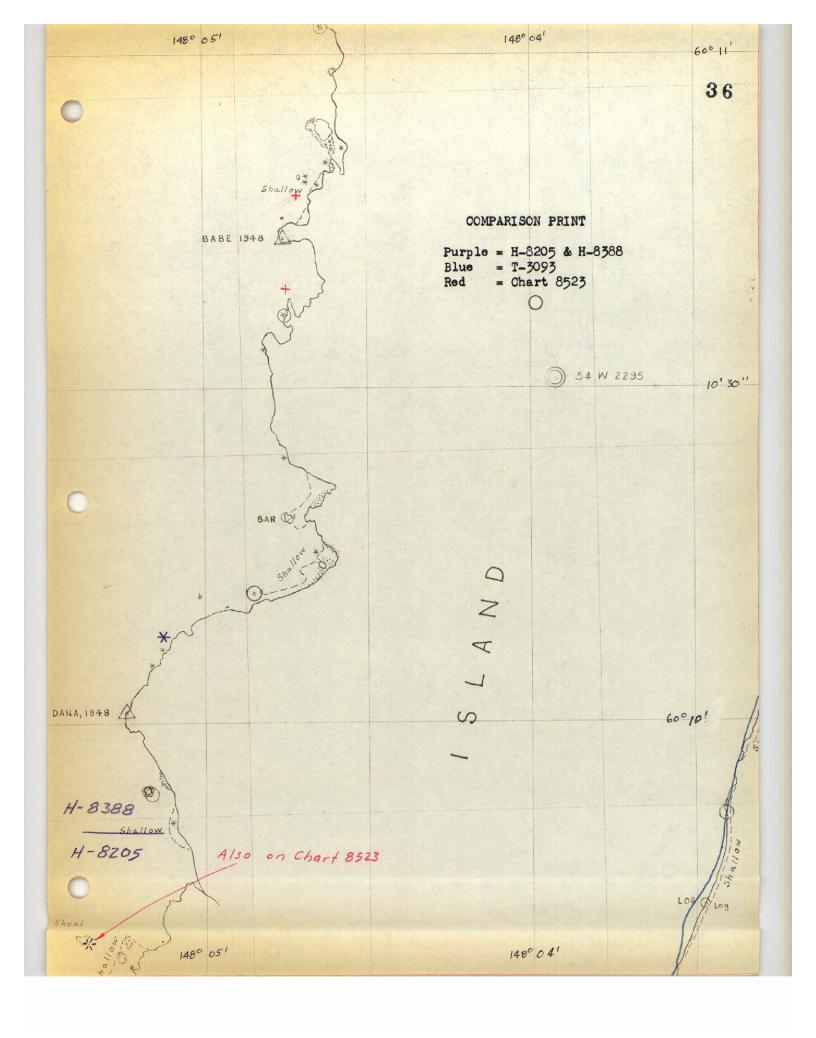
Approved:

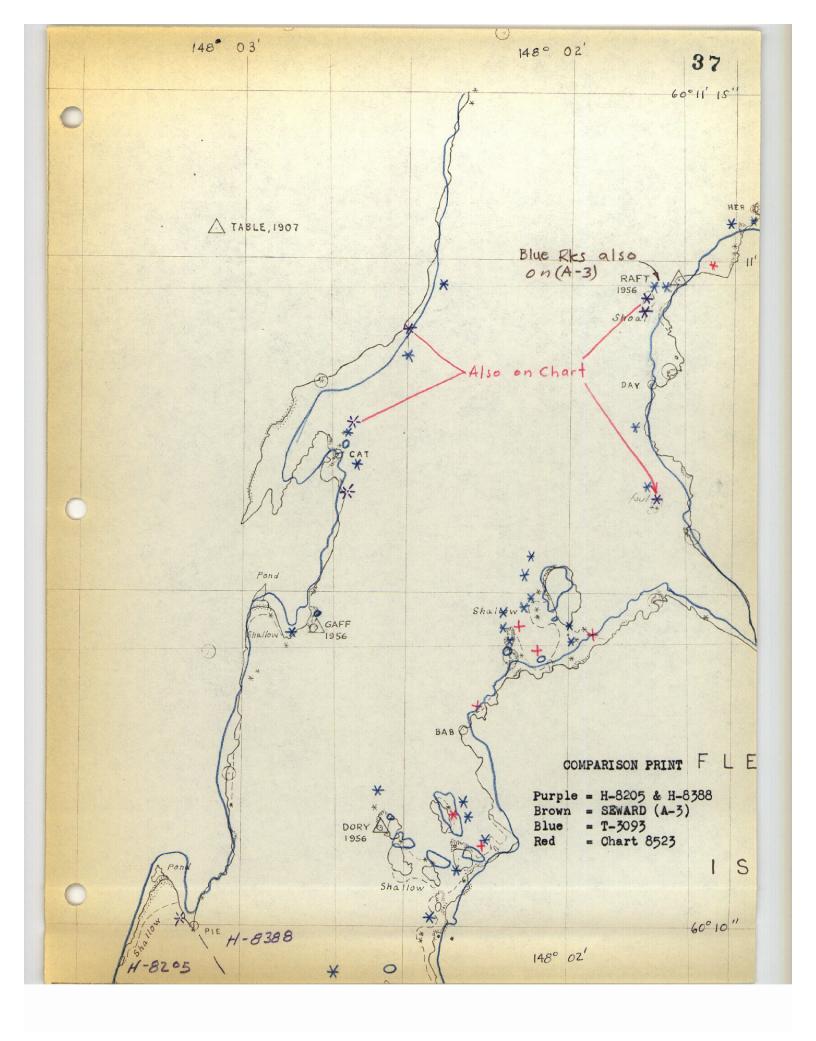
Chief, Photogrammetric Branch Chief, Photogrammetry Division

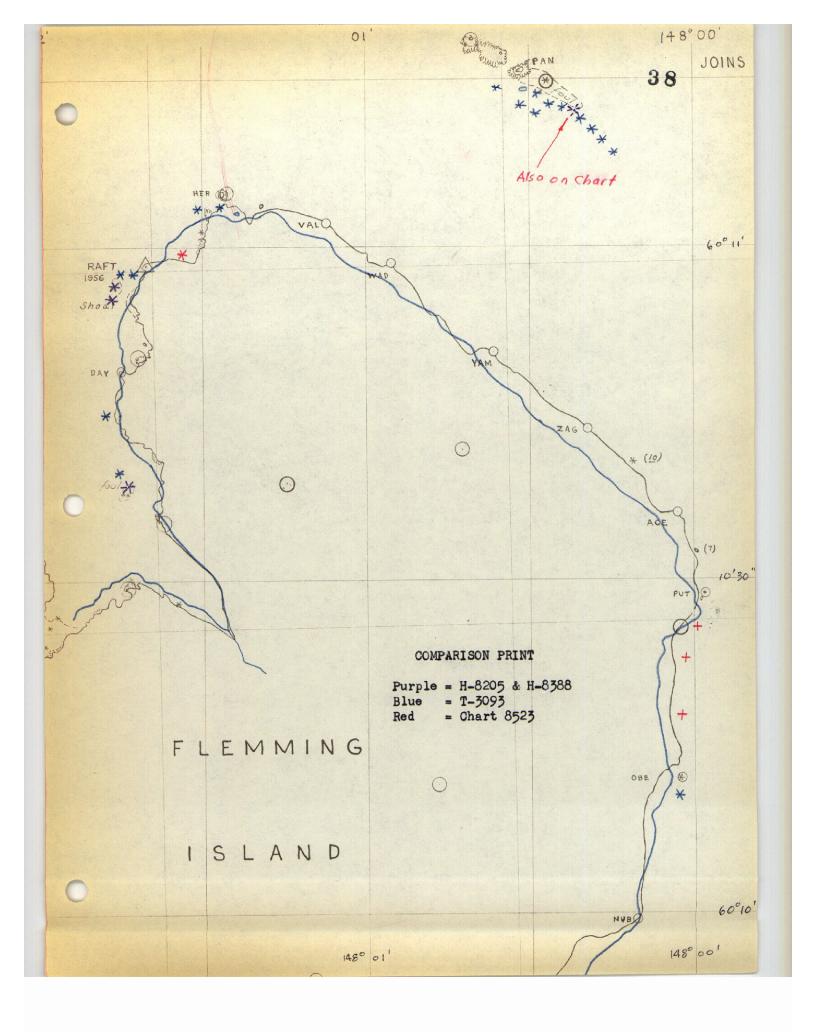
Jack E. Huth

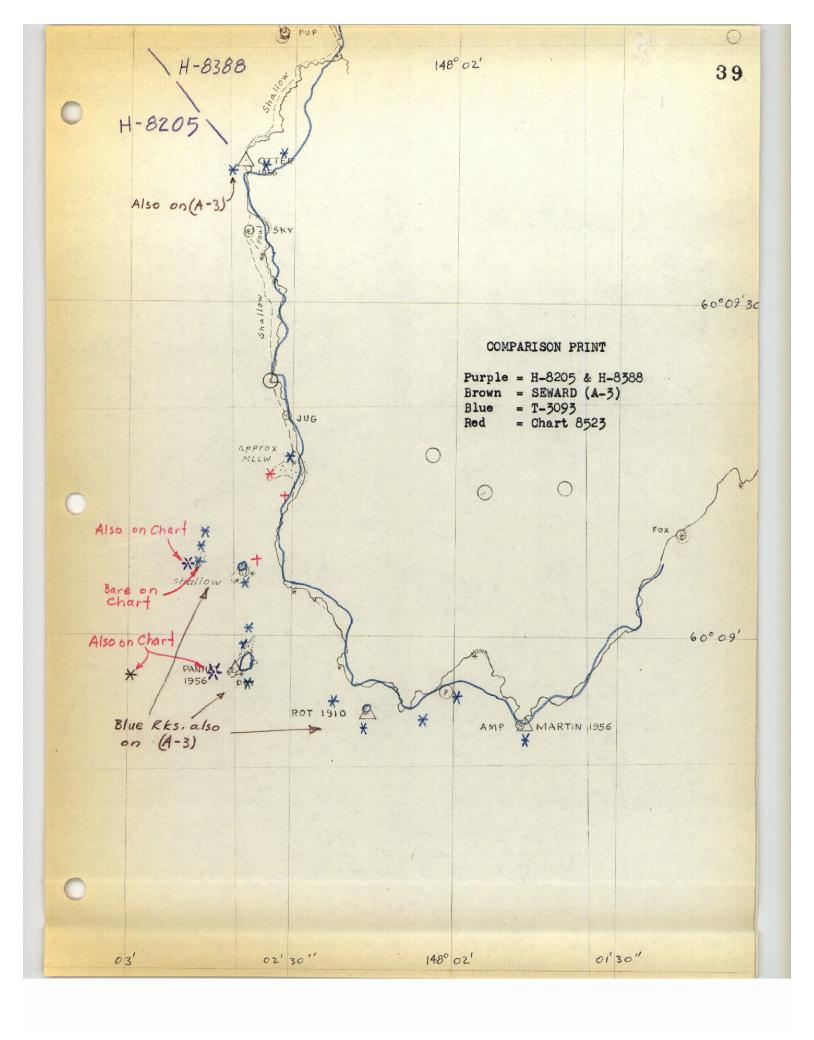


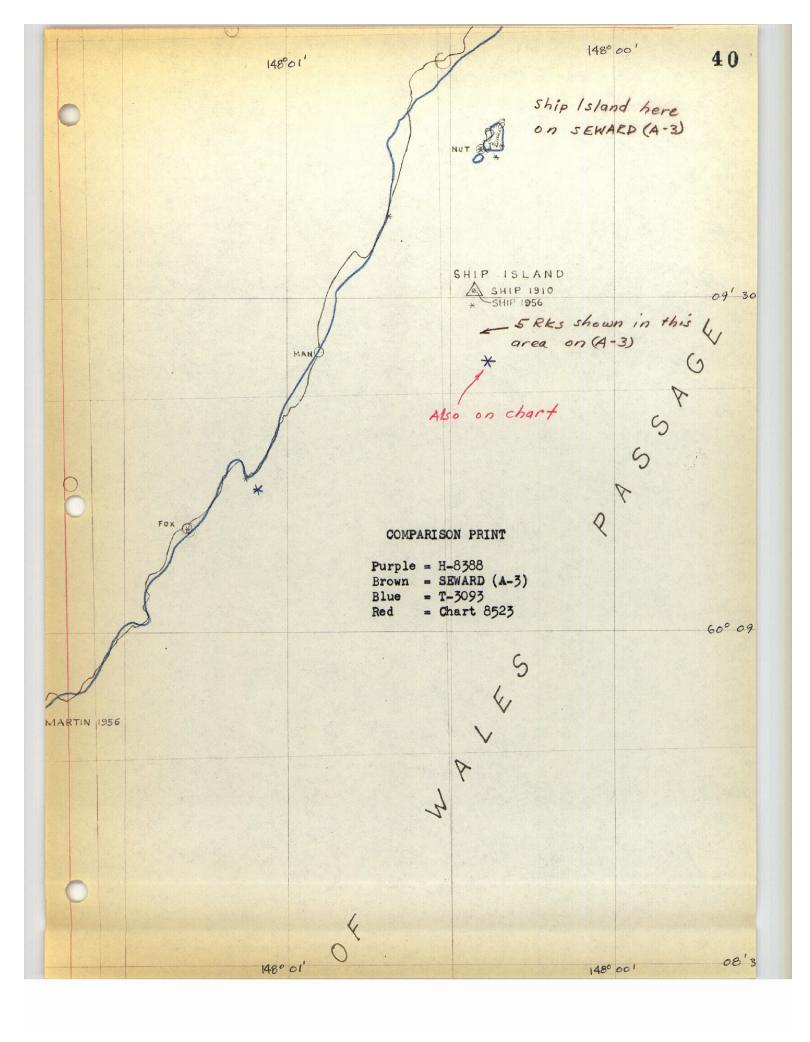


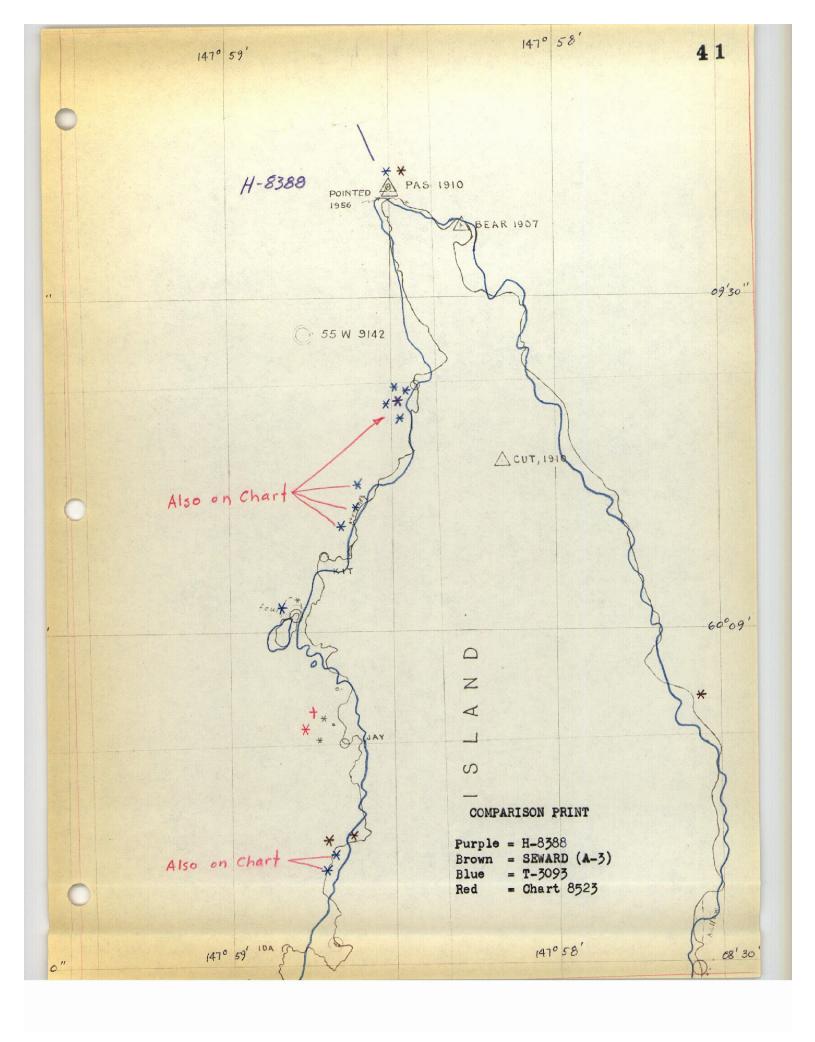


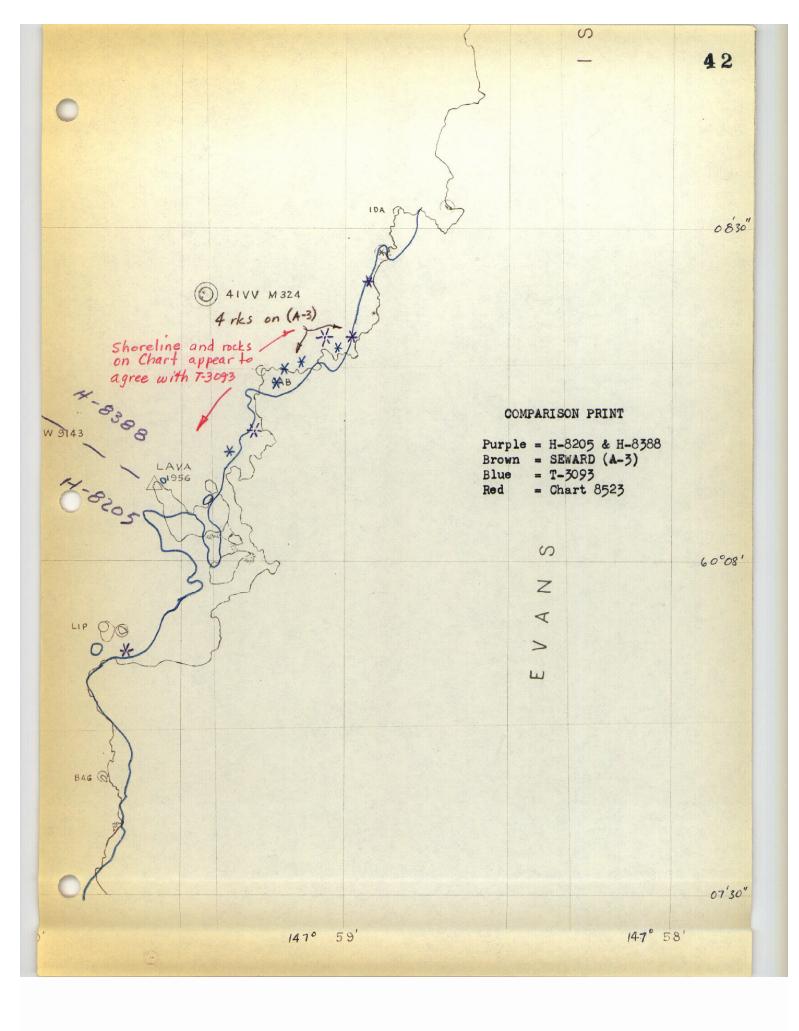


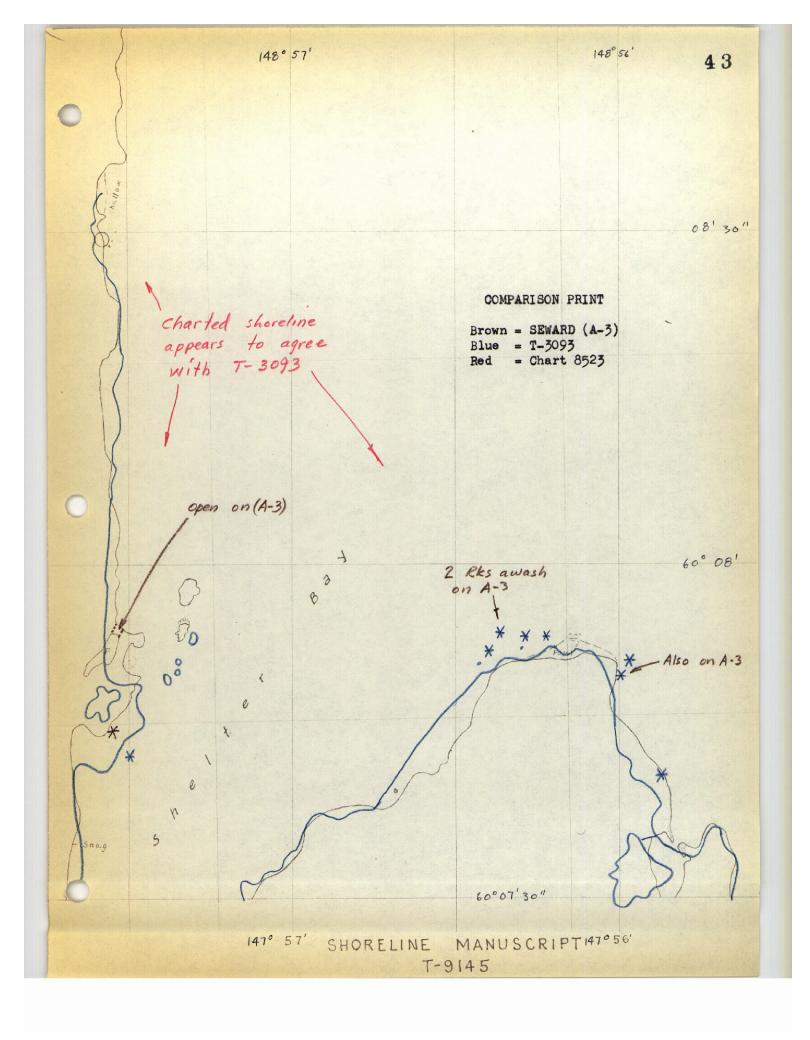












NAUTICAL CHARTS BRANCH

SURVEY NO. <u>T-914</u>5

Record of Application to Charts

D	GWARE	GA DECORA DIVER	DEWARKS.
DATE	CHART	CARTOGRAPHER	REMARKS
12/3/59	8515	Helmer	Before After Vertication and ReviewAdv. Manus. fully applied
11/4/77	8623	Stembel	Before After Verification and Review July applied
8/13/84	16702	BFerradous	Before After Verification and Review
			Dug #8, considered abaqualely appl
			Before After Verification and Review
			Before After Verification and Review
		w	Before After Verification and Review
			Before After Verification and Review
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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.