

9121

T-9121  
Original

9121

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No.	Office No. T-9121
LOCALITY	
State	Alaska
General locality	Prince William Sound
Locality	Mink Island
1954	
CHIEF OF PARTY	
Office: L. W. Swanson	
LIBRARY & ARCHIVES	
DATE	

## DATA RECORD

T-9121

Project No. (II): 6152

Quadrangle Name (IV):

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  
 11 Feb. 1955 Supp. 1  
 14 Mar. 1956 Supp. 2

Copy filed in Division of  
 Photogrammetry (IV)

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): 9-18-56

Date reported to Nautical Chart Branch (IV): 9-28-56

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): M.H.W.

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):

Lat.:

Long.:

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

Field Inspection by (II): None

Date:

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

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

Office inspection of photographs taken 26 July 1954

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

Date: 12/17/54

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

Date: 1/7/55

Control plotted by (III): B. Hale

Date: 6/26/56

Control checked by (III): G. Amburn

Date: 6/28/56

Radial Plot or Stereoscopic J. Battley - R. Sugden  
Control extension by (III):

Date: 7/3/56

Stereoscopic Instrument compilation (III):  
Planimetry  
Contours

Date:

Date:

Manuscript delineated by (III): G. Amburn

Date: 7/19/56

Photogrammetric Office Review by (III):

Date:

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

Date:

Camera (kind or source) (III): C&GS "W"

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide (MTLW)
2478-81	26 July 1954	1414	1:30,000	4.3
2446-9	"	1417	"	4.7

## Tide (III)

Reference Station: Cordova, Alaska

Subordinate Station: Culross Bay

Subordinate Station:

Atlantic Marine Center

Washington, D.C.

C. H. Bishop

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

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

Shoreline (More than 200 meters to opposite shore) (III): 11 miles

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:

## Diurnal

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

Date: 08-17-70

Date:

Date:

Date:

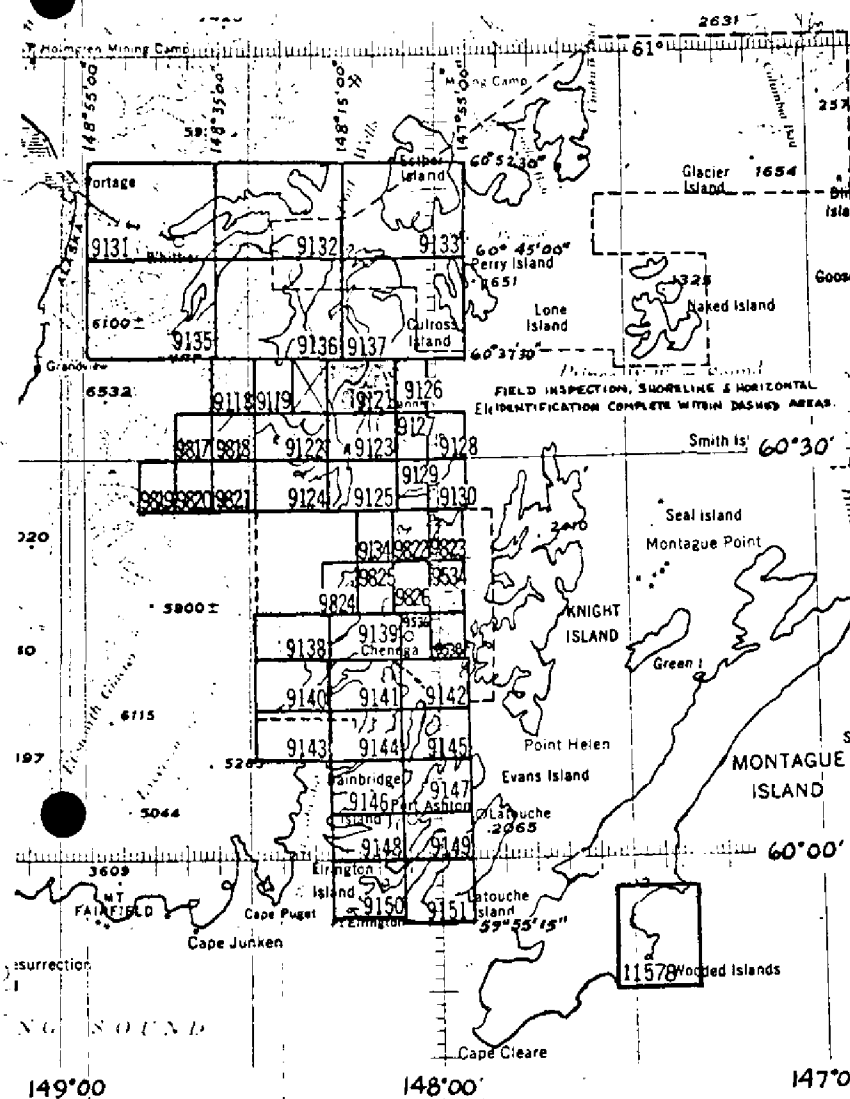


T-9121

COMPILATION RECORD	COMPLETION DATE	REMARKS
INCOMPLETE manuscript for hydro support	July 1956	
Final Review	August 1970	

## SHORELINE MAPPING PROJECT PH - 152

Prince William Sound, Alaska



OFFICIAL MILEAGE FOR COST ACCOUNTING		
	LINE 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	8
9128	5	3
9129	7	8
9130	14	6
9131	12	95
9132	48	50
9133	36	45
9134	5	11
9135	24	90
9136	26	85
9137	68	48
9138	10	7
9139	13	5
9140	12	8
9141	24	12
9142	10	3
9143	9	4
9144	26	9
9145	19	8
9146	18	8
9147	24	9
9148	25	9
9149	19	7
9150	24	8
9151	15	9
9534	6	4
9536	6	6
9538	4	1
9817	9	10
9818	11	6
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-9121

Records for this map were not complete at the time of final review, which was several years after compilation. The Compilation Record and notes concerning the absence of reports were inserted by the final reviewer.

This shoreline manuscript is one of 43 sheets that comprise Project PH-152, which is located in the western part of Prince William Sound. T-9121 includes part of Port Nellie Juan and the south entrance to Culross Passage.

Compilation was by radial plot at 1:10,000 scale, using ratio photographs from 1954 single-lens photography. There was no field inspection and no data available stating that field edit had been performed. Classification of the manuscript is "Incomplete."

Hydro-support data was furnished the hydrographer in 1961.

Final review was done at the Atlantic Marine Center in August 1970.

The compilation manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 11 minutes 15 seconds in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.

## FIELD INSPECTION REPORT

MAP T-9121

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.



PHOTOGRAMMETRIC PLOT REPORT  
Prince William Sound, Alaska  
Project 6152  
Surveys T-9119, T-9121 through T-9126  
July 1956

21. AREA COVERED:

This report discusses the radial plot for shoreline surveys T-9119, T-9121 to T-9126, inclusive, at a scale of 1:10000. These surveys fall in the area of Port Nellie Juan of Prince William Sound and include McClure Bay and a portion of Cochrane Bay.

22. METHOD:

Vinylite manuscripts with polyconic projection and UTM grid lines were used as base sheets for the plot. The grid lines were used in joining the base sheets.

Positype prints of Coast and Geodetic Survey single-lens photographs taken in 1954 were used throughout the plot. Vinylite hand templates were constructed using a master template to correct for paper distortion.

The plot was begun in T-9122 where field identified control was adequate for fixing individual templates. The plot was extended to include all surveys except T-9119 where no field-identified control was available. The area of T-9119 was not included in the plot until after final adjustment was made in the area of field-identified control.

Difficulties experienced in extending the plot resulted from errors in control identification--field and office, and in template construction using badly distorted photographs. One triangulation station (Tiger 1943) initially could not be held because of a published error in the direction of a reference mark (Geodesy Division records were corrected). All discrepancies in the plot were eventually resolved.

23. ADEQUACY OF CONTROL:

The area of T-9119 was controlled principally from office-identified triangulation stations. The plot was fairly rigid in this area and field identification of control should effect little shift in position.

- 2 -

Control was adequate to obtain as rigid a plot as could be expected with the spacing of single-lens photography which existed for this area. Stations not closely held were the result of logical causes. (See attached list of control.) Also other control which held was available for all such areas.

24. SUPPLEMENTAL DATA:

None.

25. PHOTOGRAPHY:

Flights were spaced such that there was little overlap between them. Also, there were many photographs in water areas. However, control was plentiful enough that extension of the plot was possible even though the above deficiencies existed.

The western part of T-9122 was not covered by photographs and approximately two miles of shoreline cannot be compiled until additional photography is available.

Submitted by:

*Jeter P. Battley Jr.*

Jeter P. Battley, Jr.  
Cartographer

Approved:

*Everett H. Ramey*

Everett H. Ramey  
Chief, Graphic Compilation Unit

PHOTOGRAPHIC PLOT REPORT  
Surveys T-9119 and T-9121 through T-9126

LIST OF CONTROL

T-9119

Vain, 1922 1.5 SE  
This was the position for a very doubtful office identification. A map feature which fits the station description plots at the published position.

Units, 1942 Held (Office identified only)

T-9121

Silt, 1948	Held
Nell, 1917 Sub. Pt.	0.3 mm N
Negat, 1948	0.5 mm N (2 radials only)
Port, 1917	Held
Ross, 1917 Sub. Pt.	Held
Olive, 1948	1.0 mm NE*
Wire, 1913 Sub. Pt.	Held

\*Poor field identification. Area of station obscured on photograph.

T-9122

Yield, 1948 Sub. Pt.	Held
Shady, 1948 Sub. Pt.	Held
Ripe, 1948	Held*
Xylan, 1948 Sub. Pt.	0.3 mm NE
Penny, 1948	0.4 mm NE**
Junk, 1948	Held
Organ, 1948 Sub. Pt.	Held
Fini, 1917	Held
Keel, 1948 Sub. Pt.	Held
Liar, 1948 Sub. Pt.	0.3 mm E (2 radials only)
Mace, 1948 Sub. Pt.	Held (2 radials only)
Navel, 1948	Held

\*Field identified point would not hold. Point on nearby reef which checked description was used and held.

\*\*Field identified substitute station would not hold. Office identified home station was held closely as indicated.

T-9123

Land, 1917	Held
Unit, 1948 Sub. Pt.	Held

- 2 -

T-9123 (continued)

Tart, 1948	Held
McClure W. Gable, 1948	Held
Valor, 1948 Sub. Pt.	0.3 mm W
Waltz, 1948 Sub. Pt.	Held

T-9124

Dill (UEB), 1948 Sub. Pt.	Held
Owe, 1948 Sub. Pt.	0.3 mm E (2 radials - narrow intersection)
Neck, 1948 Sub. Pt.	1.0 mm E

(Investigation, after plot was completed, revealed a point which fits the description by the field party and would have held in the plot. Evidently, the sub station was misidentified by field.)

T-9125

Pear, 1948 Sub. Pt.	Held
Money, 1948	Held
Adam, 1948 Sub. Pt.	Held
Zone, 1948	Held
Quad, 1948	Held (2 radials only)

T-9126

Port Hellie Juan Lt., 1948	Held
Juan, 1917, Sub. Pt.	0.3 mm E
First, 1912, Sub. Pt.	Held

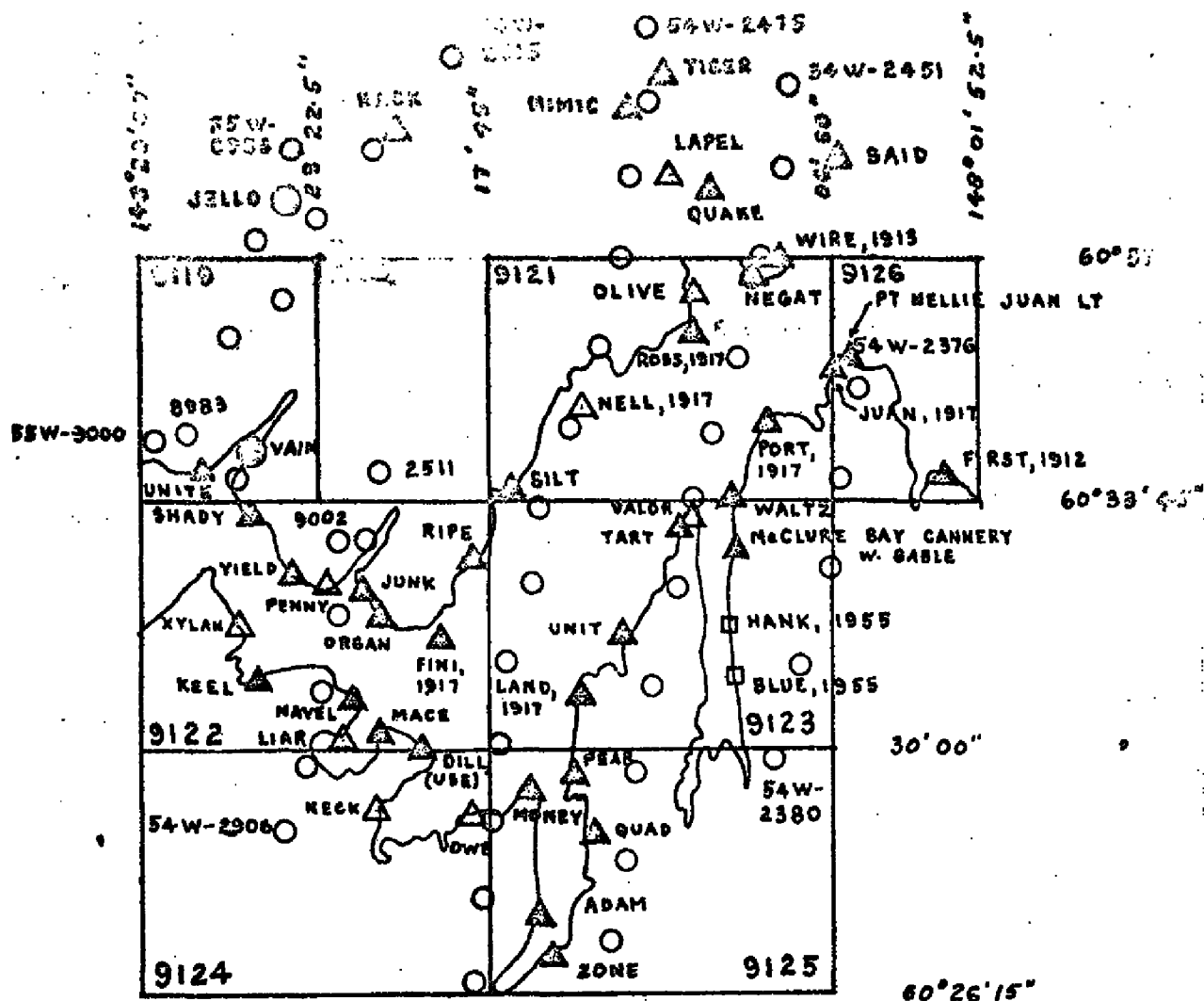
N. of Area to be Mapped

Jelloy, 1948	Held (office identification)
Hack, 1948	Held
Gland, 1948 Sub. Pt.	Held (1 radial only)
Said, 1948	Held (1 radial only)
Quake, 1943, Sub. Pt.	Held (2 radials)
Mimic, 1943 Sub. Pt.	Held
Lapel, 1948 Sub. Pt.	1.0 mm SE (very doubtful field identification - 3 points pricked on field photograph)
Tiger, 1948 Sub. Pt. A	Held
Sub. Pt. B	Held



## PRINCE WILLIAM SOUND

(2112)



54W-2485 ○ ○ 54W-2440

## PHOTOGRAMMETRIC PLOT CONTROL SKETCH

- ▲ Field identified stations held
- △ Field identified stations not held
- ⊙ Office identified stations held
- ⊕ Office identified stations not held
- Topographic stations located by radial plot

NOTE: All stations not dated are 1948

MAP T-9121

PROJECT NO. 6152

SCALE OF MAP 1:10,000

SCALE FACTOR 1.0

1 of 2 Sheets

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\nu$ -COORDINATE LONGITUDE OR $x$ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	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)	
Nell, 1917	VI 35	NA 1927	60 35 03.691		1857.1	114.2	(1742.9)	
			148 15 00.128		913.6	1.9	(911.7)	
Wire, 1913	VI 35	"	60 37 21.970		1857.1	680.0	(1177.1)	
			148 08 11.308		912.5	172.0	(740.5)	
Silt, 1948	VI 41	"	60 34 01.652		1857.1	51.1	(1806.0)	
			148 16 58.444		914.1	890.4	(23.7)	
Port, 1917	VI 35	"	60 34 57.694		1857.1	1785.7	(71.4)	
			148 08 43.418		913.6	661.1	(252.5)	
Negat, 1948	VI 44	"	60 37 14.432		1857.1	446.7	(1410.4)	
			148 10 02.305		912.6	35.1	(877.5)	
Olive, 1948	VI 44	"	60 37 02.771		1857.1	85.8	(1771.3)	
			148 11 16.434		912.7	250.0	(662.7)	
Port Nellie Juan Lt., 1948	VI 40	"	60 35 53.917		1857.1	1668.8	(188.3)	
			148 06 00.094		913.2	1.4	(911.8)	
Scar 4, 1948	VI 84	"	60 34 32.14		1857.07	994.8	(862.3)	
			148 16 58.76		913.9	895.0	(18.9)	
Sub. Station Waltz, 1948	CS 1 Card	"	60 33		1857.1	1355.5	(501.6)	
			148 09		914.2	744.4	(169.8)	
Sub. Station Ross, 1917	"	"	60 36		1857.1	491.8	(1365.3)	
			148 11		913.0	55.9	(857.1)	
Sub. Station Wire, 1913	"	"	60 37		1857.1	703.6	(1153.5)	
			148 08		912.5	169.9	(742.6)	
Sub. Station Nell, 1948	"	"	60 35		1857.1	107.1	(1750.0)	1
			148 15		913.6	8.4	(905.2)	3

1 FT. = 3048006 METER

COMPUTED BY: E. Ramey

DATE 17 May 1956

CHECKED BY: G. Walker

DATE 17 May 1956



## COMPILATION REPORT T-9121

31. Delineation

Shoreline and foreshore features were delineated from office stereoscopic interpretation.

Features shown were first drawn on a piece of vinylite superimposed on the photograph with the most nearly true scale. Graphic methods were then used to compile and delineate the MHWL and to adjust the planimetry to manuscript scale by holding the compilation points of near-sea-level elevation.

32. Control

See Photogrammetric Plot Report (attached) for discussion of control.

33. Supplemental Data: None34. Contours and Drainage: Not applicable.35. Shoreline and alongshore details

All shoreline features were delineated by stereoscopic examination of photographs using predicted tides for datum reference. Thus all features are subject to verification or completion by field surveys.

36. Offshore Details:

No unusual problems were encountered in compiling offshore detail.

37. Landmarks and aids: None38. Control for Future Surveys: None39. Junctions:

North: T-9137; West: No contemporary survey;  
East: T-9126; South: T-9123.

40. Horizontal and Vertical Accuracy

No areas appear to be sub-normal in accuracy.

46. Comparison with Existing Maps:


Planetable Sheet No. 3676 1:20,000 Date 1917  
Seward (C-4) 1:63,360, Alaska 1952 USGS



47. Comparison with Nautical Charts:

The manuscript was compared with nautical chart No. 8551, scale 1:200,000, published 1909, corrected 5-31-54. This manuscript supersedes previously charted shoreline. Items to be applied to nautical charts immediately: None.  
Items to be carried forward: None

Submitted by:

  
Garnett S. Amburn  
Cartographic Aid

Approved by:

  
Everett H. Ramey, Chief,  
Graphic Compilation Unit

August 28, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9121

Applegate Island

Chugach National Forest

Culross Passage

Mink Island

Port Nellie Juan

Approved by:

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

Prepared by:

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

49. Notes for the Hydrographer:

Features were compiled without benefit of field inspection and should be corrected or completed during hydrographic surveys if practicable.

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

MAP T- 9121

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 EDIT REPORT

MAP T- 9121

PROJECT PH-152

No record of field edit was available at the time of final review; therefore, no Field Edit Report is bound with this Descriptive Report.

## REVIEW REPORT T-9121

## SHORELINE

AUGUST 17, 1970

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print (pages 23 through 29), with differences noted in Items 62 through 65, is included with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with Survey T-3676, scale 1:20,000, dated 1917. Differences between this survey and T-9121 are shown with blue pencil on the comparison print.

Most of the discrepancies concern the mean high water line. All discrepancies are evident on the comparison print.

T-9121 supersedes previous topographic surveys for chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Because of scale differences, only a visual comparison was made with U.S.G.S. Quadrangles SEWARD (C-3) and SEWARD (C-4), ALASKA, dated 1952. Differences between this survey and T-9121 are shown in brown on the comparison print.

Two groups of rocks awash at latitude  $60^{\circ}33.8'$  longitude  $148^{\circ}17.6'$  are indicated on (C-4) as being bare.

(C-4) indicates two rocks awash at latitude  $60^{\circ}36.9'$ , longitude  $148^{\circ}09.2'$ . These are not visible on the photographs.

(C-4) indicates a rock awash at latitude  $60^{\circ}37.0'$ , longitude  $148^{\circ}08.5'$ . This rock is not visible on the photographs.

Two rocks awash and one bare rock indicated on (C-3) in the vicinity of latitude  $60^{\circ}35.6'$ , longitude  $148^{\circ}08.9'$  are not visible on the photographs.

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

A comparison was made with unverified copies of smooth sheets for Surveys H-8606 and H-8607, both 1:10,000 scale and both dated 1961. Apparently T-9121 was used as the base map for shoreline for the area of these surveys covering this map. Differences between these surveys and T-9121 are shown in purple on the comparison print.

At latitude  $60^{\circ}36.2'$ , longitude  $148^{\circ}11.3'$  the notation "RK" appears faintly on the copy of H-8606. It is not clear where the position is, nor is there a rock visible on the photographs at this position.

#### 65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8517, scale 1:80,000, 9th edition, dated April 28, 1969. Differences between this chart and T-9121 are indicated in red on the comparison print.

The general trend of the shoreline is the same; small details could not be compared because of scale difference.

Discrepancies concerning rocks awash and bare rocks are about the same as in Item 63 and are indicated 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  
August 17, 1970

Approved:

*Allen L. Powell*  
Allen L. Powell, RADM, USESSA  
Director, Atlantic Marine Center

Approved:

*Charles L. Lamm*  
Chief,  
Photogrammetric Branch *AMO*

*Jack E. Guth*  
Chief,  
Photogrammetry Division



23

35'

COMPARISON PRINT

- Blue = T-3676
- Purple = H-8606
- Red = Chart 8517
- Brown = SEWARD (C-4)

60°35'

*Rk not visible on  
photos at this position*

SCAR 4 1948



SILT 1948

60°34'

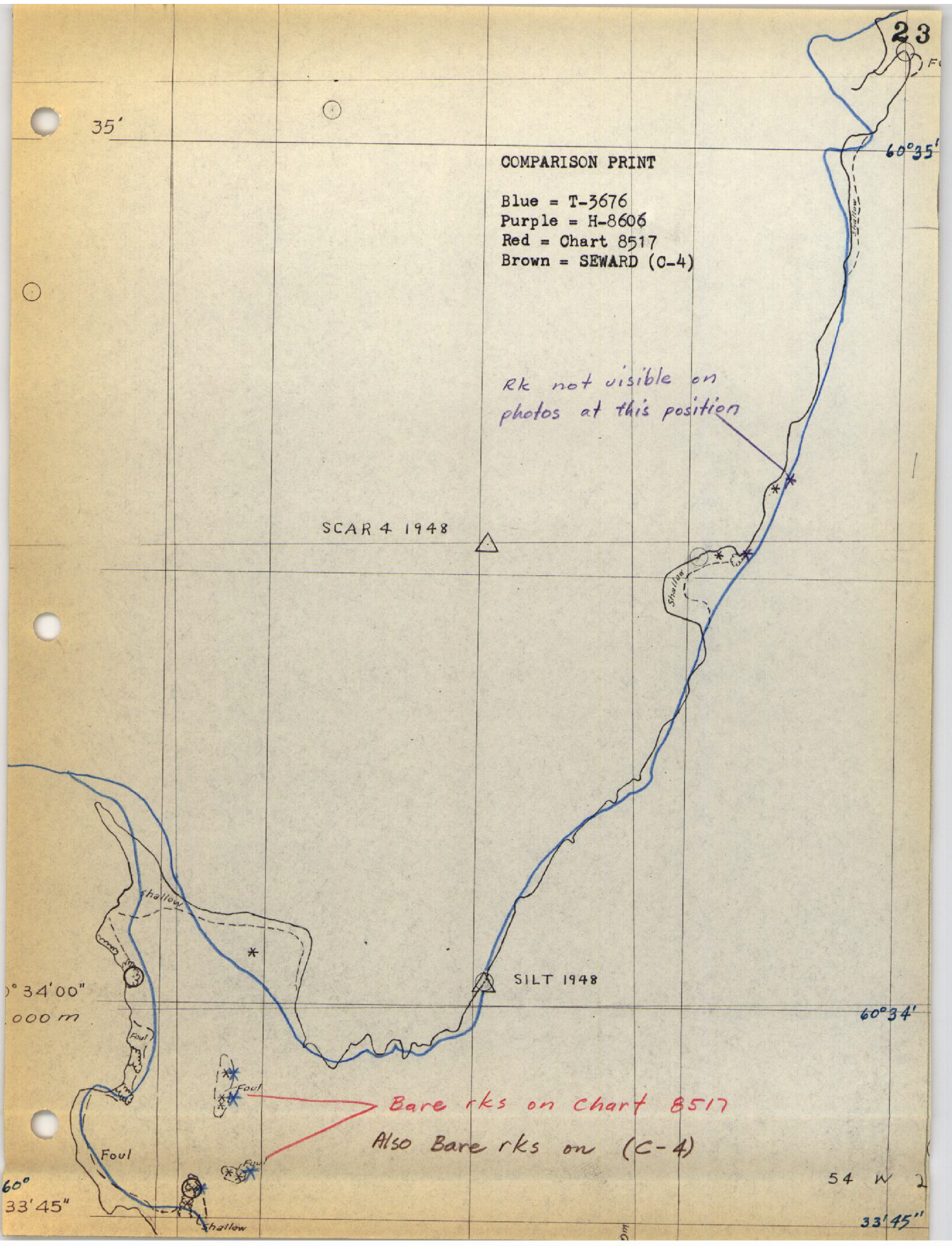
60° 34'00"  
000 m

*Bare rks on Chart 8517  
Also Bare rks on (C-4)*

54 W 2

60°  
33'45"

33'45"





148° 15'

148° 14'

24

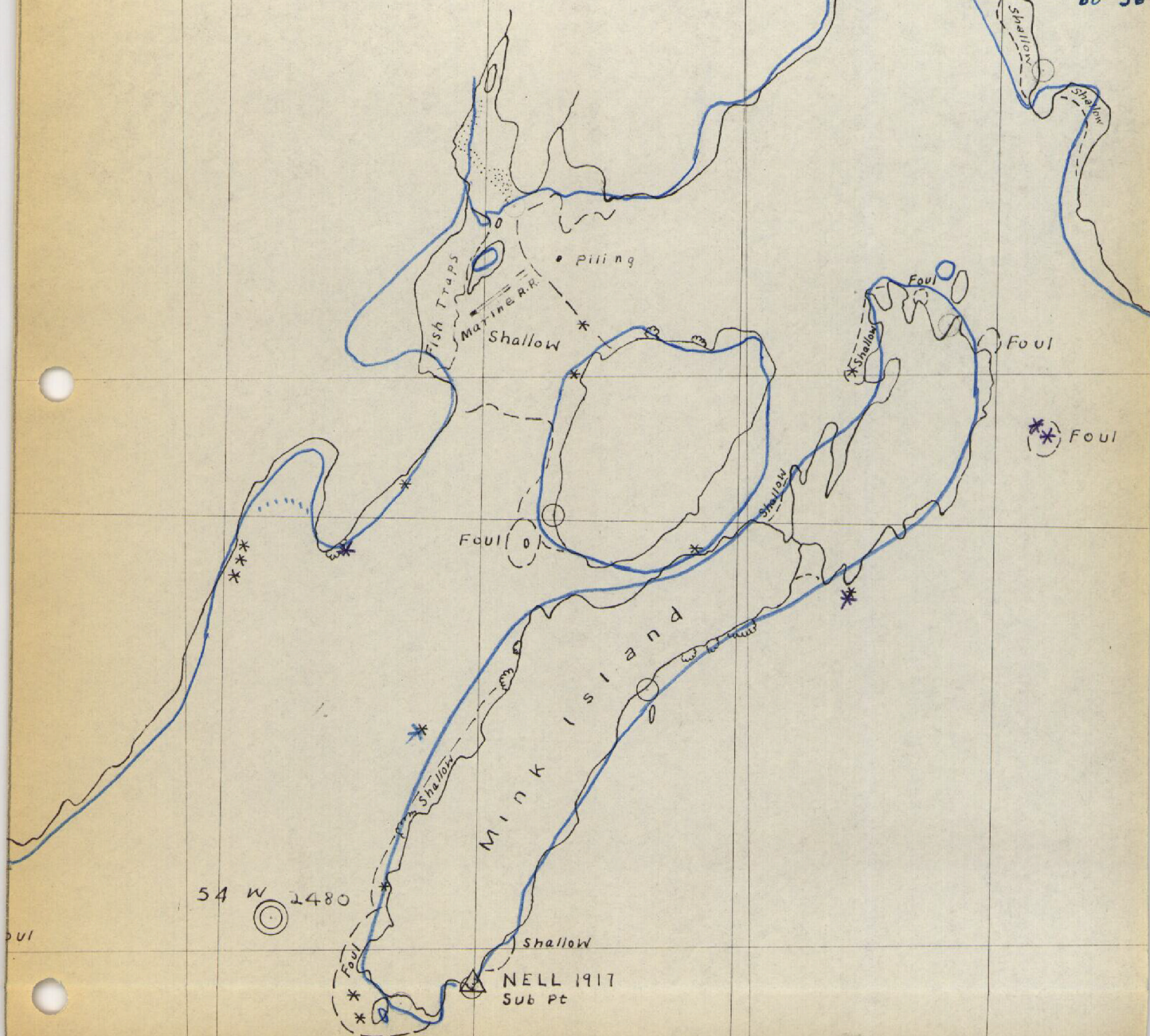
COMPARISON PRINT

Blue = T-3676

Purple = H-8606

2

60° 36'



148° 15'

148° 14'

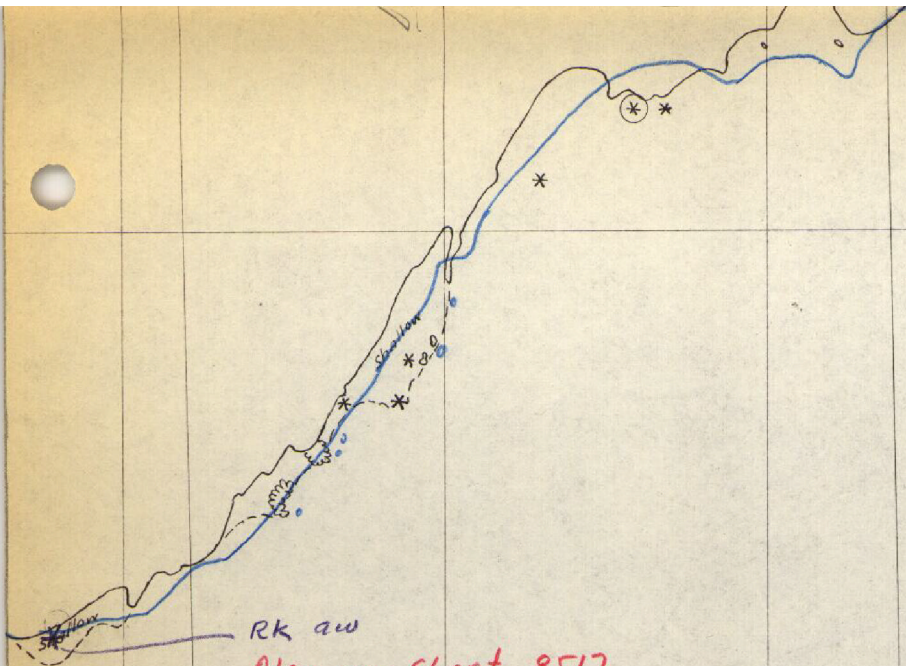
60° 35'



25

60° 36'

3



RK 9W

Also on Chart 8517

COMPARISON PRINT

Blue = T-3676

Purple = H-8606

Red = Chart 8517

JUAN

60° 35'

148° 12'

148° 13'

LIE



148°13'

JOINS T-9137

148°12'

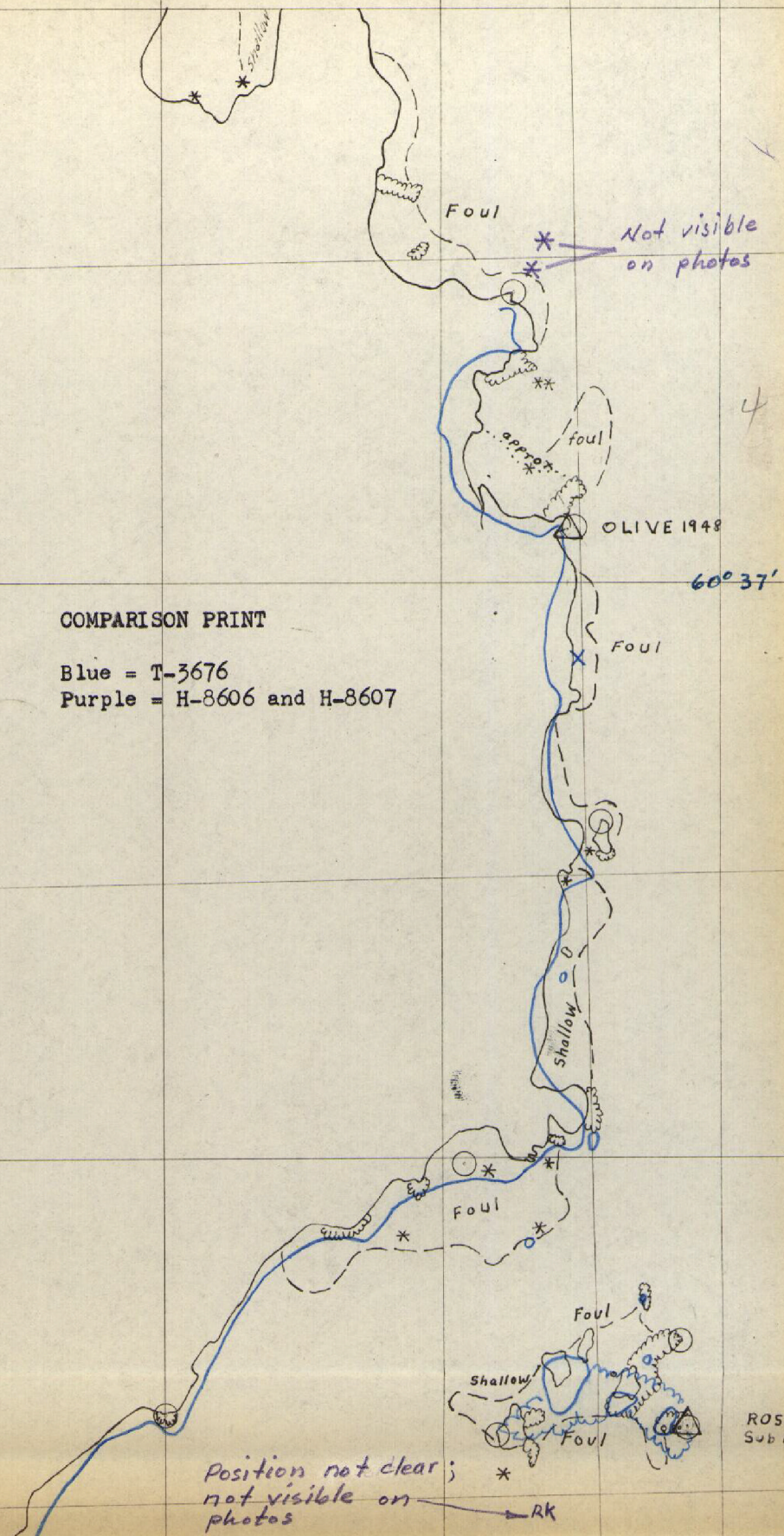
148°11'

26

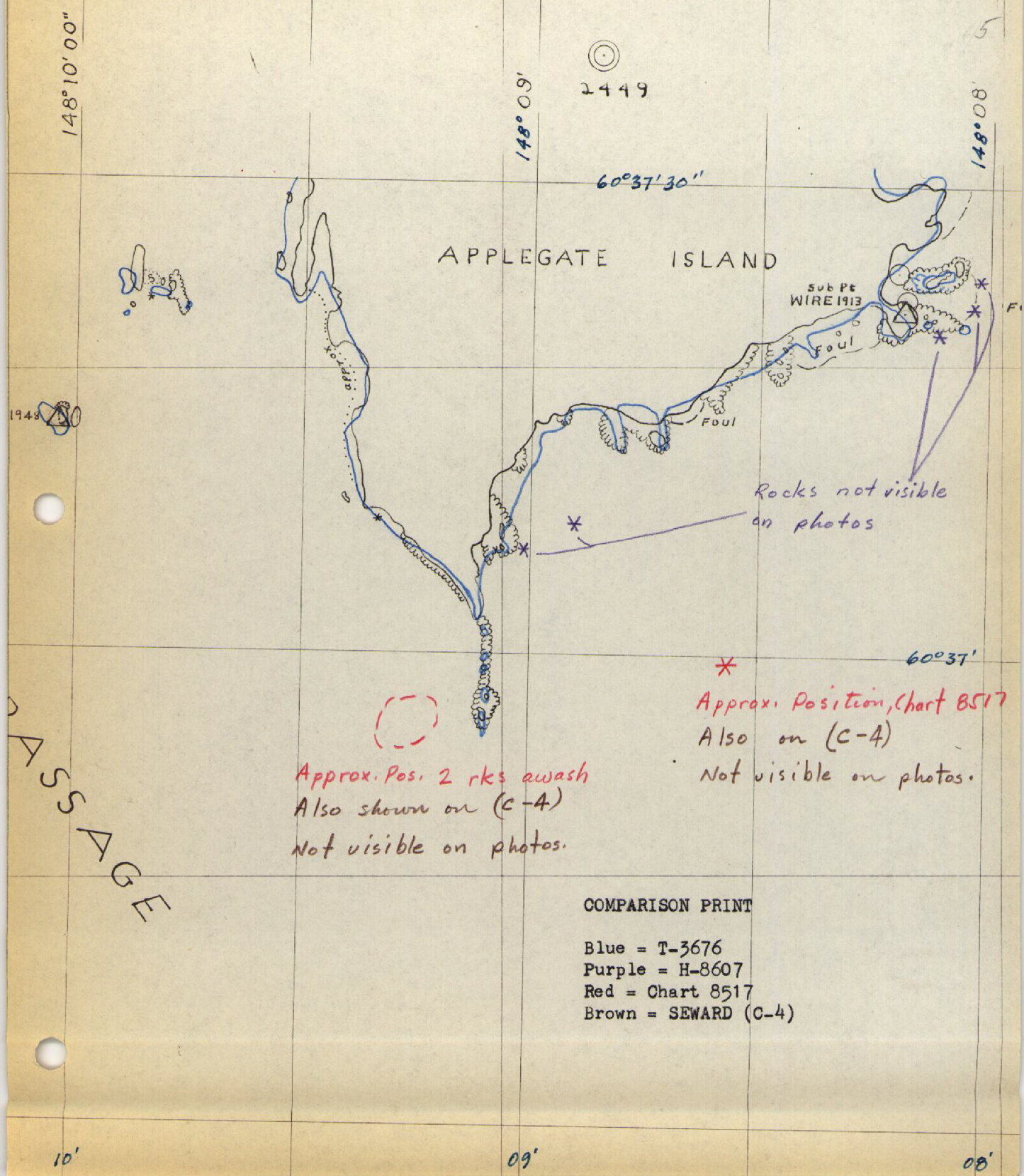
COMPARISON PRINT

Blue = T-3676

Purple = H-8606 and H-8607







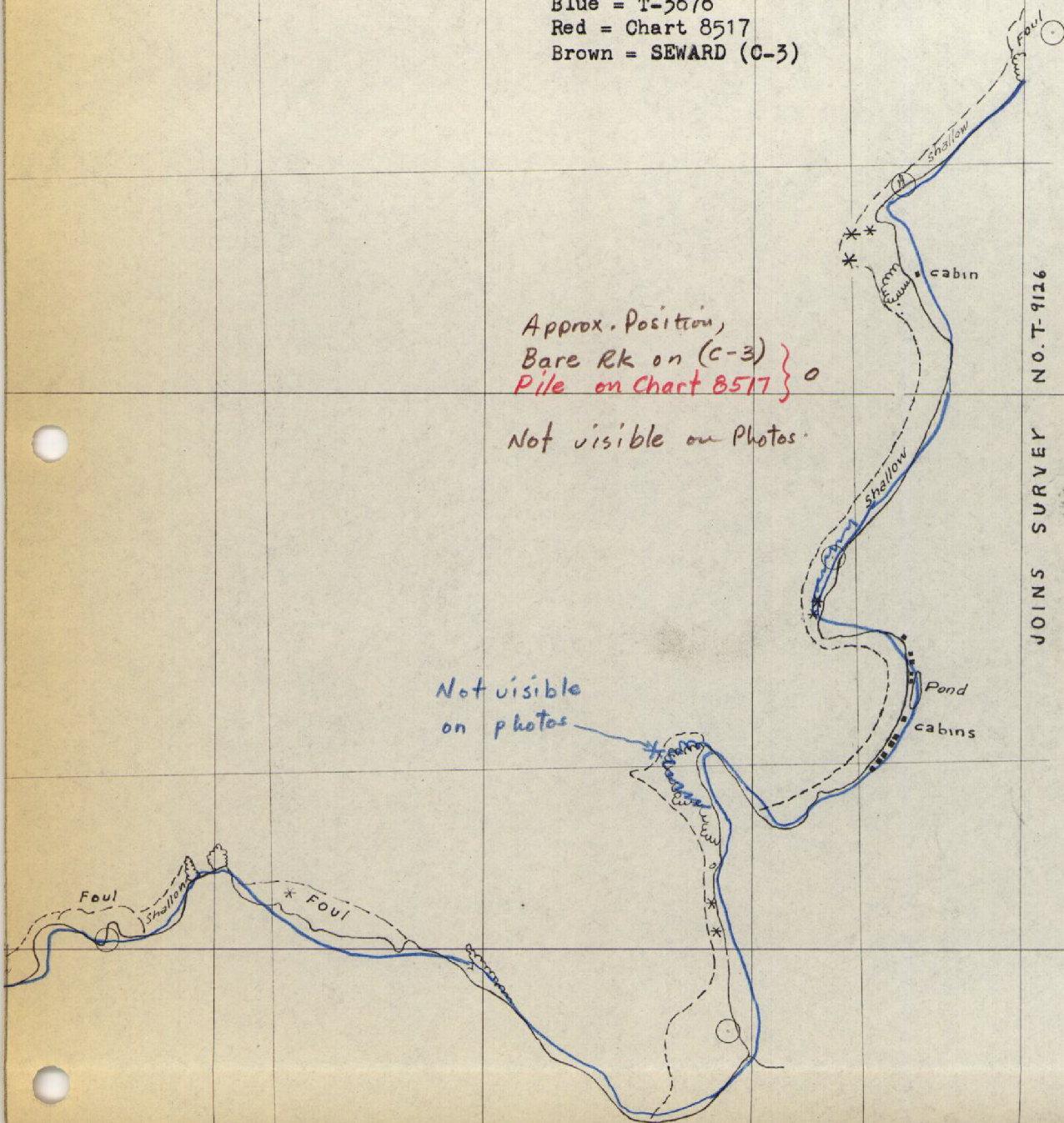


## COMPARISON PRINT

Blue = T-3676  
 Red = Chart 8517  
 Brown = SEWARD (C-3)

Approx. Position,  
 Bare Rk on (C-3)  
 Pile on Chart 8517 } 0  
 Not visible on Photos.

Not visible  
 on photos





148°10'

148°09'

60°35'

PORT 1917

54 W 2447



7

Foul

Foul

COMPARISON PRINT

Blue = T-3676

Purple = H-8606

No rock visible  
on photos at  
this position

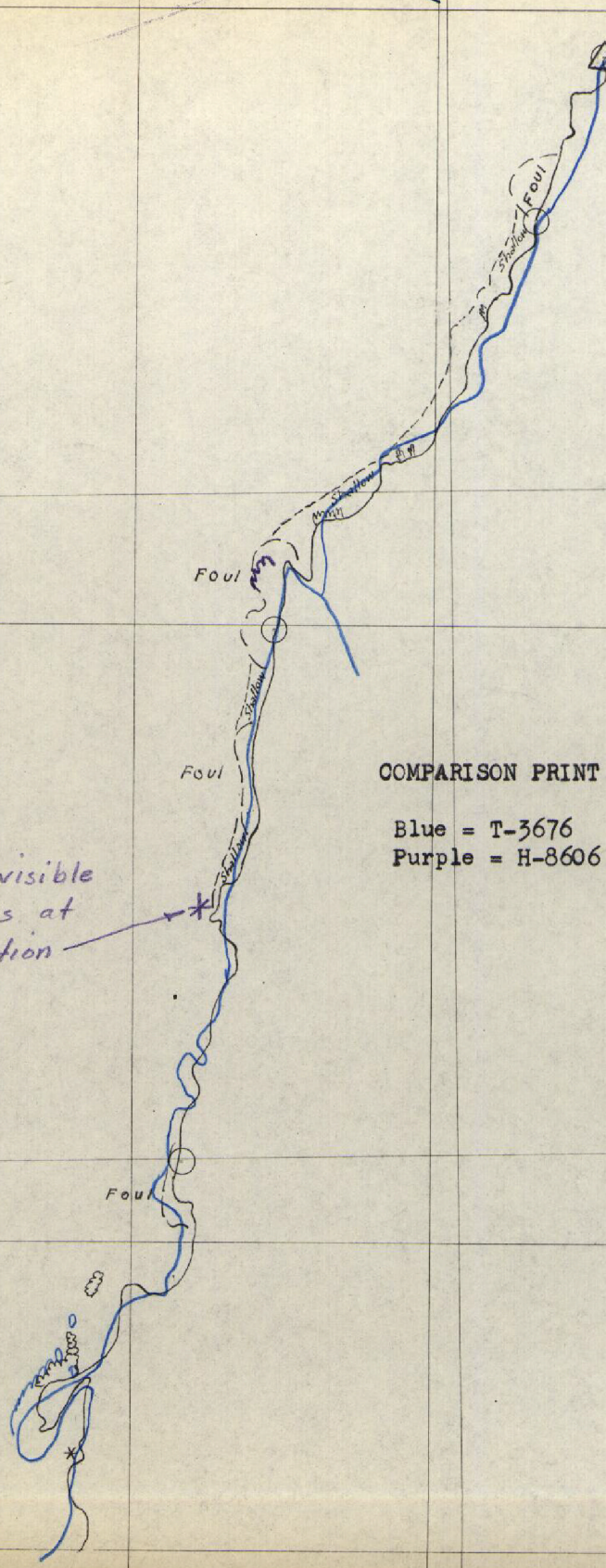
Foul

60°34'

T Z 1948  
Sub. Pt

148°10'00"

09'



## NAUTICAL CHARTS BRANCH

SURVEY NO. 9121

### Record of Application to Charts

[illegible]

M.216B-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.