

9135

Original

9135

FORM C&GS-504	
U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	TOPOGRAPHIC
Field No.	Office No. T-9135
LOCALITY	
State	ALASKA
General locality	PRINCE WILLIAM SOUND
Locality	BLACKSTONE BAY
1948-60	
CHIEF OF PARTY Glendon E. Boothe, Field Hubert A. Paton, Baltimore Photo Office Louis J. Reed, Washington Office	
LIBRARY & ARCHIVES	
DATE	

DATA RECORD

T-9135, 9136, 9137

Project No. (II): **152** ~~Ph-39(48)~~ Quadrangle Name (IV): T-9135 = BLACKSTONE BAY
 T-9136 = COCHRANE BAY
 T-9137 = CULROSS ISLAND

Field Office (II): DERICKSON

Chief of Party: Glendon E. Boothe

Photogrammetric Office (III): B'more Photo Office Officer-in-Charge: Hubert A. Paton
 Washington Office, Louis J. Reed, Chief, Stereo-
 scopic Mapping Section

Instructions dated (II) (III):

copy filed in Division of
 Photogrammetry (IV)

(II) Field dated 28 Jun 49

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1:1

Date received in Washington Office (IV): JAN 23 1951 Date reported to Nautical Chart Branch (IV): 2-5-51

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 1927

Vertical Datum (III):

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

Reference Station (III):

Lat.:

Long.:

Adjusted

~~XXXXXXXX~~

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): Glendon E. Boothe

Date: 1949

Planetable contouring by (II): none

Date:

Completion Surveys by (II): none

Date:

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

Shoreline is dated 1949 since it was field inspected in 1949.

Projection and Grids ruled by (IV): Ruling Machine

Date: 18 Aug 50

Projection and Grids checked by (IV): Theodore L. Janson

Date: 18 Aug 50

Control plotted by (III): Orvis N. Dalbey

Date: 14 Nov 50

Control checked by (III): John B. McDonald

Date: 15 Nov 50

Radial Plot of ~~Shoreline~~

Control checked by (III):

Frank J. Tarca

Date: 7 Jun 50

Robert L. Sugden
Garnett S. AmburnAug 57
Feb 60

delineation by

Planimetry

Louis Levin

Date: 21 Sep 50

Stereoscopic Instrument ~~used~~ (III):

and

and

Clarence E. Misfeldt

Date:

compilation

Manuscript ~~checked~~ by (III):Louis Levin and
John B. McDonald

Date: 30 Jan 51

Photogrammetric Office Review by (III): Louis J. Reed

Date: 30 Jan 51

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

Louis J. Reed

Date: 30 Jan 51

Camera (kind or source) (III): U S C & G S 9-Lens Camera "B", F = 8.25"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
19693-95	27 Jun 47	11:23	20,000	5 ft above MLLW
19713-16	"	11:52	"	6 "
19718-19	"	11:55	"	6 "
23401-03	2 Sep 48	13:04	"	12 "
23443-45	"	13:41	"	11 "
23447-58	"	13:47	"	11 "
23584-91	3 Sep 48	10:18	"	6 "
23594-603	"	10:35	"	7 "

Tide (III)

Diurnal

Reference Station: Cordova
 Subordinate Station: Culross Bay - Wells Passage
 Subordinate Station:

Ratio of Ranges	Mean Range	XXXX Range
1	9.7	12.1

Atlantic Marine Center
 Washington, D.C.

Review by (IV):

Charles H. Bishop

Date: 7-10-70

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): See Remarks below

Shoreline (More than 200 meters to opposite shore) (III): See Remarks below

Shoreline (Less than 200 meters to opposite shore) (III): none

Control Leveling - Miles (II): none

Number of Triangulation Stations searched for (II):

Recovered:

Identified: 9

Number of BMs searched for (II): none

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): none

Number of Temporary Photo Hydro Stations established (III): none

Remarks:

Land Area =	$\frac{T-9135}{5 \text{ sq mi}}$	$\frac{T-9136}{31 \text{ sq mi}}$	$\frac{T-9137}{19 \text{ sq mi}}$
Shoreline =	3 miles	28 miles	38 miles

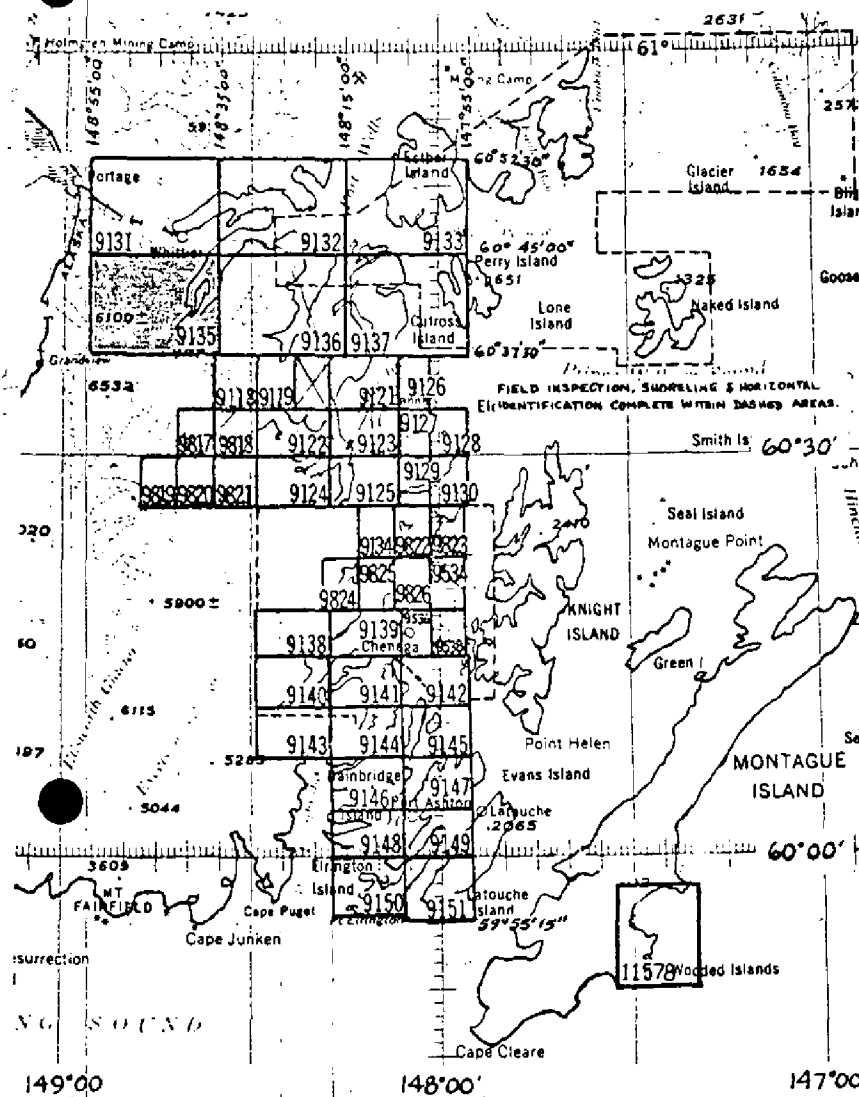
T-9135

COMPILATION RECORD	COMPLETION DATE	REMARKS
Contours and shoreline	1951	Superseded
Shoreline revised from 1958 photographs		
Final review	1970	

SHORELINE MAPPING PROJECT PH - 152

5

Prince William Sound, Alaska



OFFICIAL MILEAGE FOR COST ACCOUNTING
 SHEET NO. LIN. MI. AREA MI.
 SHORELINE

9118	3	13
9119	9	11
9121	11	10
9122	23	7
9123	17	7
9124	7	5
9125	15	6
9126	5	3
9127	6	3
9128	5	3
9129	7	8
9130	14	6
9131	12	95
9132	48	50
9133	36	45
9134	5	11
9135	24	90
9136	26	85
9137	68	48
9138	10	7
9139	13	5
9140	12	8
9141	24	12
9142	10	3
9143	9	4
9144	26	9
9145	19	8
9146	18	8
9147	24	9
9148	25	9
9149	19	7
9150	24	8
9151	15	9
9534	6	4
9536	6	6
9538	4	1
9817	9	10
9818	11	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-9135

At the time of final review, which is several years after compilation, many of the records concerning this map have been lost or misplaced and were not available for the final reviewer's use. The Compilation Record and Form 164 Control Record were prepared by the final reviewer. Notes concerning the absence of reports are inserted where the reports should be in this Descriptive Report.

No compilation report was available when this map was reviewed.

Compilation of the contoured area was by Reading Plotter in 1950 and 1951, using 1:20,000 scale, nine-lens photographs taken in 1947 and 1948. In 1957 a preliminary radial plot was run at 1:20,000 scale for the purpose of completing the area south of the contouring limit ($60^{\circ} 43'$). Nine-lens photographs with mostly office-identified control were used for the 1957 plot. In 1960 another radial plot was run at 1:20,000 scale, using nine-lens photographs with field-identified control, to verify the previous plot. Photographs used in the radial plots were taken in 1948.

No mapping was done on this map west of longitude $148^{\circ} 45'$. Topography is incomplete; no contours were mapped south of latitude $60^{\circ} 43'$.

It is not known if hydro-support data was furnished to the hydrographic party.

There was no data available to the final reviewer concerning field edit; it is not known if field edit was performed.

Final review was done at the Atlantic Marine Center during July 1970.

The compilation manuscript was a vinylite sheet $7\frac{1}{2}$ minutes in latitude and 20 minutes in longitude.

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

FIELD INSPECTION REPORT

2-20

Field inspection was accomplished in 1949 in conjunction with hydrographic operation in the area. The report on this field inspection was meager and can be found in the 1949 season's report of the USC & GS Ship DERICKSON, Project CS-277, Prince William Sound, Alaska, Glendon E. Boothe, Chief of Party, Commanding, a copy of which report relative to field inspection follows:

4. Field Inspection of Air Photographs:

Unfortunately air photographs of the area of the working grounds were not available. Under date of 9 Aug 49 instructions were received to make a field inspection of air photographs covering Passage Canal, Wells Passage, Pigot Bay, and heads of Blackstone Bay, Cochrane Bay, Port Wells, and Cylross Passage. All triangulation stations in the area were recovered, and where possible the station was located on the air photographs. All of the shoreline was inspected from small boats cruising along close to the beach, landings were made as necessary for inspection purposes, the high water line was determined and off-lying rocks were inspected and notes made on the photographs. The usual standard practices for this type of work were used. A new oil dock at Whittier was located by measurement on the ground and placed on the air photograph.

RADIAL PLOT REPORT

21 - 30

See combined descriptive report for map manuscripts T-9131, T-9132, and T-9133, page 8, which report applies here since the same plot covered all six quadrangles.

RADIAL PLOT REPORT

MAP T- 9135

PROJECT PH-152

A Radial Plot Report is mentioned in Item 32 of the Compilation Report for T-9131, 9132, and 9133. This plot report was not available at the time of final review and is not bound with this Descriptive Report.

The following sketch (original bound with T-9135) is for the 1950 plot.

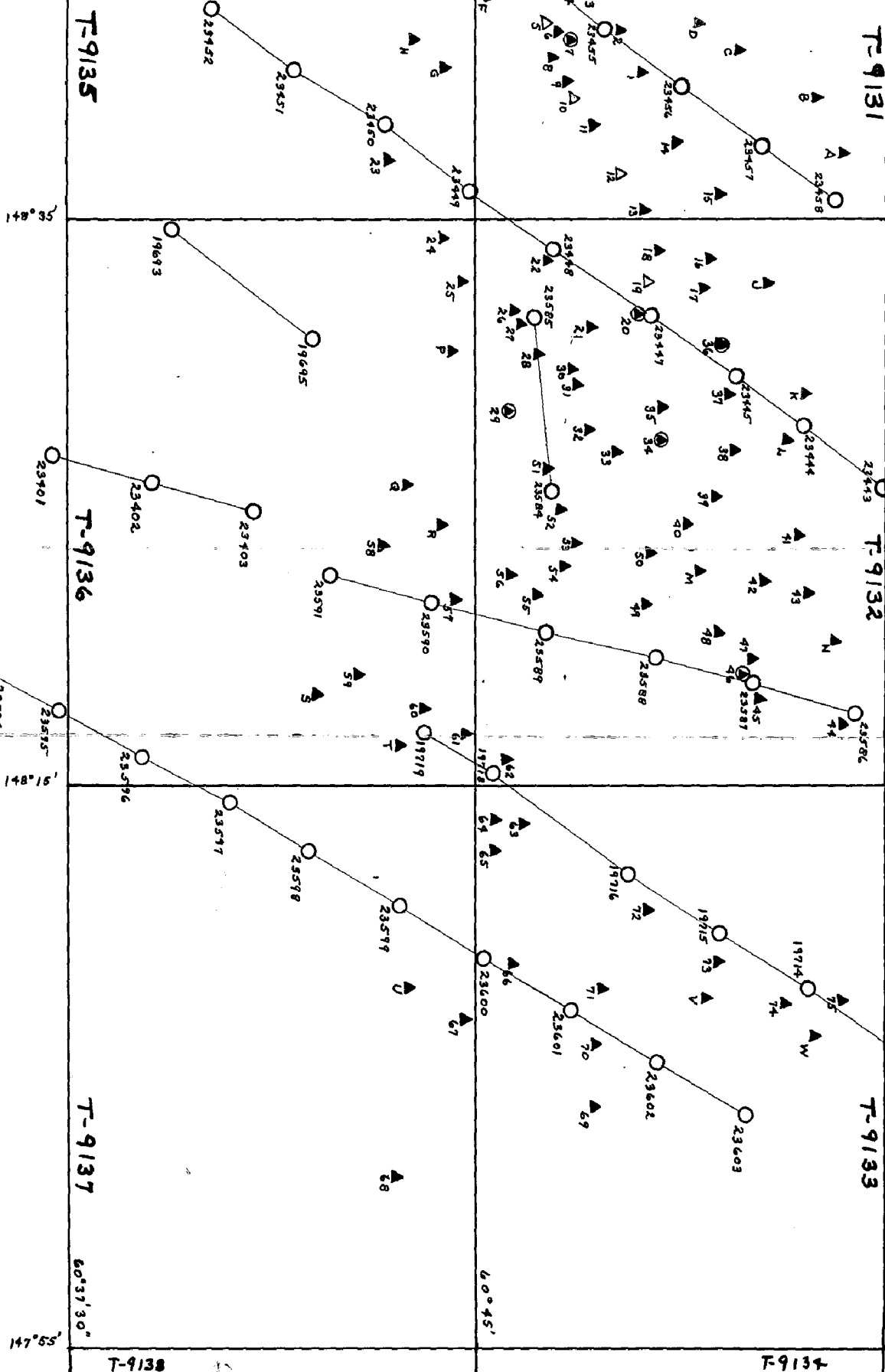
July 15, 1970

LAYOUT SKETCH PROJECT PH-39 (48) SURVEYS T-9131, T-9132, T-9133, T-9135, T-9136 & T-9137

T-9126

- NINE-LENS OFFICE PHOTOGRAPHS
- △ TRIANGULATION STATIONS (NOT IDENTIFIED)
- ▲ TRIANGULATION STATIONS (IDENTIFIED AND HELD)
- TRIANGULATION STATIONS (NOT HELD IN RADIAL PLOT)
- ▲ TRIANGULATION STATIONS (IDENTIFIED IN OFFICE)

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PHOTOGRAMMETRIC PLOT REPORT
Prince William Sound, Alaska
Project Ph-152
August 1957

21. Area Covered

This radial plot covers the southern parts of Cochrane Bay and Blackstone Bay. It is at 1:20,000 scale and completes an area on Manuscripts T-9135 and T-9136 between a 1:20,000 scale plot to the north and 1:10,000 scale plots to the south and east.

22. Method

Four vinylite manuscripts, T-9131, T-9132, T-9135 and T-9136 at 1:20,000 scale were joined together at the grid lines.

Nine-lens metal-mounted photographs were used in the plot. Mylar templates were prepared using a master template for correcting distortion errors.

The plot was begun in the northern part. Here adequate control was available in the previous plot and there was no problem in junctioning. The plot was extended southward holding to additional control stations. A satisfactory junction was achieved with plots to the south and east.

Six additional control stations were identified on the nine-lens photographs to extend the plot and strengthen positions. (See radial plot sketch which shows discrepancies with horizontal control positions).

Positions established by this plot are circled in red on the manuscripts whereas positions on the prior plot are in blue.

23. Adequacy of Control

As stated in paragraph 22 above positions to the north were well controlled. Four well described stations in the south part of Blackstone Bay were office identified. The two stations added in south Cochrane Bay (Hack 1948 & Jello 1948) were used in the plot to the south. Control was adequate and good junction was effected.

24. Supplemental Data - None

25. Photography

A flight of photographs in each bay area was available. Though one in between would have been helpful, it was not necessary as sufficient photographs and control were used in the plot to the north to establish good junction positions. There was also sufficient

control throughout so that each flight could be laid independently. Though the overlap was small, ties were made between flights. (See sketch for arrangement of photographs).

Submitted by:

Robert L. Sugden
Robert L. Sugden

Approved:

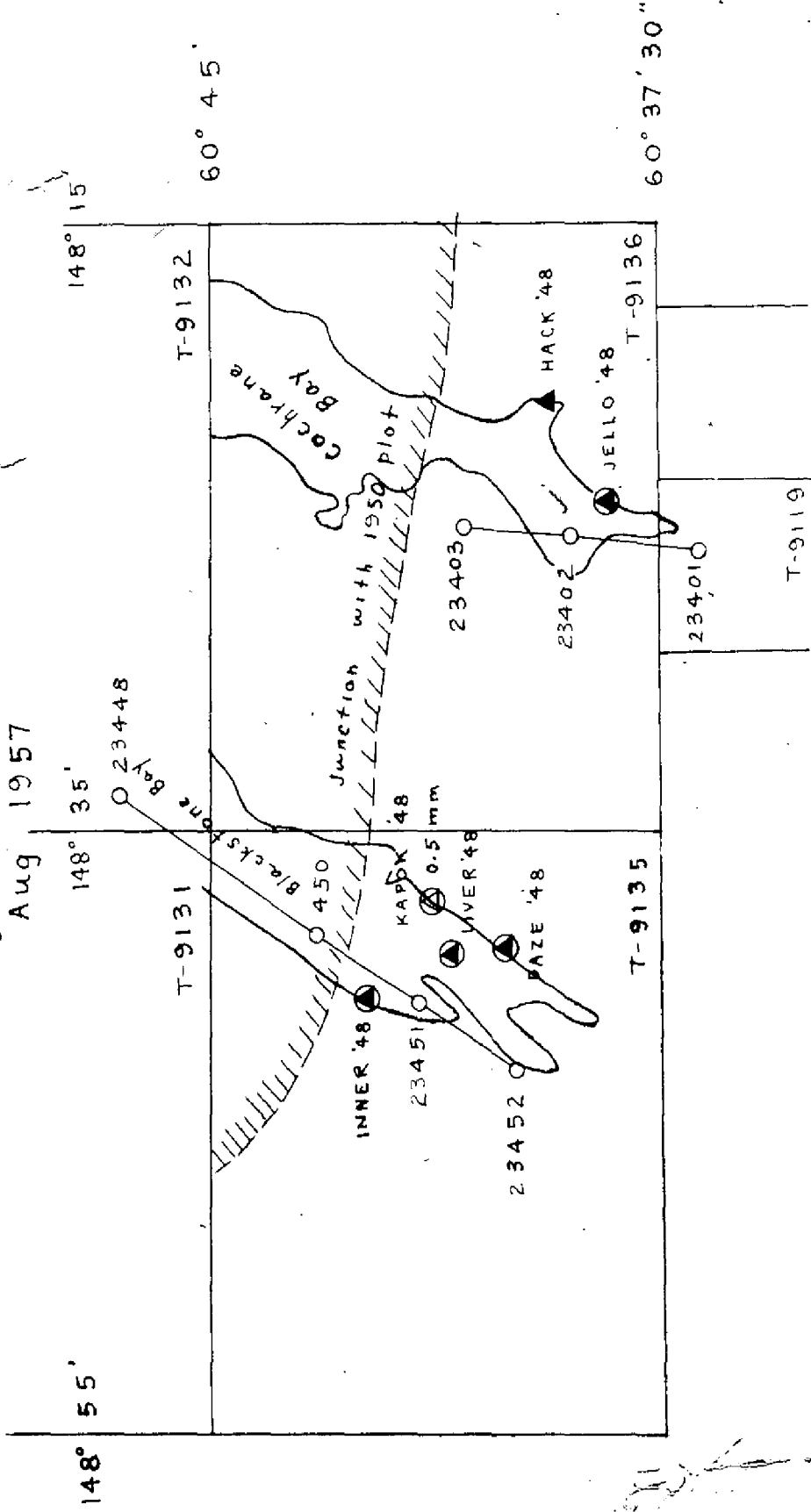
Everett H. Ramey
Everett H. Ramey
Chief, Graphic Compilation
Unit

Photogrammetric Plot Sketch

Prince William Sound

Project 27340

Aug 1957



- ▲ Field identified control held
- Office identified control held
- ⊗ Office identified control not held

PHOTOGRAMMETRIC PLOT REPORT
PRINCE WILLIAM SOUND, ALASKA
PROJECT PH-152
FEBRUARY 1960

A preliminary plot of this area, using mostly office-identified control, was done in August 1957. The purpose of this radial plot was to verify previous plot with additional field-identified control accomplished in May and June 1959 by H. J. Seaborg.

21. AREA COVERED:

This radial plot covers the southern part of Cochrane Bay and Blackstone Bay. It is at 1:20,000 scale and completes an area on Manuscripts T-9135 and T-9136.

22. METHOD:

Four vinylite manuscripts, T-9131, T-9132, T-9135, and T-9136, were joined together at the grid lines. Nine-lens, metal-mounted photographs were used in the plot. Mylar templates were prepared, except Nos. 23402, 23448, and 23450 through 23452. These templates were from the 1957 plot with the additional control added. The plot was begun at approximate latitude $60^{\circ} 49'$ and extended south to complete T-9135 and T-9136.

23. ADEQUACY OF CONTROL:

The additional control was very adequate. All stations held, except XENO 1948. It was within 0.4 mm.

24. SUPPLEMENTAL DATA:

None.

25. PHOTOGRAPHY:

The spacing and quality of the photographs were adequate for an accurate plot. A photogrammetric plot sketch is submitted with this report.

Note: See radial plot reports dated December 1956 and August 1957.

Submitted by:

Garnett S. Amburn

FEBRUARY 1960

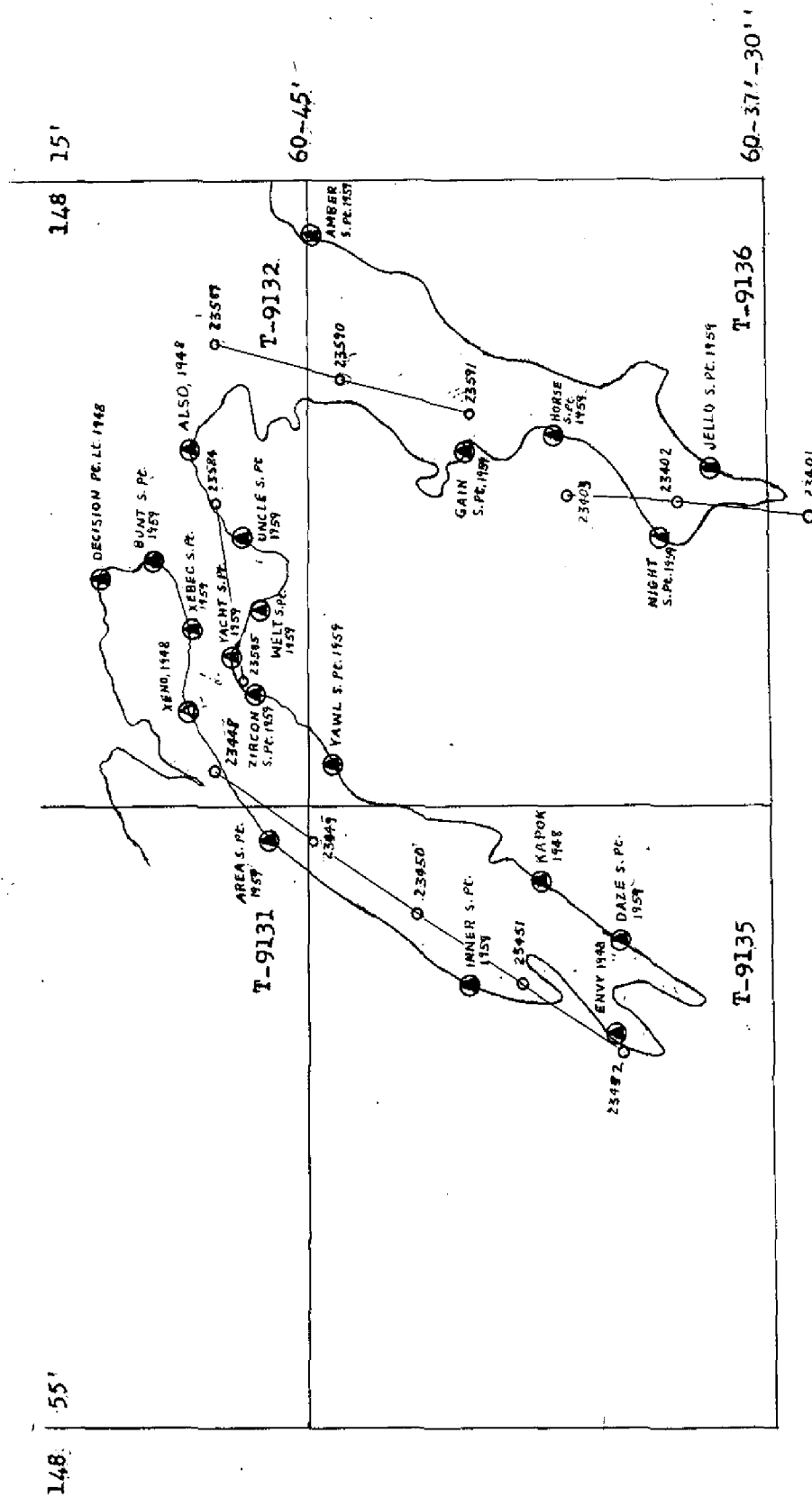
PROJECT PH-152

TRIANGULATION STATION RADIAL PLOT TOLERANCES

	<u>Station</u>		<u>Tolerance</u>
ALSO		1948	held
AMBER	Sub. Pt.	1959	held
AREA	Sub. Pt.	1959	held
BUNT	Sub. Pt.	1959	held
DECISION POINT LIGHT		1948	held
ENVY		1948	held
GAIN	Sub. Pt.	1959	held
HORSE	Sub. Pt.	1959	held
INNER	Sub. Pt.	1959	held
JELLO	Sub. Pt.	1959	held
KAPOK		1948	held
NIGHT	Sub. Pt.	1959	held
UNCLE	Sub. Pt.	1959	held
WELT	Sub. Pt.	1959	held
XEBEC	Sub. Pt.	1959	held
XENO		1948	0.4 mm north
YACHT	Sub. Pt.	1959	held
YAW	Sub. Pt.	1959	held
ZIRCON	Sub. Pt.	1959	held

PHOTOGRAMMETRIC PLOT SKETCH

PRINCE WILLIAM SOUND



DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 9135 PROJECT NO. PH-152 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
BELT 1948	VOL. VI, P. 27	N.A. 1927	60 43 29.810	922.7
COMA 1948	" 27	"	148 39 19.427	294.5
DAZE 1948	" 27	"	60 42 45.897	1420.6
ENVY 1948	" 28	"	148 35 21.059	319.4
EXTRA 1948	" 26	"	60 40 10.036	310.6
GUESS 1948	" 26	"	148 38 59.742	907.3
HEART 1948	" 26	"	60 40 09.304	288.0
INNER 1948	" 26	"	148 40 41.485	630.0
KAPOK 1948	" 26	"	60 44 14.109	436.7
LIVER 1948	" 26	"	148 38 14.370	217.8
PEAK NO. 3 1914	" 86	"	60 42 17.767	549.9
PEAK NO. 58 1947	" 73	"	148 36 50.794	770.5
			60 42 28.401	879.1
			148 38 30.181	457.8
			60 42 33.264	1029.6
			148 40 30.649	464.9
			60 41 17.922	554.7
			148 37 20.104	305.1
			60 41 16.829	520.9
			148 39 05.817	88.3
			60 44 00.71	22.0
			148 51 55.04	834.2
			60 38 12.09	374.2
			148 36 44.72	679.8
COMPUTED BY	DATE	CHECKED BY	DATE	
CHB	7-6-70	LFB	7-14-70	17

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 9135 PROJECT NO. PH-152 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter)	
				FORWARD	(BACK)
PEAK NO. 80 1948	Vol. VI, P. 80	N.A. 1927	60 44 26.24	812.2	
			148 40 11.26	170.6	
PEAK NO. 84 1948	" 80	"	60 38 12.14	375.7	
			148 36 45.63	693.7	
SHAKESPEARE 1914	" 8	"	60 44 59.901	1854.1	
			148 45 04.877	73.9	
			60 43 25.862	800.5	
ZEUS 1948	" 28	"	148 37 13.545	205.4	
COMPUTED BY	CHB	DATE 7-6-70	CHECKED BY	IFB	DATE 7-14-70

COMPILATION REPORT

MAPS T-9135, T-9136, AND T-9137

PROJECT PH-152

There was no compilation report for these maps available
at the time of final review.

August 21, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9135

Blackstone Bay

Blackstone Glacier

Chugach National Forest

Lawrence Glacier

Ripon Glacier

Shakespeare Glacier

Whittier Glacier

Willard Island

Approved by:

A. Joseph Wright
A. Joseph Wright
Chief Geographer

Prepared By:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

Project Ph-152
Prince William Sound

Notes to the Hydrographer for
T-9131, T-9132, T-9135 and T-9136

Surveys T-9131, T-9132 and a portion of T-9135 and T-9136 were compiled in 1950-51 to include contours. In 1958 the compilation of shoreline was extended southward to the head of Blackstone Bay and of Cochrane Bay.

Datum for these surveys was established by photogrammetric plots based on field identified and office identified control stations. The datum is considered final.

Nine-lens photographs taken in 1947 and 1948 were used for base compilation. In addition, infra-red single lens photographs were used to supplement the nine-lens photographs. These single lens photographs were not included in the plot.

Paper prints of nine-lens photographs have been prepared with pass points for use by the hydrographic party in positioning hydrographic stations by photogrammetric methods and in completing field inspection. Prints of the infra-red photographs ratioed to the scale of the manuscripts are also available for field inspection. The field party should verify the compilation of all shoreline features if practicable.

Everett H. Ramey
Chief, Graphic Compilation Unit

PHOTOGRAMMETRIC OFFICE REVIEW

T-9135, 9136, 9137.

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒ 9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic Instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

40. ☒ *[Signature]*
Reviewer

[Signature]
Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

M-2623-12

FIELD EDIT REPORT

MAP T-9135

PROJECT PH-152

No Field Edit Report for this map was available at the time of final review.

REVIEW REPORT T-9135

TOPOGRAPHIC

JULY 10, 1970

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print (pages 26 through 28), with differences noted in Items 63 and 65 is bound with the original of this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic surveys of this map area were available for comparison.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with U.S.G.S. Quadrangle SEWARD (C-5), ALASKA, scale 1:63,360, dated 1951. Differences between this map and T-9135 are shown in brown on the comparison print.

Considering the large difference in scale, the general trend of the shoreline compares well. Displacement was noted on the northeast side of Willard Island, and there are large shoreline differences in areas where glaciers have receded.

Two rocks awash not visible on the photographs are noted on the comparison ozalid - one at latitude $60^{\circ} 43.5'$, longitude $148^{\circ} 37.3'$; the other at latitude $60^{\circ} 42.8'$, longitude $148^{\circ} 35.4'$.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

The only survey available for comparison was a verified copy of H-7732. No shoreline or alongshore features appear on this survey; no differences with this survey appear on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 8517, scale 1:80,000, 9th Edition, dated April 28, 1969. Differences between this chart and T-9135 are shown in red on the comparison print.

Large differences in shoreline placement were noted. Generally, the chart shoreline is east of the shoreline on T-9135. Part of this difference is probably due to the fact that the chart was brought to a four times enlargement for comparison.

Bare rocks are charted in the vicinity of latitude $60^{\circ} 43'$, longitude $148^{\circ} 40'$, and at latitude $60^{\circ} 42.3'$, longitude $148^{\circ} 40.5'$. These rocks are not visible on the photographs and are not mapped on T-9135.

A rock awash at latitude $60^{\circ} 43.5'$, longitude $148^{\circ} 37.3'$ is not visible on photographs covering the area and is not mapped on T-9135. This is probably the same as the first rock awash noted in Paragraph 3, Item 63.

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

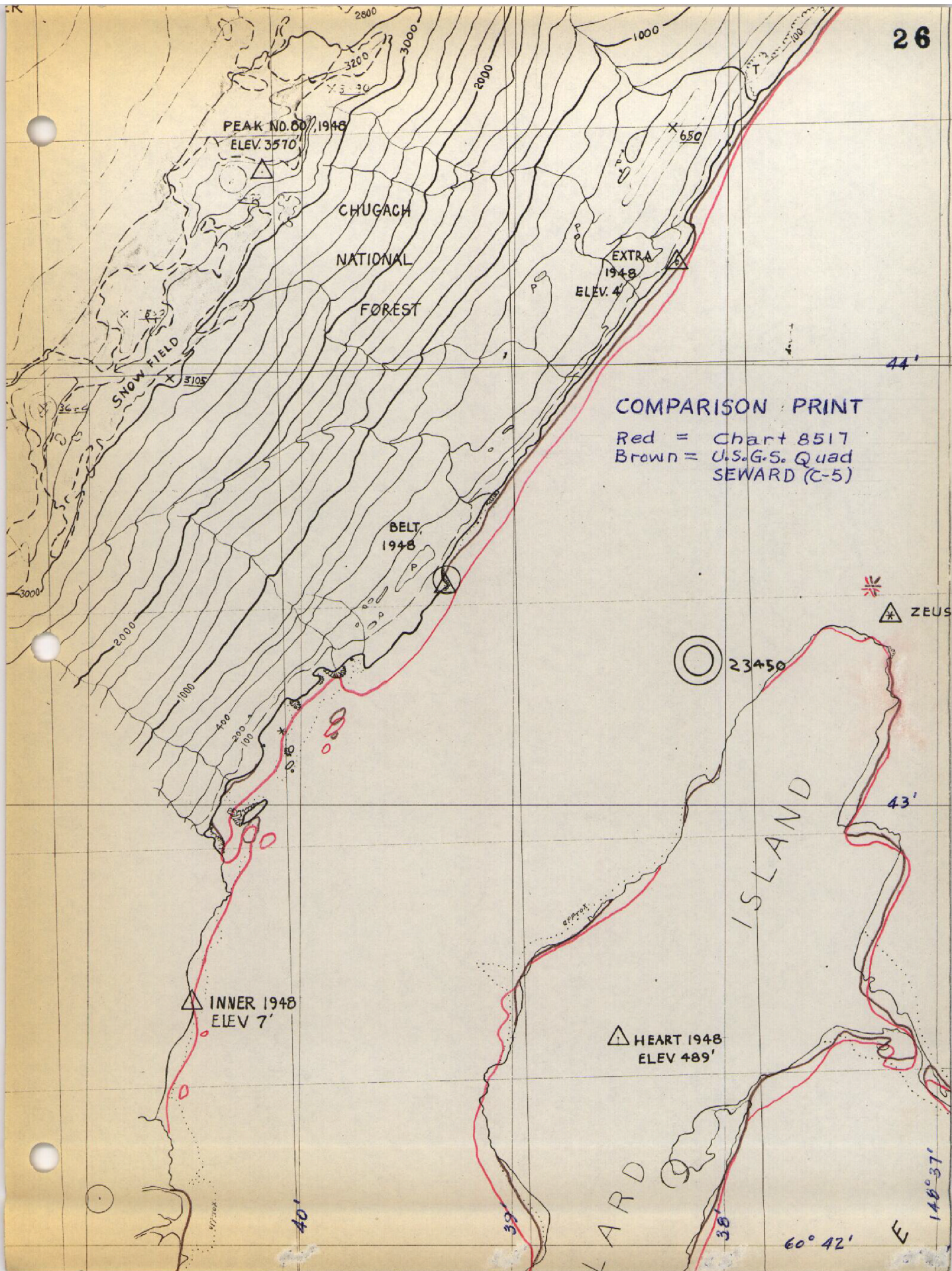
Charles H. Bishop
Cartographer
July 10, 1970

Approved by:

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

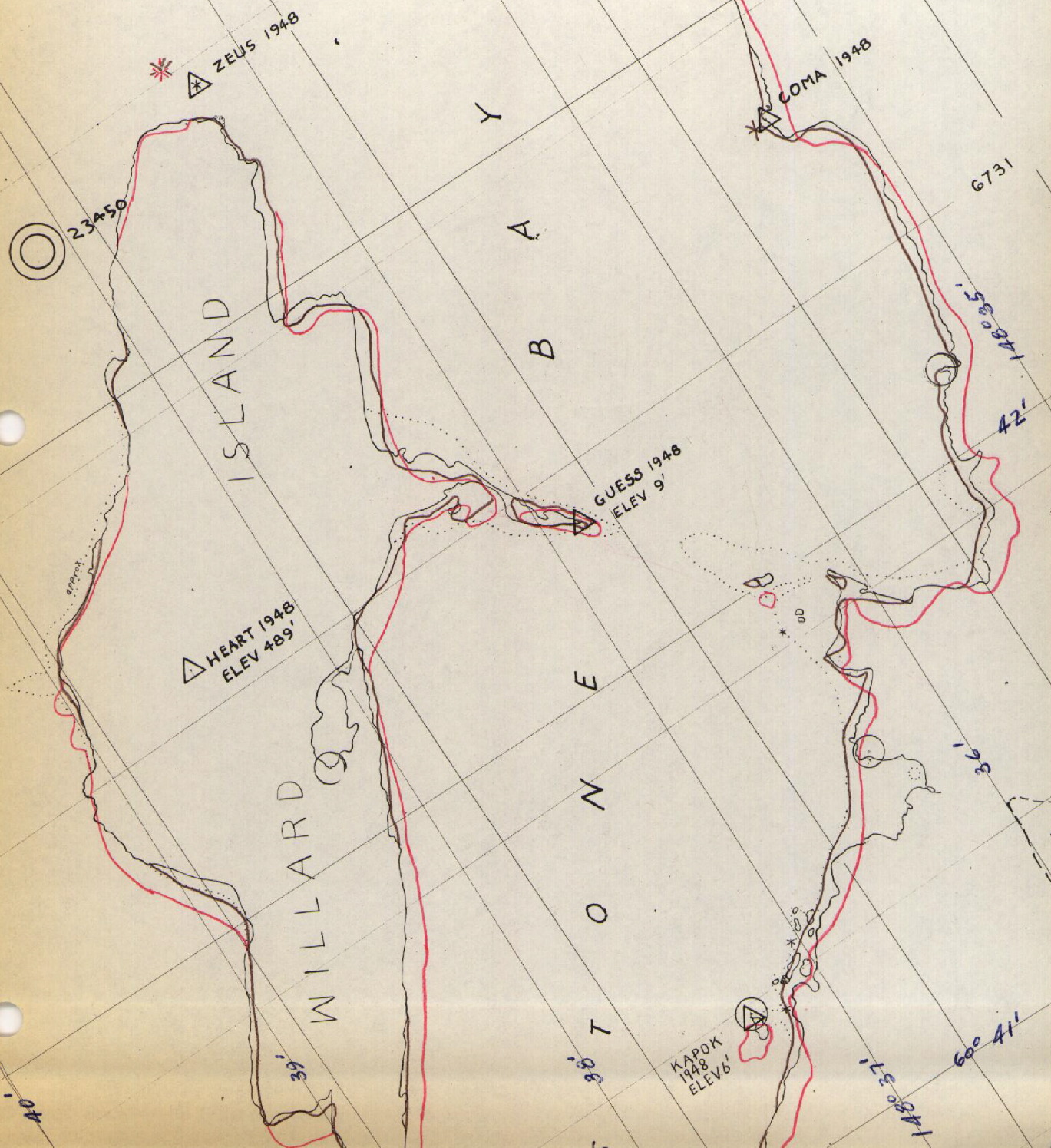
Approved by:

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



COMPARISON PRINT

Red = Chart 8517
Brown = U.S.G.S. Quad SEWARD, (C-5)



COMPARISON PRINT

Red = Chart 8517

Brown = U.S.G.S. Quad SEWARD (C-5)

60° 41'

NORTHLAND GLACIER

2345

GLACIER LIMIT

43'

GLACIER

42'

ENVY 1948

LIVER 1948
ELEV. 255'

B

L

A

C

H

41'

DAZE 1948

40'

MARQUETTE G.

60° 39'
148° 40'

LAWA

GLACIER LIMIT
8-1-58

approx.