

11564

Diag. Cht. No. 886322.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-34 Office No. T-11564

LOCALITY

State Alaska

General locality Andreanof Islands

Locality Adak Island - Bay of Islands

19 54

CHIEF OF PARTY

S.B.Grenell, Chief of Field Party

L.W.Swanson, Div. of Photo. Wash., D.C.

LIBRARY & ARCHIVES

DATE June 24, 1958

11564

DATA RECORD

T

Project No. (II): **CS 218**
Ph-34(48)

Quadrangle Name (IV):

Field Office (II): **Ship EXPLORER**

Chief of Party: **S. B. Grenell**

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

Officer-in-Charge: **L. W. Swanson**

Instructions dated (II) (III):

Supplemental instructions dated 19 March 1952
20 February 1953
23 December 1953

Copy filed in Division of

Photogrammetry (IV)
Office files

731-mkl

Director's Letter No. 22/MEK S-1-EX dated 4 May 1954
Subject Hydrographic Surveys - Project CS 218

Compilation Instructions
dated 10 November 1954

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): **5-29-58**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**

Vertical Datum (III):

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (S) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): **CAREFUL, 1954**

Lat.: **51-49-12.118**
374.5 m. (1479.9)

Long.: **176-51-44.322**
848.9 m. (300.3)

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):	(H. G. Conerly	Date: 1954 Season
Shoreline inspection	(C. W. Clark	SURVEYOR
	(J. D. Walker	
Planetable contouring by (II):	----	Date:
Completion Surveys by (II):	----	Date:
Mean High Water Location (III) (State date and method of location):		
Date of photography		
Projection and Grids ruled by (IV):	A. Riley	Date: 12-15-54
Projection and Grids checked by (IV):	A. Riley	Date: 12-15-54
Control plotted by (III):	Unregistered planetable EX-B-54 by JCT	Date: 5-27-54
	Transferred from EX-B-54 by M. Webber	12-20-54
Control checked by (III):	Verification of transfer by J. Hundley	Date: 12-21-54
Radial Plot or Stereoscopic		Date: 12-23-54
Control extension by (III):	Samuel G. Blankenbaker	
	Planimetry	Date:
Stereoscopic Instrument compilation (III):		Date:
	None	
	Contours	Date:
Manuscript delineated by (III):	Work Sheet Compilation - J. Hundley	Date: 1-5-55
	Inking - M. Charity	
	- J. Battley	1-7-55
Photogrammetric Office Review by (III):	R. J. French	Date: 1-7-55
Elevations on Manuscript		Date:
checked by (II) (III):	----	

Camera (kind or source) (III):

Number	Date	Time	Scale	Stage of Tide
54W-2831	9/6/54	3:48	1:10,000	2.8' above MLLW
2832				
2833		to	"	" " "
2834				
2835		3:50	"	" " "
2849		3:58	"	" " "
2850		to	"	" " "
2851		4:00	"	" " "

Tide (III)

Reference Station: Sweeper Cove, Adak Island, Alaska
Subordinate Station: Bay of Islands, Adak Island, Alaska
Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
.9	—	3.7
	—	3.3

Washington Office Review by (IV): S. G. Blankenbaker

Date: 27/June/56

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 7

Shoreline (More than 200 meters to opposite shore) (III): 12

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

Control Leveling - Miles (II): —

Number of Triangulation Stations searched for (II): 11

Recovered: 11

Identified: 2

Number of BMs searched for (II): —

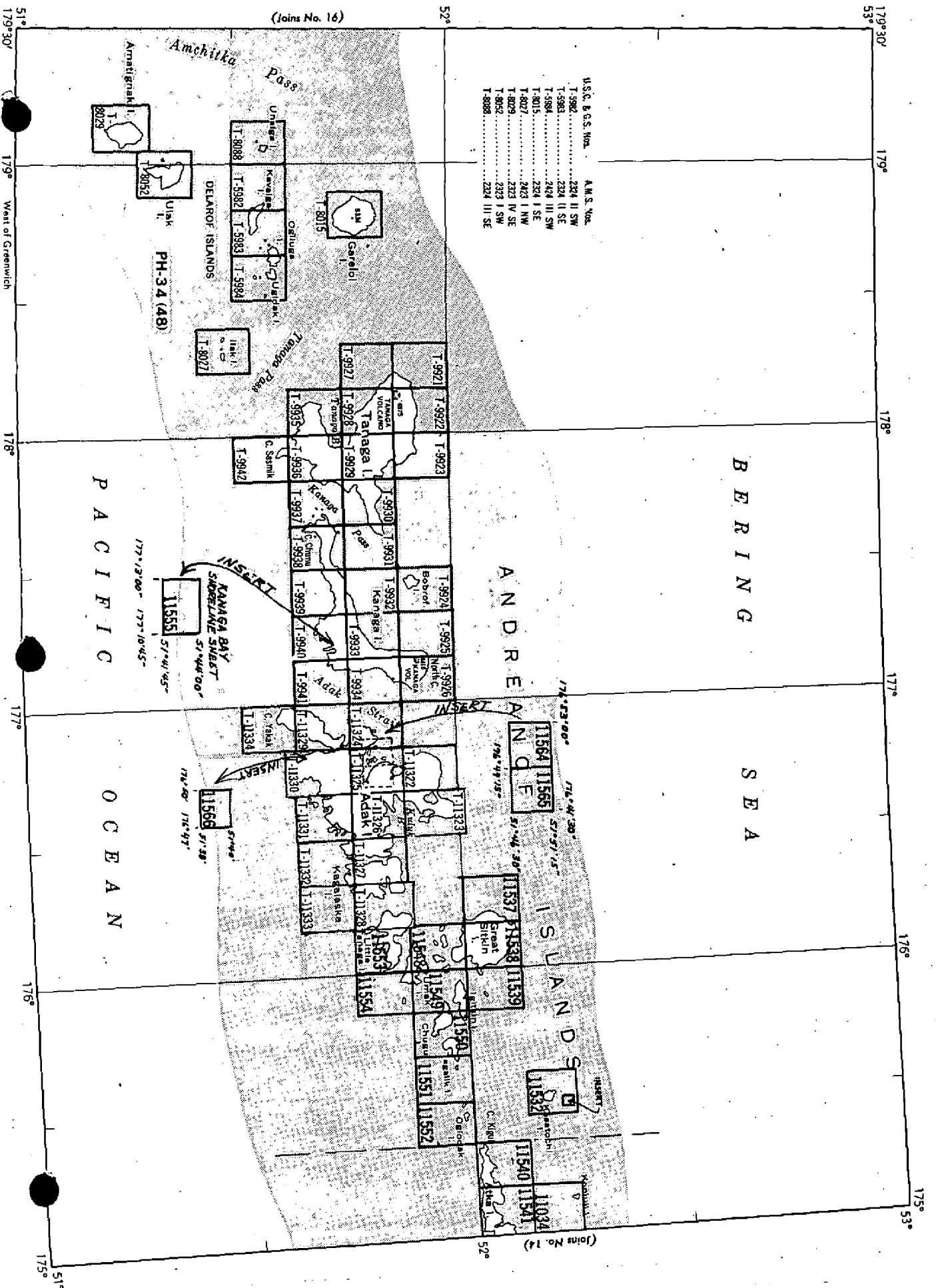
Recovered:

Identified:

Number of Recoverable Photo Stations established (III): 3

Number of Temporary Photo Hydro Stations established (III):

Remarks:



(Joins No. 16)

(Joins No. 14)

Summary to Accompany Shoreline Survey T-11564

Shoreline Survey T-11564 was accomplished as part of project 6034. It is the westernmost one of two 1:10,000-scale shoreline surveys covering the Bay of Islands on the western shore of Adak Island of the Aleutian Islands.

The surveys were accomplished to furnish shoreline and alongshore details in conjunction with Hydrographic Survey 8147 (1:10,000-scale) and to provide shoreline and alongshore details for Topographic Surveys 11324 and 11325.

Graphic Control Surveys EX-A-54 and EX-B-54 furnished control for the hydrographic and photogrammetric surveys.

1954 field work includes identification of control and inspection of alongshore features. Office photo interpretation was used in delineating the MHW line. Photographs used for field inspection include the following: (1) 1953 C&GS 1:20,000-scale nine-lens; (2) 1954 "W" camera, 1:10,000-scale single lens; (3) 1943 Air Force 1:25,000-scale single lens. The manuscript was graphically compiled, using the 1:10,000 scale "W" camera office photographs.

No field edit was accomplished.

Items registered under T-11564 will include a cloth-backed print of the map manuscript and the Descriptive Report.

The MHW line and other details were applied to the hydrographic smooth sheet (H-8147) prior to the Washington Office review. The changes made during review are minor and are mentioned in the Review Report under Item 64.

11324 & 11325

COMPILATION REPORT T-11564

The ship EXPLORER did the recovery and field inspection of shoreline and photo-hydros during the summer of 1954 which were needed for mapping at 1:20,000-scale on T-11324 and T-11325 in the Bay of Islands, Adak Island, Alaska. All hydro stations were located by field methods, and certain of them were field inspected and located in the radial plot mainly as a spot check on the field work.

The field report is filed with the 1:20,000 descriptive report for T-11324, and the photogrammetric report for this sheet is filed with T-11565.

31. DELINEATION:

T-11565

The manuscript was compiled by graphic methods; based on field-inspected control and by office interpretation. There was no shoreline inspection on this manuscript. The shoreline on the west and northwest portion of North Island is shown as approximate. This area was on the outer edges of the photographic coverage and the photographs are of very poor quality.

32. CONTROL:

The horizontal control, as a whole, is adequate with reference to identification. If one includes the hydro stations (those of less than third order accuracy) the horizontal control is adequate with reference to density and placement. As mentioned in the radial plot report, the overall horizontal accuracy is based upon hydro stations and detail points common with the nine-lens radial plot in addition to the several field identified stations.

33. SUPPLEMENTAL DATA:

Graphic Control Survey EX B-54 (1:10,000) was used for position of horizontal control and hydro stations. Rocks, foul areas and other offshore details taken from EX-B-54 were delineated in red on the manuscript.

34. CONTOURS AND DRAINAGE: Inapplicable

35. SHORELINE AND ALONGSHORE DETAILS:

Although there was no shoreline inspection in this area, the photographs were taken near the time of high water and afforded a good interpretation of the MHW line. As mentioned in Paragraph 31, only in the delineation of North Island was there difficulty in accurately identifying the shoreline.

36. OFFSHORE DETAILS:

Offshore details shown on graphic control board EX-B-54 were transferred in red ink to the manuscript. Numerous discrepancies exist between the graphic control positions and our plot position and, also, there is a difference in several cases between our photo delineation of offshore rocks: In the narrow passage between Sea Parrot Island and Dora Island the graphic control board has

Shown on Hydro Smooth
Sheet 45(2), changed on T-11565
to agree with hydro survey
during review

shown sunken rocks where our delineation from high water photography shows definite large bare rocks and two small islands. *BARE ROCKS SHOWN HERE ON HYDRO SMOOTH SHEET*

In Fishermans Cove there is a foul area showing sunken rocks in red from the graphic control board; the southernmost rock shown as awash two feet at MLLW falls in the same position of a rock as is interpreted as awash MHW. The photographic interpretation is shown. *Hydro Smooth Sheet changed on T-11565*
In addition, a rock awash was added inside a foul area of sunken rocks just northwest of the afore-mentioned area. *Shown on 107 Hydro Smooth sheet same as Air photo*

In Trappers Cove there are two rocks shown; one in red and referenced "uncovers four feet MLLW", and the other just north of it, photographically interpreted as awash MHW. Pending field inspection, it is believed that these rocks are the same though the radial plot position does not agree with the planetable position. *one rock is shown on the Hydro Smooth Sheet (position from the graphic control board)*

Off the west end of Argonne Island there is a discrepancy between the positioning of two offshore rocks and the planetable. The radial plot position is shown on one rock and the planetable elevation is in red; in the other case, the rock is shown as baring at MHW and the planetable's awash symbol is changed to an island symbol. *Hydro Smooth Sheet shows (±). Changed during review on T-11565 to agree with Smooth Sheet.*

Whirlpool Rock which falls northwest of Careful Pt. could not be located with this photography.

There are two outlying rocks shown in red north of North Island. The positioning of the rocks varied considerably with the planetable. As this fell at the extreme edge of the 1:10,000 plot and was considered a weak area, the planetable's position is shown. The position of these rocks should be compared with the 1:20,000 position when it is established. *the graphic control board position was used on the Smooth Sheet & is shown on the Manuscript (T-11564)*

37. LANDMARKS AND AIDS: Inapplicable

38. CONTROL FOR FUTURE SURVEYS:

None, except as mentioned elsewhere in this report for radial plot location of photo-hydro control.

39. JUNCTIONS:

Joins T-11565 and T-11324.

40. HORIZONTAL AND VERTICAL ACCURACY:

Vertical accuracy - inapplicable.

The horizontal accuracy is believed to comply with standard map accuracy requirements.

46. COMPARISON WITH EXISTING MAPS: None


47. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Nautical Chart 9120 (1:20,000 scale) and Nautical Chart 9193.

No discrepancies were noted other than the case of Whirlpool Rock as mentioned in Paragraph 36. This rock was shown on Nautical Chart 9193 but could not be identified on photography now available.

Approved:

Respectfully submitted:


Roscoe J. French
Supervisory Cartographer


Jeter P. Battley, Jr.
Cartographic Photogrammetric Aid

48. GEOGRAPHIC NAME LIST:

ADAK ISLAND
ARGONNE CHANNEL
ARGONNE ISLAND
CAREFUL POINT
CHANNEL ISLANDS
CORMORANT ISLAND
DORA ISLAND
EAGLET ROCKS
FISHERMANS COVE
CASCADE ROCK
GREEN ISLAND
KELP POINT
BAY OF ISLANDS
NORTH ISLAND
NORTH ROCKS
NORTH ISLAND ANCHORAGE
SOUTH ISLAND
SEA PARROT ISLAND
LARGE ROCK
HELL GATE
STATEN ISLAND
TRAPPERS COVE
RINGGOLD ISLAND
RINGGOLD SOUND
SACHEM HEAD
THE RACE
BLACK ISLAND
PLUM ISLAND ROCKS
UNALGA BIGHT

Review Report
Shoreline Survey T-11564
27 June 1956

62. Comparison with Registered Topographic Surveys:

T-4142 rec. 1925 1:20,000

This survey is to be superseded by T-11564 for nautical charting.

63. Comparison with maps of other Agencies:

Adak Island (No. 3 of 10) (AMS), 1:25,000, 1943
Adak Island (No. 4 of 10) (AMS), 1:25,000, 1943

The AMS maps are based on local datum. The difference between the NA 1927 datum and local datum amounts to several hundred meters. There are numerous differences in alongshore features. A rounded island (25 meters in diameter) with extensive ledge is shown on AMS map (4 of 10) in Argonne Channel between Ringgold and Argonne Islands. The hydro survey (H-8147) (1954) shows depths of 20 fathoms in the area.

64. Comparison with contemporary Hydrographic Surveys:

H-8147 1:10,000 1954

As mentioned in the Review Summary, the subject photogrammetric survey was used in compiling the hydrographic survey smooth sheet (H-8147) prior to final review. The several minor review changes in the shoreline and alongshore details are not in conflict with the soundings or MHW line shown on the hydrographic smooth sheet. A minor correction was made in the MHW line in Grappers Cove. Elevations of rocks taken from the field photographs were applied in the Ringgold Sound area. Three rocks (awash) were added near the MHW line on the south east end of Ringgold Island.

The photogrammetric compilation report listed several discrepancies existing between the graphic control surveys and the photogrammetric compilation. The hydrographic survey descriptive report resolved most of these differences and noted other differences. These discrepancies were reconciled and the two surveys are in agreement.

Some offshore details were transferred (in red ink) to the manuscript from the graphic control surveys during compilation. In a few instances some of these graphic control details were revised on the smooth sheet. These additions were corrected on the photogrammetric manuscript to conform with the hydro survey smooth sheet.

Several changes were made in the configuration and limits of ledge for conformance with the smooth sheet alongshore area, but no attempt was made to show all ledge and alongshore details that originated with the hydrographic survey.

The shoreline on the west side of North Island is symbolized as approximate MHW line on the subject manuscript. The shoreline in this area shown on the hydrographic smooth sheet was transferred from T-11325 (1:20,000) prior to the nine-lens instrument compilation. A correction in the MHW line (shown in red on the 1:20,000 topographic manuscript) made by the Instrument Compilation Section results in a slight difference in configuration between the shorelines on the hydrographic and topographic surveys.

Blue Print for 1954 Survey: 51926

The shoreline on Blue Print 51926 was taken from a preliminary photogrammetric Survey. Some conflicts with sounding are evident in the area west of Careful Point. The ledge shown on T-11564 four hundred and fifty meters west of hydro station Oak is in the area of a 1/2-fathom sounding shown on the blue print. The rock awash approximately 200 meters SW of station Oak is not shown on the blue print. There are other discrepancies in offshore rocks in the area.

65. Comparison with Nautical Charts:

9120	1:12,000	April 1955
9121	1947, corrected to 52-8/25	
9193	1953 corrected to 54-7/5	

66. Adequacy of Results and Future Surveys:

This survey is adequate for Bureau requirements. No significant deficiencies in accuracy and adequacy were indicated.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

APPROVED:

L. C. Landy
Chief, Review and Drafting Section
Photogrammetry Division

Max H. Little
Chief, Nautical Chart Branch
Charts Division

J. B. Zull
Chief, Photogrammetry Division

W. H. G. Smith
Chief, Coastal Surveys Division