11537 11538
11539

11538
11539
11537

Diag. Cht. Nos. 8862 and 8863-2.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-34 Office No. T-11537 T-11538 T-11539

LOCALITY

State Alaska

General locality Andreanof Islands

Locality Great Sitkin Island,

Ulak Island

1953-56

CHIEF OF PARTY

W.H.Bainbridge, Chief of Field Party
G.A.Nelson, Chief of Field Party
~~I.W.Swanson, Div. of Photo. Wash., D.C.~~

LIBRARY & ARCHIVES

DATE October 1962

USCOMM-DC 5087

DATA RECORD

11537
T 11538
11539

Project No. (II): ~~T-6034~~ (Ph-34) Quadrangle Name (IV):

Field Office (II): Ships: PIONEER, EXPLORER Chief of Party: W.H. Bainbridge, G.A. Nelson

Photogrammetric Office (III): Washington, D.C. Officer-in-Charge: L.W. Swanson

Instructions dated (II) (III): Field: 4 Mar.1953, 25 Feb.16 Dec 1954
Office: 2 Nov. 1954, 31 Oct. 1955, 25 Oct. 1956

Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Graphic (shoreline)
Nine lens plotters (topography)

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

Scale Factor (III): 1.0

Date received in Washington Office (IV): MAY 24 1960 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 5 Dec 1957

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 (5) refer to sounding datum
i.e., *mean low water or mean lower low water*

Reference Station (III):

Lat.: Long.: Adjusted

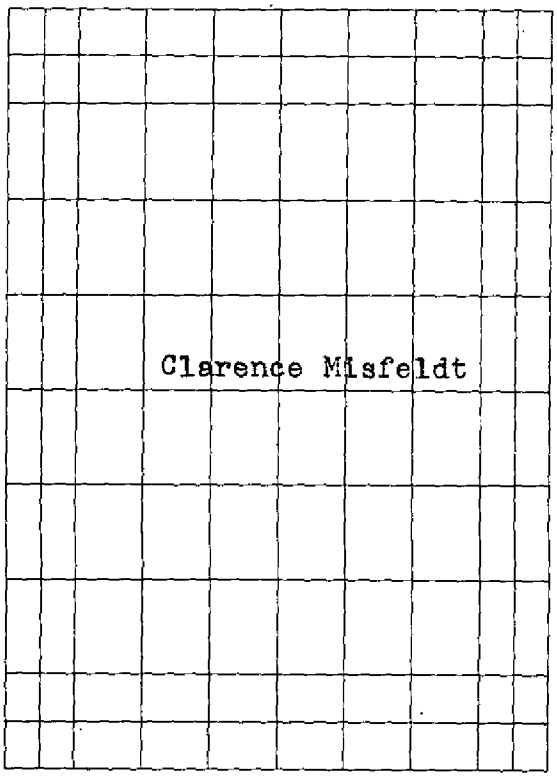
Plane Coordinates (IV): UTM Grid. State: Zone: 1

Y= UTM grid, Zone 1 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.

M-2618-12(4)



Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): A. L. Powell, C. W. Clark — Date: 1953, 1956

Planetable contouring by (II): — Date:

Completion Surveys by (II): — Date:

Mean High Water Location (III) (State date and method of location): photography in 1953 & 1954

Same Date ~~of~~ as Photography — partially identified in field in 1953 & 1956

Projection and Grids ruled by (IV): A. Riley — Date: 4-12-55

Projection and Grids checked by (IV): A. Riley — Date: 4-12-55

Control plotted by (III): D. Carrier — Date: June 1955

Control checked by (III): G. Walker — Date: June 1955

Radial Plot or Stereoscopic Control extension by (III): S. G. Blankenbaker — Date: Feb. 1956

Stereoscopic Instrument compilation (III): Planimetry — Clarence Misfeldt — Date: July 1957

Contours — Date:

Manuscript delineated by (III):
Shoreline:
T-11537,39 - G.S. Amburn — Date: July 1955 Feb! 56
T-11538 - C.O. DeMarr — Aug. 1955
Topography: C. Misfeldt — July 1957

Photogrammetric Office Review by (III):
Shoreline: K.N. Maki — Date: July 1955
E.H. Ramey — Dec. 1956
Topography: L. Levin — Aug. 1957

Elevations on Manuscript checked by (II) (III): L. Levin — Date: Aug. 1957

M-2618-12(4)

Camera (kind or source) (III): C8GS 9-Lens

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
41988	9-21-53	15:12	1:20,000	2.5 above MLLW
46052	9-6-54	14:39	"	2.5 above MLLW
46053	"	14:40	"	"
46059	"	14:49	"	"
46060	"	14:50	"	"
46061	"	14:51	"	"
46062	"	14:52	"	"
46064	"	14:57	"	"
46065	"	14:58	"	"
46068	"	15:01	"	2.6 above MLLW
46069	"	15:02	"	"
46071	"	15:06	"	"

Tide (III)

Diurnal

	Ratio of Ranges	Mean Range	~~Spring~~ Range
Reference Station: Sweeper Cove, Kuluk Bay, Adak Island	1.0		3.7
Subordinate Station: Sand Bay, Great Sitkin 1.	0.97		3.6
Subordinate Station:			

Washington Office Review by (IV): J. J. Streifler Date: Oct. 57

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III):
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): 6
Number of Temporary Photo Hydro Stations established (III): T-11537 18 T-11538 37 T-11539 None

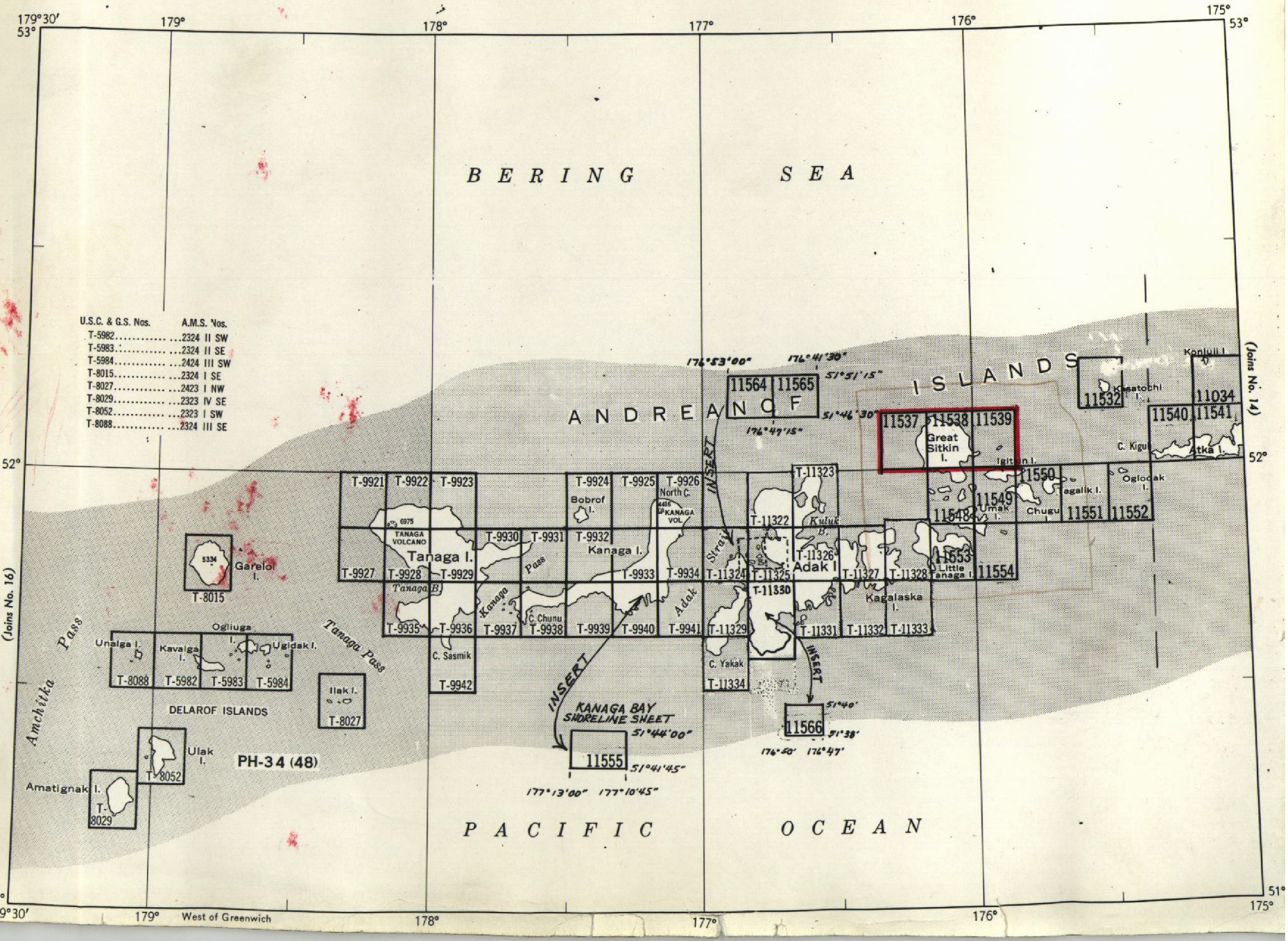
Remarks:

Continued from PHOTOGRAPHS (111)

46072	9-6-54	15:07	1:20,000
46073	"	15:08	"
46074	"	15:08	"
46077	"	15:13	"
46078	"	15:13	"
46079	"	15:14	"

TOPOGRAPHIC MAPPING PROJECT ~~24050~~ Ph 34

Aleutian Islands ALASKA Part B



FIELD INSPECTION REPORT, 1953

See descriptive Report T-11328 for 1956 Field Insp. Report

2. Area Field Inspection:

The area covered is Great Sitkin Island. The work was accomplished by personnel from the ship PIONEER in conjunction with ship-to-shore Triangulation. Field Inspection was limited to the areas where landings were made.

The Island is typical of this area; it has few sand beaches and the interior terrain is rough. The photography is poor; clouds obstruered the detail in large areas on some of the photographs.

3. Horizonaal Control:

(a) The following stations were established by ship-to-shore Triangulation:

1. AKUYAN 1953
2. SULFUR 1953
3. SAVER 1953
4. SWALLOW 1953
5. T POT 1953

The following control station identification cards are submitted:

Sub. PT. AKUYAN 1953
Saddle Rock
Pinnacle off Swallow
Swallow Horn
Picture PT. 2
W'ly Rock, Cape Kiugilak
Sub PT A GREAT SITKIN (USN) 1934
Sub PT B " " " " "
Sub PT. EAST (USN) 1934
Sub PT. T POT 1953
Pinnacle West of ULAK
Small Pinnacle South of Sulphur Pt.
Large Pinnacle South of " " "
Tea Pot Sprout
Outer Rock Sulphur Pt.
Outer Rock Bugle Pt.
Rock No. 2 off Sulphur PT.
Teapot Rock
Sub PT. SAVER 1953

The following identification cards are submitted for points that are to be located by the radial plot:

Swallow Head Light
Amos 1953
AAA
Cone 1953
Fall 1953

Listed below are the Triangulation Intersection Stations (Un-Marked) that were established for control of the radial plot:

Swallow Horn
Pinnacle off Swallow
Outer Rock Sulphur Point
Pinnacle West of ULAK
Outer Rock Bugle PT.
Tea Pot Spout
Rock No. 2 off Sulphur PT.
Tea Pot Rock
Largest Pinnacle South of Sulphur PT.

Single cuts were obtained to several points that have been identified on the Field photographs. Control Station identification cards are submitted for these points.

(b) Inapplicable

(c) The following stations were established by the U.S. Navy and were obtained from the list of Geographic Positions of Triangulation Stations Alaska Vol. V.

1. GREAT SITKIN (USN) 1934
2. EAST (USN) 1934
3. ULAK (USN) 1934

(d) Inapplicable

(e) Inapplicable

4. Vertical Control:

The elevation of Triangulation Station GREAT SITKIN (USN) 1934 was obtained by running a line of wye levels from the high water line to the stations. This elevation was carried to the other stations by trigonometric leveling. A list of the elevations established is included with the data submitted.

5. Contours and Drainage:

Inapplicable

6. Woodland Cover:

There is no woodland cover. The cover consists of grass and tundra.

7. Shoreline and Alongshore Features:

(a) The mean high-water line has been delimited on the photographs in several places; this was accomplished only where landings were made and tine would permit.

(b) The low-water line was not delimited.

(c) In general the foreshore is rocks and low boulders. Several of the sand beaches have been indicated on the Field Photographs as well as some boulder beaches.

(d) Bluffs or Cliffs; There are many bluffs within the area; these have been indicated in one or two places on the Field Photographs.

(e) Docks, Wharves, Piers, Landings; The only area on the Island having docks, wharves and etc., was not visited by this party.

(f) Submarine Cables; There are no submarine cables in the area covered by this party.

(g) Other Shoreline Structures; There were no other shoreline structures worthy of note.

8. Offshore Features:

The only offshore feature worthy of note is Tea Pot Rock; its elevation was determined by trigonometric leveling. The mean low water-line was not determined.

9. Landmarks and Aids:

All the pertinent information can be obtained from Form 567.

10. Inapplicable.

11. Other Control:

AMOS 1953
HARD 1953
AAA 1953
CONE 1953
FALL 1953

12. Other Interior Features:

There are no interior features worthy of note.

13. Geographic Names:

This will be the subject of a report to be submitted at a later date.

14. Special Reports and Supplemental Data:

List of Elevations
List of Geographic Positions
Cahier of List of Directions
Cahier of Description of Recoverable Topographic Stations

15. Due to steep slopes near the stations and cloud covers, no cuts were obtained to peaks in the interior.

Respectfully submitted,

Allen L. Powell

Allen L. Powell
Lt., USC&GS
Ship PIONEER

Approved and forwarded:

W.H. Bainbridge

W.H. Bainbridge
CMDR. USC&GS
Comdg Officer
Ship PIONEER

DATA RECORD

Project Number CS-343 Chief of Party: W.H. Bainbridge

Instructions dated: Supplemental Instructions, dated 4 March 1953

Field Inspected by: A.L. Powell
K.A. MacDonald

Control Leveling Miles 0

Number of Triangulation Stations searched for: 3
Recovered 3 Identified 3

Number of BM's searched for: 0 Recovered 0 Identified 0

Technical Assistant to Chief,
Division of Photogrammetry

30 March 1954

Thru : Chief, Administrative & Planning Branch

From : Charles Hanavich

Field data - project Ph-34 (CS-343), Atka and Great Sitkin Islands, Alaska

Field survey operations in 1953 consisted of the following:

1) Recovery, establishment and identification of horizontal control.

2) Establishment of vertical control.

3) Very limited inspection of the shoreline and offshore details (rocks, ledges, etc.).

4) Identification of several photo-topo stations on Great Sitkin Island.

The ship-intersection method of establishing horizontal control was used. The Division of Geodesy has or is adjusting this work and will clarify it as of third-order accuracy.

Field inspection work on Atka Island was done on 1951 Navy photography, ratioed to 1:20,000 scale. The area of this photography, including that of the field work, is covered, also, by 1953 nine lens photography. It is believed that sufficient horizontal control has been identified to compile the northern portion of the Island from Banner Bay to Nazan Bay. However, final detailing of the shoreline and offshore details is questionable without additional work or verification in the field. Although elevations were determined for most of the station sites, the field parties failed to provide elevations at the substitute stations; this statement holds for both Islands. No photographic coverage is available for the southern east-west portion of the island, and no field work was done here.

Except for the southern portion of Great Sitkin Island, the identification of horizontal control is considered to be adequate. However, final detailing of the shoreline and offshore details is problematical unless supplemented by additional field inspection or field edit work. To insure complete and adequate photographic coverage of the Island an additional east-west flight line is needed in the vicinity of Cape Kiugilak. Field work was accomplished on 1947 nine lens photography, scale 1:24,000. 1953 nine lens photography is available for the north portion of the Island and the main portion of the field work falls within its coverage.

Charles Hanavich

Form 567
April 1945

COPY FOR PHOTOGRAMMETRY

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR ~~LANDMARKS~~ FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

9 June, 1953

I recommend that the following objects which have (~~been~~) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing by P. C. Stark

W. H. Bainbridge
W. H. Bainbridge, Chief of Party.

STATE Alaska, Great Sitkin Island

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE D.M. METERS	LONGITUDE ° ′	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
SWALLOW HEAD LIGHT	White skeleton tower 60mft. high approx. 80 ft above water level		52 07		176 09		NA 1927	air photo plot CS-343	May 1953			x	9193 9000 8863, 9102

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

U. S. GOVERNMENT PRINTING OFFICE: 1949 O - 853418

Copy For Photogrammetry

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~NONFLOATING AIDS~~ OR LANDMARKS FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

Oakland, California 9 June 19 53

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by L. T. Cook

W. H. Bainbridge
W.H. Bainbridge Chief of Party.

STATE	ALASKA, Great Sitkin Island		POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE		DATUM						
CHARTING NAME	DESCRIPTION	SIGNAL NAME	° ′	D.M. METERS	° ′	D.P. METERS							
TEA POT ROCK	A large teapot shaped rock lying approximately 150 yards off-shore	Tea Pot Rock	52 06′	1199.62m 38.812′	176 03′	107.77′ 05.663′	NA1927	triang. CS-343	May 1953			x	8863 9102,9193 9000

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

U. S. GOVERNMENT PRINTING OFFICE: 1949 O - 853418

PROJECT 7-6034
PHOTOGRAMMETRIC PLOT REPORT
T-11537 thru 11539, T-11548 thru T-11551,
T-11553 and T-11554
Scale 1:20,000
February 1956

21. AREA COVERED:

A continuous radial plot was assembled covering that area of the Andreanof Island group which includes Great Sitkin Island and the eastern half of Little Tanaga Island, and extending east to Ikiginak Island.

22. METHOD:

Manuscripts: The plot was assembled on the manuscripts on which the polyconic projections and 1000 meter interval Alaska Zone 1 UTM grids were ruled at 1:20,000 scale. The numbers of the manuscripts included in the plot are as follows:

T-11537	(ADV)	T-11548	(INCOMP)	T-11554	(INCOMPLETE)
T-11538	"	T-11549	"	T-11550	(PRELIMINARY)
T-11539	"	T-11553	"	T-11551	"

The part of the plot covering manuscripts T-11537, T-11538, T-11539, T-11548, T-11549, T-11553 and T-11554 was assembled on field identified control and is considered final. The part of the plot covering manuscripts T-11550 and T-11551 was assembled on office identified control and is classified preliminary.

Templets: The templets were prepared on vinylite sheets using the 1953 and 1954 master calibration templets for adjustment. Templets used in the Great Sitkin and Little Tanaga preliminary plots were reused in the subject plot.

Photographs: Nine-lens metal mounted photographs were prepared in the conventional manner. Photo numbers are:

41914 thru 41918	42199, 42201, 42202
41931, 41932	42127 thru 42132
41934 thru 41938	46052 " 46054
41978, 41979, 41988	46059 " 46062
41991, 41992	46064 " 46069
42108 thru 42114	46071 " 46074
42122 " 42124	46077 " 46079

Assembly: Adequate closure on control and good intersections of radials were obtained throughout the plot. Forty of the total of 55 templets were assembled at the time the plot was drilled. The 15 templets left out did not contribute to the solution of the plot. Better selections of pass point intersections and more accurate results in drilling were obtained by leaving the templets out of the plot. These templets were adjusted in position on the base sheets and their centers drilled after the plot was disassembled. The map positions of photogrammetric points were then pricked on the templets. Pass points in the mountainous area of Great Sitkin Island were not drilled. The positions for these points were cut in by reorienting the templets, one at a time, after the plot was disassembled.

23. ADEQUACY OF CONTROL: Twenty three of the 27 photo identified control stations available for use in the radial plot were field identified. Totals of 21 field identified and 3 office identified stations held within 0.2 mm. These measurements were made before the plot was drilled. After the plot was drilled it was noted that variations on the manuscripts between the plotted positions and the drill holes amounted to 0.2 or 0.3 mm on some of the stations that were "held" in the plot. A list of control stations showing the measured differences in MM between their plotted positions and their radial plot positions is included in the radial plot report. Seven field identified control stations were thrown out either during assembly of the preliminary radial plot on Great Sitkin Island or the preparation of the photographs. This was due to questionable identification. With the exception of Pinnacle off Swallow, 1953 none of these stations are included in the 27-station total mentioned as available for use in the radial plot. The stations are: Picture Pt. No. 2, 1953; Outer Rk. Sulphur Pt., 1953; Sulphur Pt. Rock No. 2, 1953; Outer Rock, Bugle Pt., 1953; East (USN) 1953; Largest Pinnacle South of Sulphur Pt., 1953.

24. SUPPLEMENTAL DATA: Inapplicable.

25. PHOTOGRAPHY: The photography is considered adequate as to definition, coverage and overlap for radial plotting purposes. Photograph No. 41988 is badly tilted. Its templet was adjusted in position and its center located after the plot was drilled. The effects of tilt were noted on the templets in the Great Sitkin Island area. Sea level

The Field Inspection that was done on 1947 Nine lens and 1951 Navy photography was transferred to the 1953 and 1954 Nine lens photos.

points were used in adjusting the plot. As mentioned in Section 22 of the report, the positions of elevated pass points affected by tilt were established after the plot was drilled.

Approved:

K. N. Maki

K. N. Maki

Submitted:

S. G. Blankenbaker

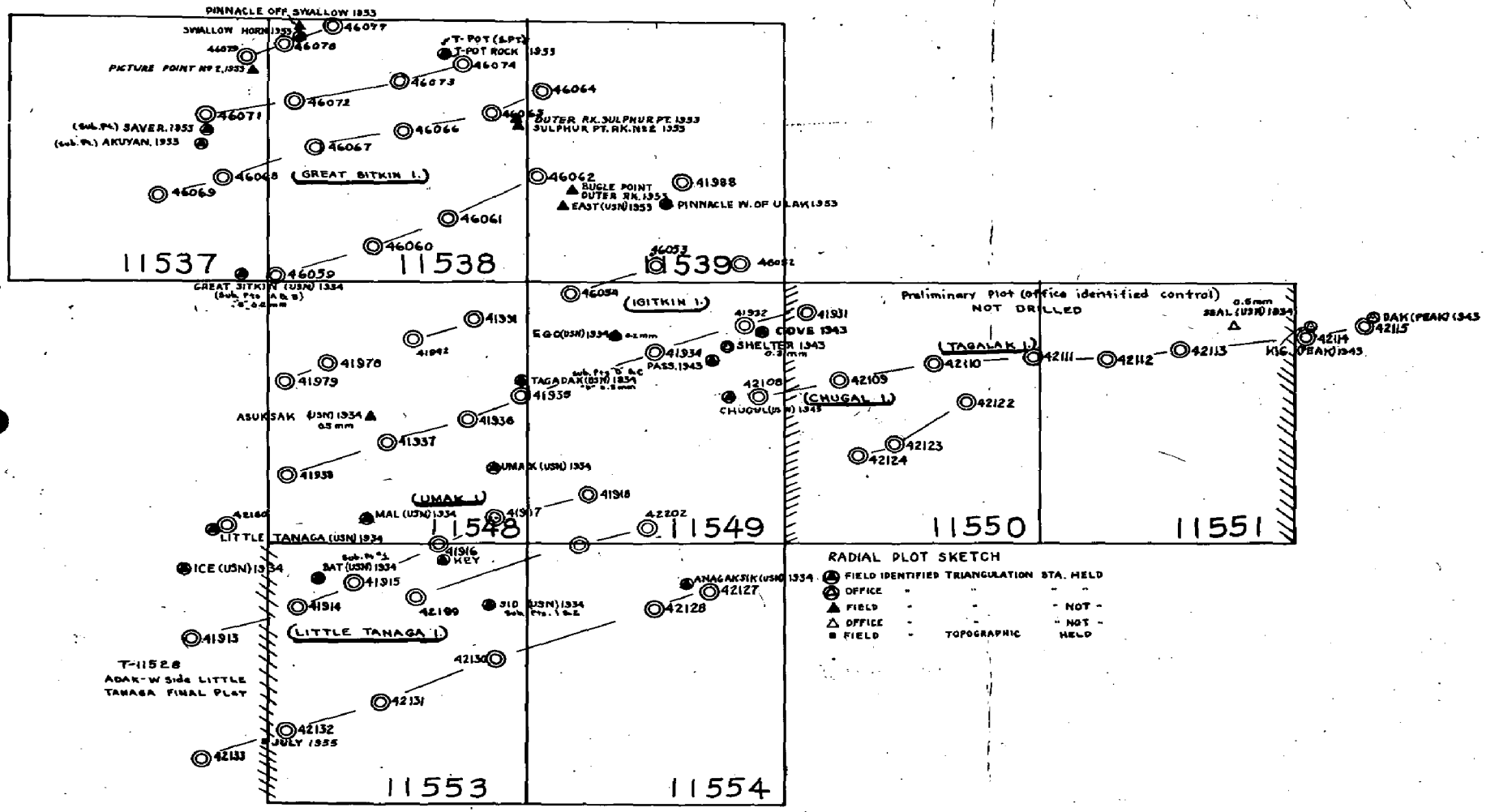
S. G. Blankenbaker
Cartographer (Photogrammetry)

List showing the measured differences in millimeters between the radial plot positions and the plotted geographic positions of Horizontal Control Stations

Station Name	Measurements taken Prior to drilling	Measurements taken on the Manuscripts after drilling
Pinnacle off Swallow	not held (approx. 1.0mm)	not held (approx. 1.0mm)
Swallow Horn	held	held
Saver (Sub. Pt.)	held	held
Akuyan (Sub. Pt.)	held	held
T-Pot Rock	held	held
T-Pot (Sub. Pt.)	held	held
Shelter *	not held (approx. 0.3mm)	not held (approx. 0.3mm)
Pass	held	not held (approx. 0.3mm)
Great Sitkin (S. Pts. "A" and "B")	held	"A" held "B" not held (approx. 0.2m)
Asuksak (Sub. Pt.)	not held (approx. 0.5mm)	not held (approx. 0.5mm)
Chugul	held	held
Tagadak (S. Pts. "D" and "C")	held	"C" held "D" not held (approx. 0.3mm)
Pinn. W. of Ulak	held	held
Ego (Sub. Pt.)	not held (approx. 0.2mm)	not held (approx. 0.2mm)
Cove	held	held
Anagaksik	held	not held (approx. 0.2mm)
Umak (S. Pt. #1)	held	held
Little Tanaga	held	Drilled in Adak Plot
Ice	held	Drilled in Adak Plot
July (Topo Sta)	held	held
Bat (Sub. Pt. #1)	held	not held (approx. 0.2mm)
1/ Kig *	held	held
1/ Seal *	not held (approx. 0.5mm)	not held (approx. 0.5mm)
Mal	held	not held (approx. 0.2mm)
Key (Sub. Pt.)	held	not held (approx. 0.2mm)
Sid (Sub. Pts. 1 and 2)	held	held
1/ Dak *	held	held

*Office identified station

1/ Not drilled


PINNACLE OFF SWALLOW 1953
SWALLOW HORN 1953
PICTURE POINT No 2, 1953
T-POT (SPT)
T-POT ROCK 1953
(Sub. Pt.) SAVER 1953
(Sub. Pt.) AKUYAN 1953
GREAT SITKIN I.
OUTER RK. SULPHUR PT. 1953
SULPHUR PT. RK. NE 1953
BUGLE POINT OUTER RK. 1953
EAST (USN) 1953
PINNACLE W. OF ULAK 1953
11537
11538
11539
GREAT SITKIN (USN) 1934
(IGITKIN I.)
EGO (USN) 1934
COVE 1943
SHELTER 1943
PASS 1943
TAGADAK (USN) 1934
ASUKSAK (USN) 1934
UMAK (USN) 1934
(UMAK I.)
MAL (USN) 1934
LITTLE TANAGA (USN) 1934
ICE (USN) 1934
BAT (USN) 1934
KEY
(LITTLE TANAGA I.)
T-1152.8
ADAK-W Side LITTLE TANAGA FINAL PLOT
JULY 1955
11548
11549
11550
11551
11553
11554
Preliminary Plot (office identified control)
NOT DRILLED
(TAGALAK I.)
(CHUGAL I.)
SEAL (USN) 1934
BAK (PEAK) 1943
KIG. (PEAK) 1943
ANAGAKSIK (USN) 1934
RADIAL PLOT SKETCH
FIELD IDENTIFIED TRIANGULATION STA. HELD
OFFICE
FIELD - - - NOT -
OFFICE - - - NOT -
FIELD - TOPOGRAPHIC HELD

Photogrammetry

MAP T-11537 PROJECT NO. Ph-34 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-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 FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Elev. 830 ft.			52-05-56.56		1854.50	1748.2 (106.3)	
Picture Pt. No. 2 1953	V p815	1927	176-10-40.31		1142.1	767.3 (374.8)	
Elev. 79 ft.			52-04-33.440		1854.49	1033.6 (820.9)	
Saver, 1953	" p814	"	176-12-21.619		1142.7	411.7 (731.0)	
Elev. 137 ft.			52-03-56.079		1854.49	1733.3 (121.2)	
AKUYAN, 1953	" "	"	176-12-32.354		1143.0	616.3 (526.7)	
Elev. 54 ft.			52-00-01.644		1854.47	50.8 (1803.7)	
Great Sitkin (USN), 1934	" p 159	"	176-11-04.281		1144.7	81.7 (1063.0)	
GREAT SITKIN			52-00			61.5 (1793.0)	
Sub. Pt. "A"			176-11			75.8 (1068.9)	
GREAT SITKIN			52-00			81.3 (1773.2)	
Sub. Pt. "B"			176-11			03.7 (1141.0)	
Sub. Pt.			52-04			1380.2 (474.3)	
SAVER			176-12			34.7 (1107.9)	
Sub. Pt.			52-03			1404.7 (449.8)	
AKUYAN			176-12			647.8 (495.3)	

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: G. O. DeMarr DATE 1 April 1955 CHECKED BY: S. G. Blankenbeker DATE 3 May 1955

Photogrammetry

MAP T-11538 PROJECT NO. Ph-34 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-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 FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
Elev. 977 ft.			52-06-53.658				1658.5	(196.0)		
Swallow, 1953	V p.814	1927	176-08-56.201				1069.4	(72.3)		
Elev. 955 ft. Swallow Horn,			52-06-57.72				1784.0	(70.5)		
1953	"	"	176-08-50.01				951.6	(190.1)		
Elev. 190 ft. Pinnacle off			52-07-06.61				204.3	(1650.2)		
Swallow, 1953	"	"	176-08-49.20				936.1	(205.6)		
Elev. 32 ft.			52-06-32.924				1017.6	(836.9)		
T-Pot, 1953	"	"	176-03-11.276				214.6	(927.3)		
Elev. 87 ft.			52-06-38.840				1200.5	(654.0)		
T-Pot Rock, 1953	V p.815	"	176-03-05.723				108.9	(1033.0)		
Elev. 62 ft. Tea Pot Spout,			52-06-39.661				1225.8	(628.7)		
1953	"	"	176-03-05.331				101.4	(1040.4)		
Elev. 509 ft.			52-04-10.763				332.7	(1521.8)		
Sulphur, 1953	V p. 814	"	176-00-16.853				321.0	(821.9)		
Sulphur Pt.,			52-04-40.759				1259.8	(594.7)		
Outer Rock, 1953	V p. 815	"	176-00-20.079				382.4	(760.3)		
Elev. 6 ft., Sulphur Pt. Rock			52-04-38.473				1189.1	(665.4)		
No. 2, 1953 (Elev. 6 ft.)	"	"	176-00-19.939				379.7	(763.0)		
Elev. 92 ft. Largest Pinnacle			52-03-22.47				694.5	(1160.0)		
S. of Sulphur Pt., 1953	"	"	176-00-25.70				489.7	(653.5)		
Sub Pt.			52-06				1049.2			
T-POT, 1953			176-03				211.9			

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: C. O. DeMarr DATE 1 April 1955 CHECKED BY: S. G. Blankenbaker DATE 3 May 1955

Photogrammetry

MAP T- 11539 PROJECT NO. Ph-6034 SCALE OF MAP 1:20,000 SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-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 FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
Bugle Pt. Outer Rock 1953	V815		52 02 35.88	1854.5			1109.0	745.5		
			175 58 13.90	1144.0			264.9	879.1		
East (USN)1934	V159		52 02 12.257	1854.5			378.8	1475.7		
			175 58 41.061	1143.7			782.7	361.0		
Kalu 1934 (USN)	V158		52 02 45.441	1854.5			1404.5	450.0		
			175 53 38.003	1143.5			724.3	419.2		
Ulak 1934 (USN)	V159		52 02 24.328	1854.4			751.9	1102.6		
			175 54 30.998	1143.7			590.9	552.8		
Pinnacle, W of Ulak 1934	V814		52 02 23.194	1854.5			716.9	1137.6		
			175 54 33.246	1143.7			633.7	510.0		

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: B. Hale DATE Feb. 1956 CHECKED BY: G. Amburn DATE Feb. 1956

Compilation Report

T-11537 T-11538 T-11539

31. Delineation

Shoreline and foreshore features were delineated ~~both~~ from field inspected photographs of 1:20,000 scale.

The work sheet method was used to delineate the MHWL and near shore features. Adjusting the planimetry to manuscript scale was done by holding to the compilation points of near sea level elevation.

32. Control

See the attached photogrammetric report and control sketch for summary of control.

33. Supplemental data

T-6938 No. A	1:24,422.4	1934
T-6939 No. C	1:24,422.4	1934

No supplemental data was carried forward to the manuscripts from these surveys.

34. Contours and Drainage

Contours (50 foot intervals) and drainage were added to the shoreline manuscripts with nine-lens photos used on the Reading Plotter. Radial plot points along the shore and triangulation stations were given preference to interior points during compilation.

35. Shoreline and Alongshore Details

The map manuscripts were delineated from office photographs with the aid of field inspected photographs. No unusual problems were encountered.

36. Offshore Details

Triangulation stations Outer Rock Sulphur Point, Rock No.2 off Sulphur Point, and Outer Rock Bugle Point were not used in the radial plot inasmuch as they are all offshore rocks in surf and were difficult to identify on a sufficient number of photographs for radial plotting purposes.

36. Offshore Details - con.

The compiled position for triangulation stations Outer Rock Sulphur Point fell on its plotted positions, thereby, verifying the approximate photo location given by both the 1953 and 1955 field parties.

The 1955 photo position for triangulation station Rock No.2 off Sulphur Point, when compiled, fell on its plotted position. The 1953 position for the same rock fell further offshore on a feature now shown as a reef on the manuscript.

37. Landmarks and Aids

The position of Swallow Head Lt. was determined by radial plot. It is reported on Forms 524 and 567.

38. Control for Future Surveys

Six (6) recoverable topographic stations have been located photogrammetrically and their scaled geographic positions have been reported on Form 524.

T-11537	Cone	1953
T-11537	Fall	1953
T-11538	AAA.	1953
T-11538	Amos	1953
T-11538	Hard	1953
T-11538	Swallow Head Lt.	1953

Seventeen (17) field inspected photo-hydro stations on T-11537 and thirty-eight (38) on T-11538 have been located on their respective manuscripts.

39. Junctions

Junctions were made between the subject manuscripts. T-11538 junctions with T-~~1148~~ T-11548 to the south and T-11539 junctions with T-11549 to the south.

40. Horizontal and Vertical Accuracy

Horizontal accuracy conforms with the map accuracy requirements of the Bureau.

When the three peaks identified as vertical control on Great Sitkin Island, were resected by plotting their angles on the combined manuscripts from the stations of observation only P051 highest point formed a reasonable intersection. As the hightest point was also a radial plot position, the elevation was computed and held together with sea level in contouring the island.

46. Comparison with Existing Maps

Adak, Alaska, Alaska reconnaissance topographic series, 1:250,000, 1951. Also refer to item 33 of this report.

47. Comparison with Nautical Charts

9139	1:30,000	Corrected to 6/2/52
9193	~~1:20,000~~ 1:120 000	Corrected to 7/5/54

These manuscripts supersede present charted information for shoreline and alongshore features and for interior planimetry and contours.

"Items to be Applied to Nautical Charts Immediately" - None

"Items to be Carried Forward" - None

APPROVED BY: Louis Levin

SUBMITTED BY: Clarence E. Mosfeldt

PH 34

Project ~~24050 (6034)~~

T-11537, T-11538, T-11539, T-11548 & T-11549

Notes for the Hydrographer:

The field inspection of the 1956 Season has been applied to the above manuscripts. Except for final review, they are in final form.

Corrections applied comprised additional data on rocks and some changes or refinements to the delineation of shoreline. In a few cases intricate shoreline features were badly obstructed by shadow or overhang of bluffs and are shown as dashed for approximate shoreline.

A very slight shift, approximately 0.3mm, was made in the eastern part of T-11549. The effect on photo-hydro stations for this area was negligible and the positions were not changed. There was no indicated datum shift for other areas of these surveys when the new 1956 control identification was applied to the surveys.

On T-11548 a rock awash was compiled at approximately 1/4 mile east of hydro-station WAR. It is discernible on all photographs but had no field inspection. It should therefore be verified by hydrographic surveys. For a few rocks, slight differences in datum references were noted between field inspection notes on different photographs. In such cases, values were taken for greater safety to the mariner.

Except for Anagaksik Island which had no field inspection and Ulak Island which had little field inspection, all areas appear fairly complete in alongshore rocks. All surveys should be adequate as a topographic base for hydrography.

T-11538

6 March 1956

OFFICE MEMORANDUM

Subject: Photogrammetric manuscripts T-11537 and T-11538, Great Sitkin Island, Aleutian Islands, Alaska

This memorandum is for insertion in Descriptive Reports H-8237, T-11537, and T-11538. Copies shall also be forwarded to the Ship EXPLORER.

Incomplete photogrammetric manuscripts T-11537 and T-11538 were forwarded to the Ship EXPLORER in August 1955. The EXPLORER was informed that the radial plot and positioning of photo-hydro stations were final and these photogrammetric manuscripts were used for plotting sheet H-8237 showing inshore hydrography along the north and northwest sides of Great Sitk' Island.

In February 1956 the manuscripts for T-11537 and T-11538 were included in a radial plot with sheets to the southward. This larger radial plot was based on additional control identified by the EXPLORER during the 1955 season. This plot resulted in a change in positions on T-11537 and T-11538.

T-11537 and T-11538 are being redetailed as advance manuscripts with changes in details and changes in photo-hydro stations varying from 0.0 to 1.3 mm.

The advance manusctipts T-11537 and T-11538 supersede the incomplete manuscripts mentioned above. However, the incomplete manuscripts will be held in the Graphic Compilation Unit until all hydrography has been completed and processed.

The new advance manuscripts T-11537 and T-11538 have been compared with the smooth sheet H-8237. It is not considered necessary that the smooth sheet be revised. The change in positioning of shoreline does not conflict with any sounding. The change of positions of photo-hydro signals is for the most part in the vicinity of Saddle Point (latitude 52.06, longitude 176.10). However, replotting of this section of H-8237 on the new signal positions does not appear to be necessary. The resulting shift apparently would not make any significant difference in the positioning of hydrographic features or in line crosses.

When H-8237 is reviewed, it is suggested that Mr. Maki or Mr. Jones be called for any questions on this. The incomplete manuscripts will be available for inspection.

B.G. Jones 3/6/56

B. G. Jones.

GEOGRAPHIC NAMES

Survey No.

T-11537

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Bering Sea										1
Cape Akuyan										2
Great Sitkin Island										3
Sitkin Sound										4
Cape Kiugilak										5
Saddle Point										6
Glacier Creek			1951 U.S.G.S. name usage							7
Akuyan Creek			"	"		"				8
										9
			Names approved 8-16-57							10
For title, see note on T-11539						L. Heck				11
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M 234

GEOGRAPHIC NAMES

Survey No.

T-11538

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Bering Sea										1
Great Sitkin Island										2
Swallow Head										3
Sulphur Point										4
Teapot Rock										5
Yoke Bay										6
North Arm			(in 1954 Coast Pilot)							7
West Arm			"	"		"				8
South Arm			"	"		"				9
Sitkin Creek			1951 U.S.G.S. name usage							10
Bugle Creek			"	"		"				11
Fox Creek			"	"		"	(on chart 9139)			12
Little Fox Creek			"	"		"	"	"		13
Middle Yoke Creek			"	"		"				14
Turmath Creek			"	"		"				15
										16
			Names approved 8-16-57							17
					L. Heck					18
See note on T-11539 re title										19
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M 234

GEOGRAPHIC NAMES

Survey No.

T-11539

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Bering Sea										1
Bugle Point										2
Ulak Island										3
Great Sitkin Island										4
										5
				Names approved 8-16-57						6
							L. Heck			7
See note on manuscript re title										8
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M 234

Review Report of
Topographic Maps T-11537, T-11538 and T-11539
September 1957

62. Comparison with Registered Topographic Surveys:

T-6938	USN	1:24422.4	1934
T-6939	USN	1:24422.4	1934
T-10001		1:20,000	1943

Extensive cultural changes on the south portion of Great Sitkin Island account for the only major differences between subject surveys and above-listed registered topographic surveys. T-11537 through T-11539 are completely detailed topographic maps with adequate control and are to supersede above-listed surveys for nautical charting purposes for common areas.

63. Comparison with Maps of Other Agencies:

Adak, Alaska and Atka, Alaska of Alaska Reconnaissance Topographic Series of 1951 and 1952 by the U. S. Geological Survey at scale of 1:250,000. The considerable difference in scale does not permit a conclusive comparison.

64. Comparison with Contemporary Hydrographic Surveys:

H-8233	1:40,000	1955
H-8237	1:20,000	1955

Preliminary shoreline of the three topographic surveys was furnished for the two listed hydrographic surveys. Minor changes and additions of shoreline and foreshore features resulting from field inspection and final Washington Office review have* yet to be applied to these hydrosurveys. None of these corrections appear to interfere with the hydrographic information shown.

* Applied to H-8237 11-14-62 D.R.E.

65. Comparison with Nautical Charts:

9139	1:30,000	Corrected to 52 6/2
9193	1:120,000	June 1957

Recent hydrographic surveys (listed under 64) will effect reprinting or new editions of nautical charts of this area. Chart number 9193 - 3rd edition, June 1957 does not include information made available by the three subject topographic surveys and hydrographic surveys listed under 64.

66. Adequacy of Results and Future Surveys:

Field inspection of shoreline and foreshore is incomplete, however, appeared adequate. Roads, buildings and other interior features were not field inspected. Such detailing by office interpretation only may be subject to error. Some field inspection photographs were not available during final review. Other than these no deficiencies in accuracy and adequacy were indicated.

Reviewed by:

Josef J. Streifler

Josef J. Streifler

Approved:

L C Lande

Chief, Review & Drafting Sec.
Photogrammetry Division

Marvin T Paulson

Chief, Nautical Chart Branch
Charts Division

J E Waugh 10/9/62

Chief, Photogrammetry Div.

Max B Ricketts

Chief, Coastal Surveys

Summary
To Accompany Topographic Maps
T-11537, T-11538 and T-11539

These three topographic surveys are part of Project Ph-34 ~~(6034)~~. Except for the southern tip of Great Sitkin Island they cover this and Ulak Island. Great Sitkin and Ulak Islands belong to the Andreanof Islands group of the Aleutians, Alaska.

Shoreline, foreshore and offshore were compiled graphically in 1955 from 1953 and 1954 nine-lens photos and furnished as preliminary manuscripts for hydrographic surveys. The three topographic compilations were completed in 1957 on the Reading Plotter.

The maps will be published by the Army Map Service as standard topographic quadrangles at the scale of 1:25,000 with the addition of hydrographic information.

A "Cronar" film positive at manuscript scale of 1:20,000 and the descriptive report as well as a cloth-backed printed copy in colors after final printing by AMS, will be registered and filed in the Bureau Archives.

NAUTICAL CHARTS BRANCH

SURVEY NO. T-11537 thru 11539.

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6/63	8862	C Mistelatt	~~Before~~ After Verification and Review
1-14-66	9139	[illegible]	~~Before~~ After Verification and Review Partly appl Shoreline detail (to be considered as final application until chart is reconstructed)
2/18/66	9193	John R. Weir	~~Before~~ ~~After~~ Verification and Review Part. Applied. consider fully applied until reconstruction.
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.