

11324

Diag. Cht. No. 8863-2.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-34(48) Office No. T-11324

LOCALITY

State Alaska

General locality Andreanof Islands

Locality Bay of Islands, Adak Island

19453-54

CHIEF OF PARTY

S.B.Grenell, Chief of Field Party
L.W.Swanson, Div. of Photo. Wash, D.C.

LIBRARY & ARCHIVES

DATE August 19, 1958

B-1870-1 (1)

11324

DATA RECORD

T-11324

Project No. (II): 7-6034 Quadrangle Name (IV): Careful Pt.
 Ph-34 (48) Adak Island, Alaska

Field Office (II): Ship EXPLORER Chief of Party: S. B. Grenell

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

Instructions dated (II) (III): Copy filed in Division of
 Supplemental Instructions dated 19 March 1952 Photogrammetry (IV)
 " " " 20 Feb. 1953 Office Files
 " " " 23 Dec. 1953 731-mkl
 Compilation Instructions " 10 Nov. 1954

Method of Compilation (III): Interior and Contours - READING PLOTTER
 Shoreline - Graphic Methods

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): 3-29-56 Date reported to Nautical Chart Branch (IV): 4-5-56

Applied to Chart No. Date: Date registered (IV): 5/7/58

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

Reference Station (III): FAR 2 (USE) 1933

Lat.: 51-46-28.586 Long.: 176-52-27.399 Adjusted
 883.5 m. (970.9) 525.3 m. (625.1) 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):		Date:
Shoreline inspection by	H. G. Conerly	1954 SEASON
	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):		
Field inspection -	1954	
Date of photography	Sept. 25, 1953	
Projection and Grids ruled by (IV):	Austin Riley	Date: 10-19-54
Projection and Grids checked by (IV):	" "	Date: 10-19-54
Control plotted by (III):	M. Webber	Date: 12-10-54
Control checked by (III):	R. J. French	Date: 12-11-54
Radial Plot or Stereoscopic		Date:
Control extension by (III):	R. J. French	12-15-54
	Planimetry	Date:
Stereoscopic Instrument compilation (III):	W. Heinbaugh	3-9-55
	Contours	Date:
Manuscript delineated by (III):	Shoreline - Jeter Battley	Date: 12-20-54
Photogrammetric Office Review by (III):		Date:
Shoreline and photo hydros -	R. J. French	12-22-54
Topography	- L. Levin	2- 2-56
Elevations on Manuscript		Date:
checked by (II) (III):		

Camera (kind or source) (III): 9 Lens C & G.S

Number	Date	PHOTOGRAPHS (III)			Stage of Tide
		Time	Scale		
42082	9-25-53	12:32	1:20,000		MHW
42083	"	12:33	"		"
42097	"	12:58	"		"
42098	"	12:59	"		"

Tide (III)

Diurnal

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

Ratio of Ranges	Mean Range	Standard Range
.9	-	3.7
-	-	3.3

Washington Office Review by (IV): Everett H. Ramey

Date: 14 Mar. 1956

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 12
 Shoreline (More than 200 meters to opposite shore) (III): 26
 Shoreline (Less than 200 meters to opposite shore) (III):
 Control Leveling - Miles (II):
 Number of Triangulation Stations searched for (II): 3 Recovered: 3 Identified: 3
 Number of BMs searched for (II): Recovered: Identified:
 Number of Recoverable Photo Stations established (III): 1
 Number of Temporary Photo Hydro Stations established (III): *33

Remarks:

*18 of these were located by the single lens 1:10,000 plot and transferred by projector to this sheet.

Summary to Accompany Topographic Map T-11324

Topographic map T-11324 was accomplished as part of Project 6034. It covers the western shore of Adak Island of the Aleutian Islands between Bay of Islands and Three Arm Bay.

Field work in advance of compilation was done in 1954 and included the inspection of alongshore features and the establishment of some supplemental control. This work was done on C&GS nine-lens photographs taken in 1953 and Air Force single-lens photographs taken in 1943 for some areas. Contemporary hydrographic surveys were also accomplished.

This map was compiled at 1:20000 scale using the nine-lens photographs. The graphic method was used for compiling alongshore areas and the Reading Nine-Lens Plotter was used for compiling topography and interior features. No field edit was accomplished. After the addition of hydrography the map will be published by the Army Map Service as a standard 1:25000 scale quadrangle.

Items registered under T-11324 will include a ~~cloth-backed~~^{CROVAR} lithographic print of the map manuscript and the descriptive report.

FIELD INSPECTION REPORT
for
Maps T-11322 (part), T-11324,
T-11325, T-11329 (part), T-11330 (part),
T-11334 (part)

2. Areal Field Inspection

This report covers the area of Adak Island for which field work was completed in 1954. The portion of the island completed in 1954 is the western shoreline including Bay of Islands and Three Arm Bay and establishment of vertical control on the western peaks of the island.

The most prominent feature on the island is Mt. Moffett. Extending southward from Mt. Moffett is an almost continuous line of higher peaks ending east of Bay of Waterfalls. West of these higher peaks relatively low rolling terrain extends to the west shoreline of the island. The southwesterly peninsula of the island is a gently rolling plateau with a maximum elevation of about 670 feet.

Cape Yakak at the southwestern extremity of the island is a bold headland with rocky cliffs rising almost vertically from the water for about 100 to 200 feet.

Bays on the west side of the island are Shagak Bay, Bay of Islands and Three Arm Bay.

The shoreline is very irregular but except for Bay of Islands and vicinity it is relatively free of offlying islands and dangers.

The area is entirely covered with 1953 nine-lens photographs. The quality of these photographs is not as good as would be expected. At first glance they appear to be excellent but with more detailed use they are noticeably of much poorer quality than would be expected. Fine details are not visible and identification of control and photo-hydro stations and even shoreline inspection is very difficult. Flight lines are well spaced and side lap is generally sufficient. End lap is scanty in places, especially in Bay of Islands, which adds to the difficulty of field inspection. There is a marked difference in the quality of photographs on this island and photographs taken the same day on Kanaga Island.

The northern part of the island is covered by 1952 nine-lens photographs. Except for cloud covered areas these photographs are excellent and are much better quality than 1953 photographs.

Most of the area covered by this report is covered with 1943 Air Force single lens 1:26,000 scale photographs. The quality of these photographs is excellent. Some control identification was done on these photographs and transferred to nine-lens photographs.

The Bay of Islands was photographed on 6 September 1954 with the W camera. These photographs were not available for field use but they appear to be of excellent quality.

Shoreline inspection was completed from Cape Yakak to Bay of Islands. From Bay of Islands north no shoreline inspection was done. All field inspection is sub-standard in some respects but that part completed is considered adequate for the area.

3. Horizontal Control

(a) The following horizontal control stations were established by second- or third-order triangulation:

ASTRO, 1925-1954
 OLD, 1925-1954
 CAREFUL, 1954

The following horizontal control stations were located by ^{less than third} ~~fourth~~ order theodolite observations:

JET (ww - marked)	SEAL (ww - marked)
KAY (ww - marked)	RING (ww - marked)
MUT (ww)	PIKE (ww - marked)
WET (ww)	LAKE (ww - marked)
BAG (ww)	SILLO (tower)
NIP (ww)	YAKA (tower)
LOG (ww)	Steel tower
HEM (ww)	Radar tower
COL (ww)	BUCK (ww - marked)
TUNA (ww - marked)	CANE (ww - marked)
	ROCK (ww - marked)

In addition to the above several peaks were located by theodolite observations. Some of these may be suitable for horizontal control.

(b) All horizontal control is computed on the N. A. 1927 datum and no datum adjustments are necessary. All geographic positions furnished with data covered by this report are based on preliminary field computations.

(c) Horizontal control was established by the Coast and Geodetic Survey, U. S. Navy and U. S. Engineers. All control is published by the U. S. Coast and Geodetic Survey.

(d) No specific stations were required by the instructions. South of the Bay of Islands more than the minimum to meet the spacing requirement were identified.

In Bay of Islands about 125 whitewashes were located on graphic control sheets EX-A-54 and EX-B-54. Most of the whitewashes are visible on 1954 single-lens photographs and many of them are pricked on those photographs. Control identified is more than sufficient for control of a 1:10,000 scale radial plot of the bay area. Whitewashes at BUCK and CANE should also be

visible on 1954 single-lens photographs of Chapel Cove.

Very few horizontal control stations in Bay of Islands were identified specifically for control of a 1:20,000 scale nine-lens radial plot. Control identified for the 1:10,000 scale radial plot or pass points established by that plot should adequately control the 1:20,000 scale radial plot.

North of Bay of Islands no horizontal control has been identified to date except Mt. Moffett. Mt. Moffett may be sharp enough for horizontal control.

It was planned to identify several horizontal control stations in the vicinity of Sweeper Cove, Clam Lagoon and Andrew Lagoon to hold the east end of flight lines across the island. However, this was not accomplished this season. Station BEAM (center of 5 radio range towers), stations on piers in Sweeper Cove and others can probably be identified in the office with sufficient accuracy to control the radial plot if this is desirable.

- (e) The following stations were not searched for:
 FITZ (USN), 1933 and all stations north of FITZ.
 LONG (USE), 1943
 KELP (USE), 1943
 ARM (USE), 1943
 CAT (USE), 1943

RAY (USE), 1943 was not recovered.

- (f) The following horizontal control stations were identified:

Station	Map	Photographs	Order of Accuracy
WBS (USN), 1933	T-11324	42083 S-12-R-3-1	Second
FAR 2(USE), 1943	T-11324	42098 54-W-2851	Second
		S-12-R-2-13	
TUNA, 1954	T-11324	42082 54-W-2831	Fourth
LON (USN), 1933	T-11324	42192 S-12-R-1-7	Second
NOR (USN), 1933	T-11325	42084 S-10-R-2-12	Second
OLD, 1925-1954	T-11325	54-W-2824	Second
SEAL, 1954	T-11329	42152 S-12-R-3-8	Fourth
RING, 1954	T-11329	42151	Fourth
PIKE, 1954	T-11329	42172	Fourth
LAKE, 1954	T-11329	42174	Fourth
ZEP (USN), 1933	T-11329	42172 S-12-R-3-17	Second
BUCK, 1954	T-11330	42144	Fourth
CANE, 1954	T-11330	42144 S-12-R-1-31	Fourth
YAKA, 1954	T-11334	42148	Fourth
SILO, 1954	T-11334	42148	Fourth

See also par. 3(d) above concerning additional control identification.

4. Vertical Control

(a) Existing bench marks are tidal bench marks at Unalga Bight, Bay of Islands and Three Arm Bay. Tidal bench marks were not used to establish elevations for vertical control. Bench marks were not identified except two identified as recoverable topographic stations.

(b) See Field Inspection Report for Kanaga Island, 1954 Season, par. 4(b).

The first and last designated vertical control points on these maps are P-022 and P-031, respectively.

(c) Vertical control points were identified as follows:

<u>Vertical Control Point</u>	<u>Horizontal Control Name</u>	<u>Map No.</u>	<u>Photo Nos.</u>	<u>Elev. in ft. above MEW</u>
P-022	Mt. Moffett, 1943	T-11322	37682 S-10-R-3-5	3917
P-023	- -	T-11322	37682 S-10-R-3-8	
WES (USN), 1933	Same	T-11324	42083 S-12-R-3-1	158
CAREFUL, 1954	Same	T-11324	42083 54-W-2833	227
ION (USN), 1933	Same	T-11324	S-12-R-2-19 42192 S-12-R-1-7	289
FAR 2 (USE), 1933	Same	T-11324	54-W-2834 42098 S-12-R-2-13	577
NOR (USN), 1933	Same	T-11325	54-W-2851 42084 S-10-R-2-12	275
ROT (USN), 1933	Same	T-11325	42084 S-10-R-1-21	332
STAT (USN), 1933	Same	T-11325	42099 S-10-R-2-8	281
DIM (USN), 1933	Same	T-11325	54-W-2848 42099 S-10-R-3-19	298
P-024	FITZ (USN), 1933	T-11325	42084	592
P-025	- -	T-11325	42085 S-10-R-3-15	1731
P-026	- -	T-11325	42100 S-10-R-4-10	
P-027B	- -	T-11325	42153 54-W-2827	1937
P-028	- -	T-11325	42153 54-W-2828	2222
ZEP (USN), 1933	Same	T-11329	42172 S-12-R-3-17	668
P-029	- -	T-11330	42153	2209
P-030	- -	T-11330	42153 S-10-R-2-1	1939
P-031	- -	T-11330	42170	

Additional elevations of points not identified for vertical control were determined as follows:

<u>Station</u>	<u>Map No.</u>	<u>Elev. in ft. above MEW</u>
TUNA, 1954	T-11324	11
ASTRO, 1925-1954	T-11325	97
AGA, (USN), 1933	T-11325	224
TUB (USN), 1933	T-11325	196
OLD, 1925-1954	T-11325	4
BUCK, 1954	T-11330	32
CANE, 1954	T-11330	13

Elevations of marked stations are on the marks. Elevations of peaks are on the highest points of the peaks.

Elevations for all U. S. E. stations are listed on the list of geographic positions. Published elevations of NOR (USN), 1933, WES (USN), 1933, FAR 2 (USE), 1943 and ZEP (USN), 1933 are all 5 to 8 feet lower than the elevations of these stations determined this year.

Vertical control established is considered adequate for stereoscopic contouring except in the eastern part of the area where additional vertical control points will probably be established in 1955.

5. Contours and Drainage

Contouring is inapplicable.

Drainage is obvious and well defined. None of it was field inspected except to indicate several waterfalls on the photographs.

6. Woodland Cover

None exists.

7. Shoreline and Alongshore Features

(a) Shoreline was field inspected from a launch running as close inshore as was safe. The mean high-water line is essentially correct on advance manuscripts and discrepancies are relatively unimportant. Very little attention was given to details of the actual high-water line. See 335

The high-water line is not indicated on 1:10,000 scale single-lens photographs of Bay of Islands. Most of the high-water line is clear on these photographs and can be compiled without difficulty.

(b) The low-water line was not defined. Along most of the shoreline the low-water line and high-water are nearly the same. Along rocky shoreline a limiting line of foul areas is indicated.

(c) The foreshore is mostly rocky with sand, gravel or boulder beaches at the heads of bays. Types of foreshore are indicated on the photographs at random intervals. There is very little rock ledge along the west side of the island.

(d) Cliffs along rocky shoreline vary in height from about zero inside of bays where there is no surf to a maximum of about 200 feet on Cape Yakak. In most areas grass covered bluffs and slopes rise steeply above the rocky cliffs. In land-locked bays grass grows down to the rocky shoreline practically at the high-water line and bare rock cliffs exist inside bays in only a very few places.

(e) There are no piers or other shoreline structures in the area covered by this report. There were three small piers in the area but they are in ruins and only a few piles remain in place. These piles are in Beverley Cove and Unalga Bight, Bay of Islands and in South Arm of Three Arm Bay.

(f) There are several cabins close to the shoreline. Isolated cabins are all trappers' cabins. Other buildings in the area are wartime construction. Cabins are noted on the photographs.

8. Offshore Features

All offshore features were field inspected in the area where shoreline inspection was complete - from Bay of Islands southward to Cape Yakak. Shoreline inspection was completed in the inner part of the Bay of Islands. Outer islands and rocks at the entrance to the bay were not field inspected except by the hydrographer. Important features were noted on the photographs. These include all isolated rocks and breakers, outer limits of foul areas and higher larger rocks in groups of rocks. Heights of rocks were estimated and the estimated heights of each noted on the photographs. Except for the piles mentioned above all offshore features are rocks or kelp.

Kelp areas were outlined approximately. Kelp areas are better defined on hydrographic sheets.

See graphic control sheets EX-A-54 and EX-B-54 for locations of some rocks.

9. Landmarks and Aids

Landmarks will be covered under another phase of field work and are not reported here.

The only aid to navigation in the area is Cape Yakak Light.

The beacon charted on Chart 9120 at 51-48.7, 176-49.5 is no longer in existence.

10. Boundaries, Monuments and Lines Inapplicable.

11. Other Control

Recoverable topographic stations and photo-hydro stations are listed on extra pages at the end of this report.

Three marked recoverable topographic stations in Bay of Islands were located on graphic control sheet EX-A-54 or EX-B-54 and will be submitted with that sheet.

12. Other Interior Features

Some Aleut village sites were noted during field inspection and are noted on the photographs. Others may exist and can be identified by the distinctive ground pattern of village sites.

There is a group of several buildings at radar station site on Cape Yakak. A line of poles of an old telephone line extends northward from the radar station site to Bay of Islands.

13. Geographic Names

To be reported as a separate report in connection with other phases of field work. Only charted names are used in connection with these records.

14. Special Reports and Supplemental Data

Supplemental data includes other phases of field work - triangulation, graphic control, hydrography, Coast Pilot Notes and geographic names.

Preliminary geographic positions of all control established have been forwarded with the project data.

Boat sheets have been forwarded to the Washington office and prints of them are available there.

Graphic control sheets EX-A-24 and EX-B-24 with control established in Bay of Islands will be forwarded as soon as data is transferred to the smooth sheet.

The following data were forwarded 25 October 1954 in package No. 19:

- Field photographs
- Office photographs
- Air Force single lens photographs
- 1954 single lens photographs of Bay of Islands
- Advance manuscripts
- Control station identification cards for horizontal and vertical control
- Descriptions of Recoverable Topographic Stations
- Observations of horizontal directions
- Observations of zenith distances
- Abstracts of zenith distances
- Computations of triangles - fourth-order
- Computations of elevations
- Computations of geographic positions - fourth-order

15. Field Inspection Notes

Photographs on which horizontal control station notes appear are listed under Side Heading 3, Horizontal Control.

Photographs on which vertical control station notes appear are listed under Side Heading 4, Vertical Control.

Photographs on which photo-topo or photo-hydro stations are identified are listed on a list of stations at the end of this report.

Photographs on which other field inspection notes appear are as follows:

42082	42099	42148	42153	42174
42083	42100	42150	42154 ✓	42191
42084	42146	42151	42172	42192
42098	42147	42152	42173	

9-6-54-W-2833 thru 2835
-2845 thru 2850

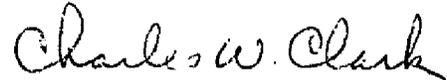
35 ✓ 33 ✓ 27 ✓
45 ✓ 43 ✓ 41 ✓ 39 ✓ 37 ✓
34 ✓

S-12-R-1-16
S-12-R-1-17
S-12-R-2-9, 11, 12
S-12-R-3-2
S-12-R-3-9 thru 12

16. Advance Manuscripts

Advance manuscripts were used as described in Field Inspection Report for Tanaga Island - 1953 Season and were entirely satisfactory.

Respectfully submitted



Charles W. Clark
Commander, USC&GS

Approved and forwarded:



S. B. Grenell
Captain, USC&GS
Comdg. Ship EXPLORER

RECOVERABLE TOPOGRAPHIC STATIONS

<u>Name</u>	<u>Map No.</u>	<u>Photograph Nos.</u>	<u>Remarks</u>
TUNA	T-11324	42082	Position Computed
SEAL	T-11329	42152 S-12-R-3-8	" "
RING	T-11329	42151	" "
PIKE	T-11329	42172	" "
LAKE	T-11329	42174	" "
DRUM	T-11329	42152 S-12-R-2-10	
Cape Yakak Light	T-11334	42148	
INA	T-11325	54-W-2847	EX-A-54
JET	T-11325	54-W-2835	EX-B-54
KAY	T-11324	54-W-2834	EX-B-54

ROCK, BUCK, CANE are included for horizontal control but are in an area of future work and will be reported with the future work.

PHOTO-HYDRO STATIONS

<u>Name</u>	<u>Photograph Nos.</u>	<u>Remarks</u>
	<u>T-11324</u>	
ACE	42152	
ASH	42083, S-12-R-3-2, 54-W-2832	
BEG	42153	
BID	42083, S-12-R-3-3, 54-W-2832	
CAN	42152, S-12-R-3-8	
COB	42153	
CUP	42083, S-12-R-3-2, 54-W-2832	
DOE	42153	
DUM	42083, S-12-R-3-2	
EAR	42083, S-12-R-3-3, 54-W-2832	
ELF	42153	
FAN	42083, S-12-R-3-3, 54-W-2832	
GAG	42083, S-12-R-3-2, 54-W-2832	
HAY	42083, S-12-R-3-3, 54-W-2832	
IRK	42083, S-12-R-3-3, 54-W-2832	
JOY	42083, S-12-R-3-3, 54-W-2832	
KEN	42153	
LAP	42153	
LOT	42083	
MAR	42153	
MIN	42083, S-12-R-3-3, 54-W-2832	
NOD	42152, S-12-R-2-12	
NOY	42083, S-12-R-3-3, 54-W-2832	
OAK	42083, S-12-R-3-2	
OAR	42153	
PEG	42083, S-12-R-3-1	
PEN	42153	
QUO	42152	

PHOTO-HYDRO STATIONS
(continued from Page 15)

<u>Name</u>	<u>Photograph Nos.</u>	<u>Remarks</u>
<u>T-11324</u>		
RAG	42152	
ROB	42083, S-12-R-3-2	
SAY	42152	
SIT	42083, S-12-R-3-2	
TED	42083, S-12-R-3-3, 54-W-2832	
<u>T-11325</u>		
FAG	42153	
GUS	42153	
HUT	42153	
ILL	42153	
JAR	42153	
<u>T-11329</u>		
APE	42152, S-12-R-1-17	
AXE	42152	
BAB	42152	
BIM	42152	
CUT	42152, S-12-R-1-17	
EKE	42153, S-12-R-1-17	
FUN	42152, S-12-R-1-17	
GOB	42152, S-12-R-1-17	
NAY	42153	
ORB	42152, S-12-R-1-15	
PIP	42152, S-12-R-3-8	
POP	42152, S-12-R-1-15	
ROD	42152, S-12-R-1-17	
TAM	42152	
VAL	42152	
WHY	42152	
YET	42152	
ZOO	42152	
<u>T-11330</u>		
HAM	42152	
JEB	42152, S-12-R-1-15	
LAX	42152, S-12-R-1-15	
MAW	42153	

All hydrographic signals in Bay of Islands were located by graphic control methods and are not listed here.

PHOTOGRAMMETRIC PLOT REPORT

21. AREA COVERED:

A nine-lens plot was laid with vinylite templets from metal mounted photographs for the area embraced by topographic sheets T-11324, T-11325, T-11329, T-11330 and T-11334 on the western end of Adak Island, Alaska.

22. METHOD:

Map manuscripts were furnished with both the projection and grids ruled on them. The five sheets involved and the adjoining manuscripts in the junction areas were matched together with the UTM 1000 meter grids, letting the polyconic projection lines match where they would.

Metal mounted photographs were used throughout, and coverage was adequate for a strong radial plot. The Reading plotter was used almost entirely for pricking rectification and pass points in the plot area. All primary horizontal control, topographic and photo hydro stations, and those interior vertical control stations most readily identified were pricked in the graphic control unit. Those vertical control stations thought to be more properly located during compilation were left for the Reading plotter.

Master calibration templet No. 40915 was used for correcting small chamber distortion errors, and rays were drawn on the templets after allowing for the proper adjustment where necessary. The technique of drawing all radial lines in blue outside of an arbitrarily chosen radius of about fifteen inches was used, while those inside were drawn in red ink. This technique offers the laydown an opportunity to weight those lines drawn in blue since those images fall in the corners and on the edges of the photographs where errors in pricking are most likely to occur. Likewise, all peaks and, in addition, control stations thought to be of doubtful pricking during photo preparation were drawn in blue with the same motive in mind.

Closure and adjustment to horizontal control was accomplished satisfactorily, and the tolerance for those not held is shown on the attached sketch. Stations are considered "held" when the intersection falls exactly "on" or with a tolerance of not more than 0.2 mm. or about one .010" line weight. Improper field identification seems the most likely reason for not holding a station with the tolerance listed since this is considered a rigid plot, and reasonable care was taken in transferring the points from field to office photographs.

A number 80 twist drill was used to drill through the several thicknesses of vinylite through the manuscript. All points were inked with a 4.0 mm. circle on the back of the manuscript.

23. ADEQUACY OF CONTROL:

The horizontal control provided complies with the project instructions, and no serious deficiencies exist. The density and placement of control is considered adequate for 1:20,000 radial plotting with the exception noted in 24. below.

24. SUPPLEMENTAL DATA:

Unregistered planetable surveys EX-A-54 and EX-B-54 were used to scale positions for two temporary hydro signal sites in Beverley Cove which were deemed useful in that area where there was a scarcity of field identified primary control (Stations Via and Box).

25. PHOTOGRAPHY:

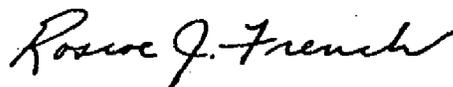
The photography is adequate and no deficiencies were noted except in the Bay of Islands area where shadows and surf made transfer of shoreline points less than desirable. No bad tilts were observed and in the case of Pk 30 a good intersection was obtained on a high peak where tilt would be most apt to cause trouble.

Coverage and overlap is adequate, and no areas of doubtful accuracy due to poor photography are evident.

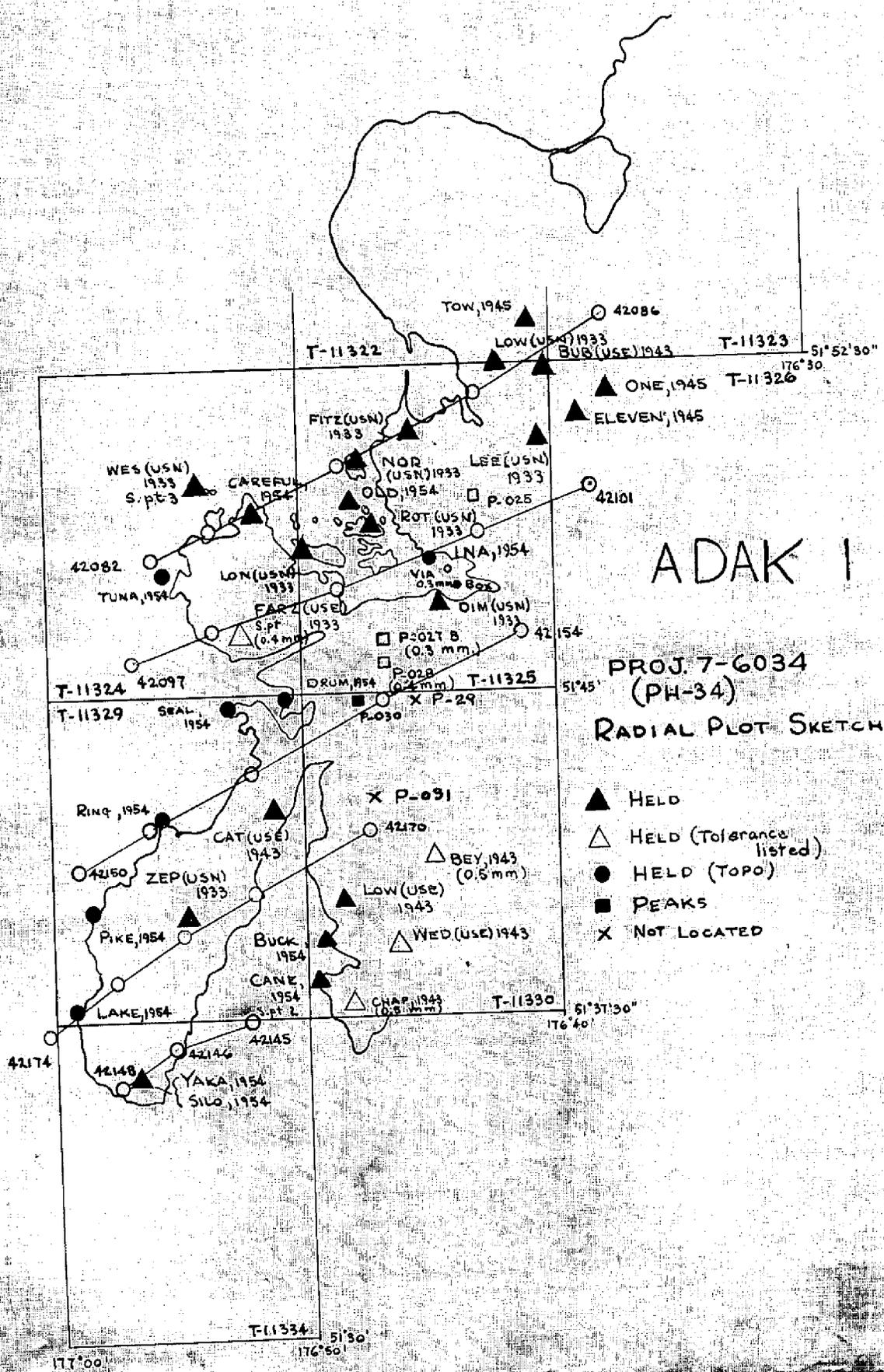
Approved:

S. V. Griffith
Chief, Cartographic Branch

Respectfully submitted:



Roscoe J. French
Supervisory Cartographer



ADAK I

PROJ. 7-6034
 (PH-34)
 RADIAL PLOT SKETCH

- ▲ HELD
- △ HELD (Tolerance listed)
- HELD (TOPO)
- PEAKS
- X NOT LOCATED

T-11322 51° 52' 30" 176° 30"
 T-11323
 T-11324 42097 51° 45' 176° 40"
 T-11329 42174 51° 37' 30" 176° 40"
 T-11325 42154
 T-11330
 T-11334 51° 30' 177° 00'

MAP T-11324 PROJECT NO PH-34 SCALE OF MAP 1:20,000 SCALE FACTOR 1.00

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR ϕ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		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)		FORWARD	(BACK)	
Wes (USN) 1933	6	V	51-49-50.115	1548.9	305.5				
		163	176-54-00.440	8.4	1140.6				
Lon (USN) 1933	5	163	51-48-27.088	837.2	1017.2				
			176-50-01.341	25.7	1123.9				
Aga (USN) 1933	5	163	51-48-00.838	25.9	1828.5				
			176-48-35.054	671.7	478.0				
Far 2 (USE) 1923	6	178	51-46-28.586	883.5	970.9				
			176-52-27.399	525.3	625.1				
Careful 1954	Field Computations	NA 1927	51-49-12.118	374.5	1479.9				
			176-51-44.322	848.9	300.3				
Kay 1954	"	"	51-49-10.107	312.4	1542.0		Topo		
			176-50-11.495	220.2	929.0				
Bag	"	"	51-48-31.807	983.0	871.3		Hydro		
			176-50-52.646	1008.6	140.9				
Tuna 1954	"	"	51-47-42.337	1308.5	545.9		Topo		
			176-55-20.254	388.2	761.7				

COMPILATION REPORT T-11324

31. DELINEATION:

Graphic methods were used to delineate the shoreline, foreshore, and offshore features, and all photo hydros shown on the manuscript. The work sheet method of detailing shoreline and foreshore features was used throughout. The area covered by the 1:10,000 manuscript T-11564, which extends westward to 176°53'00" longitude, was compiled by similar office procedures using ratio prints from the "W" camera. It was reduced photographically to scale, and was applied directly to the 1:20,000 manuscript. Scale was not considered bad, but some projector work was necessary. The bulk of the detailing was merely adjusted in by graphic procedures where scale permitted.

Those features shown in red were delineated from 1/10000 planetable survey EX-A-54 and no conflicts are apparent.

The contours, drainage and planimetry were compiled on the Reading Nine Lens plotters using rectified metal mounted photos. Slight discrepancies between the instrument and shoreline compilation were resolved when the topographic detail was inked on the shoreline manuscript.

32. CONTROL:

The horizontal control identified for use in controlling the plot is adequate, and is the subject of a photogrammetric plot report filed with T-11324. All stations were held within a satisfactory tolerance.

The stereoscopic models were oriented from sea level points only. The elevations of all available vertical field control were verified on the instrument.

33. SUPPLEMENTAL DATA:

EX-A-54	1:10,000	unregistered planetable survey.
T-11564	1:10,000	Single lens "W" camera photos (1954).

The application of T-11564 is described in Item 31.

34. CONTOURS AND DRAINAGE:

No comment.

35. SHORELINE AND ALONGSHORE DETAILS:

Field inspection data was furnished for the entire manuscript, and was most concerned with alongshore and foreshore details. The MHWL was not inspected in a manner desired for rough coastline such as is here represented, and therefore is largely the result of office interpretation. The field inspection report apparently accepts the interpretation as was shown on preliminary work (Item 7a).

No low water line was field inspected by the field party.

The delineation of Whirlpool Rock is shown as an approximate location and is to be located by the hydrographic survey.

36. OFFSHORE DETAILS:

The rock awash NE of hydro station OAK, and the rock awash NW of hydro station BID cannot be seen on the 9 lens photographs. They were transferred from the "preliminary" compilation T-11324 where the field party had indicated them in red. They were detailed by holding common shoreline detail in the immediate area and are of doubtful accuracy in position.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

Form 524 is submitted for TUNA, 1954 as located by field methods. It was used to control the plot.

Thirty-three photo-hydro stations were identified by field inspection. They were added to the photographs and templets and laid back into the plot for location. See 49. for a list of photo-hydro stations located.

39. JUNCTIONS:

Junctions with T-11329 to the south and with T-11325 to the east are in agreement. Water areas are to the west and north.

40. HORIZONTAL AND VERTICAL ACCURACY:

The horizontal accuracy is adequate as evidenced by a rigid radial plot and no deficiencies exist. See radial plot report attached to this report.

41 thru 45. Inapplicable.

46. COMPARISON WITH EXISTING MAPS:

This manuscript supersedes all previous work in the area to include a "preliminary" manuscript which was compiled from positype photographs which were controlled from office identified triangulation and office interpreted.

47. COMPARISON WITH NAUTICAL CHARTS:

9120	1:12,000	52 - 9/29
9121	1:20,000	52 - 8/25
9193	1:120,000	53 - 7/20

48. GEOGRAPHIC NAMES LIST:

See separate page attached.

49. NOTES FOR THE HYDROGRAPHER:

See separate page attached.

Respectfully submitted:

Louis Levin

Louis Levin
Supervisory Cartographer

Approved, by:

Charles Theurer

Charles Theurer
Chief, Compilation Section

29 July 1958

49. NOTES FOR THE HYDROGRAPHER - T-11324:

The following photo-hydro stations were located by the 1/10,000 scale radial plot on T-11564 and were transferred to T-11324:

ASH	IRK	BID	SIT
NOY	TED	EAR	FEG
MIN	GAG	FAN	ROB
LOT	HAY	DUM	
JOY	OAK	CUP	

In addition to the above stations, the following were located by the 1:20,000 plot:

CAN	QAR	ELF
SAY	NOD	DOE
RAG	MAR	COB
QUO	LAP	BEG
PEN	KEN	ACE

All stations were located with three or more radial lines, and reasonable care was used in the transfer from field to office photographs.

Topographic station TUNA, 1954 was located by field methods, and Form 524 is in the Photogrammetry files.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11324

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

CONTROL STATIONS

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

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. _____

Reviewer

Supervisor, Review Section or Unit

41. Remarks (see attached sheet) ***The radial plot, shoreline and foreshore features, and photo-hydros were done in Graphic Compilation Unit (W.O.)**

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.

*J. Battley and M. Webber

Compiler

R. J. French

Supervisor

43. Remarks:

Review Report
Topographic Map T-11324
14 March 1956

62. Comparison with Registered Topographic Surveys:

T-4142 rec. 1:20000 1925

This survey is to be superseded by T-11324 for nautical charting purposes for common areas.

63. Comparison with Maps of Other Agencies:

Adak Island (No. 3 of 10) (AMS), 1:25000, 1943

There are differences in alongshore features. Also, there is a difference in datum of several hundred meters. Elevations agree closely.

64. Comparison with Contemporary Hydrographic Surveys:

Blue prints for 1954 surveys: 51871, 51872, 51873, 51926

All discrepancies were reconciled.

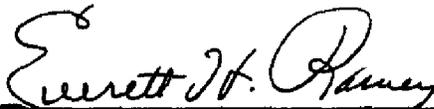
65. Comparison with Nautical Charts:

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

Differences in alongshore features exist.

66. Adequacy of Results and Future Surveys:

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



Everett H. Ramey

APPROVED:

L. C. Landy

Chief, Review and Drafting Section
Photogrammetry Division

Max Blakette

Chief, Nautical Chart Branch
Charts Division

W. J. Swanson

Chief, Photogrammetry Division

J. R. Smith

Chief, Coastal Surveys Division

29 July 1958

(initials)

GEOGRAPHIC NAMES

Survey No. T-11324

Adak Island

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A	B	C	D	E	F	G	H	K
Bay of Islands									1
Green Island									2
Plum Island Rks.									3
Ringgold Island									4
Fisherman Cove									5
Ringgold Sound									6
The Race									7
Sachem Head									8
Careful Pt.									9
Whirlpool Rock									10
Eddy Island									11
Argonne Pt.									12
North Arm									13
Middle Arm									14
Central Pt.									15
The Three Sisters									16
Three Arm Bay									17
Adak Strait									18
Andreanof Islands									19
Adak									20
Alaska									21
									22
									23
									24
									25
									26
									27

History of Hydrographic Information for T-11324

Hydrography was added to the map manuscript in accordance with Army Map Service Technical Instruction 48 dated 5 May 1950.

Depths are in fathoms at mean lower low water and originate from the following sources:

Blueprints 51871, 51872, 51873, 51926 and 51930
(boat sheets for 1954 surveys);

Hydrographic Surveys H-6881 and H-6882, 1:40000, 1933; and

Nautical Charts 9121, corrected to 52-8/25, and
9193, corrected to 54-7/5.

Hydrography was compiled by Lena T. Stevens on 17 February 1956 and verified by O. Svendsen on 5 March 1956.


Lena T. Stevens