5269

CONFIDENTIAL

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Air-photo Compilation
~~Topographic~~
~~Hydrographic~~ } Sheet No. T-5269

State ~~Alaska~~ Aleutian Is.

LOCALITY

North side Unalaska Island -- Skan Bay and Vicinity

Photographs ~~1936~~ taken in 1935

CHIEF OF PARTY

A.M.Sobieralski

U. S. GOVERNMENT PRINTING OFFICE

5269

DECLASSIFICATION BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3 (a), EXECUTIVE ORDER 12356

Inspected after review - No Cor. - JTW - 12/30/41

Applied to Chart 9023 Nov. 17 1938 (prior to review) Chas. R Bush Jr.
Applied to chart 9022 Dec. 22, 1938 " " " H. MacLaren
" " " 8802 Nov. 1940 F. M. A.

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

AIR-PHOTO COMPILATION [redacted] TITLE SHEET

REG. NO. T-5269

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. T-5269 T5269

REGISTER NO.

State ~~Alaska~~ Aleutian Is.

General locality North side Unalaska Island

Locality Skan Bay and vicinity

Scale 1:30,000 Date of survey July- August, 1936

Vessel U.S.C.& G.S.S.SURVEYOR

Chief of party A.M.Sobieralski

Surveyed by M.H.Reese

Inked by C.J.Wagner - J.C.Ellerbe - J.C.Tison

Heights in feet above MHW to ground ~~to tops of trees~~

~~Contour, Approximate contour~~, Form line interval 100 feet

Instructions dated April 13, 1934

Remarks:

ORO

DESCRIPTIVE REPORT

TO ACCOMPANY

AIR-PHOTO COMPILATION SHEET
Field No.1
T 5269
U.S.C.& G.S.S.SURVEYOR

A. M. SOBIERALSKI, Cmdg.

Project H.T. 176 1936

GENERAL INFORMATION

No general report affecting air-photo sheets is available.

The area covered by this sheet is characterized by high ridges interspersed by long deep valleys. The outer ends of the ridges rise precipitously from the water's edge, in some cases forming almost sheer bluffs. Generally the valleys between these ridges have one or more streams flowing their entire length and draining the melting snow from the higher ridges.

Practically all the land area, with the exception of a few rocky bluffs and the higher mountain peaks, is grass and tundra covered.

For additional information see Descriptive Report on Topographic Sheet Field No. ~~UA-36.~~ T654 (Graphic Control Survey)

Aerial photographs Nos. 1585 to 1600 and Nos. 1859 to 1870, inclusive, were used in the compilation of this sheet. These strips were flown by the Navy Department, and no data is available as to the times, ~~dates~~, etc. of the flights. ph

This sheet joins, on the north, Topographic Sheet Field No. A, DISCOVERER, 1935, and, on the south, Aerial-Photo Sheet Field No. 2, 1936.

CONTROL

Sources --

Triangulation by H.B.Campbell in 1935; triangulation by A.M.Sobieralski in 1936; Aluminum Control Sheets Nos. UA-36 and UB-36, Str. SURVEYOR, 1936.

Elevations --

In plotting the form lines, elevations as determined by topography on topo sheets UA-36 and UB-36 were used. A number of these elevations were determined by using the positions as determined from the radial plot and the vertical angle measured by plane-table.

Errors --

No errors in control were found during the plotting. The location and pricking of control points on the photographs, however, was not consistent with the standards of accuracy prescribed and the compiler, in making the radial plot, was forced to choose, for orientation, only those control stations which were accurate beyond question. This naturally reduced the number of control stations available, and in some cases, due to the resultant poor orientation, necessitated replotting of radials from an entire picture. However, it is felt that, by refitting

the pictures concerned on the celluloid sheet several times, a true orientation was obtained.

A second source of error was the fact that parts of some of the photographs were wholly or partly clouded over, or hazy, thus making the control points in these areas indistinct. Such points, where possible, were disregarded entirely in the radial plot.

Photograph No. 1863 was found to be so far out of scale that it was not used.

Discrepancies --

No control stations were established by other organizations.

Field Inspection Notes --

The field inspection was done by Lieut. (jg). M. H. Reese, deceased.No notes, other than a few on several of the pictures, were found among his effects.

COMPILATION

Method --

Standard radial line plot method was used throughout the sheet.

Adjustment of plot --

Due to inaccuracies in the pricking of control and radial points on the photographs, it was found necessary to replot radials from a number of the pictures several times before a satisfactory radial plot was obtained. It is felt, however, that the plot, as finally accepted, is as accurate as possible, and no further adjustments were necessary when the detail was drawn in.

Interpretation --

Only a few field inspection notes in certain small areas were available for reference in plotting the sheet.

Information from other sources --

No information was obtained from sources other than the photographs.

COMPARISON WITH OTHER SURVEYS

All junctions with other surveys were satisfactory.

LANDMARKS

No prominent landmarks appear on this sheet.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation is believed to have a probable error of 10

meters in positions of well defined detail of importance for charting, and of 20 meters for other less important data. Form lines are believed to be within the limits prescribed in the topographic manual.

The work on this sheet is complete.

Respectfully submitted:

John C. Ellerbe

John C. Ellerbe,
Jr. H. & G. Engr.

Forwarded, approved:

A. M. Sobieralski

A. M. Sobieralski,
H. & G. Engr.,
Cmdg. SURVEYOR.

- STATISTICS -

on

SHEET, FIELD NO. 1, REG. NO. 5269

PHOTOS, NO. 1585--1859 TO NO. 1600--1870

DATE OF PHOTOGRAPHS _____ TIME _____

	By	DATE FROM	TO
ROUGH RADIAL PLOT	C. J. Wagner	11-20-36	11-25-36
SCALE FACTOR (1.02)	C. J. Wagner	11-28-36	12-2-36
SCALE FACTOR CHECKED	J. C. Tison	12-2-36	12-4-36
PROJECTION	C. J. Wagner	12-6-36	
PROJECTION CHECKED	J. C. Tison	12-9-36	
CONTROL PLOTTED	C. J. Wagner	12-9-36	
CONTROL CHECKED	J. C. Tison	12-10-36	
TOPOGRAPHY TRANSFERRED	C. J. Wagner	12-11-36	
TOPOGRAPHY CHECKED	J. C. Tison	12-12-36	
SMOOTH RADIAL LINE PLOT	C. J. Wagner-J. C. Ellerbe	12-15-36-	1-10-37
RADIAL LINE PLOT CHECKED	J.C. Ellerbe-J.C. Tison	12-25-36	1-10-37
DETAIL INKED	C.J. Wagner-J.C. Ellerbe	1-10-37	1-14-37
PRELIMINARY REVIEW OF SHEET	A.M. Sobieralski	5-6-37	

AREA OF DETAIL INKED 63.3 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED _____ sq. Statute Miles (Shoals in Water Area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)
40 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)
9 Statute Miles

LENGTH OF STREETS, ROADS, TRAILS, RAILROADS, etc. ___ Statute Miles

GENERAL LOCATION Alaska--Aleutian Islands

DATUM Unalaska--1901 Latitude 53°-38'-09".728 (300.8 m.)

STATION Skan Longitude 167-03-11.251 (206.7 m.)

T- 5269

	Remarks	Decisions
1	At	USCB
2	At 41' lat.	535670
3		"
4	Point in Skan Bay	"
5	At 37' lat.	"
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M 234

GEOGRAPHIC NAMES

Survey No. T-5269

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Unalaska Island										1
Cape Starichkof										2
Skan Bay										3
Skan Pt.										4
Spray Cape										5
										6
										7
										8
	L. Heck		on 12/8/39							9
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M 234 VR

DIVISION OF CHARTS

Section of Field Records

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5269

Graphic Control Surveys

T-6545 (1936) 1:20,000.
T-6546 (1936) 1:20,000.

These surveys were made for the following purposes: Location of hydrographic control, location of control for photo plots, location of elevations for form lines drawn from the photographs, and location of rocks awash and shore line details not clear on the photographs. T-6545 and T-6546 are complete and adequate for the purpose for which they were made. Two elevations in latitude 53° 34' to 35', longitude 167° 03' to 05', have been marked out and appropriately noted on T-6546. From a comparison with the overlapping area on T-6545 and with the form lines on T-5269 these elevations are evidently in error.

All details on T-6545 within the area of T-5269 have been transferred to T-5269 with the exception of hydrographic stations. No magnetic declination is shown on T-6545.

Previous Topographic Surveys

None.

Contemporary Hydrographic Surveys

H-6175 (1936) 1:20,000.

This survey was compared with T-5269 by the hydrographic reviewer.

Comparison with Charts 8802 (38-11/3) 9022 and 9023 (not yet published).

T-5269 was applied to Charts 9022 and 9023 in November and December 1938 prior to this review. No changes have been made in T-5269 since that date, except for redrafting as stated in the following paragraphs of this review.

Only a general comparison was possible between T-5269 and Chart 8802 due to the small scale of 8802.

Junctions.

These have been checked and are satisfactory.

Low Water Line.

The dashed line on T-5269 is the limit of rock ledge

visible on the photographs. The time of the photography and stage of tide are not known and the field inspection has furnished no information as to how nearly this line may approximate actual low water. The line has been carried forward as a dashed line on the hydrographic surveys.

Form Lines.

These are controlled by the elevations shown on the sheet which were determined on the graphic control surveys. Form lines were drawn by viewing the photographs under the stereoscope and sketching on the celluloid in much the same manner as is done on plane table surveys. There is a small gap between form lines on T-5269 and T-6423 in the interior section east of Cape Starichkof. These have been sketched to a junction on Chart 9023 but no additions have been made on T-5270 or T-6423.

Redrafting.

T-5269 will not be published. The original compilation on a celluloid sheet with form lines on a tracing paper overlay, was made at a scale of about 1:30,000. The original compilation was enlarged in the projector to a scale of 1:20,000 and pencilled in this office. Inking of the sheet was done in the Philadelphia office. The drawing has been carefully checked in this office for completeness of detail and accuracy of copy. The original celluloid drawing of this survey will be destroyed as soon as the sheet has been examined and approved.

General.

It would have been preferable had the form lines been drawn directly on the celluloid with black celluloid ink. The inking could have been done on either side of the sheet. The tracing paper overlay on which the form lines for T-5269 were drawn has shrunk more than the celluloid and for this reason some additional work has been necessary in this office, in transferring the form lines.

Photograph flight lines for this sheet and T-5270 were rather widely spaced for form lining. On future air photographic surveys in Alaska it is anticipated that Coast and Geodetic Survey photographs will be available and that flight lines will probably be better spaced. In this case it will be possible to improve the form lines and reduce the amount of plane table work by determining additional elevations from the photographs. Where the photography

is done sufficiently in advance it will probably be practical to locate most of the hydrographic signals by the photographic plots.

Reviewed in office by - H. D. Reed, December 12, 1939.

Inspected by - B. G. Jones, December 12, 1939.

Examined and approved:

T. B. Reed,
Chief, Section of Field Records.

K. T. Adams
Chief, Division of Charts.

Raymond B. Eyman
Chief, Section of Field Work.

Chief, Division of H.&T.