

T-12315

T-12315

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey ... Shoreline (Photogrammetric)

Job No. ... PH-6301 Map No. ... T-12315

Classification No. Final Edition No. ... 1

Field edited map

LOCALITY

State ... Alaska

General Locality ... Kamishak Bay, Cook Inlet

Locality ... Diamond Point

19 62 TO 19 72

REGISTRY IN ARCHIVES

DATE,

DESCRIPTIVE REPORT - DATA RECORD

T-12315

PROJECT NO. (II):

PH-6301

FIELD OFFICE (III):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center, Norfolk, Virginia

OFFICER-IN-CHARGE

J. Bull, Director

INSTRUCTIONS DATED (II) (III):

March 18, 1965 - Office, Part I
Feb. 10, 1966 - Office, Supplement I
May 5, 1967 - Office, Supplement II
Dec. 27, 1967 - Office, Supplement III

METHOD OF COMPILATION (III):

Wild B-8 plotter

MANUSCRIPT SCALE (III):

1:20,000 (Photo reduced from 1:10,000
T-12320 and T-12323)

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

T-12320 & 12323 at 1:5,000 pantographed
to 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

MAY 1976

DATE REGISTERED (IV):

R. CATDR

GEOGRAPHIC DATUM (III):

N.A. 1927

VERTICAL DATUM (III): MHW

~~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~~ mean lower low water

REFERENCE STATION (III):

AID, 1907

LAT.:

59° 37' 43.468" 1499.9M

LONG.:

153° 38' 00.237" 3.7M

☒ ADJUSTED
☐ UNADJUSTED

PLANE COORDINATES (IV):

Y = 2,056,929.49 ft.

X = 567,857.13 ft.

STATE

Alaska

ZONE

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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.

DESCRIPTIVE REPORT - DATA RECORD
T-12315

FIELD INSPECTION BY (II):

None

DATE:

MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):

Office interpretation of photography taken June 1962

PROJECTION AND GRIDS RULED BY (IV):

A. Bethea

DATE:

Oct. 27, 1967

PROJECTION AND GRIDS CHECKED BY (IV):

unknown

DATE:

CONTROL PLOTTED BY (III):

C.H. Bishop

DATE:

Dec. 4, 1968

CONTROL CHECKED BY (III):

R.E. Smith

DATE:

Dec. 4, 1968

RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):

P.J. Dempsey

DATE:

Jan. 22, 1968

STEREOSCOPIC INSTRUMENT COMPILATION (III):

PLANIMETRY

DATE:

CONTOURS

Inapplicable

DATE:

MANUSCRIPT DELINEATED BY (III):

C.H. Bishop

Traced from reduction of T-12320 and T-12323

DATE:

Dec. 4, 1968

SCRIBING BY (III):

DATE:

PHOTOGRAMMETRIC OFFICE REVIEW BY (III):

DATE:

REMARKS:

Field edit applied from reduction of edited sheets T-12320 & T-12323

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FORM C&GS-181c
(3-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD
T-12315

CAMERA (KIND OR SOURCE) (III):

Wild RC-8 "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
62W6290-6294	6/18/62	1212	1:15,000	2.6' above MLLW
62W6298-6301	6/18/62	1217	1:15,000	3.5' above MLLW
62W7321-7324	6/29/62	1539	1:30,000	6.0' above MLLW
62W7334-7337	6/29/62	1549	1:30,000	5.5' above MLLW

Predicted TIDE (III)

diurnal

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Seldovia, Kachemak Bay, Alaska		15.4	17.8
SUBORDINATE STATION: Iliamna Bay, Alaska		12.3	14.5
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): J.B. Phillips

DATE: February 1976

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 1

RECOVERED:

IDENTIFIED:

1

1

NUMBER OF BM(S) SEARCHED FOR (II):

RECOVERED:

IDENTIFIED

none

none

none

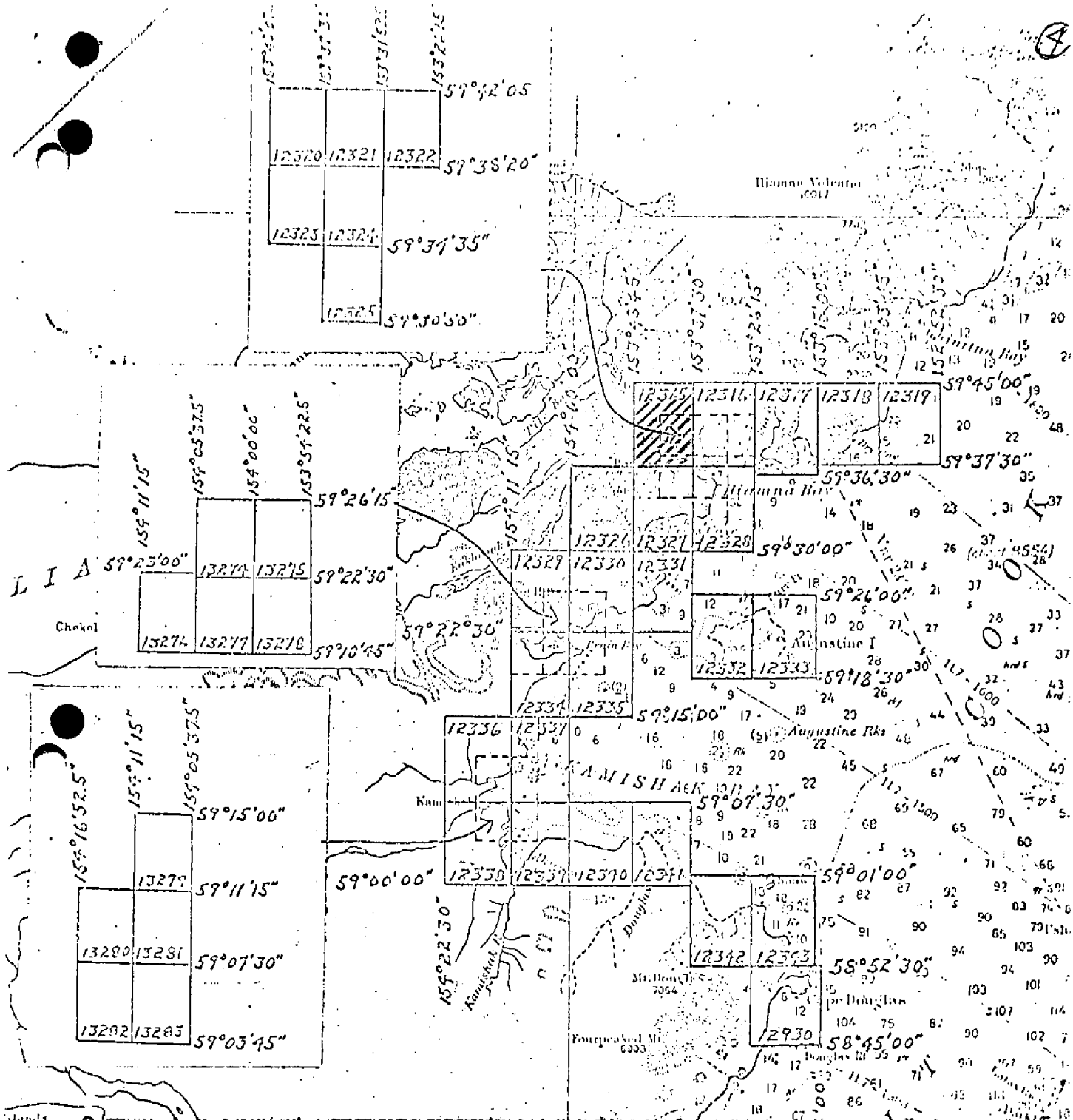
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

none

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

none

REMARKS:



JOB PH-6301 (PART-1)

COOK INLET, ALASKA

SHORELINE MAPPING

Scale 1:10,000 & 1:20,000

Revised 4-3-68 LFK

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SUMMARY

T-12315 is one of 40 shoreline maps comprising Job PH-6301 (Part I) compiled for use in contemporary hydrographic survey and nautical charting operations.

Field work, prior to compilation, consisted of the recovery and identification of horizontal control.

Compilation was by Wild B-8 stereoplotter, using 1:30,000 scale color photography. Cronaflex positives and ozalids of the manuscript were forwarded for the use of the field editor and the preparation of the hydrographer's boat sheets. Accompanying these were specially prepared ratio photographs to aid in the location of hydrographic signals.

Final edit was accomplished during *June, August 1972*.

Final review was accomplished at the Rockville Office in *March 1976*.

A cronaflex positive copy of the map and a Descriptive Report will be registered in the NOS Archives.

T-12315

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro traced from reduction of 1:10,000 sheets T-12320 & 12323	12/4/68	
Field edit applied from T-12320 & 12323	4/74	
Compilation Complete	4/74	

FIELD INSPECTION

~~T~~-12315

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the aerotriangulation of the project.

(8)

PHOTOGRAMMETRIC PLOT REPORT
Job PH-6301
Kamishak Bay, Alaska

January 22, 1968

21. Area Covered

This report covers the northern part of Kamishak Bay, Alaska, consisting of thirteen (13) 1:20,000 scale map manuscripts -- T-12315 thru T-12319, T-12326 thru T-12331, T-12334 and T-12335, and six (6) 1:10,000 scale map manuscripts -- T-12320 thru T-12325.

22. Method

Analytic aerotriangulation methods were used to bridge strips 1, 2 and 3 at 1:60,000 scale using premarked and field identified control. Numerous tie points were located to control strips 41, 42 and 43, which were bridged by stereoplanigraph.

The attached sketch of strips bridged shows the placement of triangulation used in the final strip adjustments. Closures to control are shown on the IBM readouts along with all the bridge points.

23. Adequacy of Control

Horizontal control was adequate for bridging strips 1, 2 and 3. Strips 41, 42 and 43 were bridged using tie points and are adequate. The premarked paneling at Station OIL, 1913 was removed prior to photography and could not be identified. Station TENDER, 1967 fell off of model and was not used. SKIN, 1967, Subpoint A and Subpoint B, were too poor to read and were not used in the adjustment.

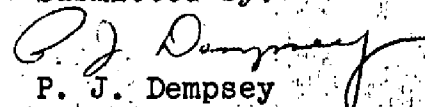
24. Supplemental Data

Vertical control needed for the adjustment was taken from USGS quadrangles.

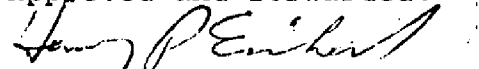
25. Photography

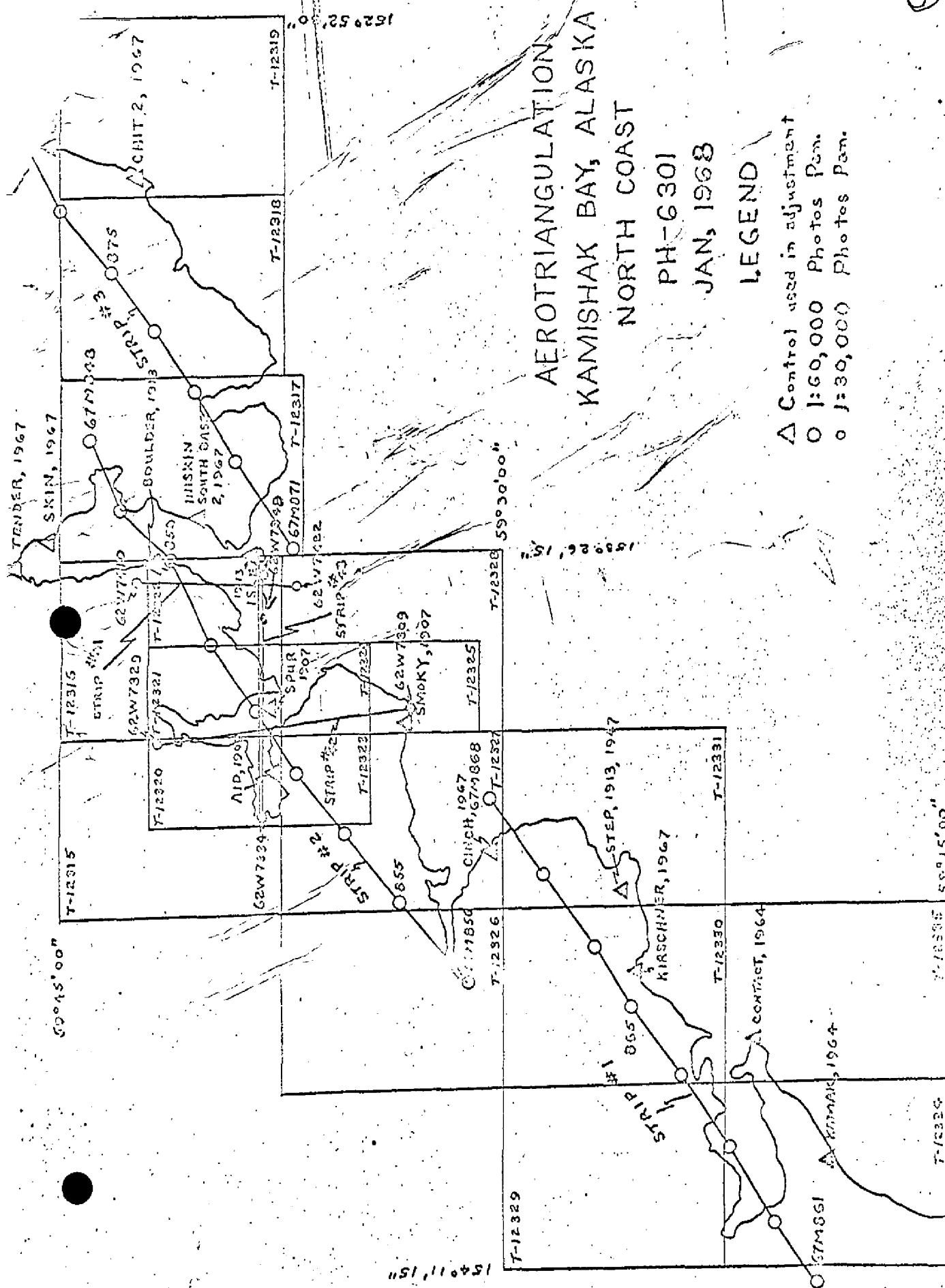
The definition and quality of the RC-9 and RC-8 photography were good. Ratio prints have been ordered to compilation scale.

Submitted by:


P. J. Dempsey

Approved and forwarded:


H. P. Eichert, Chief
Aerotriangulation Section



AEROTRIANGULATION
KAMISHAK BAY, ALASKA
NORTH COAST

PH-6301

JAN, 1963

0257

Δ Control used in adjustment

O 1:60,000 Photos Penn.

01=30,000 Photos Pan.

Compilation Report
Job PH-6301
Map Manuscript T-12315

31. Delineation

The delineation of this sheet was transferred from the 1:10,000 scale sheets from a photo reduction of T-12320 & T-12323.

32. *Control- (see next page)*

CONTROL 32.

Refer to Photogrammetric Plot Report, dated January 22, 1968.

Difficulty in holding control established by stereoplanigraph bridging of strips 41, 42, and 43 was encountered, initially. They were returned to the Bridging Section and their subsequent re-adjustment resulted in "Revisions" for strips 41 and 43.

Strip 42 had been compiled with little or no difficulty concerning the control. Although strip 41 also was compiled utilizing the original Bridge Strip, the comparison between the original and "Revised" strip #41 indicated a maximum change of approximately 0.3mm which proved to be of an insignificant effect. The compilations of these two strips were summarily considered to be of sufficient accuracy. Both of these strips were oriented in a general north-south direction.

The results of the "Revision" of strip 43 proved to be of a major change, and inasmuch as this strip was oriented in an east-west direction, intersecting both strips 41 and 42, an attempt to tie these together at their common models resulted in an error of tie-in between drilled pass points of strip 43 and shoreline pass points common to all strips.

When model 62W-7343 and 7346, of strip #43 was set, it was found that six of the seven drilled pass points would hold within tolerance, but none of the adjoining shoreline pass points from strips 41 and 42 would hold. When this model was re-scaled to all common shoreline points, the drilled points would not hold.

This same condition existed when model 62W-7334 and 7337 was set. Drilled pass points held within tolerance, but no common shoreline pass points between strip 42 and this model would hold.

It was evident at this time that no model work could be compiled from strip 43.

To further substantiate our decision, all five manuscripts were joined and a modified radial plot consisting of several processed ratio photos of each of strips 41, 42, and 43 was laid.

It was noted during this plot, that the tie points (from the stereoplanigraph bridges), and the field identified triangulation control, would hold well with the common shoreline pass points, but the drilled points would not. (A few of the drilled points at or near sea level were noticeably closer than those at the higher elevations.)

It was concluded therefore that strips 41 and 42 were tied together well and were geographically correct, and that a graphic solution and compilation of the two models in question on strip 43 could be made using the common shoreline pass points.

33. Supplemental Data - None

34. Contours and Drainage

Contours are not applicable. Drainage was delineated from office interpretation of photography.

35. Shoreline and Alongshore Details

The shoreline and alongshore detail was delineated from the bridging compilation photos.

36. Offshore Details

The offshore detail was compiled from the 1:15,000 scale offshore photos which were computed (tide computations were checked during final review and they were found to be in error. See form 181c for correct stage of tide.) to be at a higher tide than the compilation photos, but they showed more offshore detail and were closer to the MLLW line.

37. Landmarks and Aids - None

38. Control for Future Surveys - None

39. Junctions

T-12315 junctions with T-12316 (1:20,000) and T-12321 (1:10,000) to the east and with T-12327 (1:20,000) and T-12321 (1:10,000) in the south. There are no contemporary surveys to the west and north.

40. Horizontal and Vertical Accuracy - Refer to Item 32, Control.

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

A comparison has been made with U.S.G.S. Quadrangle Iliamna (C-2) Alaska, scale 1:63,360, dated 1958.

47. Comparison with Nautical Charts

A comparison has been made with USC&GS chart 8554, 9th edition, (Cook Inlet Southern Part), scale 1:200,000, dated May 10, 1965 and with USC&GS Chart 8665, Iliamna Bay, Alaska, 4th edition, dated Jan. 13, 1964, scale 1:20,000.

Items to be Applied to Nautical Charts Immediately: None

Items to be Carried Forward: None

Submitted by,

Lowell O. Neterer, Jr.
Carto Tech
March 1969

Approved,

Howard S. Cole
Director, AMC

PHOTOGRAMMETRIC OFFICE REVIEW

~~T-10363~~

T-12315

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)		7. PHOTO HYDRO STATIONS
8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES XX
16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
PHYSICAL FEATURES			
20. WATER FEATURES	21. NATURAL GROUND COVER XX		22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES
CULTURAL FEATURES			
27. ROADS	28. BUILDINGS	29. RAILROADS XX	30. OTHER CULTURAL FEATURES
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES	34. JUNCTIONS		35. LEGIBILITY OF THE MANUSCRIPT
36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS
40. REVIEWER		SUPERVISOR, REVIEW SECTION OR UNIT A.C. Rauck, Jr.	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER J.R. Minton 4/22/74		SUPERVISOR A.C. Rauck	
43. REMARKS			

Review Report T-12315
Shoreline Survey
March 1976

This 1:20,000 scale manuscript is covered in its entirety by the combined 1:10,000 scale manuscripts, T-12320 and T-12323. Refer to the Descriptive Report for each of these sheets for detailed comments pertinent to the compilation and photogrammetric review of this area.

Submitted by,

J.B. Phillips

J. B. Phillips

Approved: *S.B. Blankinbush*

for A.K. Heywood

Chief, Photogrammetric Branch

[Signature]

Chief, Coastal Mapping Division

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6301 (Cook Inlet, Alaska)

T-12315

Chigmit Mountains
Chinkelyes Creek
Cottonwood Bay
Diamond Point
Dutton
Iliamna Bay
Summit Lakes
Williams Creek
Williamsport

Approved By:

A. Joseph Wraight

A. Joseph Wraight
Chief, Geographer

Prepared By:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12315PROJECT NO. PH-6301

SCALE OF MAP 1:20,000

SCALE FACTOR None[illegible]

COMPUTED BY
A.C. Rauck, Jr.

DATE
March 12, 1968

CHECKED BY

DATE _____

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