9362 9363
9364

9363
9364
9362

Diag. Cht. No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

*Type of Survey* Planimetric

*Field No.* Ph-42 (49) *Office No.* T-9362 thru T-9364

## LOCALITY

*State* Alaska

*General locality* Chukchi Sea

*Locality* Icy Cape to Kuk River

194 9

CHIEF OF PARTY

Hübert A. Paton — Hubert A. Paton

R. A. Earle — Balto. Photo. Office

~~Chiefs of Field Parties~~

LIBRARY & ARCHIVES

DATE May 7, 1956

B-1870-1 (1)

# DATA RECORD

9362
T - 9363
9364

Project No. (II): Ph 42 (49) Quadrangle Name (IV):

Field Office (II): Barrow, Alaska Chief of Party: Hubert A. Paton
R. A. Earle

Photogrammetric Office (III): Baltimore, Maryland Officer-in-Charge: Hubert A. Paton

Instructions dated (II) (III): Field: 4 February 1948
15 February 1949
Office: 16 January 1950

Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:40,000 Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1,000

Date received in Washington Office (IV): OCT 29 1952 Date reported to Nautical Chart Branch (IV): NOV 3 1952

Applied to Chart No. Date: Date registered (IV): 3/14/56

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): Barrow, 1945
Correction figures to PRELIM. NA 1927 available May, 1953

Vertical Datum (III): MHW (Approx)

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

The difference between Point Barrow, 1945 Datum and preliminary N.A. 1927 Datum is Lat. plus/~~minus~~ 40 m. and Long. ~~plus~~/minus 155 m. *

Reference Station (III): SHELTER N.E. BASE, 1948
Omitted in compliance with project instructions.

Lat.: Long.: Adjusted ~~Corrected~~
Unadjusted

Plane Coordinates (IV): State: Zone:

Y= X=

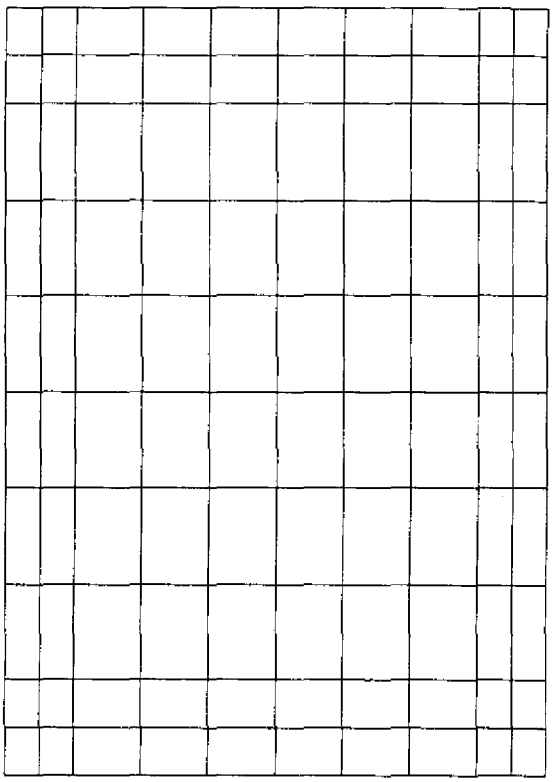
*The difference between Preliminary NA 27 Datum and the NA 27 Datum (adjusted) positions are within plotting tolerance. Therefore, the compilation can be used without applying any additional Datum correction. k.c.h.

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)

(Planimetric)

# DATA RECORD

Field Inspection by (II): Date: Control, 1948

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): 7-23-49

Photogrammetric

Projection and Grids ruled by (IV): T. L. Janson Date: 1-31-50

Projection and Grids checked by (IV): H. R. Cravat Date: 1-31-50

Control plotted by (III): L. A. Senasack Date: 2-2-50

Control checked by (III): M. F. Kirk Date: 2-2-50

Radial Plot or ~~Stereoscopic~~ Control ~~extension by~~ (III): F. J. Tarcza Date: 2-14-50
J. Steinberg 8-24-51

Planimetry Date:

Stereoscopic Instrument compilation (III):

Contours Date:

Manuscript delineated by (III): J. Y. Council, D. A. Maskell Date: 5-9-51
B. Kurs, R. Hartley, J. Honick, L. A. Senasack, 7-10-52
E. L. Williams, C. M. Kable 7-28-52

Photogrammetric Office Review by (III): E. L. Williams Date: 10-15-52

Elevations on Manuscript checked by (II) (III): Date:



M-2618-12(4)

Camera (kind or source) (III): U.S. Navy, single lens, focal length 6"

check data

PHOTOGRAPHS (III)

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| KAS - 1 - 001 thru 026 | 7-23-49 | unknown | 1:40,000 | approx 0.7' below MLLW |
| KAS - 2 - 001 " 009 | " | " | " | " |
| KAS - 2 - 057 " 066 | " | " | " | " |
| KAS - 3 - 037 " 040 | " | " | " | " |
| KAS - 4 - 064 " 082 | 7-26-49 | " | " | approx 0.9' below MLLW |
| BAR - 163 - 175 thru 183 | 7-1-49 | " | 1:20,000 | unknown |
| 163 - 222 " 232 | " | " | " | " |
| 164 - 037 " 041 | " | " | " | " |
| 165 - 011 " 020 | " | " | " | " |
| 168 - 141 " 150 | " | " | " | " |
| 168 - 164 " 179 | " | " | " | " |
| 168 - 189 " 202 | "n | " | " | " |
| 169 - 010 " 024 | " | " | " | " |
| 169 - 043 " 049 | " | " | " | " |

* continued at bottom of page

Tide (III)

From actual tide observations at

Reference Station: Point Lay Camp, Kasegaluk Lagoon, Alaska

Subordinate Station:

Subordinate Station:

| Ratio of Ranges | Mean Range | Spring Range |
|---|---|---|
| | 0.5' | |
| | | |
| | | |

Washington Office Review by (IV): Lena T. Stevens Date: 14 June, 1955

Final Drafting by (IV): FRANCIS JOHNSON 4962 Date: 6 JUNE 1955
J.H. FRAZIER - 9365
J.W. FRAZIER - 9364
14-JUNE-1955
24-JUNE-1955

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 303 sq. mi.

Shoreline (More than 200 meters to opposite shore) (III): 210 st. mi.

Shoreline (Less than 200 meters to opposite shore) (III): 20 st. mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): None Recovered: Identified: 21 **

Number of BMs searched for (II): Recovered: Identified:

Number of Recoverable Photo Stations established (III): None

Number of Temporary Photo Hydro Stations established (III): None (see item 38 )

Remarks: ** of the stations established in 1948 and 1949, 21 were identified.
For the supplementary plot (diagram attached) 2 more stations were identified in the office

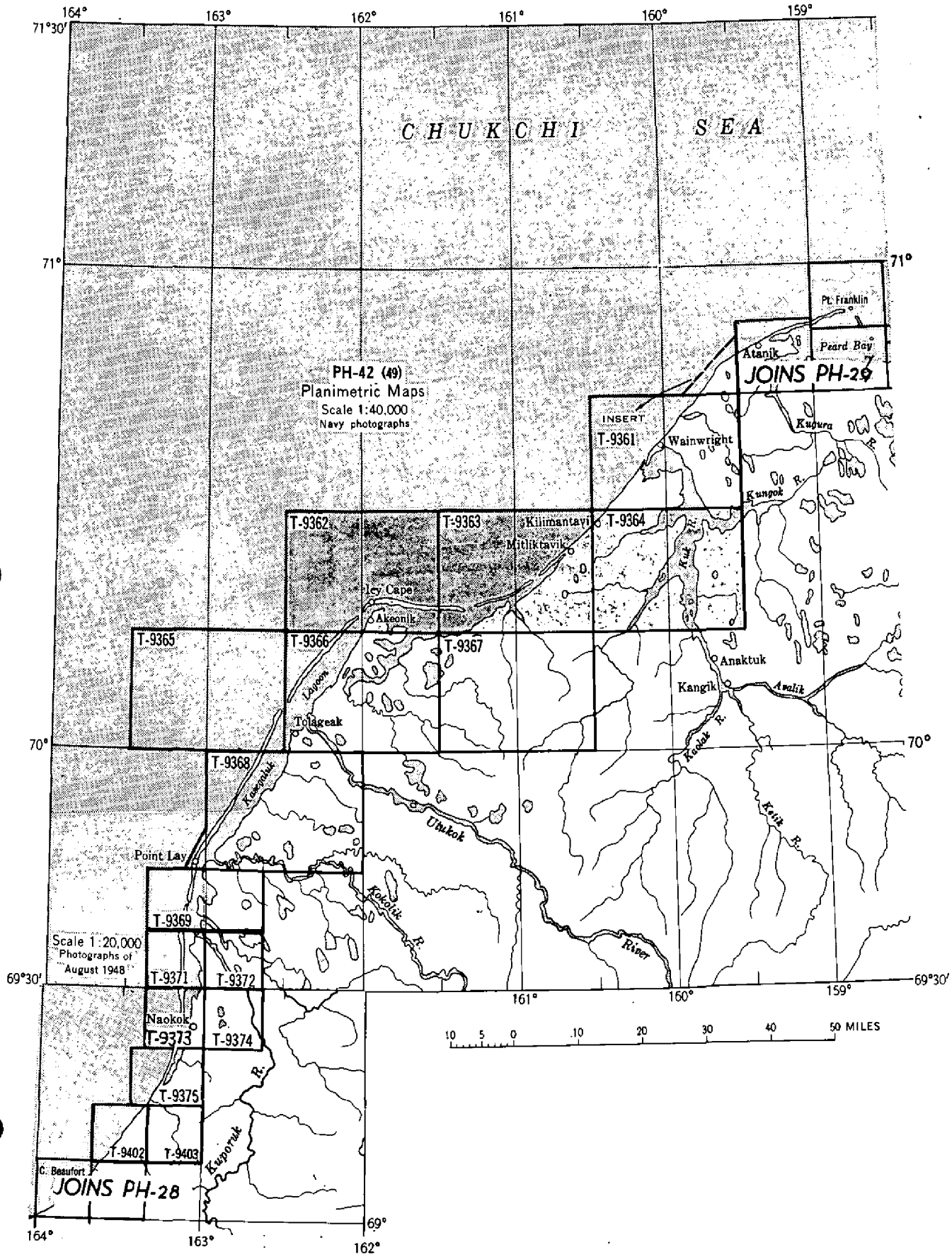
| | | | | | |
|---|---|---|---|---|---|
| * 319 - 136 Thru 148 | 7-11-49 | unknown | 1:20,000 | unknown |
| 320 - 023 " 030 | " | " | " | " |
| 334 - 060 " 067 | 7-16-49 | " | " | " |
| 335 - 016 " 027 | " | " | " | " |



M-2618-12(4)

# PLANIMETRIC MAPPING PROJECT PH-42

## ALASKA, Chukchi Sea, C. Beaufort to Atanic



Summary to Accompany
Planimetric Maps T-9362-3-4

Ph-42(49) is that part of continuing project CS-320 (which includes the whole Arctic Coast of Alaska) extending from 69°07½' to 70°49½', i.e., from the north limit of Ph-28(47) to the south limit of Ph-27(47).

Ph-42(49) has 17 maps, T-9361-69; T-9371 to 75; and T-9402 and T-9403. T-9362-3-4 includes the area Icy Cape to Kuk River.

Field work consisted solely of control station establishment in 1948. The area was photographed by the Navy in July 1949. Prior to laying the radial plot, the 1948 control was pricked in the 1949 vertical photographs by the aid of oblique pictures of the control station. These obliques were taken by the Navy at 3,000 feet and at 1,000 feet in July and August 1949. Other obliques at 1,000 feet were taken with a K-20 by our field party in August 1949.

After all the maps in the project have been reviewed, reproduced, and registered, a Completion Report will be written and filed in the Bureau Library under the project number. This report will include a brief text describing the project; any important correspondence; copies of the various instructions and special reports; statistical data; and a list of data not bound with the Completion Report, but filed elsewhere.

R. Pl. Rpt — T-9361



SUPPLEMENTAL

PHOTOGRAMMETRIC PLOT REPORT

PROJECT PH-42(49)

SURVEYS T-9362 ~~and~~ thru T-9364

27. SUPPLEMENTAL RADIAL PLOT

In order to delineate additional interior area not covered by the 1:40,000 radial plot this supplemental radial plot was run from single lens, 9" x 9" contact prints, scale 1:20,000, taken by the U.S.Navy with cameras using a focal length of 6". One hundred thirty-four photographs were used, their numbers are as follows:

| | |
|---|---|
| 8 | BAR-169-010 thru 024 |
| 5 | BAR-168-141 thru 150 |
| 11 | BAR-320-023 thru 026 030 |
| 6 | BAR-168-164 thru 179 |
| 7 | BAR-168-189 thru 202 |
| 9 | BAR-169-043 thru 049 |
| 1 | BAR-163-175 thru 183 |
| 2 | BAR-163-222 thru 232 |
| 03 | BAR-165-011 thru 020 |
| 12 | BAR-334-060 thru 067 |
| 3 | BAR-164-037 thru 041 |
| 10 | BAR-319-136 thru 148 |
| 13 | BAR-335-016 thru 027 |

A sketch showing the layout of control stations and photograph centers is attached to this report.

All control stations and pass points pricked on the 1:40,000 scale photographs used in the original plot were transferred to the 1:20,000 photographs. Additional pass points to extend the plot wer also pricked on the 1:20,000 photographs. Conjugate centers were carefully transferred because they were to be used almost entirely for azimuth in extending the plot.

Pricking cards for several control stations in the area covered by the 1:20,000 photographs were furnished by the field party, but were not identified on any photographs. An attempt was made by this office to identify these stations but only succeeded in identifying stations LACE, 1948 and TAVIK, 1948 with any degree of accuracy.

Templets, scale 1:40,000, were made of the 1:20,000 scale photographs by drawing rays midway between centers and image points.

Pass points established during the original plot on adjoining surveys

and common to Surveys T-9362 thru T-9364 were transferred thereto.

The plot was laid directly on the manuscripts and to aid in seeing the control through several thicknesses of templets, a light table was utilized for the plot table.

A preliminary plot was run from identified control with the intention of spotting the approximate position of stations for which only pricking cards were available. The position of these intersections for the stations were marked on the photographs and a stereoscopic study made of them but nothing which could accurately be interpreted as stations was found.

The plot was then laid starting with the most northerly flight, holding to established control and extending the plot easterly. Each succeeding flight was tacked on and extended easterly as far as was considered to be within the limits of accuracy. It was necessary to relay several flights before a satisfactory plot was accomplished.

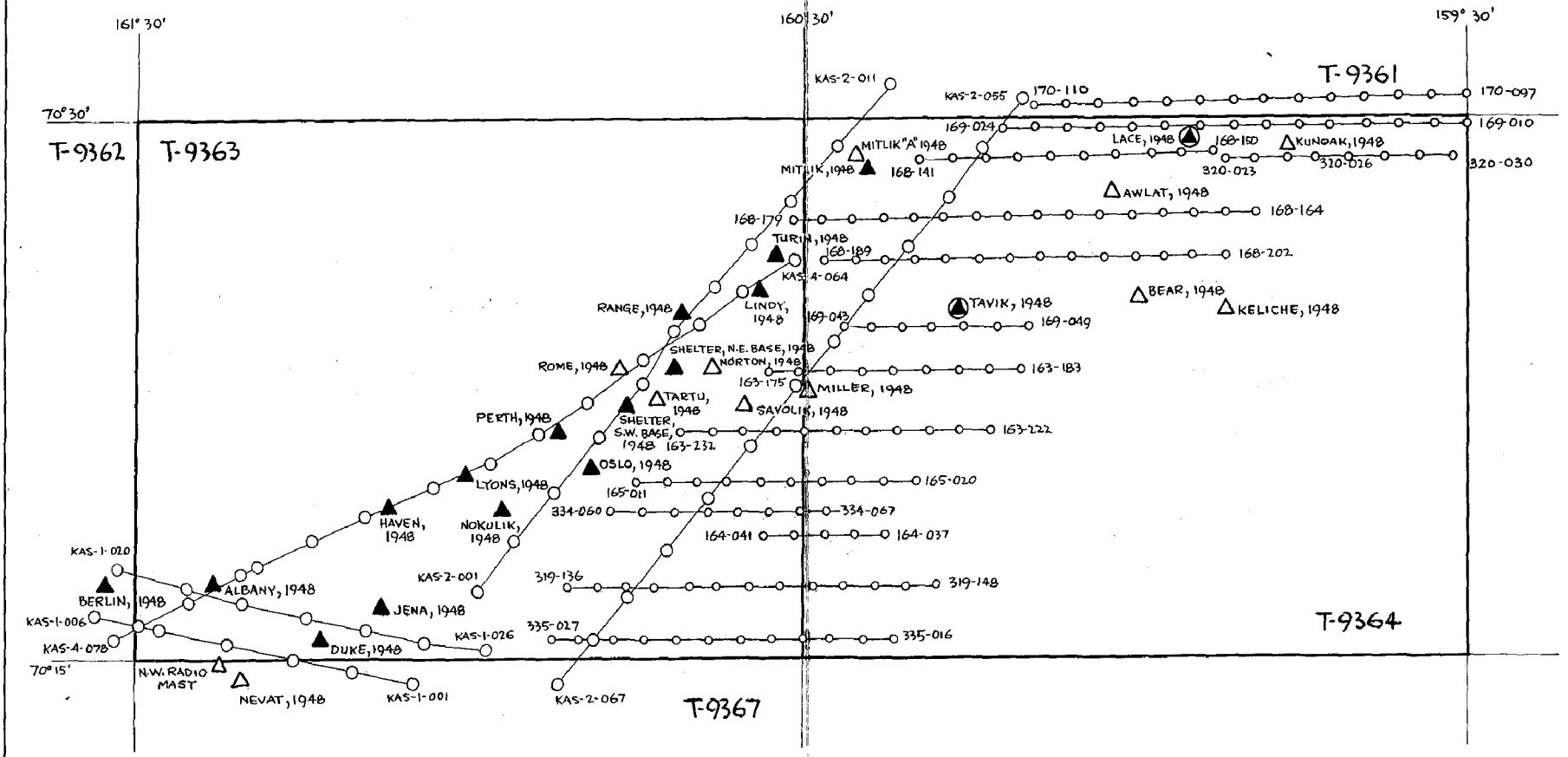
The completed assembly was carefully turned over on the light table and the positions of all photograph centers and pass points, that were located, were circled on the back of the manuscripts.

The coverage of the photographs was adequate. Low altitude oblique photographs of those stations not identified would have been helpful for office identification, since the targets around the stations are readily visible on the photographs.

Respectfully submitted

Joseph Steinberg

Joseph Steinberg
Photogrammetric Engineer




○ Office Photographs - 1: 40,000, contact (Navy)
o Office Photographs - 1: 20,000, contact (Navy)
▲ Triangulation stations - identified and held
◉ Triangulation stations - identified in office
△ Triangulation stations - not identified

# LAYOUT SKETCH
## SUPPLEMENTAL PHOTOGRAMMETRIC PLOT
## PROJECT Ph-42 (49)
## SURVEYS T-9363 & T-9364

COMPILATION REPORT

T-9362, T-9363, T-9364

FIELD REPORT

Refer to the following reports submitted by Karl B. Jeffers:

(1) Report on Airphoto Notes, Arctic Coast of Alaska, Point Belcher to Icy Cape, 1948.
(2) Airphoto Control Identification, Artic Coast of Alaska, Kasegaluk lagoon, 1949.

PHOTOGRAMMETRIC PLOT REPORT

Refer to the photogrammetric plot report for surveys T-9361 to T-9369 inclusive, which is part of the descriptive report for survey T-9361.
A supplemental photogrammetric plot report for the area of surveys T-9363 and T-9364 is part of this report.

31. DELINEATION

These manuscripts were delineated by graphic methods. There was no field inspection except in the immediate vicinity of the control stations.
The larger scale photographs were used in the vertical projector for application to the manuscripts.
Refer to item 31 of the report for Survey No T-9361 for a discussion of the delineation of the tundra areas.

32. CONTROL

Refer to the photogrammetric plot reports.

The southeast half of T-9364 was not delineated because of inadequate control.

33. SUPPLEMENTAL DATA

The following were available for general information and for geographic names:

(1) U.S.G.S. Reconnaissance Map of Northwestern Alaska, scale 1:500,000, dated 1930, reprinted 1939.
(2) U.S.C. & G.S. Chart No 9400, scale 1:1,587,870, published 1-16-50 and corrected to 2-13-50.
(3) World Aeronautical Charts, Point Hope Alaska (64), scale 1:1,000,000, third edition 12-8-48.

Large scale, low oblique, K-20 photographs of nine control

stations were used to aid in photograph interpretation.

In addition U.S. Navy 9"by 9" oblique photos at large scale were available as follows:

| | | |
|---|---|---|
| BAR - OV - 4 - 70 to 84, 86 | dated | 27 July 1949 |
| 9 - 29 to 35 | dated | 13 August 1949 |
| 9 - 37 to 42 | " | " |
| 9 - 44 to 47 | " | " |

Refer also to last paragraph of item 33, Compilation Report for Survey No. T-9361.

34. CONTOURS AND DRAINAGE

Contours - not applicable.
Drainage - Refer to item 34 of the report for Survey No T-9361.

35. SHORELINE AND ALONG SHORE DETAILS

No shoreline inspection was furnished, the delineation of the MHW, MLLW and shallow lines was based on office interpretation of the photographs.

36. OFFSHORE DETAILS

Breakers are visible at Blossom Shoals (T-9362) but the limits cannot be delineated from the photographs.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

Three hydrographic signals (see page 6 of Geographic Positions Accession No G8294) were established in the vicinity of Icy Cape by fourth order triangulation methods in 1949. They are listed in item 49.

Only one was described and marked by the field party. A form 524 was submitted for DAN, 1949.

Refer also to the hydrographic surveys for additional hydrographic signals established in connection with those surveys.

39. JUNCTIONS

Junction with survey T-9361 to the north of T-9364 has been made and is in agreement.

Junction with Surveys T-9366 and T-9367 to the south of T-9362 and T-9363 has been made and is in agreement.

40. HORIZONTAL AND VERTICAL ACCURACY

The horizontal accuracy of the southeast part of survey T-9364 is considered weak because the photogrammetric plot was extended a large distance beyond identified control stations.

41. HYDROGRAPHIC SURVEYS

Copies of the following hydrographic surveys were available for general comparison and geographic names:

H - 7660 (1948) scale 1:20,000
H - 7661 (1948) scale 1:20,000
H - 7662 (1948) " "
H - 7664 (1948) scale 1:40,000
H - 7665 (1948) " "

42. - 45.
Inapplicable

46. COMPARISON WITH EXISTING MAPS

These surveys were compared with the following maps:

(1) U.S.G.S. Reconaissance Map of Northwestern Alaska, Map 47 scale 1:500,000, dated 1930, reprint of 1939.

(2) U.S.G.S. Preliminary Map, Naval Petroleum Reserve No 4, scale 1:48,000 dated September, 1948, (sheets E 20 and E 21, E22).

47. COMPARISON WITH CHARTS

These surveys were compared with the following Charts:

(1) U.S.C. & G.S. Nautical Chart No 9400, scale 1:1,587,870 published 1-16-50 corrected to 2-13-50/

(2) U.S.C. & G.S. World Aeronautical Chart, Point Hope (64), scale 1:1,000,000, published 12-8-48.

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Respectfully submitted

Joseph W Vonasek

Joseph W. Vonasek
Carto. (Photo.)

Approved and Forwarded

Hubert A. Paton

Hubert A Paton
Comdr. U.S.C. & G.S.
Officer in Charge

48. GEOGRAPHIC NAMES

Akeonik (Abandoned)
Akoliakatat Pass 9363
Alatakrok River 9364
62 Blossom Shoals 9362
62 Chukchi Sea 9364-2-3
62 Icy Cape 9362
62 Icy Cape Pass *9362
62 Kasegaluk Lagoon 9362/3
Kilamantavi 9364
Kuk River 9364
Kungok River 9364
Mitliktavik 9363
Nokotlek Point 9363
Nokotlek River 9363
Pingorarok Hill 9363
Pingorarok Pass 9363
Nevat Point 9363

Names approved for T-9364 on 6-8-53 L. Heck
Names approved fo T-9362, T-9363 on 6-19-53. L. Heck

* Called Icy Cape Inlet in Coast Pilot Alaska, supplement dated 1-1-51.
(Pass is preferable for this feature)

49. NOTES TO HYDROGRAPHER

The following are the fourth order control stations established in the area of Survey T-9362:

LAM, 1949
DAN, 1949
CABIN, SOUTH CORNER, 1949

NOTES TO REVIEWER

T-9362 , T-9363 , T-9364

According to Comdr. Paton, the name Chukchi Sea is preferable to Arctic Ocean in this area.

He also states that the long sand bars contain no appreciable amount of gravel.

There are two places where the shoreline is not in agreement with hydrographic survey H-7660 (1948)

(1) On the east shore of the Kuk River at Lat. 70°26' Long. 159°50'.

(2) On the south shore of Alatakrok River at Lat. 70°28' Long. 160°00'.

These places will have to be investigated by the Washington Office.

According to the Coast Pilot, the western boundary of Naval Petroleum Reserve No. 4 is on the meridian of Icy Cape. More definite information was not available so the boundary was not drawn on the manuscript.

Form T-2

50.

# PHOTOGRAMMETRIC OFFICE REVIEW

T-9362, T-9363, T-9364

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 None 8. Bench marks None 9. Plotting of sextant fixes None 10. Photogrammetric plot report ✓ 11. Detail points ✓

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line ✓ 14. Rocks, shoals, etc. ✓ 15. Bridges None 16. Aids to navigation None 17. Landmarks ✓ 18. Other alongshore physical features ✓ 19. Other alongshore cultural features ✓

## PHYSICAL FEATURES

20. Water features ✓ 21. Natural ground cover ✓ 22. Planetable contours None 23. Stereoscopic instrument contours None 24. Contours in general None 25. Spot elevations None 26. Other physical features ✓

## CULTURAL FEATURES

27. Roads None 28. Buildings ✓ 29. Railroads None 30. Other cultural features ✓

## BOUNDARIES

31. Boundary lines ✓ 32. Public land lines None

## MISCELLANEOUS

33. Geographic names ✓ 34. Junctions ✓ 35. Legibility of the manuscript ✓ 36. Discrepancy overlay None 37. Descriptive Report ✓ 38. Field inspection photographs None 39. Forms ✓

40. F L H Williams — Reviewer; Frank J. Parega — Supervisor, Review Section or Unit

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 _____ Supervisor _____

43. Remarks:

M-2623-12

Review Report T-9362-4 incl.
Planimetric Maps
June 19, 1953

T-9362 Vicinity of Icy Cape
T-9363 Akoliakatat Pass to Mitlikavik
T-9364 Kuk River

62. Comparison with Registered Surveys: There are no earlier surveys for this area.

63. Comparison with Maps of Other Agencies:

USGS Wainwright, Alaska (Recon.) 1:250,000 ed. 1951
1945 Barrow Datum.

The small scale of this map affords basis for superficial comparison only. There is no conflict in the general form of the shoreline and of the character of the interior, but they do not agree in the geographic positions of details in spite of having the same datum. Differences are as much as 2 min. Elevs.

The quadrangle shows an airstrip and two coal mines on the west side of Kuk River. No evidence of them could be detected on the 1949 photographs. They are not, therefore, on T-9364.

64. Comparison with Contemporary Hydrographic Surveys:

H-7660 1:20,000, 1948 Kuk River (Wainwright Inlet) to 70°25'.

No shoreline is delineated on H-7660 in the area covered by T-9364 (1:40,000).

A tracing of the T-9364 shoreline was made and compared with the near-shore soundings on H-7660 by means of the the vertical projector.

Areas of conflict between soundings and shoreline:

1. Hydro stations JAM and HAT (70°26'-27')
   Shoreline on T-9364 was re-delineated to clear soundings.
2. Mouth of Alatakrak River to Hydro station CAR (70°28'-28½')
   Adjustment made to H-7660 J.E.G. 7-31-56
   The top of the vertical bluff forms a line which falls through the inner line of soundings. The photographs were examined stereoscopically but conditions did not seem to warrant moving the shoreline far enough inland to clear the soundings.
3. Kungok River entrance.
   The shoreline on T-9364 falls on the 5- and 6-foot soundings. This is a low sand spit area and is probably advancing. The shoreline was not changed to conform to H-7660.
   No conflict
   No adjustment made to H-7660 J.E.G. 7-31-56

4. South of Hydro Station Kay

The shoreline on T-9364 overlaps the approximate depth curve. The top of the bluff is 0.5 mm to 1.3 mm back of the delineated shoreline, but even that overlaps the curve. The depth curve should be drawn to conform to the shape of the shoreline on T-9364.

Adjustment made to curve J.E.G. 7-31-56

H-7661 1:20,000 1948 Vicinity Pingorarok Pass

No shoreline was drawn on H-7661. The shoreline of T-9362 was compared with sounding lines by means of the vertical projector and found to be in conflict at NOKOTLEK Point. The manuscript was adjusted to remove the conflict.

H-7664 1:40,000 1948 Akoliakatat Pass to Wainwright Inlet

The shoreline on H-7664 is that of T-9363. No important changes were made during review.

H-7665 1:40,000 1948. Icy Cape to Akoliakatat Pass.

The shoreline on H-7665 is the same as that on T-9362 and T-9363, except for a small part on the east side of Icy Cape spit, where it is of no importance to navigation.

The shoreline on T-9362 in the vicinity of 70°18' 161°56' was changed during review. This, too, is at a point of no importance to navigation. Shoreline not revised on H-7665 J.E.G. 7-31-56

H-7751 1:20,000 1949 Kasegaluk Lagoon at Icy Cape.

The shoreline on H-7751 agrees with that on T-9362 except in the vicinity of control station Acacia, on the east side of Icy Cape spit (as on H-7665 above). The line on T-9362 is the better line. Shoreline revised on H-7751 JEG 7-31-56

H-7753 1:40,000 1949-50 Icy Cape to Utukok Pass.

The radar tower on H-7665 and H-7753 is not on T-9362 and it is not on the 1949 photographs.

No shoreline has been drawn on H-7753 but there is no conflict between the soundings and the shoreline, though the soundings fall very near shore.

No adjustments made to H-7753 J.E.G. 7-31-56

65. Comparison with Nautical Charts:

9400 1:1,587,870 @ 70° ed. May 1947, rev. June 1952

The small scale of the chart precludes more than a cursory comparison.

The charted sand bar south of Icy Cape now extends farther north and has joined the east-west bar thus forming

a hook which encloses a lagoon so shallow in this area as to be virtually a mud flat.

66. Accuracy:

A strip about 5 miles wide along the ocean coast in all these maps is well controlled, so that the shoreline and the interior within that limit is as accurate as office interpretation of shoreline and terrain can accomplish.

The interior portions of T-9363 and T-9364 east of that strip are of sufficient accuracy for interior charting.

In the supplementary radial plot for the Kuk River area in T-9364, station LACE was pricked on the photos from office interpretation of station description and it held in the radial plot.

During review a like recovery for station KELICHE was attempted in order to test the shoreline in its vicinity. Radials thru this pricked point fell tangent to the plotted position (0.15 mm. N.E.) and met the requirements of the station description, - i.e., 400 ft. from the edge of the bluff.

Station Bear on the west side of Kuk River was not recovered and used for control. It lies 1000 ft. from the delineated shoreline, though the description says it is 500 feet from the edge of the bluff. This is a vertical bluff very close to shoreline, so that either the position or the description may be in error.

Except as noted above under 64, the Kuk River shoreline is not in conflict with the hydrographic survey. The Kuk River shoreline as delineated on T-9364 is as good as office interpretation of M.H.W. can attain and meets the needs of Alaska charting.

Reviewed by:

Lena T. Stevens

Lena T. Stevens

Approved by:

L C Lande

Chief, Review Section
Div. of Photogrammetry

This work is considered sufficiently accurate of Nautical Charting in this area

H W Swanson

Chief, Div. of Photogrammetry

4 May 1956

H. N. Edmonston

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Coastal Surveys

# HORIZONTAL DATUM ADJUSTMENT

## CHUKCHI SEA, ALASKA

Corrections to Preliminary N.A. 1927 Datum from the various independent horizontal datums on the coast of the Arctic Ocean and Chukchi Sea in Alaska have been determined by the Division of Geodesy, being computed from field positions, allowing for closure in azimuth and length. This procedure was started at adjusted N.A. 1927 Datum stations at about the 63rd Parallel on the Canadian Boundary, following the 141st Meridian (IBC Datum) to the Arctic Ocean, thence westward through the Barter Island and Flaxman Island Datums, and southwestward through the Point Barrow 1945 Datum, to a connection with N.A. 1927 Field Datum in the area of Kotzebue Sound off Chukchi Sea. The position of the stations in this area is subject to further adjustment after more geodetic field work.

## PLANIMETRIC MAPPING PROJECT

Ph-42(49)

Cape Beaufort to Atanik

T-9361 through T-9369
and
T-9371 through T-9375, T-9402 & T-9403

The correction from Point Barrow 1945 Datum to Preliminary N.A. 1927 Datum was computed for each map by miltiplying the correction in seconds to the value of one second in latitude and longitude at the latitude of the reference station of each map. This correction was recorded with the following stamp:

The difference between Pt. Barrow, 1945 Datum and preliminary N.A. 1927 Datum is Lat. plus/~~minus~~ 40 m. and Long. ~~plus~~/minus * m.

*The value of one second in meters varies from 11.030 m. (T-9402) to 10.276 m. (T-9361).

in the Descriptive Report on the first page of the data record, and on each manuscript near the title block.

See the Special Report on Corrections from the Point Barrow 1945 Datum to Preliminary N.A. 1927 Datum, filed with the completion report for Ph-42(49) for a Project Index showing the correction for each map in this project.