

9550

9552

9554

9551

9553

ORIGINAL

Diag. Cht. No. 8502-3.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

*Planimetric*  
Type of Survey ~~Shoreline~~ (Photogrammetric)  
Field No. 6040 Office No. T-9550 thru T-9554

## LOCALITY

Territory Alaska  
State Bristol Bay, North Shore  
General locality Alaska Peninsula  
Locality Port Heiden to Reindeer Creek

1949

## CHIEF OF PARTY

A.N. Stewart, Chief of Party  
Fred Natella, Portland Photogrammetric Office

## LIBRARY &amp; ARCHIVES

DATE

MAY 15 1958

COMM-DC 61300

## DATA RECORD

2.

T-9550 thru T-9554

Project No. (II): 6040

Quadrangle Name (IV):

Field Office (II): Meshik, Alaska

Chief of Party: A. Newton Stewart

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Fred Natella

Instructions dated (II) (III): Nov. 29, 1954 )  
Sept. 14, 1955 ) OfficeCopy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

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): See reverse side

Lat.:

Long.:

Adjusted

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.

T-9550 QUIRT, 1949

|       |      |     |                   |
|-------|------|-----|-------------------|
| Lat.  | 57°  | 09' | 38.849" (1201.8m) |
| Long. | 158° | 29' | 33.605" ( 564.9m) |

T-9551 ALFRED, 1949

|       |      |     |                   |
|-------|------|-----|-------------------|
| Lat.  | 57°  | 10' | 11.259" ( 348.3m) |
| Long. | 158° | 04' | 09.174" ( 154.2m) |

T-9552 ULTRA, 1949

|       |      |     |                   |
|-------|------|-----|-------------------|
| Lat.  | 57°  | 03' | 07.464" ( 230.9m) |
| Long. | 158° | 37' | 19.087" ( 321.8m) |

T-9553 MESHUK, 1949

|       |      |     |                   |
|-------|------|-----|-------------------|
| Lat.  | 56°  | 54' | 59.688" (1846.3m) |
| Long. | 158° | 40' | 47.814" ( 809.0m) |

T-9554 HEIDEN S.E. BASE, 1949

|       |      |     |                   |
|-------|------|-----|-------------------|
| Lat.  | 56°  | 57' | 52.906" (1636.6m) |
| Long. | 158° | 36' | 36.014" ( 608.6m) |

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

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

# DATA RECORD

4e.

Field Inspection by (II): I. Zirple, R.B. Melby, B. Kurs

Date: Season 1949

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): In stable areas from field locations in 1949 and shown on 1943 nine lens photographs. In unstable areas from office interpretation from 1955 nine lens photographs.

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): L. F. Van Scoy

Date: 1-10-56

Control checked by (III): J. L. Harris

Date: 1-11-56

Radial Plot or Stereoscopic J. L. Harris & J. E. Deal

Date: 2-1-56

Control extension by (III):

Stereoscopic Instrument compilation (III):  
Planimetry  
Contours

Date:

Date:

Manuscript delineated by (III): See reverse side

Date:

Photogrammetric Office Review by (III): J. E. Deal (all sheets)

Date: 4-3 thru 7-3-56

Elevations on Manuscript C. C. Harris (all sheets)  
checked by (II) (III):

Date: 6-19 thru 7-3-56

|        |                    |             |                |             |                 |             |
|--------|--------------------|-------------|----------------|-------------|-----------------|-------------|
|        | <u>Pencil</u>      |             |                |             |                 |             |
|        | <u>Compilation</u> | <u>Date</u> | <u>Scribed</u> | <u>Date</u> | <u>Stick-up</u> | <u>Date</u> |
| T-9550 | D.N. Williams      | 4/9/56      | D.N. Williams  | 4/12/56     | C.C. Harris     | 6/30/56     |
| T-9551 | L.L. Graves        | 4/20/56     | L.L. Graves    | 4/26/56     | C.C. Harris     | 7/3/56      |
| T-9552 | L.L. Graves        | 4/4/56      | L.L. Graves    | 4/9/56      | C.C. Harris     | 6/22/56     |
| T-9553 | J.C. Lajoie        | 2/8/56      | D.N. Williams  | 3/12/56     | D.N. Williams   | 3/29/56     |
| T-9554 | C.C. Harris        | 4/13/56     | C.C. Harris    | 4/24/56     | C.C. Harris     | 6/19/56     |

Camera (kind or source) (III): U.S.C. & G.S. 9 lens - focal length 8.25 inches

5.

| PHOTOGRAPHS (III) |         |       |          |                         |
|-------------------|---------|-------|----------|-------------------------|
| Number            | Date    | Time  | Scale    | Stage of Tide           |
| 38802 and 38805   | 8/14/52 | 12:58 | 1:20,000 | 0.8 ft. above M.L.L.W.  |
| 51055 thru 51060  | 6/18/55 | 16:04 | 1:20,000 | -2.8 ft. below M.L.L.W. |
| 51121 thru 51124  | 6/18/55 | 17:21 | 1:20,000 | -2.0 ft. below M.L.L.W. |
| 51126 thru 51138  | 6/18/55 | 17:44 | 1:20,000 | -1.2 ft. below M.L.L.W. |

Note: The stages of tide are computed for Lat. 57° 04' by proportioning the height and time differences between Pt. Moller and Egegik River Ent.

Tide (III)

|                                         |                |
|-----------------------------------------|----------------|
| Reference Station: Nushagak Bay         | ) Proportioned |
| Subordinate Station: Port Moller        |                |
| Subordinate Station: Egegik River Ent.) |                |

| Ratio of Ranges | Mean Range | Diurnal Range |
|-----------------|------------|---------------|
|                 | 15.3       | 19.5          |
| 0.92            | 13.8       | 18.2          |
| 0.55h           | 7.5        | 10.6          |
| 0.85L           |            |               |

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 370

Shoreline (More than 200 meters to opposite shore) (III): 47.2 statute miles

Shoreline (Less than 200 meters to opposite shore) (III): 25.2 " "

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 34 Recovered: 34 Identified: 33

Number of BMs searched for (II): none Recovered: Identified:

Number of Recoverable Photo Stations established (III): 10\*

Number of Temporary Photo Hydro Stations established (III): none

Remarks:

\* 6 Forms 524 were submitted by field party. 4 of these are described and positions are published in triangulation data of the area and they have been disregarded as recoverable topo. stations. 10 additional Forms 524 were executed at the photogrammetric office for azimuth marks and marked stations of other government agencies.

## FIELD INSPECTION REPORT

Map Manuscripts T-9550 thru T-9554

Project 6040

Refer to Project Report, Aerial Photograph Control and Inspection, Alaska Peninsula, Alaska, Project Ph-40(49) July - Sept. 1949, A. Newton Stewart, Chief of Party.

## PHOTOGRAMMETRIC PLOT REPORT

Map Manuscripts T-9550 thru T-9554

Radial Plot "C"

Project 6040

21. Area Covered:

This radial plot covers the north and east shorelines of Port Heiden and an area approximately seven miles in width along the north shore of the Alaska Peninsula, or otherwise the southeast shore of Bristol Bay from Port Heiden to Reindeer Creek. It comprises map manuscripts No'd. T-9550 thru T-9554.

22. Method:

The methods described in the Photogrammetric Plot Report for T-9561, T-9562, T-9564, T-9565, T-9567 and T-9570 which is included in the combined Descriptive Report for T-9561 and T-9562, Project 6040 are applicable to the radial plot except as follows:

The photography consists mainly of nine lens photographs taken in 1955. These were supplemented by two nine lens photographs taken in 1952. The location of photograph flights are shown on the included sketch. Some difficulty was encountered when transferring sub points identified on 1943 photography to the 1952 and 1955 photography.

Except as stated in Item 23 of this report all horizontal control stations were held within the allowable tolerance and the resulting intersections for photogrammetric points were very good.

23. Adequacy of Control:

The identification of horizontal control stations was adequate. Stations which could not be held in the plot were as follows:

In T-9550, station DUBB, 1949 could not be held because shoreline detail had changed since time of identification and it was impossible to accurately transfer the 1949 identification to the 1955 photography.

In T-9551, stations ALFRED, 1949 and BABS, 1949 were beyond the limits of 1955 photography.

In T-9552, a direct identification of station OFFAL, 1949 was

made from a hand held K-20 photograph and this held in the radial plot. The sub station "A" was disregarded. No angle or distance was furnished for sub station "B". Station YUCCA, 1949 was beyond limits of 1955 photography.

In T-9553, due to the extreme changes continually taking place in the shoreline of Chfistiakof Island it was impossible to identify station N.E. BEACON, 1949 and S.W. BEACON, 1949. Refer to additional remarks under Item 37 of the Compilation Report.

In T-9554, station WITCH, 1949 was beyond limits of 1955 photography. Station "B" (C.A.A.) 1949 would not hold. Apparently there is an error as to the identity of the azimuth station used for measuring the angle to the sub station. The resected location of the sub point verifies the distance measured in the field from the instrument station to the sub station and shown on the control station identification card.

The office computed the geographic position of V-10, 1949 and the orientation of the photographs in the area of T-9551 are based on this station. Computations are forwarded with this report.

24. Supplemental Data:

None.

25. Photography:

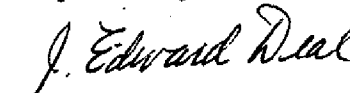
The photography was adequate.

Forwarded:

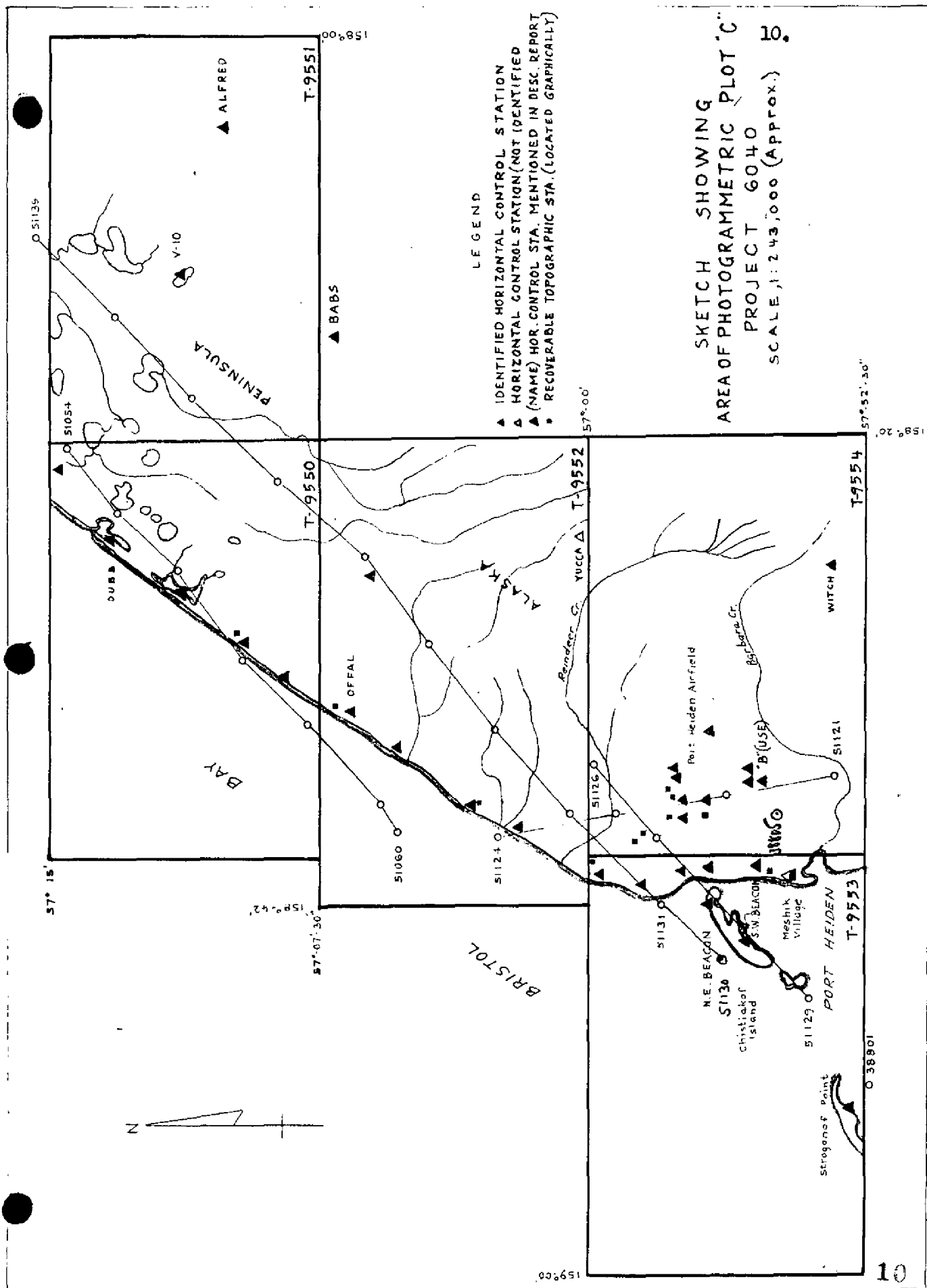


Fred Natella  
Comdr., C&G Survey  
Officer-in-Charge

Respectfully submitted:



J. Edward Deal  
Cartographer  
C&GS





SCALE FACTOR ..... None

12

SCALE FACTOR:

FACTOR DISTANCE  
FROM GRID OR PROJECTION LINE  
IN METERS

FORWARD (BACK)

1722:1 (133.9)

507 7 (7060)

230 0 (7625 7)

182-8 (1673-2)

537.3 (1318.7)

1500 9 ( 976 2 )

566.4 7.995 (L.577)

9/20/55

COMM-DC-57843

13

SCALE FACTOR None

|                       |                    |              |                 |
|-----------------------|--------------------|--------------|-----------------|
| 1 FT. = 3048006 METER | DATE 9/19/55       | DATE 9/20/55 | COMM- DC- 57843 |
| COMPUTED BY: D.N.W.   | CHECKED BY: C.C.H. |              |                 |

SCALE FACTOR ..... None

15

DATE 9/21/55

## COMPILATION REPORT

Map Manuscripts T-9550 thru T-9554

Project 6040

31. Delineation:

Remarks under this heading in the combined Descriptive Report for map manuscripts T-9551 and T-9552, Project 6040 are also applicable to the five manuscripts covered by this report.

32. Control:

Refer to Item 23 "Adequacy of Control" in the Photogrammetric Plot Report which is included in this Descriptive Report.

There were sufficient pass points located during the radial plot to control the orientation of photographs at the compilation table when locating minor pass points.

33. Supplemental Data:

Supplemental data available in the area of T-9554 was as follows:

- (a) Fort Morrow, Alaska, Airfield and Garrison Site, Project location and general layout.
- (b) Fort Morrow, Alaska, Airfield and Garrison Site Plot Plan.
- (c) Field Plan, Port Heiden, Alaska.
- (d) Proposed withdrawal plan, Port Heiden, Alaska.
- (e) General Plan, Port Heiden, Alaska.
- (f) Power and Control Cable Layout, Port Heiden, Alaska  
(2 sheets)

The above were used as reference when compiling details at Port Heiden.

34. Contours and Drainage:

Contours are not applicable. Drainage was delineated by office examination of the photographs.

### 35. Shoreline and Alongshore Details:

There are many places within the limits of these five manuscripts where extreme changes continually occur in the shape of the shoreline. Where this occurs the remarks contained under this heading in the combined Descriptive Report for T-9564 and T-9565 are applicable.

Approximate low-water lines have been delineated.

### 36. Offshore Details:

There are no offshore details.

### 37. Landmarks and Aids:

In T-9553 there is recommended that two non-floating aids to navigation, namely "N.E. BEACON" and "S.W. BEACON", located on Chistiakof Island be charted. These were located by triangulation in 1949. They could not be identified on the 1955 photographs and they are not listed in the 1956 Pacific Coast Light List. The triangulation positions have been shown but whether or not they are still in operation should be determined by the hydrographic party.

### 38. Control for Future Surveys:

Sixteen Forms 524 are submitted with these five map manuscripts. Six of these were submitted by the field party. Four of these six are now triangulation stations and one other has been destroyed. A position has been determined for the remaining one Form 524 submitted by the field party. Ten additional Forms 524 for azimuth marks and marked stations of other agencies have been executed at the compilation office. All stations for which positions have been determined are listed in Item 49, "Notes to the Hydrographer".

### 39. Junctions:

Satisfactory junctions have been made with all adjoining map manuscripts.

### 40. Horizontal and Vertical Accuracy:

There are no areas of sub-normal horizontal accuracy. Vertical accuracy is not applicable. There is one vertical control station within the area of T-9551, namely V-10, but no zenith distances were available to compute its elevation.

### Items 46 and 47:

Refer to the combined Descriptive Report for T-9561 and T-9562,

Project 6040.

Forwarded:



Fred Natella  
Comdr., C&G Survey  
Officer-in-Charge

Respectfully submitted:



J. Edward Deal  
Cartographer  
C&GS

48. Geographic Names:

Geographic names appearing on these five map manuscripts are as follows:

T-9550

Alaska Peninsula  
Bristol Bay

T-9551

Alaska Peninsula

T-9552

Alaska Peninsula  
Bristol Bay  
Reindeer Creek

T-9553

Alaska Peninsula  
Bristol Bay  
Chistiakof Island  
Port Heiden  
Meshik

stroganof Point  
Barabara Creek

T-9554

Alaska Peninsula  
~~Barabara Creek~~  
Port Heiden Airfield  
Reindeer Creek

Barabara Creek

Names approved 5-20-57  
L. Heck

49. Notes to the Hydrographer:

Recoverable topographic stations located are as follows:

In T-9550

QUIRT AZIMUTH MARK, 1949

In T-9552

ULTRA AZIMUTH MARK, 1949

OFFAL AZIMUTH MARK, 1949

In T-9553

WARE, 1949

HEIDEN N.W. BASE AZIMUTH MARK, 1949

In T-9554

1-C(USED) 1943      1-CA (USED) 1943

14, (USED) 1943      12A (USED) 1943

11, (USED) 1943      10 (USED) 1943

No photo-hydro stations were located.

Please investigate N.E. BEACON, 1949 and S.W. BEACON, 1949 on Chistikof Island in T-9553 in accordance with remarks in Item 37, "Landmarks and Aids", Compilation Report.

Review Report of Planimetric Maps

T-9950 thru T-9554

July 1957

62. Comparison with Registered Topographic Surveys:

There are no registered topographic surveys of this area.

63. Comparison with Maps of other Agencies:

|                     |           |      |      |
|---------------------|-----------|------|------|
| BRISTOL BAY, ALASKA | 1:250 000 | 1951 | USGS |
| CHIGNIK, ALASKA     | 1:250 000 | 1951 | USGS |

Agreement is as good as scale difference permits.

64. Comparison with Contemporary Hydrographic Surveys:

There are no contemporary hydrographic surveys of this area.

65. Comparison with Nautical Charts:

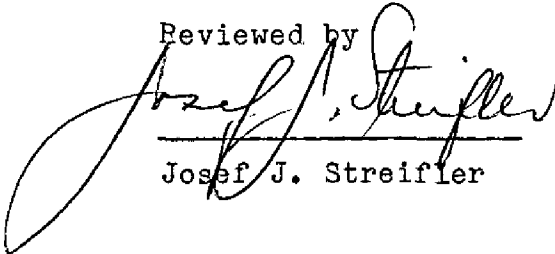
|      |            |      |         |
|------|------------|------|---------|
| 8502 | 1:969 761  | 1956 | (8-13)  |
| 8802 | 1:1023 188 | 1956 | (7-9)   |
| 9302 | 1:1534 076 | 1956 | (12-24) |

The considerable differences in scale do not permit an effective comparison.

66. Adequacy of Results and Future Surveys:

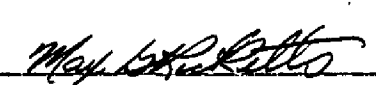
Control and field inspection of these surveys appear adequate and no inaccuracies are indicated.

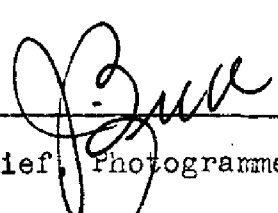
Reviewed by

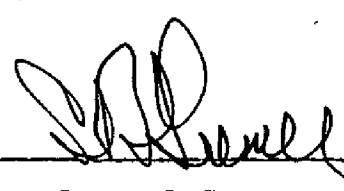
  
Josef J. Streifler

APPROVED:

  
Chief, Review and Drafting Sec.  
Photogrammetry Division

  
Chief, Nautical Chart Branch

  
Chief, Photogrammetry Division

  
Chief, Coastal Surveys

Summary

to accompany Planimetric Maps:

T-9550 thru T-9554

These five planimetric map manuscripts extend from the upper portion of PORT HEIDEN northeastward. See page 10 of this report for the geographic position of subject manuscripts.

Field inspection was accomplished during the season of 1949 on photography of June 1943. Manuscripts were compiled from photography of August 1952 and June 1955. Notes by the field inspector of the Bristol Bay shoreline could not be utilized fully, since this shoreline is subject to frequent and extreme changes.

This group of planimetric maps was scribed in the Portland Office from pencil compilations. Limited additions and changes were applied directly to the submitted film positives by the reviewer. Contact film negatives and acceptable "Cronar" film positives will be obtained to be filed with the descriptive report in the Bureau Archives.