9555 9556
9557 9558
9559

Diag. Cht. Nos. 8802 & 8502-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric (Photogrammetric)

Field No. 6040 *Office No.* T-9555 thru T-9559.

LOCALITY

State Alaska

General locality Bristol Bay, North Shore Alaska Peninsula.

Locality Ilnik to Port Heiden

1949-55

CHIEF OF PARTY

A.N.Stewart, Chief of Field Party
F.Natella, Portland Photo. Office

LIBRARY & ARCHIVES

DATE June 5, 1958

8-1870-1 (1)

9555 9556 9557 9558 9559

DATA RECORD

T- 9555 thru T-9559

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)Office
Sept.14, 1955)

Copy 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): JUN 25 1956 Date reported to Nautical Chart Branch (IV): JUL 12 1956

Applied to Chart No. Date: Date registered (IV): 21 Oct 1957

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.

M-2618-12(4)

T-9555 LILAC, 1949

Lat. 56° 48' 40.753" (1260.6m)
Long. 159° 01' 27.863" (472.7m)

T-9556 STRONG, 1949

Lat. 56° 52' 17.619" (545.0m)
Long. 158° 54' 07.669" (129.9m)

T-9557 RAKE, 1949

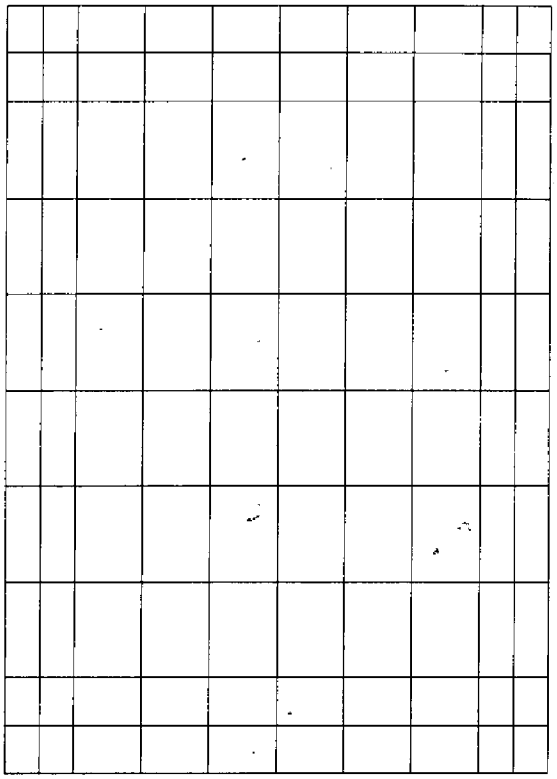
Lat. 56° 46' 51.335" (1587.9m) Unadjusted
Long. 158° 37' 16.817" (285.6m)

T-9558 CHIEF, 1949

Lat. 56° 38' 45.131" (1396.0m)
Long. 159° 23' 17.049" (290.5m)

T-9559 NEGRO, 1949

Lat. 56° 44' 58.803" (1818.9m)
Long. 159° 11' 20.647" (350.9m)



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

DATA RECORD

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): J. L. Harris — Date: 11/16/55

Control checked by (III): J. E. Deal — Date: 11/29/55

Radial Plot or Stereoscopic Control extension by (III): J. L. Harris & J. E. Deal — Date: 1/9/56

Stereoscopic Instrument compilation (III):
Planimetry — Date:
Contours — Date:

Manuscript delineated by (III): See reverse side — Date:

Photogrammetric Office Review by (III): J. E. Deal (all sheets) — Date: 4/2 thru 4/16/1956

Elevations on Manuscript checked by (II) (III): J. E. Deal — Date: 4/13/56

	Pencil Compilation	Date	Scribed	Date	Stick-up	Date
T-9555	J. C. Lajoye	1/26/56	D. N. Williams	3/5/56	D. N. Williams	3/27/56
T-9556	C. C. Harris	3/20/56	C. C. Harris	3/28/56	C. C. Harris	4/12/56
T-9557	C. H. Bishop	2/9/56	D. N. Williams	3/15/56	D. N. Williams	3/26/56
T-9558	C. H. Bishop	1/23/56	C. H. Bishop	1/25/56	C. C. Harris	2/27/56
T-9559	L. L. Graves	1/26/56	D. N. Williams	2/27/56	D. N. Williams	4/12/56

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
X	51098 thru 51131	6/18/55	17:00	1:20,000	1.0 ft. above M.L.L.W.
	38715	8/14/52	10:20	1:20,000	1.2 ft. above M.L.D.W.
	38724 thru 38728	8/14/52	10:30	1:20,000	1.2 ft. above M.L.L.W.
	38812 thru 38820	8/14/52	13:17	1:20,000	1.0 ft. below M.L.L.W.

Note: The stages of tide are computed for Lat. 56°45' by proportioning the height and time differences between Pt. Moller and Egegik River Ent.

Tide (III)

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

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

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): 267
Shoreline (More than 200 meters to opposite shore) (III): 96.8
Shoreline (Less than 200 meters to opposite shore) (III): 70.9
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 10 Recovered: 10 Identified: 10
Number of BMs searched for (II): none Recovered: Identified:
Number of Recoverable Photo Stations established (III): 14 *
Number of Temporary Photo Hydro Stations established (III): none

Remarks:

* 10 Forms 524 were submitted by field Party
1 of these is now probably destroyed
1 of these was located by theodolite fix
4 additional Forms 524 were submitted by compilation office for Azimuth Marks.

FIELD INSPECTION REPORT

Map Manuscripts T-9555 thru T-9559

Project 6040

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

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscripts T-9555 thru T-9559

Radial Plot "B" Project 6040

21. Area Covered:

This radial plot covers an area approximately seven miles in width along the north shore of the Alaska Peninsula, or otherwise the southeast shore of Bristol Bay, from Ilnik to Port Heiden. Also included is the south shore of Port Heiden from Bristol Bay to Meshik River and the east shore of Port Heiden from Meshik Village to Meshik River. It comprises map manuscripts No'd. T-9555 through T-9559.

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 Descriptive Report for T-9561 and T-9562 Project 6040 are applicable to this radial plot except as follows:

Along the Bristol Bay shoreline the photography consists of one flight of nine lens photographs made in June 1955 and flown parallel to the shoreline. These are supplemented by two nine lens photographs made in June 1955 whose principal points are located farther offshore and also by one flight of nine lens photographs made in August 1952 and also flown parallel to the shoreline but about three miles inshore. Along the south shore of Port Heiden there is one flight of nine lens photographs made in June 1955 and flown parallel to the shoreline. These are supplemented by a flight of nine lens photographs made in August 1952 and also flown parallel to the shoreline but about three miles inshore. Along the east shore of Port Heiden is one flight of nine lens photographs made in August 1952 and flown parallel to the shoreline and about one mile inshore. Also a flight of nine lens photographs made in June 1955 and flown about one mile farther inshore than the 1952 nine lens photographs. Photograph difficulties described for the previous radial plot "A" are the same for this radial plot "B".

All horizontal control stations were held within the allowable tolerance and the resulting intersections of radials for photogrammetric points were very good but the accuracy of much of the area is based on remarks contained in Item 23 of this report.

23. Adequacy of Control:

The horizontal control stations available and identified along the Bristol Bay shoreline were adequate. The horizontal accuracy of pass points located in the mud flat areas of Port Heiden; in the south area of T-9556 and also in the west area of T-9557 depends entirely on the location of RAKE, 1949 which was determined by a three point theodolite fix. This condition is more specifically described when it is stated that the accuracy of the entire extension made in this radial plot from the Bristol Bay shoreline southeasterly into T-9557 is based on station RAKE, 1949 which we consider to be of less than 3rd order accuracy. Computations of the position of this station, which were made at this office, are submitted with this report.* There was no office photograph coverage for stations V-11, 1949, TEXAS, 1949, PEAK,282, 1949 and WITCH 1949.

Remarks made under this heading in the photogrammetric plot report for radial plot "A" relative to certain recoverable topographic stations located from observations made in the field are also applicable for several stations in radial plot "B".

24. Supplemental Data:

None

25. Photography:

Refer to remarks in Item "22", Methods.

Approved:

Fred Natella By JEDeal

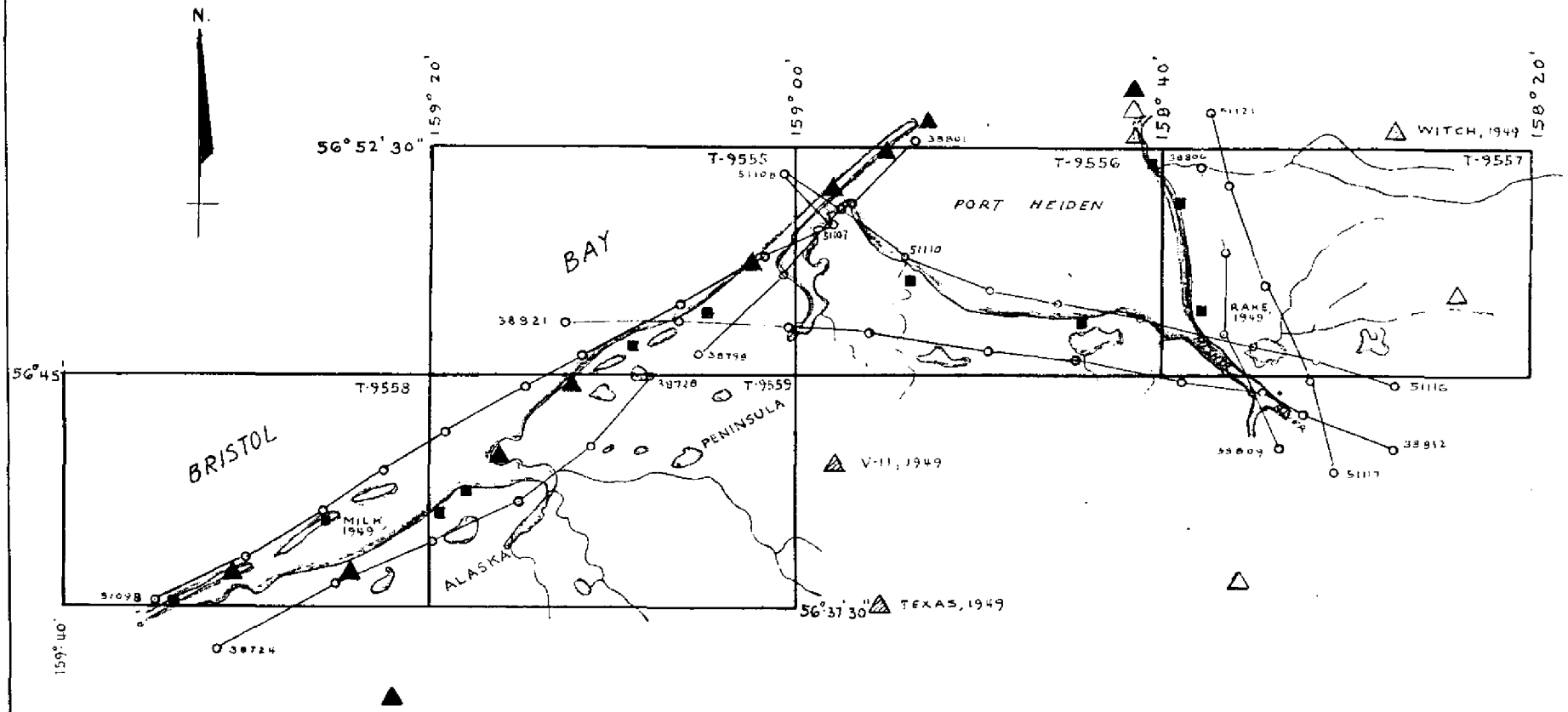
Fred Natella
Comdr., C&G Survey
Officer-in-Charge

Respectfully submitted:

J. Edward Deal

J. Edward Deal
Cartographer

* neither the field observations nor the computations can be found in any of the files of Photogrammetry or Geodesy of this time - 11/14/57 BGJones



LEGEND

- IDENTIFIED HORIZONTAL CONTROL STATIONS
- IDENTIFIED HORIZONTAL CONTROL (NO OFFICE PHOTOGRAPH COVERAGE)
- HORIZONTAL CONTROL (NOT IDENTIFIED)
- RECOVERABLE TOPOGRAPHIC STATIONS
- RAKE, 1949 ■ STATIONS REFERRED TO IN DESCRIPTIVE REPORT
- 51000 (1955 Photography)
- 38000 (1952 Photography)

FIELD PRINTS (1943 Photography) Not Shown

AREA OF RADIAL PLOT "B"
PROJECT 6040
NORTH SHORE ALASKA PENINSULA
BRISTOL BAY

SCALE:- 1:320,000 (APPROXIMATE)

FRED NATELLA, OFFICER-IN-CHARGE

10

10

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-9555 PROJECT NO. 6040 SCALE OF MAP 1:20,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
LILAC, 1949	G-9236	N.A.	56 48 40.753			1260.6 (595.4)	
	P. 188	1927	159 01 27.863			472.8 (545.3)	

1 FT. = .3048006 METER

COMPUTED BY: D.N.W. DATE 9/19/55 CHECKED BY: C.C.H. DATE 9/21/55

COMM-DC-57843

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-9556 PROJECT NO. 6040 SCALE OF MAP 1:20,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
MIME, 1949	G-9236	N.A.	56 50 49.93			1544.5 (311.5)	
	P. 193	1927	158 57 39.46			668.9 (348.2)	
STRONG, 1949	G-9236	N.A.	56 52 17.619			545.0 (1310.9)	
	P. 188	1927	158 54 07.669			129.9 (886.5)	

12

12.

1 FT. = .3048006 METER

COMPUTED BY: D.N.W. DATE 9/19/55 CHECKED BY: C.C.H. DATE 9/21/55

COMM-DC-57843

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-9557 PROJECT NO. 6040 SCALE OF MAP 1:20,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
PEAK No.282, 1949	G-9236	N.A.	56 46 45.903			1419.9 (436.1)	
	P. 193	1927	158 26 18.151			308.2 (710.7)	
RAKE, 1949 (topo)	Office	N.A.	56 46 51.335			1587.9 (268.0)	
	Comp.	1927	158 37 16.817			285.6 (733.3)	

13

1 FT = .3048006 METER

COMPUTED BY: D.N.W. DATE 9/19/55 CHECKED BY: C.C.H. DATE 9/21/55

COMM-DC-57843

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T- 9558 PROJECT NO. 6040 SCALE OF MAP 1:20,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
CHIEF, 1949	G-9236	N.A.	56 38 45.131			1396.0 (459.9)	
	P. 189	1927	159 23 17.049			290.5 (732.0)	
SNIPE, 1949	G-9236	N.A.	56 38 33.118			1024.4 (831.5)	
	P. 191	1927	159 29 23.222			395.8 (626.8)	

1 FT. = 3048006 METER

COMPUTED BY: D.N.W. DATE 9/19/55 CHECKED BY: C.C.H. DATE 9/21/55

COMM-DC-57843

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-9559 PROJECT NO. 6040 SCALE OF MAP 1:20,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
NEGRO, 1949	G-9236	N.A.	56 44 58.803			1818.9 (37.0)	
	P- 189	1927	159 11 20.647			350.9 (668.8)	
SHAKE, 1949	G-9236	N.A.	56 42 17.704			547.6 (1308.3)	
	P. 191	1927	159 15 36.128			614.7 (406.2)	

1 FT. = 3048006 METER

COMPUTED BY: D.N.W. DATE 9/19/55 CHECKED BY: C.C.H. DATE 9/21/55

COMM-DC-57843

COMPILATION REPORT

Map Manuscripts T-9555 thru T-9559

Project 6040

31. Delineation:

Remarks under this heading in the Descriptive Report for map manuscripts T-9561 and T-9562 Project 6040 are applicable to these five map manuscripts.

Refer to remarks in thePhotogrammetric Plot Report, Item 22, "Method" for photograph inadequacies.

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:

None.

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 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:

There were none recommended within the limits of these five map manuscripts.

38. Control for Future Surveys:

Fourteen Forms 524 are submitted with these five map manuscripts. Ten of these were submitted by the field party and four are submitted for Azimuth Marks located at the compilation office. One station, RAKE, 1949 was located from a theodolite fix. One station, MILK, 1949 is now probably destroyed due to extreme changes in the sand spit on which it was located. Also the sextant fix furnished for the location of this station could not be held to all four stations. A note of explanation has been entered on the Form 524. All stations 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 provided that the limitations of the horizontal control described in the Photogrammetric Plot Report under Item 23, "Adequacy of Control" are not considered inadequate.

Vertical accuracy is not applicable and no vertical control stations were located within the limits of these five map manuscripts. Elevations given for triangulation stations in the lists of geographic positions have been shown along with the station name.

Items 46 and 47:

Refer to the Descriptive Report for T-9561 and T-9562, Project 6040.

Approved:

Fred Natella, by JEDeal

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

Respectfully submitted:

J. Edward Deal

J. Edward Deal
Cartographer

48. Geographic Names:

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

T-9555

Alaska Peninsual
Bristol Bay

T-9556

Alaska Peninsula
Bristol Bay
Port Heiden

Birthday Creek

T-9557

Alaska Peninsula
Birthday Creek
Meshik River
Port Heiden

T-9558

Alaska Peninsula
Bristol Bay
Seal Islands

T-9559

Alaska Peninsula
Blueberry Creek
Bristol Bay
Seal Islands

Names approved 5-20-57
L. Heck

49. Notes to the Hydrographer:

Recoverable topographic stations located are:

In T-9555

FEAR, 1949
NEAT, 1949
LILAC AZ. MARK, 1949

In T-9556

GENE, 1949
JULY, 1949
PEAR, 1949
STRONG AZ. MARK, 1949

In T-9557

OPEN, 1949
RAKE, 1949

In T-9558

MILK, 1949 (no location submitted, refer to note on Form 524)
CHIEF AZ, MARK 1949

In T-9559

YELP, 1949
ZONE, 1949
SHAKE AZ. MARK, 1949

No photo-hydro stations were located.

Review Report of Planimetric Maps

T-9555 thru T-9559

July 1957

62. Comparison with Registered Topographic Surveys:

There are no registered topographic surveys of this area.

63. Comparison with Maps of Other Agencies:

CHIGNIK, ALASKA 1:250 000 1951 USGS

In consideration of the scale difference, there is good agreement between these surveys.

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	1:1023188	1956	(7-9)
9302	11:1534 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:

L C Lande
Chief, Review and Drafting Sec.
Photogrammetry Division

Chief, Nautical Chart Branch

Chief, Photogrammetry Division

Chief, Coastal Surveys

11/14/57

Summary

to accompany Planimetric Maps:

T-9555 thru T-9559

The five planimetric map manuscripts extend from SEAL ISLANDS to PORT HEIDEN, Bristol Bay, Alaska Peninsula, Alaska (see page 10 of this report for index of this group of maps).

Photography of June 1943 was used during field inspection in the season of 1949. Compilation of these planimetric maps was accomplished from photography of August 1952 and June 1955. Many of the field inspector's notations pertaining to the main shoreline (along Bristol Bay) were of little value; this shoreline being subject to frequent and extreme changes.

This group of five planimetric maps was scribed in the Portland Office from pencil compilations. Minor 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.