

9044
9045

Diag Cht. 8802

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic
Field No. _____ Office No. T-9044
T-9045

LOCALITY

State Alaska
General locality Bristol Bay
Locality Upper Kulukak Bay

1947

CHIEF OF PARTY

A. Newton Stewart, Chief of Field Party
Charles W. Clark, Chief of Portland Photo Office
~~Div. of Photogrammetry, Washington, D.C.~~

LIBRARY & ARCHIVES

DATE February 18, 1955

9045
9044

DATA RECORD

T-9044 & 9045

Project No. (II): Ph8B(46)

Quadrangle Name (IV):

T-9044 = KULUKAK
T-9045 = KANIK RIVER

Field Office (II): Bristol Bay, Alaska

Chief of Party: A. Newton Stewart

Photogrammetric Office (III): Portland, Oregon
Washington, D.C.

Radial Plot = Charles W. Clark
Officer in Charge: Louis J. Reed, Chief,
Compilation = Stereo-map Section
Copy filed in Division of
Photogrammetry (IV)

Instructions dated (II) (III):

(II) = 25 Apr 47 and 21 Apr 48
(III) = 19 Mar 48 and 4 Feb 49

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1:1

Date received in Washington Office (IV): APR 4 - 1952 Date reported to Nautical Chart Branch (IV): APR 8 1952

Applied to Chart No.

Date:

Date registered (IV): 7 Jan. 1955

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 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):

The difference between ^{NA 1927} Unadjusted Datum
and N.A. 1927 Datum is Lat. plus/minus 9 m.
and Long. ~~plus~~/minus 7 m. l.c.h.

Lat.: present

Long.:

XX Adjusted X
Unadjusted

Plane Coordinates (IV):

State:

Zone:

Y=

X=

Military Grid = none
Other Grids = none

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.

Areas contoured by various personnel
(Show name within area)

(X) (III)

100% compiled on the Reading Plotter,
model A, by Clarence E. Misfeldt

DATA RECORD

Field Inspection by (II): **A. Newton Stewart** Date: 1947-8

Planetable contouring by (II): **None** Date:

Completion Surveys by (II): **None** Date:

Mean High Water Location (III) (State date and method of location):
 ?
MHWL is dated 1947 since it was photo-identified during that year. It has been compiled on the Reading Plotter using this field identification as a guide.

Projection and Grids ruled by (IV): **Theodore L. Janson on the Reading Ruling Machine** Date: 19 Oct 50

Projection and Grids checked by (IV): **Harland R. Cravat** Date: 20 Nov 50

Control plotted by (III): **Caïta C. Wiebe** Date: 27 Dec 50

Control checked by (III): **Marie B. elrod** Date: 27 Dec 50

Radial Plot ~~extension~~ ~~control~~ ~~extension~~ by (III): **James L. Harris and Roy A. Davidson** Date: 4 Jun 51

~~control~~ extension by (III):

~~control~~ extension by (III): **delineation by Clarence E. Misfeldt** Date: 6 Mar 52

Stereoscopic Instrument ~~control~~ ~~extension~~ by (III):
 Planimetry
 Contours

Manuscript ~~control~~ ~~extension~~ by (III): **Henri Lucas** Date: 28 Mar 52

Photogrammetric Office Review by (III): **Louis J. Reed** Date: 4 Apr 52

Elevations on Manuscript ~~control~~ ~~extension~~ by (III): **Louis J. Reed** Date: 4 Apr 52

Camera (kind or source) (III): USC&GS 9-lens model B, F=8.25 inches

Number	Date	Time	Scale	Stage of Tide
28624 thru 28626, 28631 thru 28636, 28653 thru 28656, 28659 thru 28664, 20411	13 Aug 50	Clock Stopped	20,000	
20414, 18069 thru	23 Aug 47	11:05 Tide (III)	Not Coastal	Unknown
18069 thru	73:12 Oct 46	12:40	"	

Reference Station: Nushagak Bay (Clark Pt.)
 Subordinate Station: Black Rock (1951 predictions)
 Subordinate Station: reference to M.S.L. ^{highest} 4.6ft

Ratio of Ranges	Mean Range	diurnal	
		Low Tide	High Tide
0.5	0.7	5.9	9.5

Washington Office Review by (IV): B.J. Colner

Date: 3-12-53

Final Drafting by (IV): *mg Bar*

Date: T-9044 - 5/3/54
T-9045 4/13/54

Drafting verified for reproduction by (IV): *W.O. Hallain*

Date: 5-24-54
5-25-54

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): T-9044 = 96 sq mi; T-9045 = 93 sq mi
 Shoreline (More than 200 meters to opposite shore) (III): T-9044 = 9 mi; T-9045 = 11 mi
 Shoreline (Less than 200 meters to opposite shore) (III): T-9044 = 2 mi; T-9045 = 20 mi
 Control Leveling - Miles (II): None
 Number of Triangulation Stations searched for (II): Recovered: Identified: 2 7
 Number of BMs searched for (II): None Recovered: Identified: None
 Number of Recoverable Photo Stations established (III): T-9044 = 2; T-9045 = 2
 Number of Temporary Photo Hydro Stations established (III): T-9044 = 7; T-9045 = 4

Remarks:

Summary to Accompany T-9044 and T-9045

Ph-8(46) covers the north shore of Bristol Bay in Alaska and runs from the Egegik River and Kvichak Bay on the East to Cape Newenham on the West.

It is divided into three parts as follows:

Ph-8(46) A includes 23 planimetric maps in the general area of Kvichak Bay and extends from Egegik Bay to Nushagak Bay.

Ph-8(46) B is composed of two shoreline surveys on the Egegik River between Egegik Bay and Lake Becharof.

Ph-8(46) includes 45 topographic maps covering the area from Nushagak Peninsula westward to Cape Newenham and north to Goodnews Bay. It includes offshore islands such as Hagemeister and the Walrus Islands.

T-9044 and T-9045 are in the central portion of the project. These maps border on Kulukak Bay. T-9044 contains Kulukak River and T-9045 contains Kanik River.

Each map manuscript consists of one sheet, $7\frac{1}{2}$ -minutes in latitude and 20 minutes in longitude, at a scale of 1:20,000, with a contour interval of 50 feet. A clothbacked lithographic print of each map at the compilation scale will be registered with the combined Descriptive Report in the Bureau Archives. These maps will not be published.

FIELD INSPECTION REPORT

2-20:

See two separate reports entitled:

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

BRISTOL BAY, ALASKA

Project Ph-8(46) May to July 1948

A. Newton Stewart, Chief of Party

and

Library No 172

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

BRISTOL BAY, ALASKA

Project Ph-8(46) May to Sep 1947

A. Newton Stewart, Chief of Party

Library No 138

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

RADIAL PLOT REPORT

20-30:

See descriptive report to accompany map manuscript T-9237. It includes, beginning on page 8, the radial plot report covering the area of the two quads of this report plus the area of several others, the total area of which was controlled by a single radial plot.

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

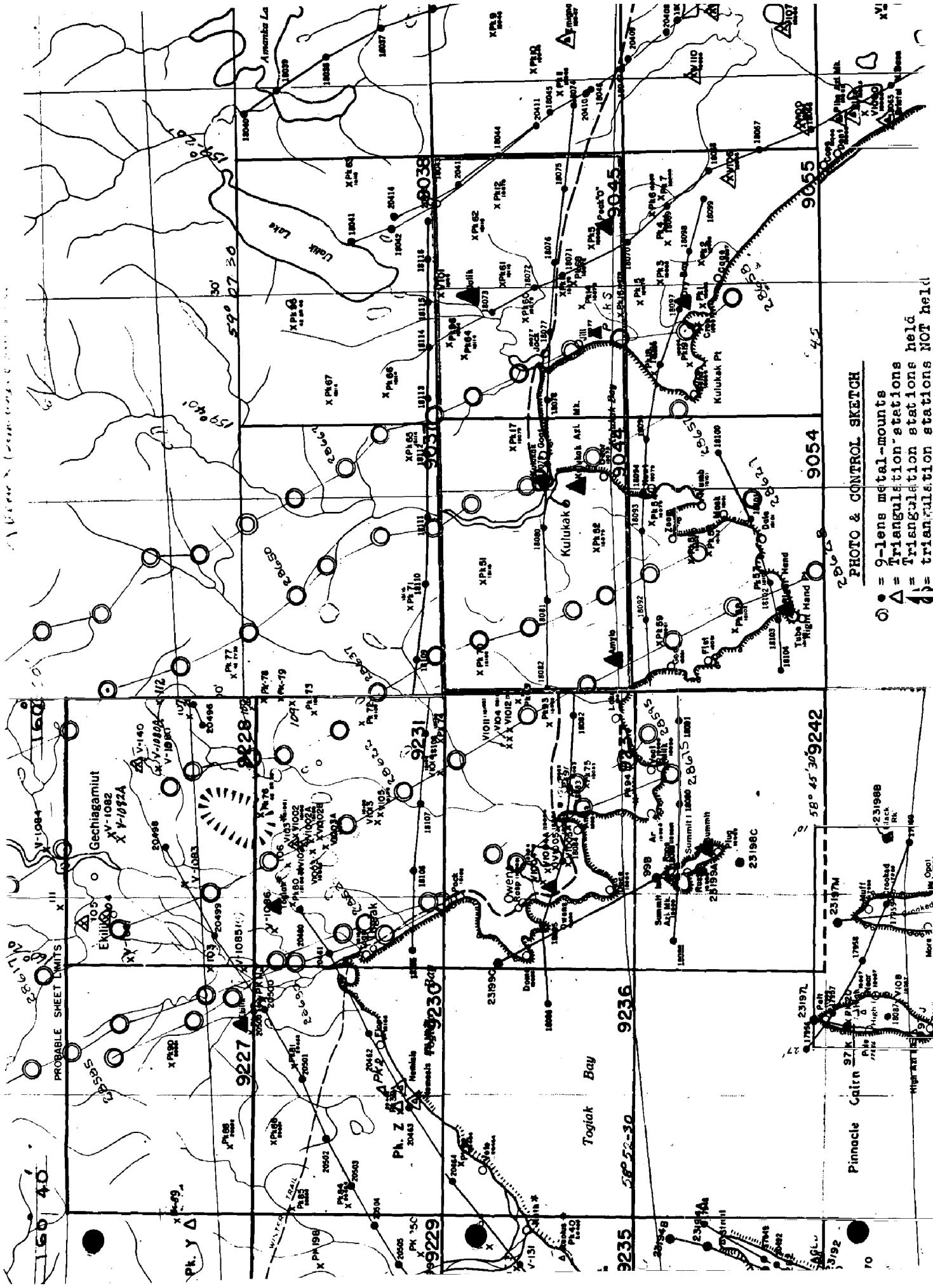


PHOTO & CONTROL SKETCH

- = 9-lens metal-mounts
- △ = Triangulation stations held
- ⊕ = Triangulation stations held
- ⊙ = triangulation stations NOT held

2865

58° 45' 30" 9242

23198B

23198C

23197M

23198A

23198

70

COMPILATION REPORT31: Delineation:

All contours and cultural features were delineated simultaneously on the Reading Plotter, model "A". Photo coverage was complete although just barely so in the NE third of T-9045 where photos of a former year were used to complete the coverage. The shoreline was covered by field inspection but/as^{not} adequately as is expected today. The entire land area of both quads has been delineated.

32. Control:

The adequacy of Horizontal control for the radial plot covering this area is discussed in the plot report; see T-9237, and note the control sketch on page 9 of this report. A lack of such control in the back areas tended to weaken the plot, but a satisfactory plot was produced.

Vertical control for contouring purposes was furnished in the form of sea-level elevations at the shoreline, and trig elevations on peaks in the interior. The major part of these two quads is back from the coast and therefore peak elevations controlled the major portion of the contouring; the quality and number of such peak elevations was very weak for the instrument contouring.

33. Supplemental Data: *See review report.*

- a. Graphic Control Surveys: None.
- b. Hydrographic Control Surveys: None.
- c. Vertical Angle Computation Brochure:

"COMPUTATION & TABULATION OF VERTICAL CONTROL IN THE AREA OF RADIAL PLOT E, PROJECT Ph-8B(46), including T-9038, T-9044, T-9045, T-9055, T-9228, T-9231, T-9237, and T-9242."

34. Contours and Drainage:

The photographs used on the instrument for contouring were of satisfactory quality for this purpose. However, there are areas of contours that may be questionable as regards meeting mapping accuracy standards for 50ft contouring. In the back areas where control was scarce, bridging of vertical control was done, but whether desired results were obtained is not known for sure; combined with scarce control, below-standard field identification of control, poorly calibrated photos, and a radial plot of doubtful quality, it is little wonder that a question exists as to the results of bridging.

See review report.

35. Shoreline and Alongshore Details:

Field inspection of the shoreline was not complete in upper Kulukak Bay falling within the limits of these two quads. The inspection notes that were made was done on photos taken at high tide when many shoreline details were hidden from view. Instrument photos were at a lower tide and these missing details were delineated and have been shown on the map manuscripts. Therefore the major portion of the shoreline and alongshore features are office rather than field identified.

36. Offshore Details: Not applicable.37. Landmarks and Aids:

No aids exist, but the field party recommended three mountain peaks as landmarks, namely Peak 5, 17, and 52. See the 1948 Field Inspection Report by A. Newton Stewart.

38. Control for Future Surveys:

Several points were established and photo-identified by the field party, both hydro signals and monumented topo stations. All have been positioned by the radial plot and may be found on the manuscripts in proper name and symbol. These points are listed on two separate unnumbered pages of this report, one page for each quad showing name, description, and photo on which it is identified.

39. Junctions:

All junctions that exist are in agreement because all adjoining quads that have been compiled were made with these two quads as a joint project. No quad was produced to the north of either quad of this report.

40. Horizontal and Vertical Accuracy:

See previous report
These maps are considered to meet map accuracy standards in both respects, even considering the doubt expressed in the plot report and in side-headings 32 and 34 above. *See previous report.*

46. Comparison with Existing Maps: None exist.47. Comparison with Nautical Charts: None exist.48. Geographic Name List: See separate numbered page, following.49. Notes for the Hydrographer: Two unnumbered pages follow.50. Compilation Office Review: See T-2 form following.

Submitted by:

Orvis N. Dalbey
Orvis N. Dalbey
Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed
Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

GEOGRAPHIC NAMES

Survey No.
 T-9044
 T-9045

Name on Survey	Source										No.
	A	B	C	D	E	F	G	H	K		
											1
<u>T-9044</u>											2
KULUKAK BAY											3
KUKULAK RIVER											4
											5
											6
<u>T-9045</u>											7
KANIK RIVER											8
KULUKAK BAY											9
<u>Tuxlung River</u>											10
<u>Tithe Creek</u>											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names approved
 2-12-53
 L. HECK

Louis J. Reed, Chief
 Stereoscopic Mapping Section
 Photogrammetric Engineer

Map Manuscript T-9044

Photo Hydrographic Stations

<u>Signal No.</u>	<u>Photo No.</u>	<u>Description</u>
3	18079	To be pricked directly. It is the high point of the easterly end of a rock cleft from the inshore rock. Use apparent northeasterly corner of the cleft-off portion. It is vertical on N and E sides, slopes off to the S and from about 12' W slopes off to the W, on which side it was climbed.
4	18079	To be pricked directly. It is the high point of an offshore rock, 9' above MHHW by hand level. Not visited (on foot and no bottom mud between).
5	18079	To be pricked directly. It is the high point of an offshore rock 6' above MHHW.
6	18079	To be pricked directly. It is a 5' boulder sitting on the crest of a ridge that is bare rock the lower 10', and grass and tundra covered higher. The boulder is 33' from the toe of the ridge and 12' from the vertical N side. It is 18' above MHHW. Two leaders at right angles indicate its position on photos.
91	18079	The center of the offshore face of a mass of rock, 300' offshore and rising to a height of about 30'.
92	18079	A large lone rock, ledge rock, at about $\frac{1}{2}$ tide line near the center of a 1200' beach. The rock is about 10' high, projects approx. 4' at HW.
93	18079	The face of a finger of rock running at 45° angle southerly from the shoreline. A hole large enough for human passage, through the ledge, is about $\frac{1}{2}$ way out to the end of the finger and is at beach level.

Recoverable Topographic Stations.

49:

NOTES FOR THE HYDROGRAPHER:

Map Manuscript T-9045

Photo Hydrographic Stations

<u>Signal No.</u>	<u>Photo No.</u>	<u>Description</u>
2	18079	Center of a 6' diameter dry grass patch having in its center a hole 12" in diameter and 15" deep. Could be used as topo. sta. On top of distinctive yellow bluff 26' above HW at this point. Station is 21 m from HWL and 5 yds. from top of bluff. See Sketch on field photo.
115	18077	Lone rock at northerly corner of toe of projecting grass point. Rock is 18" high.
116	18077	Build signal in gravel opening through grass, on grass line midway between solid grass area on S and grass "island" on N.
117	18077	Lone rock lying parallel to beach 4'x 2'x 2½' high, 8.5 m from inner edge of "bight" in grassline that is 2m deep.

Recoverable Topographic Stations

JACK 1947

JILL 1947

PHOTOGRAMMETRIC OFFICE REVIEW

T-9044-9045

- 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)

✓ = checked
γ = non-existent

- 12. Shoreline
- 13. Low-water line
- 14. Rocks, shoals, etc.
- 15. Bridges
- 16. Aids to navigation
- 17. Landmarks
- 18. Other alongshore physical features
- 19. Other along-shore cultural features

PHYSICAL FEATURES

- 20. Water features
- 21. Natural ground cover
- 22. Planetable contours
- 23. Stereoscopic instrument contours
- 24. Contours in general
- 25. Spot elevations
- 26. Other physical features

CULTURAL FEATURES

- 27. Roads
- 28. Buildings
- 29. Railroads
- 30. Other cultural features

BOUNDARIES

- 31. Boundary lines
- 32. Public land lines

MISCELLANEOUS

- 33. Geographic names
- 34. Junctions
- 35. Legibility of the manuscript
- 36. Discrepancy overlay
- 37. Descriptive Report
- 38. Field inspection photographs
- 39. Forms

40. _____
Reviewer

Louis J. Reed
Supervisor, Review Section of Unit

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

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:

Review Reports T-9044 and T-9045
Topographic Maps
March 12, 1953

62. Comparison with Registered Topographic Surveys.- None
63. Comparison with Maps of other Agencies.- None
64. Comparison with Nautical Charts.- None
66. Adequacy of Results and Future Surveys.- Further field edit is not considered necessary prior to hydrographic surveys in the area. These maps are considered adequate as a base for hydrographic surveys and the construction of nautical charts.

Reviewed by:

B. J. Colner
B. J. Colner

APPROVED

L. E. Laude 10 Jan 1955
Chief, Review Section
Div. of Photogrammetry

H. Edmonson
Chief, Nautical Chart Branch
Division of Charts

L. W. Swanson
Chief, Div. of Photogrammetry

Carl O. Heaton
Chief, Div. of Coastal Surveys

1 Feb. 1955

Horizontal and vertical accuracy: No field check of accuracy has been made. The maps are adequate for nautical charting and are judged to be within standard accuracy for the scale and contour interval in the area near the coast but probably fall somewhat below these standards in the northern half.

B. J. Jones
1/21/55