

8614

8614

Diag'd. on Dia. Ch. No. 8502-3

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey <u>Topographic</u>	
Field No.	Office No. <u>T-8614</u>
<u>CS-317</u>	
LOCALITY	
State <u>Alaska</u>	
General locality <u>Alaska Peninsula</u>	
Locality <u>Wide Bay</u>	
<u>1944</u>	
CHIEF OF PARTY	
<u>Lieut. William F. Deane</u>	
LIBRARY & ARCHIVES	
DATE <u>Jan. 24. 1949</u>	

8-1870-1 (1)

7-8614

PHOTOGRAPHS (III)
150° W. Meridian

Photograph

06058	8-5-41	1350	1:20,000	8.9' above MLLW
10989-92 incl.	9-5-42	1347	1:20,000	5.0' above MLLW
10994-95 incl.	9-5-42	1347	1:20,000	5.0' above MLLW
11020-22 incl.	9-13-42	1035	1:20,000	2.9' above MLLW

Rectified prints of originals were also furnished.

Tide from (III): Predicted Tide Tables, Pacific Ocean and Indian Ocean 1941 and 1942. Reference Station, KODIAK, ALASKA with corrections to Lees Cabins Wide Bay.

Mean Range: 9.8' Spring Range: 11.9'

Camera: (Kind or source) United States Coast and Geodetic Survey nine lens camera. Focal length 8 $\frac{1}{4}$ ".

Field Inspection by: Lt. Comdr. S.B. Grenell date: June-August 1944

Field Edit by: date:

Date of Mean High-Water Line Location (III): All of the MHWL along the rocky shore was delineated from photographs taken in September 1942. The MHWL along the flat sandy beaches was located at the time of the field inspection in 1944.

DATA RECORD

T-8614

Quadrangle (II): T-8614

Project No. (II): CS-317

Field Office:
Seattle, Washington

Chief of Party: S. B. Grenell

Compilation Office:
Baltimore Photogrammetric OfficeChief of Party:
William F. Deane

Instructions dated (II III): Copy filed in Descriptive
 29 Feb. 1944 (Supplemental); 18 Mar. 1944 Report No. T- (VI)
 (Suppl); 27 Feb. 1945; 21 Aug. 1946 (Supplemental);
 30 December 1946 (Memo Instructions) 31 Jan. 1947 (Supplemental)
 Completed survey received in office: 28 Feb. 1947

Reported to Nautical Chart Section: 7 March 1947

Reviewed: July 1948 Applied to chart No. Date:

Redrafting Completed: 3-24-50

Registered: Oct. 13, 1948

Published:

Compilation Scale: 1:20,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Sea Level
(Preliminary)

Reference Station (III): KAYAK, 1944 Vo. 5, Pg. 32

Lat.:

Long.:

Adjusted:
Unadjusted *
(Preliminary)

State Plane Coordinates (VI):

X =

Y =

* The N.A. 1927 adjusted datum
 has been shown on the map
 manuscript by supplemental
 grid ticks.

Military Grid Zone (VI)

PHOTOGRAPHS (III)					
150 W Meridian					
<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>	
* 10989	9-5-42	1347	1:20,000	5.0' above MLLW	
11018 & 11019	9-13-42	1035	1:20,000	2.9' above MLLW	
* 11021 to 11023	9-13-42	1035	1:20,000	2.9' above MLLW	

* Rectified prints were also furnished

Tide from (III): Predicted Tide Tables, Pacific Ocean and Indian Ocean,
1942. Reference Station: Kodiak, Alaska, with correction
Mean Range: 9.8' Spring Range: 11.9' to Lees Cabins, Wide Bay.

Camera: (Kind or source) U.S.Coast and Geodetic Survey nine lens camera
focal length $8\frac{1}{4}$ ".

Field Inspection by:
Lt. Comdr. S.B. Grenell

date:
June-August 1944

Field Edit by:

date:

Date of Mean High-Water Line Location (III): Same as date of photographs
except for a very small portion of M.H.W.L. at the southern end of a
sandy beach about $\frac{3}{4}$ mile N. of Cape Kayakliut which was identified at the
time of the field inspection in 1944.

Projection and Grids ruled by (III) S.R.

date: 3/11/46

" " " checked by: S.T.

date: 3/14/46

Control plotted by: F.J.Tarcza

date: 4/3/46

Control checked by: R.E. Rudolph

date: 6/12/46

Radial Plot by: F.J.Tarcza

date: June 1946

Contours by: Wm. D. Harris

date: January 1947

Contours inked by: Bernice Wilson

date: 2/6/47, 2/7/47

Detailed by: Ruth M. Whitson

date: 2/11/47 to 2/18/47

Reviewed in compilation office by: R.Glaser

date: 2/21/47 and 2/27/47

manuscript
Elevations on ~~Final~~ Sheet
checked by:

date: 2/21/47

STATISTICS (III)

Land Area (Sq. Statute Miles): 10

Shoreline (More than 200 meters to opposite shore): 9 statute miles

Shoreline (Less than 200 meters to opposite shore): none

Number of Recoverable Topographic Stations established: none

Number of Temporary Hydrographic Stations located by radial
plot: 4

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered

Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:

Preface to Descriptive Report T-8614

Project CS-317

Alaska Peninsula

T-8614 is one of six topographic maps in project CS-317 located on the south shore of the Alaska Peninsula between Cape Kunnik and Wide Bay. These maps are not of standard quadrangle size.

The field inspection was accomplished from the Motor Vessel WESIDAH, J. B. Granell commanding, whose "Report of Field Inspection of Air Photographs, Alaska Peninsula, Wide Bay to Cape Kunnik, 1944" is filed in the general files of the Division of Photogrammetry.

The radial plot for project CS-317 was made in the Baltimore Office using templates of nine-lens photographs on polyconic projection bases at 1:20,000 on the North American 1927 Datum. The shoreline was compiled by graphic methods on manuscript bases. All of the materials were then forwarded to the Washington Office where the contouring was compiled from rectified nine-lens photographs on the Reading Plotter, using a contour interval of 200 feet. The maps and materials were then forwarded to the Baltimore Office where the final compilation and inking of the manuscript were completed, after which they were again returned to the Washington Office where they were critically examined in the Stereoscopic Mapping Section, reconciling all discrepancies between hydrographic and topographic features.

A cloth-backed, advance, photographic print of the manuscript is registered with the descriptive report. When the map is printed a cloth-backed lithographic print will replace the advance photographic print. Depth curves and critical soundings are not shown on this map because the hydrography is very old and sketchy.

S. V. Griffith
S. V. Griffith
Chief, Review Section
Div. of Photogrammetry

FIELD REPORT

SURVEY NO. T-8614

1. DESCRIPTION OF THE AREA:

T-8614 is one of six topographic surveys in Project No. 317, located on the Alaska Peninsula. The instructions for this project are dated 29 February 1944 (Supplemental), and 18 March 1944 (Supplemental). Instructions to the compilation office are dated 27 February 1945, 21 August 1946 (Supplemental), 30 December 1946 (Memo Instructions), and 31 January 1947 (Supplemental).

This survey includes the area just south of Wide Bay from Titcliff Island to just south of Cape Kayakliut. With the exception of small sand beaches at the heads of narrow bights between cliffs, and several long flat sand beaches, most of the shoreline is steep and rocky. The interior is mountainous and devoid of trees. The only vegetation consists of moss, grass and low alder brush.

2. COMPLETENESS OF FIELD INSPECTION:

It was impossible to carry out completely the instructions for field inspection because favorable weather conditions were limited. Only a very small section of the M.H.W.L. at the southern end of a sandy beach approximately 3/4 mile north of Cape Kayakliut has been identified. However, careful stereoscopic examination of the photographs should satisfactorily reveal the shoreline detail.

Detailed notes on the character, formation, and heights of rocks and reefs which have been omitted at this time will have to be made at the time of the next hydrographic survey.

3. INTERPRETATION OF THE PHOTOGRAPHS:

No comment.

4. HORIZONTAL CONTROL:

Three U.S.C. & G.S. horizontal control stations were recovered and two new U.S.C. & G.S. horizontal control stations were established.

The following is a tabulated list of information on horizontal control:

STATION	ESTABLISH. AGENCY	RECOVERED	IDENTIF. ON PHOTO.	METHOD OF IDENTIF.
CREEK, 1923	USC&GS	Yes		None
KAYAK, 1944	"		No. 10989	Pricked direct
POND, 1944	"			None
TERRACE, 1923	"	Yes		None
* TITCLIFF, 1923	"	Yes	No. 10989	*

* * Identified in compilation office.

5. VERTICAL CONTROL:

All of the horizontal control stations are also vertical control stations. The elevation of POND was determined by spirit leveling. The elevations of CREEK, KAYAK, TERRACE, AND TITCLIFF were determined by reciprocal vertical angles.

6. DRAINAGE:

No identification

7. MEAN HIGH WATER LINE:

Refer to "Report of Field Inspection on Air Photographs-Alaska Peninsula Wide Bay to Cape Kunmik, 1944", submitted by Lt. Comdr. S.B.Grenell.

8. MEAN LOWER LOW WATER LINE:

No identification

9. WHARVES AND SHORELINE STRUCTURES:

None

10. DETAILS OFFSHORE FROM MEAN HIGH WATER LINE:

Notes on details offshore from the M.H.W.L. have been made as complete as time permitted but only a few of the many rocks in the area have been noted. Detailed notes which have been omitted will have to be made at the time of the hydrographic survey.

11. LANDMARKS AND AIDS TO NAVIGATION:

None.

12. HYDROGRAPHIC CONTROL:

No temporary signal sites were identified.

18. GEOGRAPHIC NAMES:

No investigation.

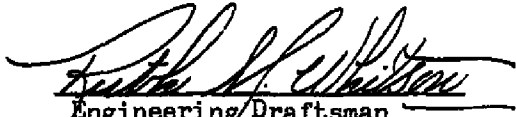
19. SUPPLEMENTAL DATA:

Five reconnaissance sheets without projections were made up by tracing shoreline directly from the photographs and adjusting this shoreline by aligning the centers of the photographs only. This gave fairly good detail

19. SUPPLEMENTAL DATA: (Continued)

on an approximate scale of 1:20,000 for running reconnaissance sounding lines, using rocks, reefs and tangents for fixes. On these sheets numerous rocks and reefs were located or noted, and other notes as to low water line, etc., were added. These sheets will be forwarded to Washington and should be referred to by the compiler when the airphoto compilations are executed.

(Field report written in compilation office from information submitted by field party.)


Engineering Draftsman

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8614

26. CONTROL:

See radial plot report for layout of control in this area.

The radial plot for the six sheets in this project was run in May 1946, at which time only the preliminary geographic positions for the horizontal control stations were available. On 17 February 1947 the adjusted geographic positions for this horizontal control was received in the compilation office.

Computations have been made which determine that in order to correct the manuscript in respect to the adjusted datum, the polyconic projections should be redrawn with the meridional arcs moved 0.70 mm. to the east and the arcs of the parallel moved 0.98 mm. to the north.

The final adjusted datum is shown on T-8614 by ticks drawn with red ink at two minute intervals throughout the delineated area of the map. (See copy of letter from Chief, Division of Photogrammetry, No. 711-RCR, dated 25 February 1947, attached to this report).

27. RADIAL PLOT:

Refer to the report for combined radial plot covering the areas of T-8614 to T-8619, inclusive, submitted to the Washington Office, 3 December 1946.

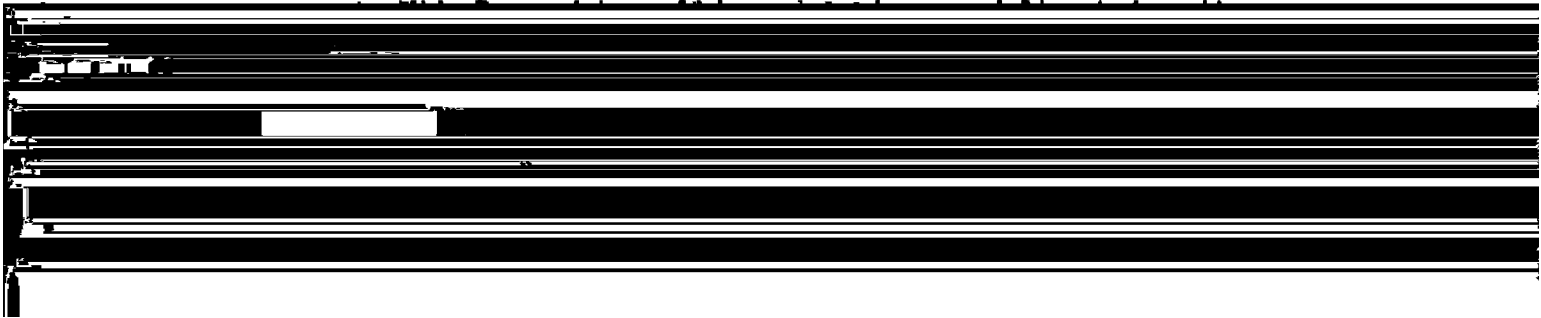
28. DELINEATION:

The compilation is in accordance with the written instructions pertaining to Project No. CS-317.

No field inspection was submitted for the map with the exception of a few notes just offshore from Cape Kayakliut and a very small section of shoreline at the southern end of a sandy beach approximately $\frac{3}{4}$ of a mile north of Cape Kayakliut. (See heading No. 2 of this report.)

Photographs No. 11018, 11019, portions of 11021 through 11023, and 10989 were not entirely satisfactory for office delineation because the photographic detail was obliterated by cloud formations and shadows, and therefore, only two cut intersections were possible in the area of Wide Bay.

Only the northernmost tip of the mainland on the south side of the



28. DELINEATION:(Continued)

Rectified prints were furnished for all of the photographs except 11018 and 11019.

A reconnaissance survey was furnished by the field party which was used to supplement data for offshore details. (See heading No. 19 of this report.)

Contouring phase:

This is one of six surveys contoured with the Reading Stereocartograph in the Washington Office and inked in the Baltimore Compilation office. The contour interval is 200 feet with occasional 100 foot contours shown with dashed lines in accordance with the letter 711-RCR dated 30 December 1946 attached to the descriptive report for T-8616. The topography is believed to conform to the standard map accuracy specifications for 200 foot contours except the first 100 foot contour above sea level, which is delineated throughout its length and which conforms to the accuracy standards for 100 foot contours. (See also heading No. 28 in descriptive report for T-8616.)

29. SUPPLEMENTAL DATA:

See heading No. 19 of this report.

30. MEAN HIGH WATER LINE:

The mean high water line has been compiled almost entirely after stereoscopic examination of the photographs, since less than 1 percent of the mean high water line was identified by the field party. (See heading No. 2. "COMPLETENESS OF FIELD INSPECTION").

31. MEAN LOWER-LOW WATER LINE:

None shown.

31-A. SHOAL AND REEF LINES:

All shoal and reef lines apparent on the photographs have been delineated on the map.

32. DETAILS OFFSHORE THE MEAN HIGH WATER LINE:

No comment.

33. WHARVES AND SHORELINE STRUCTURES:

None.

34. LANDMARKS AND AIDS TO NAVIGATION:

None.

35. HYDROGRAPHIC CONTROL:

Four (4) Hydrographic signal sites have been selected in this office.

A list of their descriptions is attached to this report. Two additional copies have been furnished for the use of the hydrographic party.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None.

37. GEOGRAPHIC NAMES:

The following three (3) geographic names appearing on the map have been taken from Nautical Chart No. 8666:

CAPE KAYAKLIUT
TITCLIFF ISLAND
WIDE BAY

38. JUNCTIONS:

Junction with T-8615 to the south has been made and is in very good agreement.

Surveys for the other junctions not available to this office.

44. COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS:

T-8614 has been compared in detail with the U. S. Geological Survey topographic map of Kanatak District, Alaska Peninsula, scale: 1,250,000, edition 1935. Although there was a great scale difference, the maps appeared to be in fair agreement.

45. COMPARISON WITH NAUTICAL CHARTS:

T-8614 has been compared in detail with Chart No. 8666, scale 1:50,000 published July 1927, reissued October 1939, and corrected to July 20, 1946.

a. The following topographic information shown on T-8614 is of sufficient importance to warrant immediate application to the chart:

None.

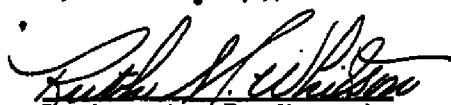
b. The following topographic details above the plane of mean high-water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:

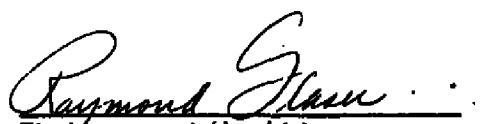
None.

45. COMPARISON WITH NAUTICAL CHARTS:(Continued)

- c. Low-water features are shown in part and will be completed by the hydrographic party.
- d. This survey shows minor changes in cultural and shoreline details, none of which need discussion here.

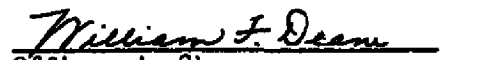
Respectfully submitted:
19 February 1947


Engineering Draftsman
Compilation and
Compilation Report


Photogrammetric Aid
Photogrammetric Office Reviewer


Supervisor

Approved and Forwarded
28 February 1947


Officer in Charge
Baltimore Photogrammetric Office

Division of Photogrammetry
Review Report of
Topographic Map Manuscript T-8614

Subject numbers not used in this report have been adequately covered in other parts of the Descriptive Report.

26. Control:- Triangulation station Kayak, 1944 is the only station, used to control the radial plot, which fell inside the limits of the map manuscript.

Other triangulation within the limits of the quadrangle was either not identified in the field, office pricking was unsatisfactory, or the station fell beyond the photo coverage. Horizontal control data form No. M-2388-12 listing all triangulation stations within the limits of the map, on the N.A. 1927 adjusted datum is attached to the descriptive report. The form supplements the previous listing on the Preliminary N.A. 1927 datum.

28. Detailing:- Field inspection photographs were not used in making the final review; they were being used by the hydrographic party. Since the field inspection photos included the pricking of only one triangulation station and, a meager shoreline clarification note, their absence did not hinder the final review.

The final review corrections and changes were made on the map manuscript to insure completeness and conformance with specifications. The changes included the addition of a top contour, substantiated by elevations furnished by the Division of Geodesy, the addition of several drainages, and changes in nomenclature for some shoreline features.

The delineation of shoreline was carefully examined and compared with office photographs; it appears to be satisfactory.

Even though the field inspection of M.H.W.L. was very meager, the characteristic of the steep rocky bluff shoreline and steep sandy beaches, rigidly fix the line within very narrow limits. The same cannot be said of the shoal areas, ledge lines, reef lines, and all other details offshore from the high-water line. Such features are subject to change by the hydrographic party. The delineation of offshore features was based on the interpretation of the office compiler and only as aid to the hydrographic party.

37. Geographic Names:- All Geographic Names shown on the map manuscript have been approved by the Geographic Names Section of the Division of Charts. Attached to the Descriptive Report is a list of Approved Geographic Names.

44. Comparison with Existing Topographic Surveys:- In addition to the comparison mentioned under item 44 of the compilation report, comparison was made with the following topographic survey, common only in the vicinity of Titcliff Island:

4031 - 1:20,000 1923

Differences between common M.H.W.L. delineation vary from a negligible amount to 4 mm.

47. Adequacy of Compilation:- An examination of map manuscript T-8614 indicates it to be complete in all details as a base map for nautical charts and hydrographic surveys. From the M.H.W.L. inland, all delineated details are adequate for incorporation into standard quadrangle type maps, of publication scale not to be larger than 1:24,000 and contour interval not to be less than 200 ft. except for the first 100 ft. contour.

48. Accuracy Tests:-

Horizontal:

No horizontal accuracy test was made. The combination of adequate nine-lens photographic coverage, nine-lens radial plot methods and adequate horizontal control, insures a horizontal accuracy equal to or better than National Map Accuracy Requirements.

Vertical:

Vertical accuracy tests have not been made on this map, nor have similar areas been previously mapped by similar methods.

A consultation with the instrument operators revealed that contour errors were minimized by the lack of woodland cover and any discrepancies which might exist are caused by datum errors in the nine-lens chamber junctions. The chance of such errors was greatly reduced by the presence of sea level as a base for datum corrections at chamber junctions.

The instrument operators felt that the contours were within an accuracy of one-quarter contour interval.

Reviewed by:

Harland R. Cravat
Harland R. Cravat
July 14, 1948

Approved by:

S. V. Griffith
S.V. Griffith
Chief, Review Section

H. Edmonston
Chief, Nautical Charts
Division of Charts

K.T. Adams
Chief, Div. of Photogrammetry

C. K. Green
Chief, Div. of Coastal Surveys
1448

GEOGRAPHIC NAMES

Survey No. T-8614

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
<u>Alaska</u>			(for title)						1
<u>Alaska Peninsula</u>								USGB	2
<u>Wide Bay</u>								"	3
<u>Cape Kayakliut</u>									4
<u>Titoliff Island</u>									5
									6
Names underlined in red are approved. 7/14/48 I. Beck									7
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NOTES
FOR
HYDROGRAPHIC PARTIES
ALASKA PENINSULA

MAP MANUSCRIPT SURVEY NO. T-8614

Project No. CS-317

The $2\frac{1}{2}$ millimeter circles accompanied with a number are the positions of the hydrographic signal sites. Two copies of the list of descriptions of all of the hydrographic signal sites have been furnished for your use.

The outlines of reef and shoal areas are approximate and are for your advance information only. They are shown with short dashed and long dashed lines accompanied with the notes "Reef" and "Shoal" respectively.

The map has been compared in detail with Chart No. 8666, scale 1:50,000, published July 1927, reissued October 1939, and corrected to July 20, 1946.

- a. The following topographic information shown on T-8614 is of sufficient importance to warrant immediate application to the chart:

None.

- b. The following topographic details above the plane of mean high-water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:

None.

- c. Low-water features are shown in part and will be completed by the hydrographic party.
- d. This survey shows minor changes in cultural and shoreline details, none of which need discussion here.

Approved and Forwarded
28 February 1947
William F. Dean
Officer in Charge
Baltimore Photogrammetric Office

Respectfully submitted
19 February 1947

Arthur M. Whitson
Engineering Draftsman

LIST OF HYDROGRAPHIC SIGNAL SITES

Site No.	Description	Pricked on Photo. No.
58	Point of Wedge	10989 - Field
59	High Point of Rock	10989 - Field
61	Point of Bluff	11019 - Office
62	Projection on Bluff	11019 - Office

LISTED BY:

Robert L. Whitman

COMPUTATIONS SHOWING ADJUSTMENT REQUIRED
TO CORRECT PROJECTION LINES TO N. A. 1927
ADJUSTED DATUM FOR SURVEY NO. T-8614

	Forward Lash Old Position Meters	Forward Lash New Position Meters	Differences Meters
CREEK, 1923	1095.1	1075.3	- 19.8
	664.6	678.8	+ 14.2

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Re: 711-RCR

POST-OFFICE ADDRESS:

WASHINGTON 25

25 February 1947

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

To: Lieutenant William F. Deane
U. S. Coast and Geodetic Survey
601-611 Gorsuch Avenue
Baltimore -18, Maryland.

Subject: Datum difference on project CS-317,
sheets T-8614 to T-8619 inclusive

With reference to your letter of 21 February 1947, I agree with you that the ticks showing the final adjusted datum should be shown at intervals throughout each manuscript. However, I think it will be adequate if this is done at two minute intervals. Therefore, please draw the ticks at the even two minute intervals of latitude and longitude.

These ticks may be omitted on the extreme offshore and inshore edges where no details are shown. In other words, sufficient ticks should be shown to square up the new projection, but the rectangular limits of the new projection can be restricted to the detailed area on each sheet.

It may be that we can save you this work by ruling the new datum on the projection ruling machine in this office. However, this can be done only if the distortion in the manuscript is negligible. If you want to try this method, select one manuscript which can be spared from your office and measure the projection for distortion. If the distortion is negligible, forward it to this office and we will attempt to rule the new datum on the machine. If it works, the same can be done for all six manuscripts.

On the other hand, if you find the manuscript to be distorted, the work will have to be done by hand in the Baltimore Office. Also, if you consider that in any case it will be too much trouble to route the sheets here for ruling a new datum, you are entirely free to do the work in Baltimore without any further reference to the ruling machine.

K. T. Adams,
Chief, Div. of Photogrammetry

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS:

711-RCE

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

17 February 1947

C
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To: Lieutenant William F. Deane
U. S. Coast and Geodetic Survey
601-611 Gorsuch Avenue
Baltimore 18, Maryland.

Subject: T-8614, project CS-317

With reference to Mr. Steinberg's inquire regarding the junction with planetable surveys at the entrance to Wide Bay on T-8614, it will be of sufficient to compile the shoreline up to and around the northern - most point of the mainland, latitude 57 19.3', longitude 156 21.5". It will not be necessary to compile the islands, that is, Titcliff Island and the island just southeast of Titcliff Island. The appearance of the land details on Chart 8666 shows pretty well where the planetable work stopped.

B. G. Jones
Technical Assistant to the
Chief, Div. of Photogrammetry

SURVEY NO. 8614

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

