9654

CONFIDENTIAL

Diag. Cht. No. 9380

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. Ph-65(50) Office No. T-9654

LOCALITY

State TERRITORY OF ALASKA

General locality SEWARD PENINSULA

Locality NOME

194 50

CHIEF OF PARTY

T.B.Reed, Commanding Officer, Ship PIONEER
C.W.Clark, Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

9654

CONFIDENTIAL

DECLASSIFIED 3/12/57 Letter
Authority 3(5) of SR 380-5-5 dated 14 July 52.

DATA RECORD

T-9654

Project No. (II): Ph-65(50) Quadrangle Name (IV): Nome, Alaska

Field Office (II): Nome, Alaska Chief of Party: T. B. Reed

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Charles W. Clark

Instructions dated (II) (III): Field (RS 384, 388-392)-17 April 1950 Copy filed in Division of Photogrammetry (IV)
Field (letter) - 18 April 1950
Field (CS-341) - 19 May 1950
Compilation - 9 November 1950
Compilation (letter) - 20 December 1950

Method of Compilation (III): Graphic

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

Scale Factor (III): 1.000

Date received in Washington Office (IV): 4/11/51 Date reported to Nautical Chart Branch (IV): 4-16-51

Applied to Chart No. Date: Date registered (IV):

Publication Scale (IV): 1:20,000 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
Shoreline at MHW

Reference Station (III): City, 1900

Lat.: 64° 30' 03".343 Long.: 165° 21' 25".487 Adjusted ~~Unadjusted~~

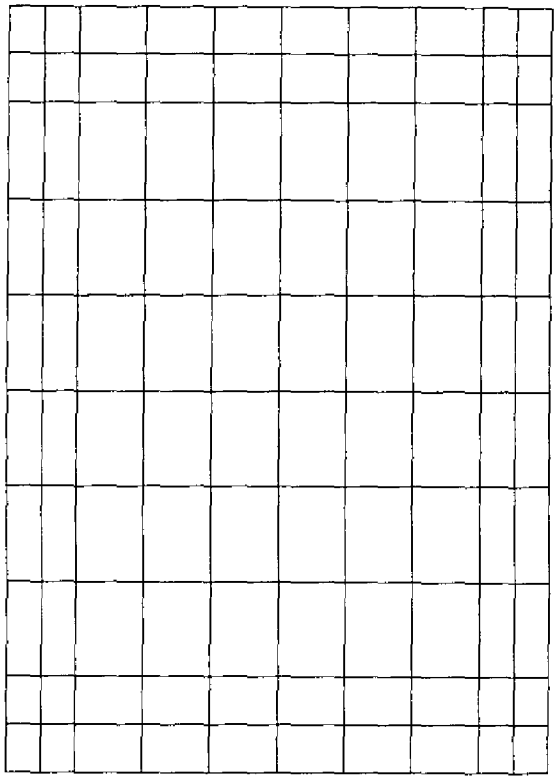
Plane Coordinates (IV): ~~State~~: Alaska Zone: 3

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)



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

DATA RECORD

Field Inspection by (II): None Date: —

Planetable contouring by (II): None Date: —

Completion Surveys by (II): A. C. Holmes (see item "Field Edit" ~~In Review~~ Report) Date: Oct. 11, 1950

Mean High Water Location (III) (State date and method of location):
Office photographic interpretation - Feb. 1950
Field inspection - Sept. 16, 1950

Projection and Grids ruled by (IV): W. O. Date:

Projection and Grids checked by (IV): W. O. Date:

Control plotted by (III): (1) S. G. Blankenbaker (W.O.) Date: Feb. 1950
(2) Portland Office April 1950

Control checked by (III): Same as above Date: —

Radial Plot ~~or Stereoscopic Control extension by~~ (III): " " " Date: Mar. 3, 1950
May, 1951

Stereoscopic Instrument compilation (III): ~~Planimetry~~ None Date: —
~~Contours~~ Date: —

Manuscript delineated by (III): S. G. Blankenbaker (W.O.) Date: Mar. 3, 1950

Photogrammetric Office Review by (III): G. B. Willey (W.O.) Date: Mar. 3, 1950
J. E. Deal, Jr. (Portland) May, 1951

Elevations on Manuscript checked by (II) (III): None Date: —

Camera (kind or source) (III): Single-lens

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
SEW-15 002-005	9-1-49		Ratioed to 1:20,000	
036-038	"		" " "	
043-046	"		" " "	
077-081	"		" " "	
1:16-18 40-48	6-6-49		1:20,000	

Tide (III)

Diurnal

Ratio of Ranges	Mean Range	Spring Range
	2.2	3.7
	1.0	1.6

Reference Station: Dutch Harbor
Subordinate Station: Nome
Subordinate Station:

Washington Office Review by (IV): L. Martin Gazik Date: Aug 26, 1952

Final Drafting by (IV): E. B. Hunter Date: 11-4-52

Drafting verified for reproduction by (IV): W. O. Ballou Date: 11-24-52

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III):
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 4 Recovered: 4 Identified: 4
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III):
Number of Temporary Photo Hydro Stations established (III):

Remarks:

M-2618-12(4)

Summary T-9654

The planimetric survey for NOME is one of 16 maps at 1;20,000 scale in project Ph-65(50) and does not adjoin the other maps of this project.

The remaining 15 maps in this series cover the coastline of the SEWARD PENINSULA northward from CAPE DOUGLAS around CAPE PRINCE OF WALES to the IKPEK LAGOON at the 66° parallel.

Information concerning the project in its broader aspect will be included in a project completion report to be compiled at the conclusion of the review of all surveys in this project and will be filed in the Bureau Archives.

SUPPLEMENTAL PHOTOGRAMMETRIC PLOT
Map Manuscript No. T-9654 (RS-384)
Project Ph-65(50)

21: AREA COVERED:

This photogrammetric plot for Map Manuscript No. T-9654 comprises an area about 4 miles wide, along the north shore of Norton Sound, Alaska, extending about 5 miles easterly and about 3 miles westerly from Nome, Alaska.

22: METHOD:

The plot was laid directly on the previously compiled map manuscript using the 1949 Navy Department single lens photography which consisted of ratio prints at a scale of 1:20,000. These were the same prints as those used by the Washington Office in the original plot.

Templets were made on sheets of 18" x 18" x .005" sheets of clear acetate and paper distortion corrections were made by use of the single lens master templet and the special fiducial marks shown on the ratio prints.

Four horizontal control stations which were identified during the 1950 field season by the Ship PIONEER namely: SATELLITE WEST BASE 1944, SATELLITE EAST BASE 1944, SUB BEACH (USE) 1944, and CITY 1944 were used to supplement the identified horizontal control used in the original radial plot.

The sub station for SUB BEACH (USE) 1944 was the only one of these four stations which was positively identified on a field photograph. The locations of the other 3 stations were only approximately indicated on the field photographs. It is believed, however, that they were satisfactorily identified by office examination of the photographs with the aid of the descriptions entered on the control station identification card (Form M-2226-12) for each station.

A sub station was also identified for traverse station QUON. This office was not furnished a geographic position for this station. The identified point has been radially intersected and shown on the map manuscript as sub station QUON. It is assumed that the geographic position for this station is on file in the Washington Office and that the station will be plotted during final review of the map manuscript utilizing the measurements entered on the control station identification form to verify the accuracy of the planimetry in the vicinity of station QUON. Position of QUON determined from data given on form M-2226-12 was within .5 mm of the traverse position, Lat. 64° 30' 35."1 Long 165° 31' 00."959 as given by H-7844. This unmarked station was not accepted by Geodesy as third order traverse and is not shown on T-9654.

In all but a few instances the radials to the horizontal control stations passed directly through the points of their plotted positions on the map manuscripts. In no case was any radial held more than 0.10 mm off the plotted point. The closure was excellent and intersections of radials to pass points verified all pass points located in the original plot except those at the extreme eastern and western limits of the map manuscript. [This plot indicated that the map manuscript is slightly ~~under a~~ smaller than 1:20,000 scale at its eastern and western limits but since no horizontal control stations are located at these extreme limits this scale change was not positively proven. Red lines have been drawn on the map manuscript outlining the areas which this plot indicated the accuracy of the map manuscript to be doubtful. The red lines mentioned in the previous sentence have been deleted - for comment on map accuracy see Items 67 and 67 of the Review Report.]

23: ADEQUACY OF CONTROL:

The horizontal control stations were satisfactorily identified and of sufficient density to control the orientation of the templets except as stated in the preceeding side heading No. 22.

24: SUPPLEMENTAL DATA:

Not applicable.

25: PHOTOGRAPHY:

The photography was adequate for the area of this radial plot.

26: REMARKS:

It is assumed that Forms M-2388-12 for the area of this map manuscript were submitted with the original photogrammetric plot report.

Approved:

Charles W. Clark

Charles W. Clark
Officer-in-Charge

Respectfully submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Cartographer

Photogrammetry

MAP T-9654 PROJECT NO. Ph-65(50) SCALE OF MAP 1:20,000 SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID INTERSECT. 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)
Newton (U.S.E.) 1944	Alaska vol IV Pg. 78	NA 1927	64° 33' 34.598"	1,071.5			
			165 18- 59.116	787.4			
City, 1900; r. 1944	"	"	64 30 03.343	103.5			
			165 21 25.487	340.2			
Army Peak 2, 1944	"	"	64 32 20.206	625.8			
			165 11 11.470	152.9			
Inter (U.S.E.) 1944	Alaska vol IV Pg. 79	"	64 31 44.248	1,370.3			
			165 24 51.947	692.7			
Astroaz 1944	"	"	64 33 27.342	846.8			
			165 21 05.655	75.3			
Anvil (U.S.E.) 1944	"	"	64 33 41.900	1,297.6			
			165 23 09.333	124.3			
42 nd (U.S.E.) 1944	"	"	64 33 58.238	1,803.6			
			165 25 56.058	746.5			
Satellite West Base (Pic U.S.E.) 1944	"	"	64 32 36.491	1,130.1			
			165 24 17.843	237.8			
Satellite East Base (Rus U.S.E.) 1944	"	"	64 32 29.926	926.8			
			165 22 23.317	310.8			
4 th (U.S.E.) 1944	"	"	64 32 20.883	646.7			
			165 21 10.740	143.2			
Barn (U.S.E.) 1944	"	"	64 31 09.062	280.6			
			165 22 31.906	425.6			
Hill (U.S.E.) 1944	"	"	64 31 52.755	1,633.8			
			165 17 37.703	502.7			

1 FT. = .3048006 METER

COMPUTED BY: R.L.S. DATE 8-27-57 CHECKED BY: L.M.G. DATE 8-29-57

M-2388-1

Photogrammetry

MAP T- 9654 PROJECT NO. Ph-65(50) SCALE OF MAP 1:20,000 SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID INTERSECT. 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)
USLM 1C (GLO) 1944	Alaska Vol IV Pg. 80	NA 1927	64° 30' 24.049 165 25 48.460	744.8 646.7			
Sub Beach (USE) 1944	"	"	64 30 36.399 165 27 49.020	1,127.2 654.1			
Nome Field 1944	"	"	64 30 40.994 165 23 24.334	1,269.5 324.7			
Mark 1944	"	"	64 30 ~~46.343~~ 40.994 165 26 31.524	1,277.3 ~~421.1~~ 419.2			
Nome, CAA Transmitter 1944	Alaska Vol IV Pg. 95	"	64 30 19.524 165 19 30.673	604.6 409.4			
Nome, CAA Radio Range, 1944	"	"	64 30 00.506 165 18 58.441	15.7 780.1			
Nome, ACS Tower, 1944	"	"	64 30 03.761 165 23 33.558	116.5 448.0			
Nome, CAA Antenna, 1944	"	"	64 30 08.264 165 24 33.253	255.9 443.9			
Nome, Federated Church Belfry 1944	"	"	64 30 01.218 165 24 33.584	37.7 448.3			
Nome, Federal Bldg., Theodolite, 1944	Alaska Vol IV Pg. 96	"	64 29 54.055 165 24 09.159	1,674.0 122.3			
Nome, St. Joseph's Church Spire, 1944	"	"	64 29 58.396 165 23 55.678	1,808.5 743.2	(destroyed)		
Snake (AMS) X 1949	Alaska Vol IV Pg 139	"	64 35 38.624 165 33 09.585	1,196.1 127.5			

FT. = 3048006 METER

COMPUTED BY: R.L.S. DATE 8-27-52 CHECKED BY: L.M.G. DATE 8-29-52

M-2388-1

Photogrammetry

MAP T- 9654 PROJECT NO. Ph-65(50) SCALE OF MAP 1:20,000 SCALE FACTOR 1:000

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)
Newton eccentric GTZ	N A		64 33 34.467	1,067.4			
✓(A.M.S.) 1949	G-8304	1927	165 18 58.807	783.3			

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: DATE CHECKED BY: DATE

SUPPLEMENTAL COMPILATION REPORT
Map Manuscript No. T-9654 (RS-384) .
Project Ph-65(50)

The following changes are shown in red ink on the original compilation of Map Manuscript No. T-9654.

Plane-table Sheet PI-A-50(1950, Scale 1:2500 was reduced to a scale of 1:20,000 by use of the vertical projector. Changes indicated by this plane-table sheet were then traced in red ink on the map manuscript.

The location of the mean high water line as determined on the plane-table sheet was applied to the photographs and by analogy this interpretation was extended upstream and the mean high water line was relocated beyond the limits of the plane-table work to a point opposite to the western limits of the east-west runway of Mark Field Airport.

The mean high water line along Norton Sound was revised to agree with measurements made by the field party at photo points marked "A" to "H" incl., on the map manuscript. These points, as identified by the field party, were located by radial intersections.

Four fixed aids to navigation and one landmark were plotted on the map manuscript using plane-table positions listed in the descriptive report for Topographic Survey Field No. PI-A-50(1950).

The outlines of most of the buildings in the city of Nome were straightened so that better reproduction could be obtained. From stereoscopic examination of the photographs several buildings were added in the city of Nome.

Road classifications were added from field edit sheet and a minor relocation was made to a small portion of one road.

Approved:
Charles W. Clark
Charles W. Clark
Officer-in-Charge

Respectfully submitted:
J. Edward Deal Jr.
J. Edward Deal, Jr.
Cartographer

17.

FIELD EDIT REPORT

RS - 384 1950

Ship PIONEER Thos. B. Reed, Chief of Party

Nome, Alaska

METHODS The identification of ground control stations was done in accordance with Photogrammetry Instructions No. 22 4-26-48. The shoreline inspection was done in accordance with "Supplemental Instructions - Shoreline Inspection" for Photogrammetric Parties dated March 18, 1944. The shoreline inspection and the identification of triangulation station SUB BEACH and traverse station QUON was done on the 9" x 9" photographs NOM 1-7, NOM 1-9 through 17, NOM 1-40. Triangulation stations CITY, SATELLITE WEST BASE and SATELLITE EAST BASE were identified on 18" x 18" photographs SEW-15, -003 and SEW-15-037. Some field editing was done on a photostatic copy of the map manuscript. The mean high water line was visited along the full length of the manuscript, ~~but was not indicated either on the manuscript or photographs.~~ Distances were measured from the high water line to identifiable points at intervals along the shoreline. These points were pricked and circled in red on the photographs.

ADEQUACY OF COMPILATION The compilation seems to be very complete and adequate, particularly so considering it was done without benifit of previous field inspection.

MAP ACCURACY A good indication of the map accuracy was obtained by a traverse run from SUB BEACH to the west edge of the manuscript for the purpose of locating hydrographic signals along the beach. Points along this traverse checked excelently with the positions of detail on the manuscript such as identifiable buildings and drainage. The building on the shoreline near the western limits was not on RS 384 on T-9654 before review. See

RECOMMENDATIONS. None. Item 64 of the Review Report.

EXAMINATION OF PROOF COPY. The manuscript was not shown to any residents in the area for security reasons, thus their assistance in locating possible errors was not obtained.

REMARKS. Only one day was available in the field edit with the photographs as they were not received aboard ship until 31 July. At this time the ship was working off Wales, the work in the vicinity of Nome having been completed. Comdr. Riddell and the following members of his 1950 Photogrammetry Party greatly assisted in this field work on Sept. 16; V.E. Serena, R.H. Skelton II, and J. Chamberlin.

A.C. Holmes

October 11, 1950

A.C. Holmes
ENS., USC&GS

Approved and forwarded:

Thos. B. Reed
CDR., USC&GS
Comdg. Ship PIONEER

GEOGRAPHIC NAMES

Survey No. T-9654

NOME, Alaska

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 Ma	G Rand McNally A	H U. S. Light List	K	
Otter Creek ✓										1
Florence Gulch ✓				✓	Seward Peninsula					2
McDonald Creek				✓	Norton Sound					3
Tripple Creek				✓	Nome					4
Lost Creek				✓	Nome Field					5
Derby Creek				✓	Nome Municipal Field					6
Little Derby Creek				✓	Lynn Creek					7
Cunningham Creek				✓	Ingraham Creek					8
Irene Creek				✓	Little Specimen Gulch					9
Laurada Creek				✓	Cooper Gulch					10
Moss Gulch				✓	Holyoke Creek					11
Stevens Gulch				✓	Left Fork (of Extorting)					12
Washington Creek				✓	Grouse Gulch					13
Birthday Gulch				✓	Dexter Creek					14
Nome River				✓	Joe Gulch					15
Osborn Creek				✓	Bear Creek					16
Zeaman Gulch				✓	Fox Gulch					17
Quincy Gulch				✓	Extra Dry Creek					18
St. Michael Creek				✓	Nil Desperandum Gulch					19
Anvil Creek					Anvil Peak					20
Little Creek				✓	Blind Gulch					21
Snake River				✓	Bird Creek					22
Dry Creek										23
Bourbon Creek					Names underlined in red are approved 7-23-52 L. Heck					24
Newton Gulch										25
Left Fork		(of Dry Cr)								26
Peluk Creek					additional names 8-15-52					27
Martin Creek										

M 234

Review Report T-9654
Planimetric Map
August 26, 1952

62. Comparison with Registered Topographic Surveys.-

T-2518	1:40,000	1900
T-6927 (PI-A-50)	1:2,500	1950

Except for the shoreline around NOME Harbor, the remainder of the coastal shoreline of T-9654 shows little change since the above 1900 survey.

For interior features, such as drainage, topographic relief and planimetry this survey supersedes T-2518 for nautical chart purposes.

T-6927 supplied detailed information at 1:2,500 scale for the area immediately adjacent to Nome Harbor and was accomplished by the same field party that provided field information for this contemporaneous survey.

63. Comparison with Maps of other Agencies.-

1. NOME Special Map, USGS, 1:62,500 1906
2. NOME, Alaska, USGS, 1:250,000, 1951
3. Reconnaissance Map of Seward Peninsula, USGS, 1:500,000, 1918 reprint 1935.

The "landing area" just below ANVIL PEAK on the USGS map (2.) is now the scene of mining operations as shown on T-9654.

Some ditches on the 1951 USGS map are shown as abandoned. This survey shows all ditches without distinction since the field party provided no information on that score.

Hachures, showing topographic relief to the north of Nome, compare favorably with the relief depicted more specifically by contours on the USGS 1906 map.

64. Comparison with Contemporary Hydrographic Surveys.-

H-7844	1:20,000	1950

Other than horizontal control and shoreline, there is no detail common between the above survey and T-9654.

Topographic station, SOGA 1950, established for H-7844 is next to the last station in an open traverse extending about 3 miles west from SUB BEACH (USE) 1944. This is the same

traverse referred to in the third paragraph of the Field Edit Report on page 12 of this Descriptive Report. This station, described by the hydrographic party as the south gable of an abandoned log cabin, is 1 mm. west of the position of what appears to be the same building on T-9654.

East of 165° 10' and west of 165° 30' are the areas mentioned in the last paragraph of Item 22 of the Photogrammetric Plot Report, page 7, as being at a slightly smaller scale than 1:20,000. SOGA 1950 falls in the area west of 165° 30' and probably accounts for the difference in position of SOGA on H-7844 and the south gable of the cabin on T-9654.

Since SOGA 1950 falls in a questionable area of the topographic survey, T-9654, the signal has not been shown. See Item 67 below.

65. Comparison with Nautical Charts.-

Provisional Chart	9383 A	1:20,000	August 1950
	Chart 9380	1:400,000	August 1950

RS 384 and T-9654 before review served as base compilations for the above provisonal chart. Changes and additions made to T-9654 during review are as follows:

1. Planimetry was extended to 64° 35' latitude.
2. Considerable additions were made as to marsh, drainage, mining areas and buildings.
3. Minor corrections throughout the length of the coastal shoreline were made to conform to eight measurements locating the MHW line submitted by field edit.
4. Relief shown by hachures was considerably revised during review after stereoscopic examination. See Item 63 above.

66. Miscellaneous.-

(a) FIELD EDIT - was not the complete operation that this term implies and consisted only of shoreline inspection, control identification, and some road and building identification of RS 384 which served as a preliminary compilation for T-9654.

(b) LANDMARKS and AIDS TO NAVIGATION - positions for lights and the tower at the entrance to Nome Harbor will be found on Chart Letter 183 (1951) submitted by the field edit party.

(c) HOLIDAY - the holiday in the northeastern portion of the survey is due to lack of photo coverage.

67. Adequacy of Manuscript.-The area west of the red line mentioned in Item 22 of the Photogrammetric Plot Report as being of doubtful accuracy is the area west of 165° 30' (the red line now deleted).

The comment under Item 64 above regarding the traverse station, SOGA 1950, would tend to confirm the doubtful accuracy of this area. And the comment in the third paragraph of the Field Edit Report that the traverse checked the details on the manuscript would tend to confirm the accuracy of the area east of 165° 30'.

The area east of a second red line mentioned in Item 22 of the Photogrammetric Plot Report as being of doubtful accuracy is the area southeast of a line (the red line now deleted) drawn from a point where 165° 15' crosses the shoreline to the source of BIRTHDAY GULCH.

Within the limits described in the preceding three paragraphs, T-9654 complies with project instructions and bureau standards.

Reviewed by:

L. M. Gazik per Sm
L. Martin Gazik

APPROVED

11/25/53
Chief, Review Branch
Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Photogrammetry

Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T.9654

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
Feb 1954	9383	NICHOLS	~~Before~~ After Verification and Review Various changes to original application
11/14/55	Reconstr 9380	GKE	~~Before~~ After Verification and Review SMA
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.