

9819

Original

9819

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No.	Office No. T-9819
LOCALITY	
State	ALASKA
General locality	PRINCE WILLIAM SOUND
Locality	KINGS RIVER
19 57-59	
CHIEF OF PARTY	
Field - H. J. Seaborg	
Office - L. W. Swanson	
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

DATA RECORD

T-9819, T-9820, T-9821

Project No. (II): Ph-152

Quadrangle Name (IV):

Field Office (II): Ship BOWIE

Chief of Party: H. J. Seaborg

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

Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III):

Copy filed in Division of
Photogrammetry (IV)

Compilation Instructions - Prince Wm. Sound

Supp. 5 dated 15 December 1958

Office Files

Supp. 6 dated 22 July 1959

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.0

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): NA 1927

Vertical Datum (III): MHW

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):

Lat.:

Long.:

Adjusted
Unadjusted

Plane Coordinates (IV): UTM

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.

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): W. P. James

Date: June 1959

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

Mean High Water Location (III) (State date and method of location):

Field and office identification of shoreline on photographs
taken May 1957 and Aug. 1958.

Projection and Grids ruled by (IV): Dempsey

Date: Dec. 17, 1958

Projection and Grids checked by (IV): Shoup

Date: Jan. '59

Control plotted by (III): H. Lucas
J. Battley

Date: Jan. '59
Aug. '59

Control checked by (III): W. Halluin
R. Sugden

Date: Jan. '59
Aug. '59

Radial Plot or Stereoscopic R. Sugden
~~Control-extension by (III):~~

Date: Sept. '59

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): T-9819, T-9820, T-9821:
R. Sugden

Date: Sept. '59
Sept. '59

Photogrammetric Office Review by (III): E. Ramey

Date: 22 Oct. 1959

Elevations on Manuscript
checked by (II) (III):

Date:

DESCRIPTIVE REPORT - DATA RECORD

3

Camera (kind or source) (III): USC&GS - 9-L and 1-L infrared

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
9-lens	17 May 1957			
56137, 56138		1350	1:20,000	9.5 above MLW
56146, 56147,				
56148	7 Aug. 1958	1402		
Single-lens	7 Aug. 1958	1208	1:30,000	4.1 ft. above MLW
58-L-5353 thru				
5357				

Tide (III)

Reference Station: Cordova
Subordinate Station: Wells Passage
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
9.5	10.0	
9.5	9.7	

Atlantic Marine Center
~~Washington Office~~ Review by (IV): C. H. Bishop

Date: 9-21-70

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

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

Shoreline (More than 200 meters to opposite shore) (III): 3 mi.

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

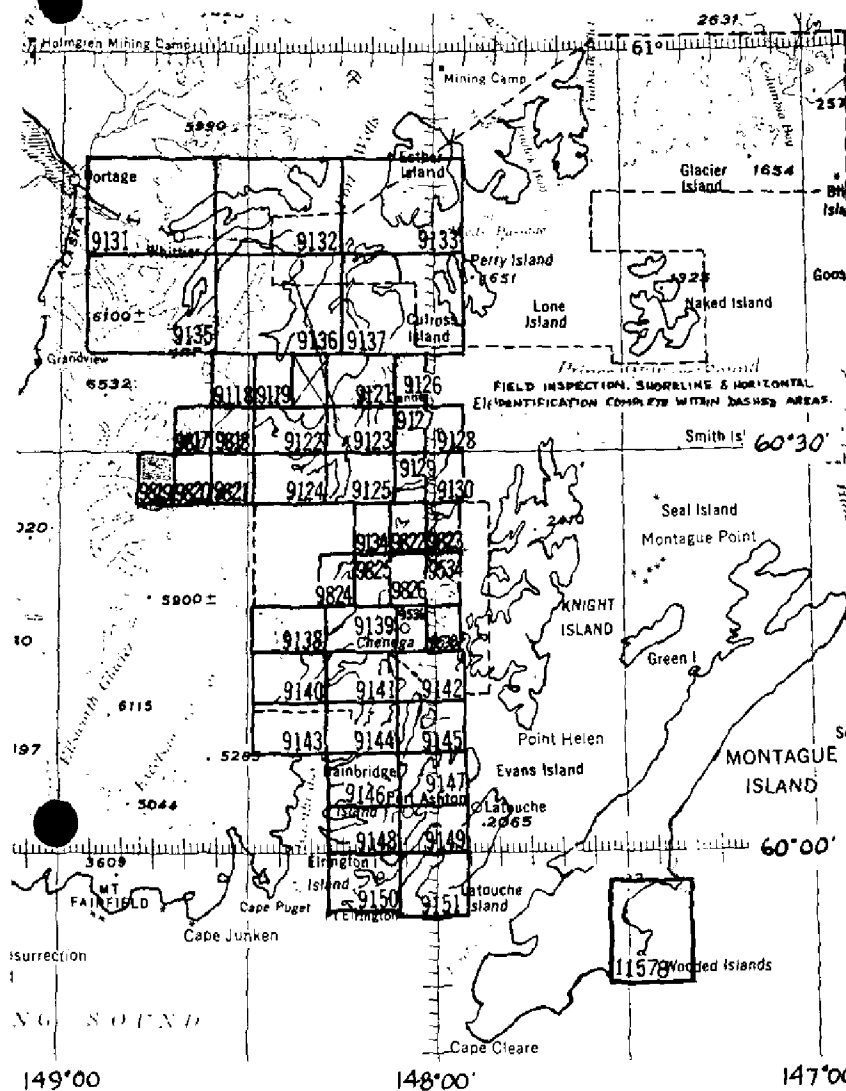
T-9819

COMPILATION RECORD	COMPLETION DATE	REMARKS
Preliminary shoreline for hydrography	February 1959	Superseded
New plot, map revised after field edit, ADVANCE	Sept. 1959	
Final Review	Sept. 1970	

PH - 152

5

Prince William Sound, Alaska



OFFICIAL MILEAGE FOR COST ACCOUNTING		
	LIN. MI.	AREA SQ.
SHEET NO.	SHORELINE	MILES
9118	3	13
9119	9	11
9121	11	10
9122	23	7
9123	17	7
9124	7	5
9125	15	6
9126	5	3
9127	6	8
9128	5	3
9129	7	8
9130	14	6
9131	12	95
9132	48	50
9133	36	45
9134	5	11
9135	24	90
9136	26	85
9137	68	48
9138	10	7
9139	13	5
9140	12	8
9141	24	12
9142	10	3
9143	9	4
9144	26	9
9145	19	8
9146	18	8
9147	24	9
9148	25	9
9149	19	7
9150	24	8
9151	15	9
9534	6	4
9536	6	6
9538	4	1
9817	9	10
9818	11	6
9819	3	9
9820	7	5
9821	2	10
9822	9	9
9823	7	4
9824	9	10
9825	11	6
9826	10	8
11578	19	21

TOTALS

702

726

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-9819

Records for this map were not complete at the time of final review, which is several years after compilation. The Compilation Record and notes concerning the absence of reports were inserted by the final reviewer.

This shoreline manuscript, scale 1:10,000, is one of 43 sheets that comprise Project PH-152, which is located in the western part of Prince William Sound, Alaska. T-9819 is at the southwest end of Kings Bay.

The original manuscript was preliminary in advance of hydrography. A radial plot was run on a 1:20,000 scale base sheet, using nine-lens photography of 1957. Points thus obtained were transferred to the 1:10,000 scale manuscript and shoreline and alongshore features were compiled graphically, using resected ratio photographs.

Copies of the preliminary manuscript were sent to the field in the spring of 1959 for photo-hydro support. Additional horizontal control was identified on the photographs furnished and field edit was accomplished. A final plot was run, the map was revised and classified "ADVANCE".

Final Review was done at the Atlantic Marine Center in September, 1970.

The compilation manuscript was a vinylite sheet 3 minutes 45 seconds in latitude and 5 minutes 37.5 seconds in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.

FIELD INSPECTION REPORT

MAP T-9819

PROJECT PH-152

There was no field inspection prior to compilation of this map and no Field Inspection Report is bound with this Descriptive Report.

PHOTOGRAMMETRIC PLOT REPORT

KINGS BAY, ALASKA

Project Ph-152

Aug - 1959

A preliminary plot of this area using mostly office-identified control was done in Feb. 1959. Ten additional control stations with CSI cards and accompanying field photo identification (June 1959) were furnished to control a new plot. The original templates were utilized in laying this latter plot.

21. Area Covered: This report discusses the final radial plot for shoreline surveys T-9118, T-9817 thru T-9821 and a portion of T-9122. These surveys cover the area of Kings Bay from the entrance to the head.
22. Methods - Vinylite sheets, ruled with base grids at 1:20,000 scale to correspond with the UTM grid lines were used to lay the plot.

Photo coverage of the area included two nine-lens flights on either side of the bay furnished on positype paper prints at 1:20,000 scale, and single-lens 58 L series infra-red photographs at 1:10,000 scale.

The additional field-identified control was transferred to the nine-lens office prints and added to the original templates. Positions of templates generally remained the same in the junction area of the north part of the plot which had former field-identified control. Due to the additional control some positions on the west side of the bay and in the delta at the head of the bay shifted about 0.3 mm. Otherwise positions did not change. The new positions were recircled on the base sheet and replotted on the 1:10,000 scale manuscripts where the resultant error would be doubled.

The single lens photographs were resected on the manuscripts into common pass points with the nine-lens photographs used in the plot. The positions of their centers were added for compilation purposes.

23. Adequacy of Control. The additional control resulted in a tight plot throughout. All control held within 0.3 mm, except EDNA 1946 (sub pt) which was missed 0.5 mm to the southeast

-2-

due to an error in identification on the field photo. During photo preparation another similar point fitting the description was noted which would have held in the photo. (see plot sketch for distribution of control).

24. Supplemental Data - None

25 Photography

The infra-red photographs were lacking in detail especially in shadow areas, making it difficult to find common pass points with the nine-lens photographs. The nine-lens photographs although lacking in definition were adequate for the plot.

Photogrammetric Plot Sketch and list of control submitted with report.

Submitted by

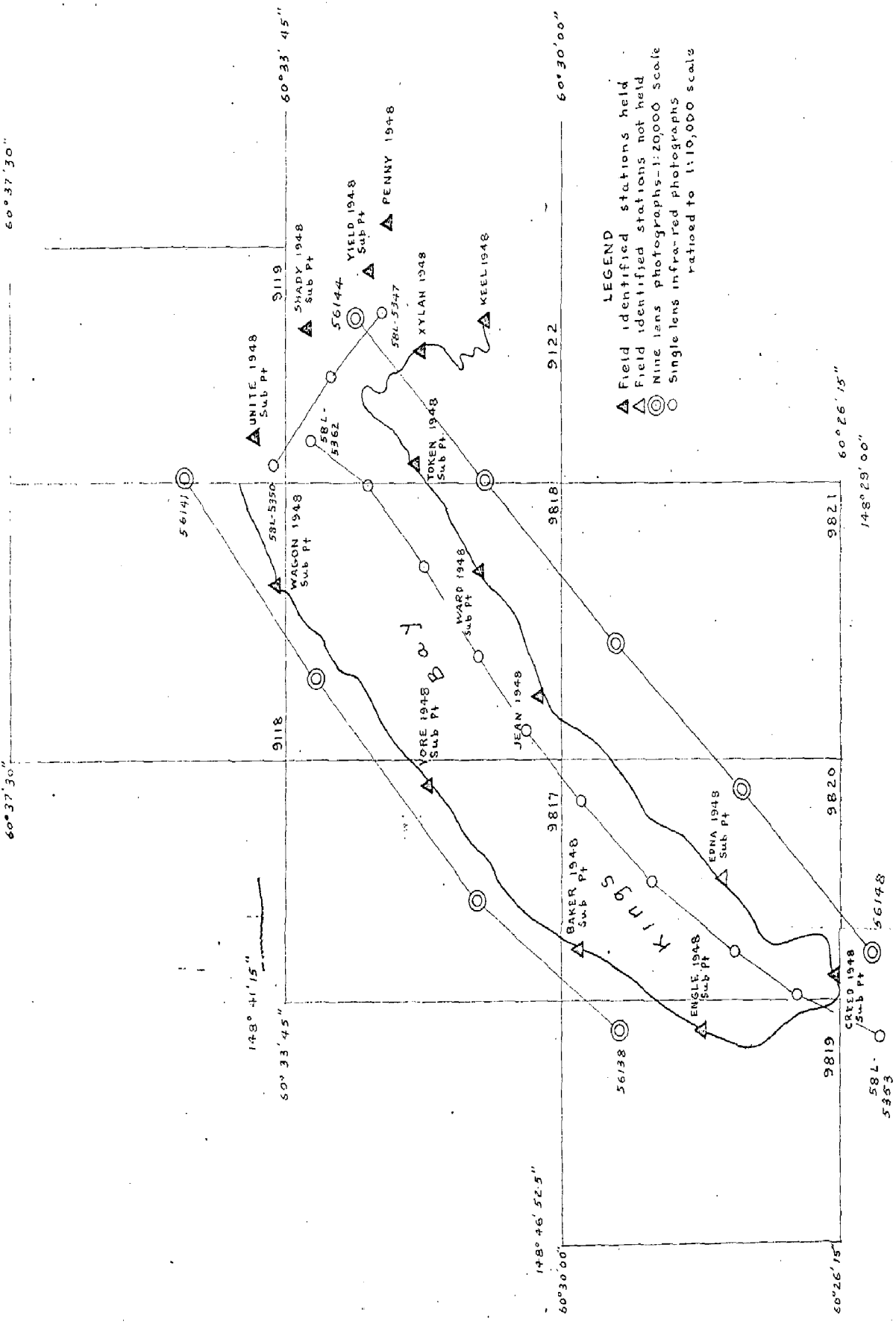
Robert L. Sugden
Robert L. Sugden
Cartographer

Approved by:

Everett H. Ramsey
Everett H. Ramsey
Chief, Graphic Unit

148° 35' 37.5"
60° 37' 30"

148° 23' 22.5"
60° 37' 30"



LEGEND
▲ Field identified stations held
△ Field identified stations not held
⊙ Nine lens photographs-1:20,000 scale
○ Single lens infrared photographs
ratioed to 1:10,000 scale

PHOTOGRAMMETRIC PLOT SKETCH

PH-152

Kings Bay, Alaska
Aug. 1959

PROJECT NO.	PH-152	SCALE OF MAP	1:10,000	SCALE FACTOR
-------------	--------	--------------	----------	--------------

[illegible]

COMPUTED BY: R. Sugden

DATE.....1/9/59.....

CHECKED BY: R. Kelly

DATE 1/24/59

COMM-DC-5784

COMPILATION REPORT
T-9819, T-9820 & T-9821
September 1959

Preliminary manuscripts based on an office-controlled plot of the Kings Bay area were completed in February 1959. These were furnished to the field party for the purpose of establishing photo-hydro control positions.

A new plot was completed in August 1959 using field-identified control (June 1959). Field inspection of shoreline was also furnished.

As the new plot resulted in only minor changes of position (see Photogrammetric Plot Report filed with Descriptive Report for Manuscript T-9118),^x The original preliminary manuscripts were used, compilation being held to the new positions.

31. Delineation

The 1:10,000 scale manuscripts were compiled by graphic methods, shoreline being delineated stereoscopically both from 1:10,000 retioed infrared photographs and from 1:20,000 scale nine-lens photographs using the reflecting projector to fit photographic detail to the manuscript.

The field inspection was done on single-lens infrared photographs on which detail was greatly obscured by shadow and lack of tone. Because of this the shoreline and low-water line delineated by the field party was of poor quality and was not used in some areas where an error was obvious. Field inspection was done on photographs numbered 58-L-5353 thru 5358, nine-lens 53138, 53139, thru 56148.

32. Control

56146

Control was adequate as regards identification, density, and placement. (See plot report filed as part of Descriptive Report T-9118.)

33. Supplemental Data

None.

34. Contours and Drainage

Inapplicable.

- 2 -

35. Shoreline and Alongshore Details

As noted under Sub-heading 31, the field inspection of shoreline and low-water line was refined in compilation. Much of this was done after studying the nine-lens photographs in areas where detail was obscured on the single-lens infrared photographs.

The low-water line was identified in the field using a tone line on the infrared photographs. The stage of tide at the time of these photographs was approximately 4 feet. Thus the line must be very approximate.

36. Offshore Details

Inapplicable.

37. Landmarks and Aids

Inapplicable.

38. Control for Future Surveys

Photo-hydro stations were located in the field on a blackline impression of the preliminary manuscript. These positions were relocated to fit the new plot positions. Descriptions of photo-hydro stations were not furnished and thus field identified points had to be generally accepted as shown.

39. Junctions

Junctions have been made with adjoining manuscripts.

40. Horizontal and Vertical Accuracy

Vertical control inapplicable. Horizontal control - see pp 32.

41. through 45.

Inapplicable.

- 3 -

46. Comparison with Existing Maps

US Geological Survey Quadrangles - Seward B-5, Scale 1:63,360, Dated 1952. No differences evident.

47. Comparison with Nautical Charts

US C&GS Chart No. 8517, Scale 1:80,000 - January 1952. No differences evident.

Items to be applied to Nautical Charts immediately:
None.

Items to be carried forward: None.

SUBMITTED BY:

Robert L. Sugden
Robert L. Sugden

APPROVED:

Everett H. Ramey
Everett H. Ramey
Chief, Graphic Unit
Photogrammetry Division

August 28, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-152 (Alaska)

T-9819

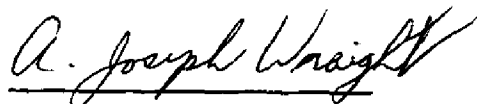
Chugach National Forest

Kings Bay

Kings River

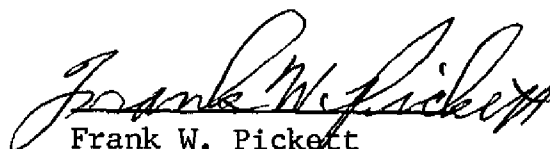
Nellie Juan River

Approved by:



A. Joseph Wraight
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

KINGS BAY
Surveys T-9118, T-9119, T-9817 through T-9821

NOTES TO THE HYDROGRAPHER

The manuscripts of the Kings Bay area were corrected to datum as established by the plot of August 1959 and positions of all photo-hydro stations were relocated to this datum. As the final plot resulted in some shift in pass point positions, local differences occur between some of the field-established photo-hydro positions and those on the final manuscript.

Those stations with significantly different positions are:

CAB - T-9817
PAT - T-9820
LUX - T-9820

Photo-hydro Station RAT on manuscript T-9820 is listed as "out" on the field photo.

Photo-hydro control ends on manuscripts T-9118 and T-9818.

The manuscripts which are subject to a final office review show new positions for photo-hydro stations and the shoreline as field inspected in 1959. They with accompanying vinylite impressions of preliminary manuscripts should suffice for the completion of the hydrographic surveys.

The low-water line shown on the manuscripts was identified in the field on infrared photographs which were taken at 4 feet above low water. The line is thus very approximate.

Everett H. Ramoy
Chief, Graphic Unit
Photogrammetry Division

FORM 1002(T-2) PHOTOGRAMMETRIC OFFICE REVIEW

MAP T- 9819

PROJECT PH-152

No Form 1002(T-2) was available at the time of final review and none is bound with this Descriptive Report.

FIELD EDIT REPORT

MAP T- 9819

PROJECT PH-152

Field edit was accomplished in 1959 in advance of revision of this map. At the time of final review, no Field Edit Report was available and none is bound with this Descriptive Report.

REVIEW REPORT T-9819

SHORELINE

SEPTEMBER 21, 1970

61. GENERAL STATEMENT:

See Summary on Page 6 of this Descriptive Report.

No ozalid comparison print was made for this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic surveys were available at the time of final review; no comparison was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle SEWARD (B-5), ALASKA, scale 1:63,360, dated 1952. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with an unverified copy of the smooth sheet for Survey H-8491, scale 1:10,000, dated 1959. No discrepancies were noted. T-9819 was used as a base for shoreline in the area compared.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8517, scale 1:80,000, 9th Edition, dated April 28, 1969. No discrepancies were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with Job Instructions, Bureau requirements, and the National Standards for Map Accuracy. No accuracy test was run in the field.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer
September 21, 1970

Approved:

Allen L. Powell

Allen L. Powell, RADM, USESSA
Director, Atlantic Marine Center

Approved:

Charles H. Bishop

Chief,
Photogrammetric Branch *CHB*

Jack E. Luth

Chief,
Photogrammetry Division