# T-12008

Form 504										
U. S. DEPARTMENT OF COMMERCE										
COAST AND GEODETIC SURVEY										
DESCRIPTIVE DEPORT										
DESCRIPTIVE REPORT										
Class III Map										
Type of Survey SHORELINE (PHOTOGRAMMETRIC)										
Field No. PH-60/3 Office No.: 7-12008										
Office No.										
LOCALITY										
LOCALITY										
State ALASKA										
General locality Knik Arm	į									
General locality KN1K ARM										
Locality SIX MILE CREEK										
<u> 19.60</u>										
CHIEF OF PARTY	ı									
Portland	ĺ									
P. A. STARK, PHOTOGRAMMETRIC OFFICE										
LIBRARY & ARCHIVES										
LIDRANT & ANDTHYES										
	1									
DATE										

A SECOND EDITION OF THIS MAP IS REGISTERED

# DESCRIPTIVE REPORT - DATA RECORD

T- 12008

PROJECT NO. (II):							
PI	1-6013						
FIELD OFFICE (II):			CHIEF OF PART				
			CHIEF OF PAR				
PHOTOGRAMMETRIC OFFICE (III):			OFFICER-IN-CH	ARGE			
PORTLAND,	OREGON				. STARK		
INSTRUCTIONS DATED (II) (III):							
APRIL 1, APRIL 17.	7, 1963, SUPPLEMENT 1964, SUPPLEMENT 1964 AMMENDMENT R DATED APRIL 14, 1	No. 2	EMENT No. 2				
METHOD OF COMPILATION (III):							
KELSH INS	FRUMENT						
MANUSCRIPT SCALE (III):		STEREOSCO	PIC PLOTTING INS	STRUMENT SCAL	E (III):1:6000		
1:10,000			RAPH SCALE: 1:10,000				
DATE RECEIVED IN WASHINGTON OF	ICE (IV):		PORTED TO NAUTICAL CHART BRANCH (IV):				
Jan. 25, 1980			Feb. 1980	CHART BRAN	CH (IV):		
APPLIED TO CHART NO.		DATE:		DATE REGISTE	RED (IV):		
				JONE	1000		
GEOGRAPHIC DATUM (III):			VERTICAL DATU		1780		
			MEAN SEA LEVEL		LLOWS:		
			Elevations shown				
			Elevations shown	as (5) refer to sou	mding datum		
			i.e., mean low wate	er or mean lower I	ow water		
REFERENCE STATION (III):							
LOOP, 1944							
LAT.:	LONG.:		XX ADJUSTED				
61° 15' 14.269°	149° 50' 44.37	3"	UNADJUSTED				
PLANE COORDINATES (IV):			STATE	Z	ONE		
Y = 2,650,318.94	= 527,177.54		ALASKA		4		
ROMAN NUMERALS INDICATE WHETHER OR (IV) WASHINGTON OFFICE.							
HEN ENTERING NAMES OF PERSONNE	L ON THIS RECORD GIVE TH	E SURNAME AN	ND INITIALS, NOT	INITIALS ONLY.			

### **DESCRIPTIVE REPORT - DATA RECORD**

T-12008

	FIELD INSPECTION BY (II):		DATE:											
	None													
	MEAN HIGH WATER LOCATION (III) (STATE DATE AND METH	HOD OF LOCATION):												
	Kelsh Stereoplotter (8/30/60 Date of photography)													
	No MLLW line has been													
	PROJECTION AND GRIDS RULED BY (IV):	have a great and a second	DATE											
	A. E. ROUNDTREE	-	4-17-64											
	PROJECTION AND GRIDS CHECKED BY (IV):		DATE											
	C. R. JOHNSON		4-17-64											
	CONTROL PLOTTED BY (III):		DATE											
	L. L. GRAVES		5-11-64											
	CONTROL CHECKED BY (III):		DATE											
	CONTROL CHECKED BY (III).													
1	R. H. MEYER		5-11-64											
			* *											
	RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY	(m):	DATE											
	J. D. PERROW, JR.		No DATE Feb. 1964											
	STEREOSCOPIC INSTRUMENT COMPILATION (III): PLANIME	TRY	DATE											
		D. N. WILLIAMS	5-12-64											
	CONTOUR	RS	DATE											
		None												
	MANUSCRIPT DELINEATED BY (III):		DATE											
	DRAFTED FOR HYDRO SUPPORT: ;	L. L. GRAVES	5-15-64											
	SCRIBING BY (III):		DATE											
	None													
	PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE											
	L. L. GRAVES		5-15-64											
	REMARKS:													
	The state of the s													

REMARKS:

U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

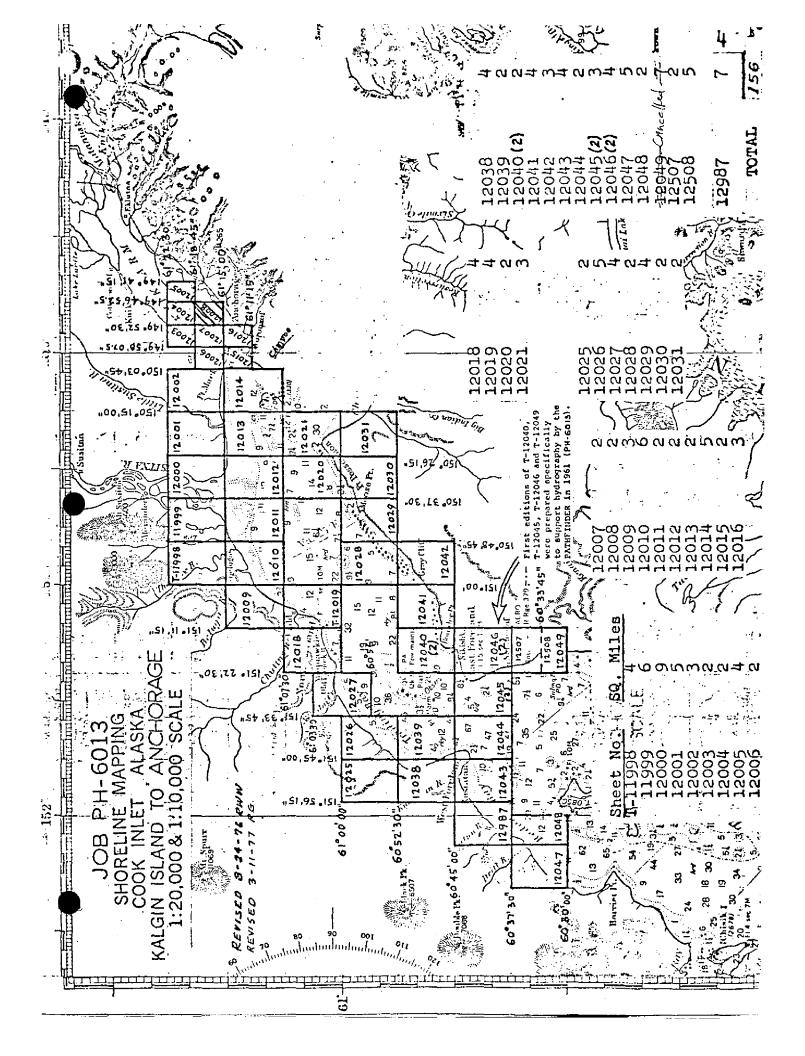
# DESCRIPTIVE REPORT - DATA RECORD

T- 12008

CAMERA (KIND OR SOURCE) (III):

C&GS SINGLE LENS "W"

NIIIVS==		IOTOGRAPHS (III)				
NUMBER	DATE	TIME	SCALE		STAGE OF	TIDE
60 W 1229 THRU 1232	8-30-60	09:40	1:30,000		ABOVE	
				PREDI	CTED TI	DESTABL
* *	20 m 1 1 2 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1					
	3.4 24			7.		
		TIDE (III)				
• • • • • •				RATIO OF RANGES	MEAN RANGE	RANGE
EFERENCE STATION:	ANCHORAGE				26.7	29.
JBORDINATE STATION:	9 To 10				-	
JBORDINATE STATION:						
ASHINGTON OFFICE REVIEW BY (	v): + - E.L.	Rolle		DATE:	eb. 1980	
ROOF EDIT BY (IV):	E.L.	Rolle		DATE: F.	eb. 1980	,
JMBER OF TRIANGULATION STAT	IDENTIFIE	IDENTIFIED:				
MBER OF BM(S) SEARCHED FOR	(11):	None	RECOVERED:	IDENTIFIE		
MBER OF RECOVERABLE PHOTO	STATIONS ESTABLISH	ED (III): NONE				
AND DESCRIPTION OF THE PARTY OF		BLISHED (III): N				



# SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS

### T 12003 Thru T 12008, T 12015 and T 12016

Knik Arm

This portion of Project Ph 6013 covers the knik-arm portion of Cook Inlet, near Anchorage, Alaska from Point Woronzof Northeasterly to Goose Creek including Eagle Bay.

Eight maps T12003-T12008, T12015, T12016 were included in this portion of project Ph 6013 all are at 1:10,000 scale. The purpose of these maps were to provide contemporary Shoreline support of hydrographic operations and to aid in chart revision.

Field work prior to compilation in the 1961 field season consisted of establishing Horizontal Control.

This area was flown in August 1960 with the "W" camera in black and white and in August 1961 with the "M" Camera in black and white at 1:40,000 scale.

Bridging was performed in the Washington Office; Tl2015, Tl2016 in January 1963, and Tl2003-Tl2008 in February 1964.

The maps were compiled at the Portland office from February 1963 to May 1964.

Field edit was performed for sheets T 12015, T 12016 in August 1963 and applied in October 1963. Limited field edit was performed for T-12004, T12005, and T 12008 in July 1965 but was never applied. Manuscripts T-12003, T12006, T12007 never had any field edit performed. The field edit was considered "cancelled" because of the earthquake on March 27, 1964 affecting all of this Knit-Arm area. This area has been re-mapped as project CM-7310 KNIK-ARM, Anchorage, Alaska.

Final Review was performed at AMC in January, 1979. T 12015 and T12016 were forwarded to the Washington Science Center for final Registration. T12003-T12008 were forwarded to the Washington Science Center to be registered as CLASS III manuscripts. All pertinent data (Archive Material) will remain with Ph 6013 and the completion report will be submitted upon completion of the entire project. See letter dated March 8, 1977 in the back of this Descriptive Report.

# FIELD INSPECTION REPORT

MAP MANUSCRIPT T-12008

PROJECT 21035 PH-6013

Refer to the Field Inspection Report by Robert E. Williams for Project SP-1-61, 1961, included with the Descriptive Report for T-12507.

# COOK INLET, ALASKA

PROJECT SP-1-61 1961

USC&GS Ship PATHFINDER

Arthur L. Wardwell, CAPT., Comdg.

MAIJUSCRIPTS:-

12049, 12046, 12045, 12040, 12031, 12032, 12026, 12027, 12028, 12020, 12021, 12022, 12017, 12015, 12016, 12014, 12013, 12008, 12007, 12006, 12003, 12004, 12005, 12002, 12001, 12000, 12012, 11999, 12011, 11998, 12010, 12009, 12019, 12018, 12023, 12025, 12024, 12029, 12030, 12035

# AERIAL FIELD INSPECTION:-

Areas inspected were as follows: Manuscripts No. 12049, 12046, 12045, 12040, Kenai to Boulder Point, all shoreline and alongshore features.

Balance of above listed manuscripts were used only for horizontal control identification.

The area is primarily moderately timbered with spruce, fir, alder and bear claw above the mean high water line. Shoreline varies from fine black silt at the mouth of the Kenai River mouth to large fragmented boulders at Boulder Point. Most of the beachline is sand and shingle interspersed with boulders of varying sizes. Numerous underground springs and some small creeks discharge small quantities of silt and water and are subject to constant change.

The area was inspected by cruising alongshore by launch and by walking the beach and bluff line. Foul areas now indicated on Chart No. 8553 are

adequate. Two primary foul areas were noted as follows:

. Kenai River Mouth

East Foreland to Moose Point

Quality of photographs was excellent. Areas of shadow were limited to the shoreline east of East Foreland and upper Knik Arm. No attempt was made to sketch in the mean high water line. Enough open areas in shadowed areas are available to adequately delineate mean high water line.

# HORIZONTAL CONTROL:-

Four additional second-order triangulation stations were established between Kenai and East Foreland to supplement existing control in the area of hydrography. They were identified as follows:

AUDRY 1961 Manuscript No. 12049 Photo No. 1397 LOUISE 1961 - 11 12049 11 1402 B00 1961 11 12045 1420 HELEN 1961 Traverse from East Foreland Light 1960.

ap T-12017 Cancelled - Memo 3/8/77

Additional horizontal control recovery was made in upper Cook Inlet in accordance with project instructions. All stations were searched for and approximately 75 percent were recovered. Most of the stations not recovered are considered lost. It is recommended that the next vessel assigned to this project be given a Tellurometer. Simple traverse between recovered triangulation stations would adequately control presently un-controlled flight lines.

In many cases the listed triangulation station was not recovered and a U.S. Engineers' triangulation station was used as a substitute. It appears that the U.S. Engineers could not recover listed C&GS control and substituted their own stations.

Great assistance was rendered by the 5040 Air Transport Squadron at Elmendorf AFB in furnishing heliocopter service. Three days of flying enabled personnel to cover shoreline control stations over the greater part of upper Cook Inlet.

If additional control is required in the vicinity of Elmendorf AFB, use can be made of triangulation now being observed by a C&GS geodetic party. Triangulation station DORF 1961 (in the vicinity of LOOP 2) is to be set in the roof of a building on the base. By use of the description written by the observing party, an accurate office identification can be made.

Triangulation not plotted on the Photo Index was identified where it was on photographs. This control was established by G.W.M. in 1959 and H.G.C. in 1960.

### VERTICAL CONTROL:-

None recovered or established.

### CONTOURS AND DRAINAGE:-

No contouring was attempted.

Primary drainage features are the Kenai, Matanuska, Little Susitna, Susitna, Beluga, Kustitan, and Drift Rivers. Tidal sweep keeps some of the rivers from building up deltaic features. An extremely flat foreshore on the Matanuska, Little Susitna, Susitna and Beluga rivers give rise to wide deltas that change seasonally. Many small streams discharge around Cook Inlet but have no apparent seasonal change.

### WOODLAND COVER:-

The major portion of the area is wooded and interspersed with muskeg and open grassy areas. These are easily identifiable on the photographs. In areas of increasing cultural activity, the woodland oover is being removed. No attempt was made to indicate these areas.

### SHORELINE AND ALONGSHORE FEATURES:-

The mean high water line is adequately delineated on manuscripts 12049, 12046, 12045, 12040. In the area of photo hydro signals TVY and EGG, east of East Foreland, the mean high water line is as follows:

IVY 30 meters inside MHW

EGG on piles at MW

Most of the shoreline signals are located at NHW along the beach. Many of the fishing huts set on piles at the base of the bluff were used as signals.

No attempt was made to delineate the low water line. Hydrography in the area should be satisfactory.

The foreshore area is primarily sand, small stones and boulders. The normal gradiation from stones at NHW to sand at NHW exists in all areas, except south of the Kenai River. In this area a heavy layer of silt is found in the tide zone.

### OFFSHORE FEATURES:-

All offshore features are located by the hydrographer.

### LANDMARKS AND AIDS:-

There are two fixed aids to navigation within the limits of the hydrographic project:

EAST FORELAND LIGHT

KENAI RIVER ENTRANCE RANGE

Both are located on Chart No. 8553.

One floating aid is also located on Chart No. 8553. Another can buoy is maintained by the oil company and is located just north of the pier.

One landmark for charts is recommended in the Descriptive Report for SP-1-61. This landmark is identified as follows:

KENAI TANK 1959, located by G.W.M. and identified on Photo No. 60w1400.

## BOUNDARIES, MONUMENTS AND LINES:-

None shown.

### OTHER CONTROL: -

Photo hydro signals were located in accordance with standard instructions. Signal IVY was found in error and relocated photogrammentric ally, then verified by hydrographic cuts. Final location is shown on manuscript 12045.

Final location of photo hydro signals will remain in their relative position with the shoreline. Final compilation will cause a datum shift which will move both hydrography and signals the same relative amount.

### DATUM DIFFERENCES:-

Radial plotting of photo identified control stations was made in the field. The following discrepancies were noted between plot positions and geographic positions.

EAST FORELAND LIGHT 1960	Lat.	-13.8 meters
,	Long.	-75.4 meters
BOULDER (USE)	Lat.	-37.0 meters
•	Long.	-45.2 meters
KENAI CHURCH STEEPLE 1909	Lat.	-15.3 meters
•	Long.	-23.6 meters

CULTURAL FEATURES:-

Numerous fishing shacks are located along high water line in the area of hydrography. These huts are subject to damage by winter storms and are in a constant state of transition. No attempt was made to locate current huts.

The Nikiski Oil Pier was under construction at the time of photography. The completed dimensions are available from a blueprint of the structure submitted with descriptive report for Project SP-1-61.

· Respectfully submitted,

Robert E. Williams. Lieut. Comdr., C&GS

Devald C. Saladin LTJG, C&GS

Arthur L. Wardwell,

Captain, C&GS

Comdg., Ship PATHFINDER

# Cook Inlet, Alaska 21035 PH-6013 Photogrammetric Plot Report

### 21. Area Covered

This report covers the area to the west and north of Anchorage, Alaska, and includes T-Sheets 12,000 thru 12,008, plus 12.015 and 12,016.

### 22. Method

Strips #1 and #2 were bridged on the stereoplanigraph and Strip #3 was bridged on the Mann Comparator. All three strips were adjusted by IBM methods. Pass points were drilled on plates by Pug method.

Strip #1 was adjusted on two triangulation stations plus points taken from a previous bridge in the area. Triangulation station Birch (USE) 1941 and its sub-station could not be held in the adjustment. No reason could be determined as to why it could not be held and it was dropped from the bridge. Despite errors of 8 to 9 feet in control the bridge is acceptable.

Strip #2 was adjusted on three triangulation stations with tie points from Strip #3 being used on the eastern end. In no instance could any 3 or more of the stations be held with each other and the results do not meet National Map Accuracy Standards for 1:10,000 scale charting since error of up to 14' in "Y" exist in the final bridge solution.

Strip #3 was adjusted using four control points, plus two pass points from Strip #1. Accuracy of this bridge is good. Tie points between Strips #1, #2 and #3 were meaned.

# 23. Adequacy of Control

The control recovered, complied with instructions. However, in practically every case the quality of the substations left much to be desired. It is felt that these poor quality images were the cause of many problems during the bridging operations. In the cases of In 8 (BLM) and L-lA (BLM), sub-stations were identified but no azimuth or exact distance was given between the home station and its sub-station. Station Misery 3, SS-l and SS-2 were very poor image points and could not be positively identified during the bridging. Station Low could be identified on Strip #3 but could not be seen on Strip #1. Station Whitney's sub points were very poor and no positive identification could be made during bridging operations.

## 24. Supplemental Data

In the cases of Strip #1 and Strip #2 old bridging data was used to help control the adjustments.

### 25. Photography

Photography in Strips #1, #2 and #3 was adequate in coverage overlap, definition and quality.

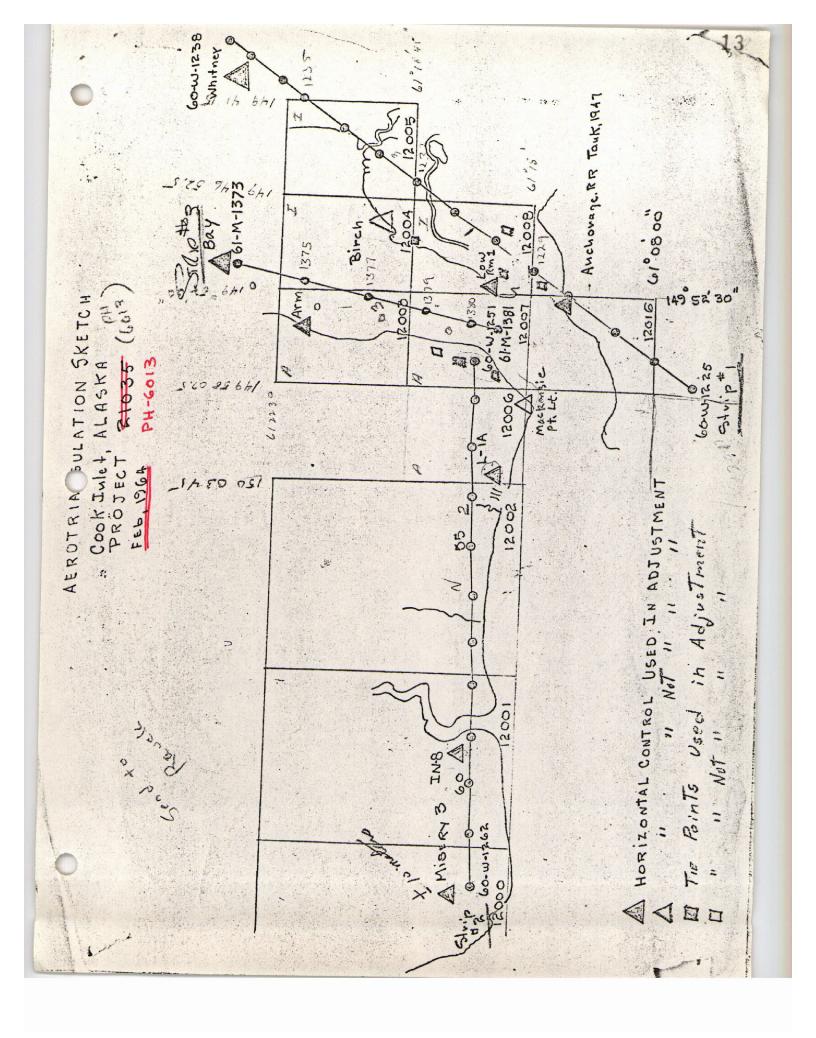
### 26. Recommendations

If smooth sheets are required for T-Sheets 12,000, 12,001, 12,002 and 12,006, re-identification of control should be performed and new C&GS control should be provided where doubtful control exists

Submitted by:

Approved by:

Jone. H. Ramey



FORM C&GS-1 (3-64) USCOMM-DC 6659-P64

# DESCRIPTIVE REPORT CONTROL RECORD

SCALE FACTOR	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)													DATE 5-9-64	
SCALE OF MAP 1:10,000 SCA	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	2,650,318,94	527,177.54											CHECKED BY L.F.B.	
21035 PH-6013	SOURCE OF INFORMATION DATUM (INDEX)	61149 N.A.	P. 8 1927											5-9-64	
MAP T- 12008 PROJECT NO.	STATION		LUOP, 1944											COMPUTED BY J.L.H.	

### COMPILATION REPORT

### MAP MANUSCRIPT T-12008

PROJECT 21035- PH-6013

### ITEMS 31 THRU 38:

REFER TO THE COMPILATION REPORT FOR T-12507, bound with this Descriptive Report.

### 39. JUNCTIONS:

Satisfactory junctions were made with T=12004 to the north and with T=12007 to the west. There are no contemporary surveys on the east or south.

40. HORIZONTAL AND VERTICAL ACCURACY:
Horizontal control was adequate in both identification and density.
Refer to Compilation Report T-12507 bound with this Descriptive Report.

### 46. COMPARISON WITH EXISTING MAPS:

Comparison was made with the U.S.G.S. Anchorage (B-8), ALASKA QUADRANGLE, SCALE 1:63,360, EDITION 1953.

### 47. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Nautical Chart 8553, scale 1:194,154 at Lat. 61° 00', 5th edition, April 30, 1962.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

NONE .

ITEMS TO BE CARRIED FORWARD:

NONE .

APPROVED:

P. A. STARK, CDR, C&GS PORTLAND DISTRICT OFFICER SUBMITTED:

JAMES L. HARRIS

#### COMPILATION REPORT

### Map Manuscript T-12507

### Project PH-6013

### 31. DELINEATION:

The Kelsh stereoscopic Instrument was used for compilation without the benefit of Field Inspection.

### 32. Control:

Horizontal Control was adequate in both density and Identification.

### 33. SUPPLEMENTAL DATA:

No supplemental data was furnished for this project.

### 34. CONTOURS AND DRAINAGE:

Contours are inapplicable. The drainage was compiled without benefit of Field Inspection but with reference to existing nautical charts.

### 35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline and Alongshore details were compiled without the benefit of field inspection.

### 36. OFFSHORE DETAILS:

Rocks offshore were office identified stereoscopically.

### 37. LANDMARKS AND AIDS:

None.

### 38. CONTROL FOR FUTURE SURVEYS:

None.

### 48. GEOGRAPHIC NAME LIST:

No geographic names sheet was furnished for this project. The names shown on this manuscript were obtained from the U.S.G.S. quadrangle.

GREEN LAKE
KNIK ARM .
SIX MILE CREEK

49. Notes for the Hydrographer:

None.

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C&GS FORM 1002 (11-13-61)	/ <del>-</del> .	, ,	, ** - * * * * * * * * * * * * * * * * *	S, DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY				
	PHO		RIC OFFICE REVIEW 1995					
1. PROJECTION AND GRIDS	2. TITLE	<u>.                                    </u>	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE				
			<u> </u>					
CONTROL STATIONS		1.6		1 • 2 · 2 · 2 · 2 · 2 · 2 · 2 · 2 · 2 · 2				
5. HORIZONTAL CONTROL ST THIRD-ORDER OR HIGHER	ATIONS OF ACCURACY	BLE HORIZONTAL STATIONS AN THIRD-ORDER ACCURACY (cataligns)	7. PHOTO HYDRO STATIONS None					
			None					
8. BENCH MARKS	9. PLOTTING		10, PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS				
None	No	ne		None				
ALONGSHORE AREAS (Nauttca	i Chart Data)							
12, SHORELINE	13. LOW-WATE		14. ROCKS, SHOALS, ETC.	15. BRIDGES				
	None	2		None				
16. AIDS TO NAVIGATION	17. LANDMAR	(\$	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES				
None	Non	e	11101012	OGE TORRES				
PHYSICAL FEATURES	1		<u> </u>					
20. WATER FEATURES		21. NATURAL	GROUND COVER	22. PLANETABLE CONTOURS				
				Not Applicable				
23. STEREOSCOPIC	24. CONTOUR	S IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES				
INSTRUMENT CONTOURS	No	ne	None	FEATURES				
Not Applicable								
CULTURAL FEATURES  27. ROADS	28. BUILDING	s	29, RAILROADS	30. OTHER CULTURAL				
		•	None	FEATURES				
BOUNDARIES 31. BOUNDARY LINES			32. PUBLIC LAND LINES					
Non	æ		None	2_				
MISCELLANEOUS 33. GEOGRAPHIC NAMES		I 34. JUNCTION	e	35. LEGIBILITY OF THE				
		Jan Jone Hon	° /	MANUSCRIPT				
			•					
36. DISCREPANCY OVERLAY	37. DESCRIPT	IVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS				
	•							
40. REVIEWER	<u></u>		SUPERVISOR, REVIEW SECTION	ON OR UNIT				
L.L. Grave	2 5		L.F. Beugnet					
41. REMARKS (See attached she	et)		<u> </u>					
FIELD COMPLETION ADDITIO	NS AND CORREC							
42. Additions and correction script is now complete ex	s furnished by th cept as noted un	ne field complet der item 43.	ion survey have been applied	to the manuscript. The manu-				
COMPILER			SUPERVISOR					
43. REMARKS		<u></u>	<u> </u>					
<u></u>	····	_ <u></u>						
				USCOMM-DC 16252-P61				

FIELD EDIT REPORT
PROJECT
PH-60/3
Sheets T-12004, T-12005 and T-12008

Field edit for these sheets was accomplished on 7 and 8 July 1965.

An attempt was made to edit these sheets by truck from the shore side but the area is restricted and roads are few and in poor repair. Only a small portion is accessible by vehicle.

On 8 July a Cessna 172 aircraft was chartered to make a low level flight along the shore line. The majority of the edit was accomplished in this fashion.

The only information added was the heights of bluffs, the classification of the Eagle River Flats, and the existence of mud flats along shore and in mid channel off Eagle Creek and a small shoreline change in the vicinity of a slide.

John C. Lajoy

### REVIEW REPORT T - 12008 .

### SHORELINE

January II, 1979

61. GENERAL STATEMENT:

See Summary, which is page of the Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Not applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with verified copy of H-9440 (1974). As expected, there is a conflict with the MHWL position since this manuscript was compiled prior to the March 1964 earthquake.

### 65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 16660 scale 1:194,154 19th Ed. September 10/77 and Chart 16664 scale 1:40,000 16th Ed. May 28/77. As expected the position of the MHWL differs since this map was compiled prior to the earthquake of March 1964.

### 66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with Project instructions, and meets the requirements for Bureau Standards and National Standards of Map Accuracy.

Submitted by: Jun Byrd

Jim Byrd Final Reviewer

Approved for forwarding:

Belly H. Barnes Chief Photogrammetric Branch, AMC

Colin Derrow

Chief Photogrammetric Branch

Chief, Coastal Mapping Division

Photogrammetry



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SURVEY Rockville, Md. 20852

C3421/W

March 8, 1977

TO:

Chief, Photogrammetric Branch, C342

Rockville, Maryland

Chief, Photogrammetric Branch, CAM52

Norfolk, Virginia

FROM:

James Collins

Chief, Coastal Mapping Division

SUBJECT: Job PH-6013

Cancel map T-12017. No record of original compilation, if compiled, can be found. Reassign this map to CM-7310 as a first edition.

Cancel map T-12049(2) as this area is covered by larger scale maps.

Complete the final review of maps T-12003, T-12004, T-12005, T-12006, T-12007, T-12008, T-12015, and T-12016 and forward for registration. No chart maintenance prints required.

Retain all Archive material with remainder of the job. Job completion report to be submitted only upon completion of entire project.

cc: C344 C3442 CAM521



