

T-12015

T-12015

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
FINAL	
Type of Survey <u>SHORELINE (PHOTOGRAMMETRIC)</u>	
Field No. <u>PH-6013</u>	Office No. <u>T-12015</u>
LOCALITY	
State <u>ALASKA</u>	
General locality <u>COOK INLET</u>	
Locality <u>POINT WORONZOF</u>	
<u>19 60-63</u>	
CHIEF OF PARTY FRED NATELLA PORTLAND PHOTO. UNIT	
LIBRARY & ARCHIVES	
DATE _____	

USCOMM-DC 5087

A SECOND EDITION OF THIS MAP IS REGISTERED

DESCRIPTIVE REPORT - DATA RECORD  
T - 12015

PROJECT NO. (II):

PH-6013

FIELD OFFICE (II):

PATHFINDER

CHIEF OF PARTY

ARTHUR L. WARDWELL

PHOTOGRAMMETRIC OFFICE (III):

PORTLAND, OREGON

OFFICER-IN-CHARGE

FRED NATELLA

INSTRUCTIONS DATED (II) (III):

JANUARY 17, 1963

METHOD OF COMPILATION (III):

KELSH STEREOSCOPIC INSTRUMENT

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:6000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

Jan. 25, 1980

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

Feb. 1980

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

JUNE 1980

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

ELEVATIONS SHOWN AS [20] WERE  
DETERMINED STEREOSCOPICALLY.

REFERENCE STATION (III):

WORONZOF 4, 1960

LAT.:

LONG.:

☐ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

= 2,632,136.60

x = 497,665.80

ALASKA

4

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

T- 12015

FIELD INSPECTION BY (II): R. E. WILLIAMS G. C. SALADIN		DATE: APR. & MAY 1961 JUNE & JULY 1961
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  No MLLW line has been compiled on this map.  (AUGUST 30, 1960, KELSH INSTRUMENT Date of Photography)		
PROJECTION AND GRIDS RULED BY (IV):  A. Roundtree		DATE 1-18-63
PROJECTION AND GRIDS CHECKED BY (IV):  W. M.		DATE 1-24-63
CONTROL PLOTTED BY (III):  J. L. HARRIS		DATE 2-5-63
CONTROL CHECKED BY (III):  C. H. BISHOP		DATE 2-5-63
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): J. D. PERROW, JR. L. W. FRITZ		DATE Feb. 1964 JAN. 1963
STEREOSCOPIC INSTRUMENT COMPILATION (III):  KELSH	PLANIMETRY R. H. MEYER	DATE 2-18-63
	CONTOURS None	DATE
MANUSCRIPT DELINEATED BY (III): R. H. Meyer		DATE Aug. 1963
SCRIBING BY (III): None		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. N. Williams		DATE Sept. 1963
REMARKS:		



DESCRIPTIVE REPORT - DATA RECORD

T-12015

CAMERA (KIND OR SOURCE) (III):

WILD AVIOGON RC 5

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 W 1213 - 1217	8-30-60	0930	1:30,000	17.0ft. PREDICTED TIDE TABLES

TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: ANCHORAGE, ALASKA		26.7	29.6
COORDINATE STATION:			
SUBORDINATE STATION: PREDICTED TIDE TABLES			

INSPECTION  
WASHINGTON OFFICE REVIEW BY (IV):

E.L.Rolle

DATE:

Feb. 1980

PROOF EDIT BY (IV):

E.L.Rolle

DATE:

Feb. 1980

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

3

IDENTIFIED:

3

NUMBER OF BM(S) SEARCHED FOR (III):

None

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

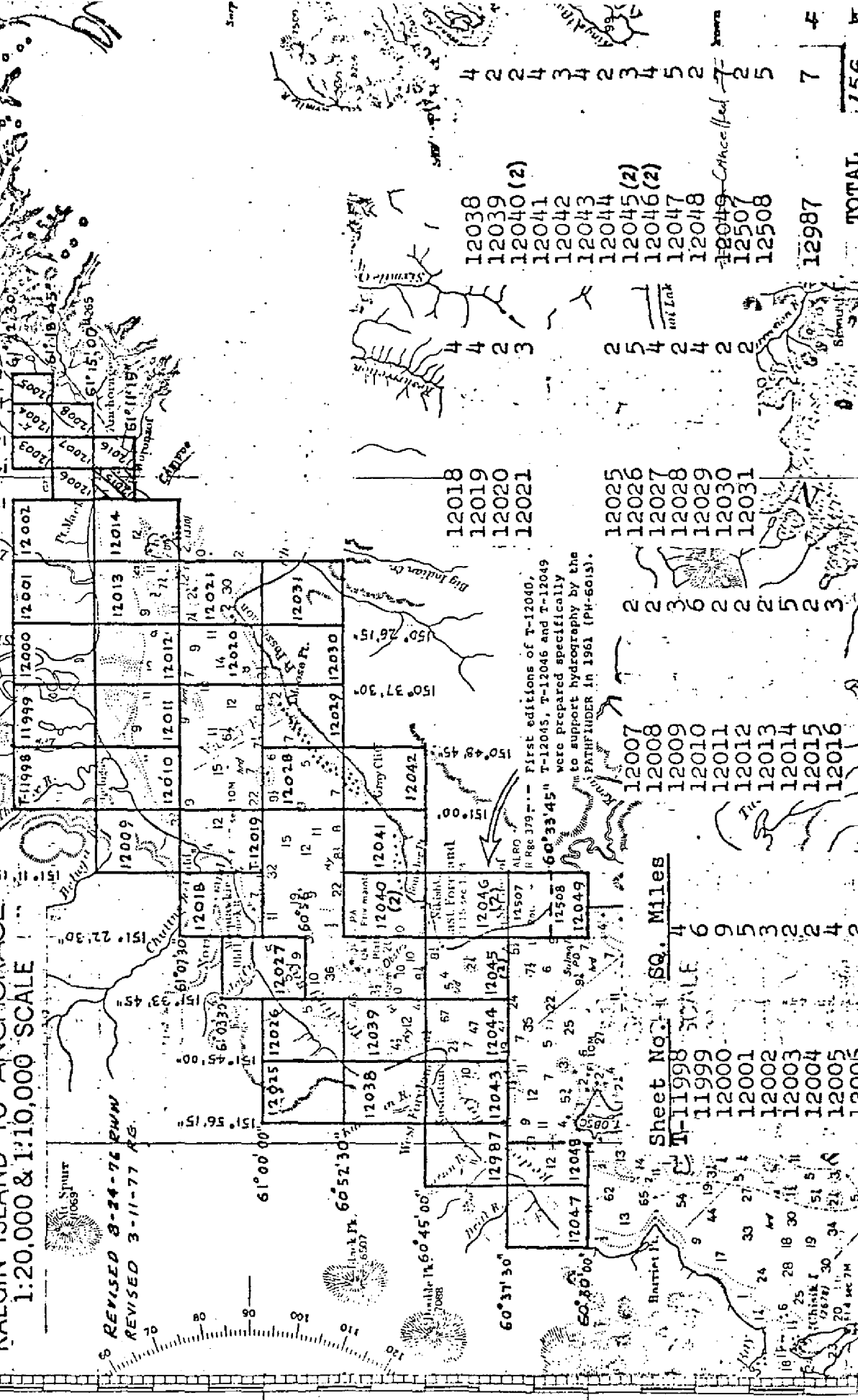
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): None

REMARKS:



**JOB PH-6013**  
**SHORELINE MAPPING**  
**COOK INLET, ALASKA**  
**KALGIN ISLAND TO ANCHORAGE**  
**1:20,000 & 1:10,000 SCALE**

REVISED 8-24-76 RWN  
 REVISED 3-11-77 RB



Sheet No. 1 of 4 SQ. Miles

Sheet No.	Scale	SQ. Miles
T-11998	1:20,000	4
11999	1:20,000	6
12000	1:20,000	9
12001	1:20,000	5
12002	1:20,000	3
12003	1:20,000	2
12004	1:20,000	2
12005	1:20,000	4
12006	1:20,000	2

12018  
 12019  
 12020  
 12021

12025  
 12026  
 12027  
 12028  
 12029  
 12030  
 12031

12038  
 12039  
 12040 (2)  
 12041  
 12042  
 12043  
 12044  
 12045 (2)  
 12046 (2)  
 12047  
 12048  
 12049  
 12507  
 12508

12987  
 TOTAL 156

First editions of T-12040, T-12043, T-12046 and T-12049 were prepared specifically to support hydrography by the PATHFINDER in 1961 (PH-6013).



## SUMMARY TO ACCOMPANY

## DESCRIPTIVE REPORTS

T 12003 Thru T 12008, T 12015 and T 12016

This portion of Project Ph 6013 covers the ~~knik-arm~~ <sup>Knik Arm</sup> 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; T12015, T12016 in January 1963, and T12003-T12008 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-12015

PROJECT PH-6013

REFER TO THE FIELD INSPECTION REPORT, COOK INLET, ALASKA,  
PROJECT SP-1-61, 1961, SUBMITTED BY CAPT. ARTHUR L. WARDWELL OF  
THE USC&GSS PATHFINDER, CONTAINED IN THE DESCRIPTIVE REPORT FOR  
T-12013.

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FIELD INSPECTION REPORT

COOK INLET, ALASKA

PROJECT SP-1-61 1961

USC&GS Ship PATHFINDER

Arthur L. Wardwell, CAPT., Comdg.

MANUSCRIPTS:-

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,  
12034, 12033, 12037, 12036

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	" " 12049	" " 1402
BOO 1961	" " 12045	" " 1420
HELEN 1961	Traverse from East Foreland Light 1960.	

\* Map 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 helicopter 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 cover 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 IVY and EGG, east of East Foreland, the mean high water line is as follows:

IVY 30 meters inside MHW  
EGG on piles at MHW

Most of the shoreline signals are located at MHW 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 gradation from stones at MHW to sand at MLW 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 photogrammetrically, 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

*Gerald C. Saladin*  
Gerald C. Saladin  
LTJG, C&GS

*Arthur L. Wardwell*  
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 sub-stations 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-1A (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-1 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.

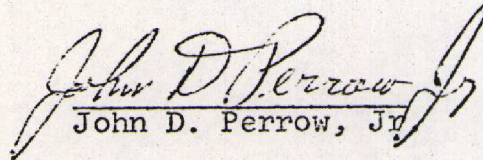
25. Photography

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

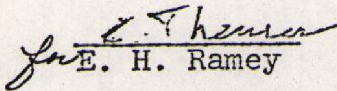
26. Recommendations

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:

  
John D. Perrow, Jr.

Approved by:

  
E. H. Ramey

NOTE: The JAN. 1963 Photogrammetric Plot Report is LOST  
7/5/80





## COMPILATION REPORT

INCOMPLETE MANUSCRIPT T-12015

PROJECT PH-6013

31 THROUGH 34:

REFER TO PARAGRAPHS 31 THRU 34 OF THE COMPILATION REPORT FOR T-12015.\* *\* Bound with this Descriptive Report.*

35. SHORELINE AND ALONGSHORE DETAILS:

THE SHORELINE AND ALONGSHORE DETAILS WERE COMPILED WITHOUT THE BENEFIT OF FIELD INSPECTION.

THE MEAN HIGH WATER LINE WAS DELINEATED BY LEVELING THE KELSH MODELS AT THE ELEVATION OF THE WATER SURFACE OF THE PHOTOGRAPHY, THE PREDICTED STAGE OF TIDE OF WHICH WAS 17.0 FT. ABOVE MEAN LOWER LOW WATER, RAISING THE TRACING TABLE OF THE INSTRUMENT UP TO THE PUBLISHED MEAN HIGH WATER FOR ANCHORAGE, ALASKA AND CONTOURING THE LAND SURFACE ALONG THE SHORELINE AT THIS POINT AS THE MEAN HIGH WATER LINE.

ABOUT ONE MILE OF THE MHW LINE ALONG THE WEST SIDE OF POINT WORONZOF IS COMPLETELY OBSCURED BY TREE SHADOW. AN APPROXIMATE MHW LINE SYMBOL DEPICTS THE SHORELINE IN THIS AREA.

36. OFFSHORE DETAILS:

THE LIMIT OF THE FORESHORE WAS DELINEATED FROM THE PHOTOGRAPHY WITH A PREDICTED TIDE OF 17.0 FT.

37. LANDMARKS AND AIDS:

FORMS 567 WERE SUBMITTED FOR ONE FIXED AID TO NAVIGATION.

38. CONTROL FOR FUTURE SURVEYS:

NONE.



39. JUNCTIONS:

A SATISFACTORY JUNCTIONS WAS MADE TO THE EAST WITH MANUSCRIPT T-12016. OTHER JUNCTIONS WILL BE MADE WHEN ADJOINING MANUSCRIPTS ARE COMPILED.

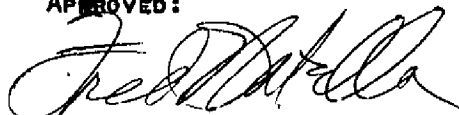
40. HORIZONTAL AND VERTICAL ACCURACY:

THERE ARE NO AREAS OF THIS MANUSCRIPT BELIEVED TO BE OF SUBNORMAL HORIZONTAL ACCURACY. VERTICAL ACCURACY IS NOT APPLICABLE.

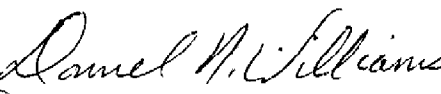
46 AND 47:

REFER TO PARAGRAPHS 46 AND 47 OF THE COMPILATION REPORT FOR T-12013.

APPROVED:

  
FRED NATELLA, CAPT, C&GS  
PORTLAND DISTRICT OFFICER

RESPECTFULLY SUBMITTED:

  
DONNEL N. WILLIAMS  
CARTOGRAPHER



COMPILATION REPORT  
INCOMPLETE MANUSCRIPT T-12013  
PROJECT PH-6013

31. DELINEATION:

THE KELSH STEREOSCOPIC INSTRUMENT WAS USED FOR COMPILATION WITHOUT THE BENEFIT OF FIELD INSPECTION. THE KELSH DIAPOSITIVES WERE PRINTED IN REVERSE WHICH MADE IT NECESSARY TO MAKE WORKSHEETS FOR COMPILATION OF THE ORIGINAL MANUSCRIPTS IN REVERSE. THESE WORKSHEETS WERE THEN TURNED OVER, SLIPPED UNDER THE ORIGINAL MANUSCRIPT, REGISTERED AND THE DETAIL TRACED.

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 THE 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.

THE MEAN HIGH WATER LINE WAS DELINEATED BY LEVELING THE KELSH MODELS AT THE ELEVATION OF THE WATER SURFACE OF THE PHOTOGRAPHY, THE PREDICTED STAGE OF TIDE OF WHICH WAS 22.4 FT. ABOVE MEAN LOWER LOW WATER. BY RAISING THE TRACING TABLE OF THE INSTRUMENT UP TO THE PUBLISHED MEAN HIGH WATER FOR FIRE ISLAND, ALASKA, AND THE LAND SURFACE ALONG THE SHORELINE AT THIS POINT WAS CONTOURED AS THE MEAN HIGH WATER LINE.

36. \* OFFSHORE DETAILS:

ROCKS OFFSHORE WERE OFFICE IDENTIFIED AND THEIR HEIGHTS DETERMINED STEREOSCOPICALLY. THE LIMIT OF THE FORESHORE WAS DELINEATED FROM THE PHOTOGRAPHY WITH A PREDICTED TIDE OF 22.4 FT.

\* Inapplicable to this map, T-12015.



48. GEOGRAPHIC NAME LIST:

GEOGRAPHIC NAMES WERE INDICATED ON A COPY OF NAUTICAL CHART  
No. 8557.

COOK INLET ✓

KNIB ARM

POINT MACKENZIE ✓

POINT WORONZOF ✓

T-12015

49. NOTES TO THE HYDROGRAPHER:

THE PREDICTED STAGE OF TIDE IS 17.0 FT. ABOVE MLLW AT TIME OF PHOTOGRAPHY.

THE MHW LINE WAS DETERMINED BY LEVELING THE KELSH MODELS ON THE WATER SURFACE AND RAISING THE TRACING TABLE 11.9 FT. TO COME UP TO THE MHW OF 28.9 FT. WHICH IS THE PUBLISHED MHW FOR ANCHORAGE, ALASKA. THE LAND SURFACE AT THIS ELEVATION WAS CONTOURED AS THE MHW LINE.

THE MHW LINE ON THE WESTERN SIDE OF POINT WORONZOF WAS OBSCURED ON THE PHOTOGRAPHY BY TREE SHADOWS AND THEREFORE COULD NOT BE COMPILED ACCURATELY. THIS PORTION OF THE MHW LINE SHOULD BE CAREFULLY VERIFIED BY FIELD INSPECTION.

ROCK HEIGHTS WERE DETERMINED STEREOSCOPICALLY BY USE OF THE KELSH INSTRUMENT.

REFER TO LAST PARAGRAPH FOR T-12013.



INCOMPLETE MANUSCRIPT  
PHOTOGRAMMETRIC OFFICE REVIEW  
T-XXXX 12015U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

1. PROJECTION AND GRIDS <b>X</b>	2. TITLE <b>X</b>	3. MANUSCRIPT NUMBERS <b>X</b>	4. MANUSCRIPT SIZE <b>X</b>
<b>CONTROL STATIONS</b>			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY <b>X</b>	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) <b>NONE</b>		7. PHOTO HYDRO STATIONS <b>X</b>
8. BENCH MARKS <b>NONE</b>	9. PLOTTING OF SEXTANT FIXES <b>NONE</b>	10. PHOTOGRAMMETRIC PLOT REPORT <b>X</b>	11. DETAIL POINTS <b>X</b>
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE <b>X</b>	13. LOW-WATER LINE <b>NONE</b>	14. ROCKS, SHOALS, ETC. <b>X</b>	15. BRIDGES <b>NONE</b>
16. AIDS TO NAVIGATION <b>X</b>	17. LANDMARKS <b>NONE</b>	18. OTHER ALONGSHORE PHYSICAL FEATURES <b>X</b>	19. OTHER ALONGSHORE CULTURAL FEATURES <b>X</b>
<b>PHYSICAL FEATURES</b>			
20. WATER FEATURES <b>X</b>	21. NATURAL GROUND COVER <b>X</b>		22. PLANETABLE CONTOURS <b>INAPPLICABLE</b>
23. STEREOSCOPIC INSTRUMENT CONTOURS <b>INAPPLICABLE</b>	24. CONTOURS IN GENERAL <b>INAPPLICABLE</b>	25. SPOT ELEVATIONS <b>NONE</b>	26. OTHER PHYSICAL FEATURES <b>X</b>
<b>CULTURAL FEATURES</b>			
27. ROADS <b>X</b>	28. BUILDINGS <b>X</b>	29. RAILROADS <b>NONE</b>	30. OTHER CULTURAL FEATURES <b>X</b>
<b>BOUNDARIES</b>			
31. BOUNDARY LINES <b>NONE</b>		32. PUBLIC LAND LINES <b>NONE</b>	
<b>MISCELLANEOUS</b>			
33. GEOGRAPHIC NAMES <b>X</b>	34. JUNCTIONS <b>X</b>		35. LEGIBILITY OF THE MANUSCRIPT <b>X</b>
36. DISCREPANCY OVERLAY <b>NONE</b>	37. DESCRIPTIVE REPORT <b>X</b>	38. FIELD INSPECTION PHOTOGRAPHS <b>X</b>	39. FORMS <b>X</b>
40. REVIEWER <i>D.N. Williams</i> <b>D. N. WILLIAMS</b>		SUPERVISOR, REVIEW SECTION OR UNIT <i>J. Edward Deal</i> <b>J. EDWARD DEAL</b>	
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 <i>D.N. Williams</i>		SUPERVISOR <i>J. Edward Deal</i>	
43. REMARKS			

T-120'

TO BE CHARTED  
 BOX 225 X 225 X 225 X  
 BOX 225 X 225 X 225 X

## STRIKE OUT TWO

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~(detached) separate~~ the charts indicated.

The positions given have been checked after listing by

**D. N. WILLIAMS**

PORTLAND, OREGON

8 Feb. 1963

T-12015

**FRED NATELLA**

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

### \* TABULATE SECONDS AND METERS

USCOMM-DC 10234-P61



## REVIEW REPORT T - 12015

## SHORELINE

January 12, 1979

61. GENERAL STATEMENT:

The photo plot report <sup>\*</sup>January 1963 could not be located at the time of final review.

The field edit report <sup>\*</sup>August 1963 could not be located at the time of final review.

*\* Both Reports are LOST 2/5/80*

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

N.A.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

N.A.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with verified copy of H-9441 (1974). As expected, there is a conflict with the MHWL position since this manuscript was compiled prior to the March 1964 earthquake.

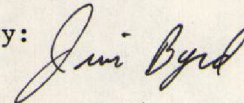
65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 16660 scale 1:194,154 19th Ed. September 10, 1977 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 March 1964 earthquake.

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:



Jim Byrd

Final Reviewer

Approved for forwarding:

*Billy H. Barn*  
Chief Photogrammetric Branch, AMC

Approved:

*John D. Perrow Jr.*  
Chief Photogrammetric Branch

*Walter Sh*  
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 *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

