

T-12042

T-12042

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Job No. PH-6013	Map No. T-12042
Classification No. Final Map	Edition No. 1
LOCALITY	
State	Alaska
General Locality	Cook Inlet Kalgin Island to Anchorage
Locality	Gray Cliff
1966 TO 1977	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)	U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY <del>FR</del> -T-12042 MAP EDITION NO. (1) MAP CLASS Final Map JOB PH-6013
<b>DESCRIPTIVE REPORT - DATA RECORD</b>			
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Atlantic Marine Center, Norfolk, VA	<b>LAST PRECEDING MAP EDITION</b>		
OFFICER-IN-CHARGE Jeffrey G. Carlen, Cdr.	TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
<b>I. INSTRUCTIONS DATED</b>			
<b>1. OFFICE</b>		<b>2. FIELD</b>	
Aerotriangulation 9/15/66 Compilation, Supplement 3 4/26/67 Aerotriangulation 8/13/73	Field 6/6/66 Supplement 1 8/08/66 Field 3/30/73		
<b>II. DATUMS</b>			
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN	OTHER (Specify)		
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL	OTHER (Specify)		
3. MAP PROJECTION Polyconic	4. GRID(S)		
5. SCALE 1:20,000	STATE Alaska	ZONE 4	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS	NAME	DATE	
1. AEROTRIANGULATION Analog BY METHOD: and Analytic <del>COORDINATORGRAPH</del>	P. Hawkins M. McGinley	4/67 9/74	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coordinatorgraph CHECKED BY	A. Roundtree A. Roundtree	5/67 5/67	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Kelsh Stereoplotter and Wild B-8 SCALE: 1:8,000 and 1:20,000 CHECKED BY	Kelsh/A. Shands - R. White Wild B-8 NA NA	5/67 - 12/74	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smoothdrafted SCALE: 1:20,000 HYDRO SUPPORT DATA BY CHECKED BY	L. Graves - J. R. Minton R. Pate - C. Blood NA NA L. Graves - J. R. Minton R. Pate - C. Blood	6/67 - 12/74 7/67 - 1/75 6/67 - 12/74 7/67 - 1/75	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	C. Blood	1/75	
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY	D. Butler F. Margiotta	1/78 1/78	
7. COMPILATION SECTION REVIEW BY	F. Margiotta	1/78	
8. FINAL REVIEW BY	J. Byrd/C. Blood	4/86	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	J. Byrd	9/86	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	P. Dempsey	Oct. 1986	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	EL DAUGHERTY	DEC '86	

T-12042  
COMPILATION SOURCES

I. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "L"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR	X(P) PANCHROMATIC	ZONE Alaska	<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(I) INFRARED		MERIDIAN 150th	<input type="checkbox"/> DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
66L6713 - 66L6715	8/14/66	09:25	1:40,000	0.2 ft. above MLLW

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was compiled from the above listed photographs.

3. SOURCE OF MEAN LOWER LOW-WATER LINE:

The mean lower low water line was compiled from the above listed photographs.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12028	No Survey	No Survey	T-12041

REMARKS

T-12042

HISTORY OF FIELD OPERATIONS

I. <input checked="" type="checkbox"/> FIELD INSPECTION OPERATION		<input type="checkbox"/> FIELD EDIT OPERATION	
OPERATION	NAME	DATE	
1. CHIEF OF FIELD PARTY	A. Wardwell	4/61 - 7/61	
2. HORIZONTAL CONTROL	RECOVERED BY G. Saladin	4/61 - 7/61	
	ESTABLISHED BY None		
	PRE-MARKED OR IDENTIFIED BY None		
3. VERTICAL CONTROL	RECOVERED BY NA		
	ESTABLISHED BY NA		
	PRE-MARKED OR IDENTIFIED BY NA		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED ( <i>Triangulation Stations</i> ) BY None		
	LOCATED ( <i>Field Methods</i> ) BY None		
	IDENTIFIED BY None		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION		
	<input type="checkbox"/> COMPLETE BY		
	<input type="checkbox"/> SPECIFIC NAMES ONLY		
	<input checked="" type="checkbox"/> NO INVESTIGATION		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA	
II. SOURCE DATA			
1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None		NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
3. PHOTO NUMBERS ( <i>Clarification of details</i> )			
None			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED			
None			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS			
None			
8. OTHER FIELD RECORDS ( <i>Sketch books, etc. DO NOT list data submitted to the Geodesy Division</i> )			
None			

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HISTORY OF FIELD OPERATIONS

1.  FIELD INSPECTION OPERATION ~~Field Inspection Operation~~ Premarking  FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	6/66
2. HORIZONTAL CONTROL	RECOVERED BY	R. B. Melby
	ESTABLISHED BY	None
	PRE-MARKED OR IDENTIFIED BY	R. B. Melby
3. VERTICAL CONTROL	RECOVERED BY	NA
	ESTABLISHED BY	NA
	PRE-MARKED OR IDENTIFIED BY	NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY	None
	LOCATED (Field Methods) BY	None
	IDENTIFIED BY	None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE	BY
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED	2. VERTICAL CONTROL IDENTIFIED
None	NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
6616549	GRAY CLIFF, 1909		

3. PHOTO NUMBERS (Clarification of details)  
None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED  
None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES:  REPORT  NONE

6. BOUNDARY AND LIMITS:  REPORT  NONE

7. SUPPLEMENTAL MAPS AND PLANS  
None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

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T-12042  
HISTORY OF FIELD OPERATIONS

I.  FIELD INSPECTION OPERATION  FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	B. I. Williams	June 1977
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY	G. Leigh June 1977
	PRE-MARKED OR IDENTIFIED BY	None
	RECOVERED BY	None
3. VERTICAL CONTROL	ESTABLISHED BY	NA
	PRE-MARKED OR IDENTIFIED BY	NA
	RECOVERED (Triangulation Stations) BY	None
4. LANDMARKS AND AIDS TO NAVIGATION	LOCATED (Field Methods) BY	None
	IDENTIFIED BY	None
	TYPE OF INVESTIGATION	
5. GEOGRAPHIC NAMES INVESTIGATION	<input type="checkbox"/> COMPLETE	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	N. Millett June 1977
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None		NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)  
66-L-6713, 66-L-6714, 66-L-6715

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED  
None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES:  REPORT  NONE

6. BOUNDARY AND LIMITS:  REPORT  NONE

7. SUPPLEMENTAL MAPS AND PLANS  
None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)  
1-Field edit film ozalid  
1-Field edit data volume  
1-Field edit report OPR-469-FA-77

NOAA FORM 76-36D (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 T-12042  
**RECORD OF SURVEY USE**

I. MANUSCRIPT COPIES			DATE MANUSCRIPT FORWARDED	
COMPILATION STAGES			MARINE CHARTS	HYDRO SUPPORT
DATA COMPILED	DATE	REMARKS		
Compilation partially complete, pending field edit.	6/67	Class III Manuscript		
Compilation complete, pending field edit.	12/74	Class III Manuscript	3/25/75	3/24/75
Field edit applied, compilation complete	1/78	Class I Manuscript	2/1/78	2/1/78
Final Review	4/86	Final Map		

II. LANDMARKS AND AIDS TO NAVIGATION None

I. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2.  REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_  
 3.  REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

III. FEDERAL RECORDS CENTER DATA

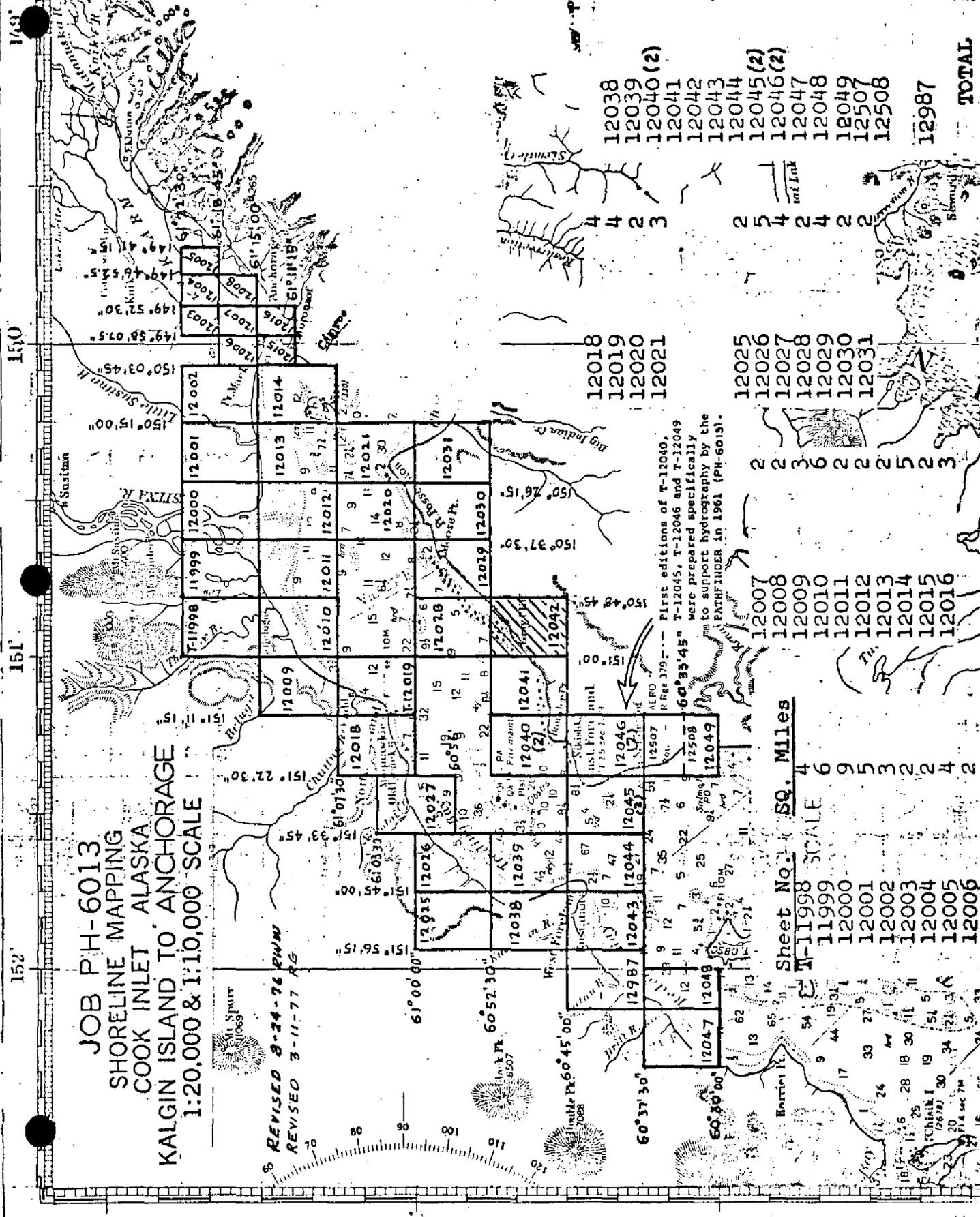
1.  BRIDGING PHOTOGRAPHS;  DUPLICATE BRIDGING REPORT;  COMPUTER READOUTS.  
 2.  CONTROL STATION IDENTIFICATION CARDS;  FORM NOS 567 SUBMITTED BY FIELD PARTIES.  
 3.  SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:  
 4.  DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: \_\_\_\_\_

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	<input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	<input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	<input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

**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 RG



Sheet No. 1:10,000 SCALE SQ. Miles

T-11998	4
11999	6
12000	9
12001	5
12002	3
12003	2
12004	2
12005	4
12006	2

12018	4
12019	4
12020	2
12021	3
12025	2
12026	2
12027	3
12028	6
12029	2
12030	2
12031	2
12007	5
12008	2
12009	3
12010	6
12011	2
12012	2
12013	5
12014	2
12015	2
12016	3

TOTAL 756

First editions of T-12040, T-12045, T-12046 and T-12049 were prepared specifically to support hydrography by the PATHFINDER in 1961 (PH-6013).

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

T-12042

This 1:20,000 scale Final shoreline map is one of 44 maps designated as Project Cook Inlet, Kalgin Island to Anchorage, Alaska. T-12042 was compiled from photography taken after the 1964 earthquake.

The purpose of this map was to provide contemporary shoreline in support of hydrographic operations and to aid in chart revision.

Field work prior to compilation in the 1961 field season consisted of recovery of horizontal control and limited field inspection. Field work in 1966 consisted of premarking of horizontal control for aerotriangulation.

This area was flown in August 1966 with the RC-8 "L" camera using panchromatic film at 1:40,000 scale. The photography was used for bridging, compilation, and hydrographic support.

Aerotriangulation was performed in the Washington Office in April 1967 and September 1974.

T-12042 was compiled at the Norfolk office in January 1975.

Field edit was performed for T-12042 during the 1977 field season. Field edit data was applied at AMC in January 1978.

Final review was performed at the Atlantic Marine Center April 1986.

This Descriptive Report contains all pertinent information used to compile this Final Map. The original base manuscript and all related data were forwarded to the Washington Science Center for final registration.

## FIELD INSPECTION

T-12042

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the aerotriangulation of the project.

9/9/74 8

PHOTOGRAMMETRIC PLOT REPORT  
Job PH-6013  
Cook Inlet  
East Foreland Area  
Alaska

21. Area Covered

This project covers the eastern shoreline of Cook Inlet from Kenai to just north of Number Three Bay. Included are seven T-sheets: T-12040(2), T-12041, T-12042, T-12045(2), T-12046(2), and ~~T-12049(2)~~ at 1:20,000 scale, and T-12507, T-12508, at 1:10,000 scale.

22. Method

Three strips of 1:40,000 scale panchromatic photography (strips 18, 19, and 20) were bridged on the Wild STK-1 in order to obtain pass point positions and exact scale ratios to be used during compilation.

Strip 20 was adjusted on four field identified triangulation stations with checks obtained from two additional triangulation stations and two tie points. Strip 18 was adjusted on four field identified triangulation stations with two tie points as checks. Strip 18 was adjusted on six tie points. All adjustments were performed on the IBM 6600. All sheets were ruled and plotted on the Calcomp.

Ratios at 1:20,000 scale were ordered for the entire project with additional 1:10,000 scale ratios for the area covering sheets T-12507 and T-12508. Ratios at 1:20,000 scale of the bridging photography were also ordered for the portion of the project not covered by the offshore photography.

The horizontal control utilized in the adjustments held within National Map Accuracy.

24. Supplemental Data

Vertical control for bridging only was obtained from local USGS quads.

25. Photography

Photography was adequate as to overlap, definition, and coverage.

Approved by:

*John D. Ferrow, Jr.*

John D. Ferrow, Jr.  
Chief, Aerotriangulation Section

Submitted by:  
*Michael L. McGinley*  
Michael L. McGinley



PHOTOGRAMMETRIC PLOT REPORT  
Job PH-6013  
Cook Inlet, Alaska

April 13, 1967

21. Area Covered

The area covered by this report extends from the Redoubt Bay-East Foreland area to Anchorage, Alaska. Included in this area are T-sheets 11998 thru 12001, 12009 thru 12012, 12018, 12019; 12021, 12025 thru 12030, 12038, 12039, 12042 thru 12044, 12047, 12048 and 12987.

22. Method

Five strips were bridged on the C-8 and C-5 stereoplanigraph. Strip #1 (66-L-6602 thru 6623) was adjusted on four triangulation stations with tie points used as checks. Strip #2 (66-L-6629 thru 6634) was adjusted on two triangulation stations plus tie points from Strip #1. Strip #3 (66-L-6641 thru 6653) was adjusted on three triangulation stations plus ties. Strip #4 (66-L-6667 thru 6677) was adjusted on three triangulation stations plus ties. Strip #9 (66-L-6713 thru 6725) was adjusted on three triangulation stations.

23. Adequacy of Control

The control, being premarked, was very good insofar as being able to see it clearly; however, in several cases, the 1:40,000 scale photography completely missed the stations. It should be noted that all strips were adjusted with minimum control, and as such, no positive proof can be provided that the adjustments are correct other than by means of tie points and residuals of adjustment. The tie points and residuals do indicate a good adjustment on all strips. Strip #4 had to be terminated at station SIT 1966 due to lack of control beyond this point. (Port McKenzie could not be seen on the 1:40,000 scale photography.) Attempts were made to provide a tie point for the terminal station on the east end of this strip by bridging three models south of Anchorage, dropping points onto Strip #4. This met with complete failure. Strip #6 had to be terminated on the southern end at station GRAY CLIFF 1909 since the station at East Foreland was not covered by the 1:40,000 scale photography.

#### 24. Supplemental Data

Local USGS quads were used to provide vertical control used in the bridging adjustment.

The coverage of 1966 photography falls short of being sufficient to show the shallow mud areas which are near lower-low water level in the area of the Susitna River Delta. To provide for the delineation of the limiting line of this feature, scale points have been selected which are common to 61M photography which does show the limiting line. Ratios of these photographs will be provided for the graphic delineation of the limiting line only. The compiler should select whatever additional points are necessary for correct delineation. A holiday exists on some of the shoreline along Strip #9. A flight of 60W photography provides coverage and three ratio photos were provided for compilation of this area.

All points on the bridged plates were drilled by PUG methods. Plate 66-L-6719 was broken after bridging. A new plate was provided but it does not contain any drilled points. It is suggested that the models on either side be compiled and pass points be dropped on this plate for compilation.

#### 25. Photography

Photography was adequate as to definition and overlap but was not adequate as to coverage. The 1:40,000 scale photos did not cover either the shoreline or the marked control on the east end of Strip #4 or the southwest end of Strip #9. A portion of the shoreline along the part of Strip #9 which was bridged also lacks coverage.

Submitted by:

*Paul Hawkins*  
by J.P.P.

Paul Hawkins

Approved by:

*John D. Perrow, Jr.*  
John D. Perrow, Jr.



## COMPILATION REPORT

T-12042

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter. Photography was adequate.

32. CONTROL:

See the attached Photogrammetric Plot Reports dated April 13, 1967 and September 9, 1974.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Alongshore details were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

The mean high water line was delineated from the photographs.

36. OFFSHORE DETAILS:

Boulders and areas foul with rocks.

37. LANDMARKS AND AIDS:

No charted landmarks or aids were noted during compilation.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the attached Form 76-36B, Item 5 of the Descriptive Report, concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following USGS Quadrangle: KENAI (D-3), ALASKA, 1951, 1960 Revision, 1:63,360 scale.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following National Ocean Survey Chart: No. 16660 (USC&GS No. 8553), 1:194,154 scale, 13th Edition, February 1972.

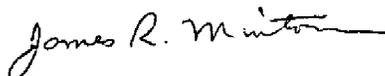
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

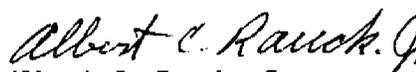
None.

Submitted by:



J. R. Minton  
Cartographic Technician  
January 1975

Approved:



Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6013 (Cook Inlet)

T-12042

Cook Inlet

Gray Cliff

Kenai National Moose Range

Otter Creek

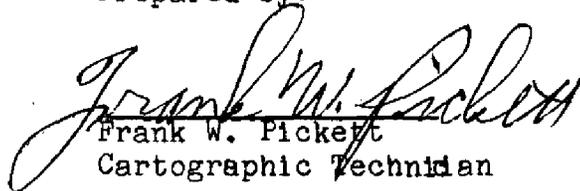
Swanson River

Approved by:



A. S. Wraight  
Chief Geographer

Prepared by:



Frank W. Pickett  
Cartographic Technician

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Field Edit Report  
Number Three Bay to Miller Creek  
Tyonek to Ivan River  
OPR-469-FA-77

GENERAL

This report covers the following manuscripts:

T-11998 T-11999 T-12009 T-12010 T-12011 T-12019  
T-12020 T-12028 T-12029 T-12030 T-12041 T-12042

Field work is essentially complete on all maps.

The northern shore between North Foreland and Shorty Creek is characterized by sand and gravel beaches, backed by dirt bluffs in some areas, with small mud flats in the vicinity of the Tyonek Timber Company pier and Shorty Creek which are exposed at low tides. The rest of the northern shore is low and gently sloping with marshy areas above high water and extensive mud flats exposed at low tide.

The entire southern shore is littered with rocks and boulders, often to considerable distances from shore. Beach areas are sand and gravel with occasional areas of mud flats, not as extensive as found on the northern shore. Dirt bluffs line most of the beach.

A total of 153 fixes were taken to locate significant features along 44 nautical miles of shoreline. Each was assigned a number with the format DDD-FF, where DDD represents the julian day of the fix and FF represents the sequential fix number for that day.

All fix information is recorded in the field edit data volume. Fix times are given in Greenwich mean time. All height information is noted on the master field edit ozalid. Information on all signals and stations used for control is included with this report. Deletions are noted in green ink, additions and changes in red ink, verifications in violet ink. All are noted on the master field edit ozalid.

METHOD

Field edit along the southern shoreline was done by LTJG Neal Millett and ENS Robert Crowell during the month of June, 1977. Work was performed at low tidal stages using a 17 foot skiff equipped with a Mini-ranger console and transceiver. Copies of the field edit ozalids and corresponding photographs were examined in the field. General features, including the mean high water line, were verified by visual comparison of the field edit ozalid

and the areas concerned.

Detached positions and heights were obtained on the more significant rocks. Control for fixes was by range-range and range-azimuth. In several instances sextant angles were also taken. Heights were estimated by comparison to a boathook of known length.

Field edit along the northern shoreline was done by LTJG Neal Millett and ENS Robert Crowell during the month of July, 1977. Initial field edit was done by helicopter at a low tidal stage. Copies of the field edit ozalids and corresponding photographs were examined in the field. Verification of general features, including the mean high water line, was done by visual comparison of the field edit ozalid and the area concerned. No control was used for this phase.

Follow-up field edit was done in those areas where detached positions were needed. Work was done using a 29 foot launch equipped with Raydist electronic positioning equipment. Control for fixes was a combination of range-range, used to locate the launch, and visual. Three lines of position were determined to each object by taking horizontal sextant angles from the launch. The position of the launch was provided by the Raydist system. Heights were estimated by comparison to nearby objects of known size.

#### ADEQUACY OF COMPILATION

Compilation of the maps is generally adequate. Not all existing rocks on the southern shore were located due to their large numbers. Photography at low tidal stages would best accomplish this.

#### MAP ACCURACY

The positions of horizontal control stations as they plotted on the maps were compared to surrounding features, in some cases by measurement. These comparisons generally gave good results. Fix accuracy, as indicated by check fixes, was good.

#### RECOMMENDATIONS

It is recommended that the maps be revised as noted on the master field edit ozalid and then be accepted as advanced manuscripts. Improved photography, both in coverage and quality, would aid all stages of field edit.

#### INDIVIDUAL MANUSCRIPTS

Details specific to each manuscript are included in the following individual reports.

Map T-12042  
Gray Cliff

METHOD

Detached positions were obtained on rocks in the outer areas and those rocks used to delineate foul limits. The positions of some prominent rocks were verified.

MAP ACCURACY

The plotted positions of stations DRAB 1966 and ROK 29TH ENG 1942 compared well with surrounding features.

FOUL LIMITS

Sounding lines were run within the revised foul limits at high tides. They are still valid as the areas are unsafe for all but shallow draft vessels at any tidal stage.

Submitted by:

*Robert B Crowell*

Robert B Crowell  
LTJG, NOAA

Approved by:

*Bruce I Williams*

Bruce I Williams  
Commanding Officer  
NOAA Ship Fairweather

REVIEW REPORT  
SHORELINE

T-12042

61 - GENERAL STATEMENT

See Summary included with this 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 Hydrographic Survey H-9696, 1:20,000 scale, dated July 6, 1979.

There were no major conflicts.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS Charts:  
16660, scale 1:194,154; 22nd edition, May 8, 1982  
16662, scale 1:100,000, 1st edition, April 9, 1983.

The above listed charts compared well with this manuscript.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Submitted by

*C. Byrd for*  
James L. Byrd, Jr.  
Final Reviewer

Approved for forwarding

*Billy H. Barnes*  
Billy H. Barnes  
Chief, Photogrammetric Section

Approved

*J.M. Moore* Chief, Photogrammetric Production Sec.      *Ronald K. Brewer* Chief, Photogrammetry Branch

