

T 12353

T-12353

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. T-12353	Edition No. 1
Job No. PH-6301 PART 2	
Map Classification FINAL MAP	
Type of Survey SHORELINE	
LOCALITY	
State ALASKA	
General Locality COOK INLET SOUTHERN PART	
Locality FOSSIL POINT, WEST OF	
19 ₆₆ TO 19 ₇₈	
REGISTERED IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Norfolk, VA		SURVEY TP-T-12353 MAP EDITION NO. (4) MAP CLASS Final Map JOB PH- 6301 Pt 2	
OFFICER-IN-CHARGE Jeffrey G. Carlen		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH- _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation Jun 27, 1975 Compilation Oct 9, 1975 " Amend I May 20, 1976 " Amend II Jan 28, 1977			
II. DATUMS			
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 type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Transverse Mercator		4. GRID(S) STATE Alaska ZONE 5	
5. SCALE 1:20,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		S. Solbeck	Sept 1975
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		S. Solbeck "	Sept 1975 "
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild-B-8 SCALE: 1:20,000 CONTOURS BY CHECKED BY		C. Blood A. Rauck, Jr. N.A. N.A.	Mar 1977 " -- --
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smooth drafted CONTOURS BY CHECKED BY SCALE: 1:20,000 HYDRO SUPPORT DATA BY CHECKED BY		J. Minton L.O. Neterer, Jr. N.A. N.A. J. Minton L.O. Neterer, Jr.	Apr 1977 Apr 1977 -- -- Apr 1977 Apr 1977
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		L.O. Neterer, Jr.	Apr 1977
6. APPLICATION OF FIELD EDIT DATA BY		F. Mauldin	Nov 1978
7. COMPILATION SECTION REVIEW BY		F. Margiotta	Nov 1978
8. FINAL REVIEW BY		C. Blood/J. Bryd	Nov 1986
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		J. Byrd	Jan 1987
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		P. Dempsey	Feb. 1987
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		E.L. DAUGHERTY	APR '87

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12353
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-9"M" FL=88.20 mm Wild RC-8"E" FL=152.71 mm		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE	
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Alaska	
				MERIDIAN	
				150th	
				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
70E(C) 7177-7181 *	Jul 25, 70	11:10	1:40,000	5.8 ft above MLLW
70E(C) 7262-7265 *	"	12:45	1:40,000	3.8 "
70E(C) 7317-7322 **	"	13:41	1:20,000	4.0 "
70E(C) 7328-7333 **	"	13:50	1:20,000	4.1 "
70E(C) 7307-7311 **	"	13:32	1:20,000	3.8 "
70M(P) 276-279 ***	Jul 20, 70	--	1:60,000	No tide data

REMARKS * Compilation photography ** Hydro support photography ** Bridge photography

2. SOURCE OF MEAN HIGH-WATER LINE:

* The Mean High Water line was compiled from the above compilation photography.

3. SOURCE OF MEAN LOW-WATER LINE:

None compiled

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
No survey	T-12354	No survey	T-12352

REMARKS

NOAA FORM 76-36C
(3-72)

T-12353

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ~~XXXXXXXXXX~~ Premarking ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	E. Taylor	June 70
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None E.A.T. June 1970 R.M.M. " N.A.
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	N.A. N.A. N.A.
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED Premarking		2. VERTICAL CONTROL IDENTIFIED N.A.	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
70M-277	RUSTY, 1970		

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 ☒ NONE6. 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-form 152, and 1-Geodetic Traverse Report, Pathfinder, 1970

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12353
HISTORY OF FIELD OPERATIONS1. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	B. Williams	Jun/Aug 78
2. HORIZONTAL CONTROL	RECOVERED BY J. Quinlan	July 1978
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
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 <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

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 ☒ NONE6. 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*)

Field edit report

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	Apr 77	Class III manuscript	Mar 13, 78	Mar 14, 78
Field edit applied compilation complete	Nov 78	Class I manuscript	Dec 8, 78	Dec 8, 78
Final Review	Nov 78	Final Map	2-11-87	

II. LANDMARKS AND AIDS TO NAVIGATION None

1. 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: none
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: none

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 - _____	TYPE OF SURVEY <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 - _____	TYPE OF SURVEY <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 - _____	TYPE OF SURVEY <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	

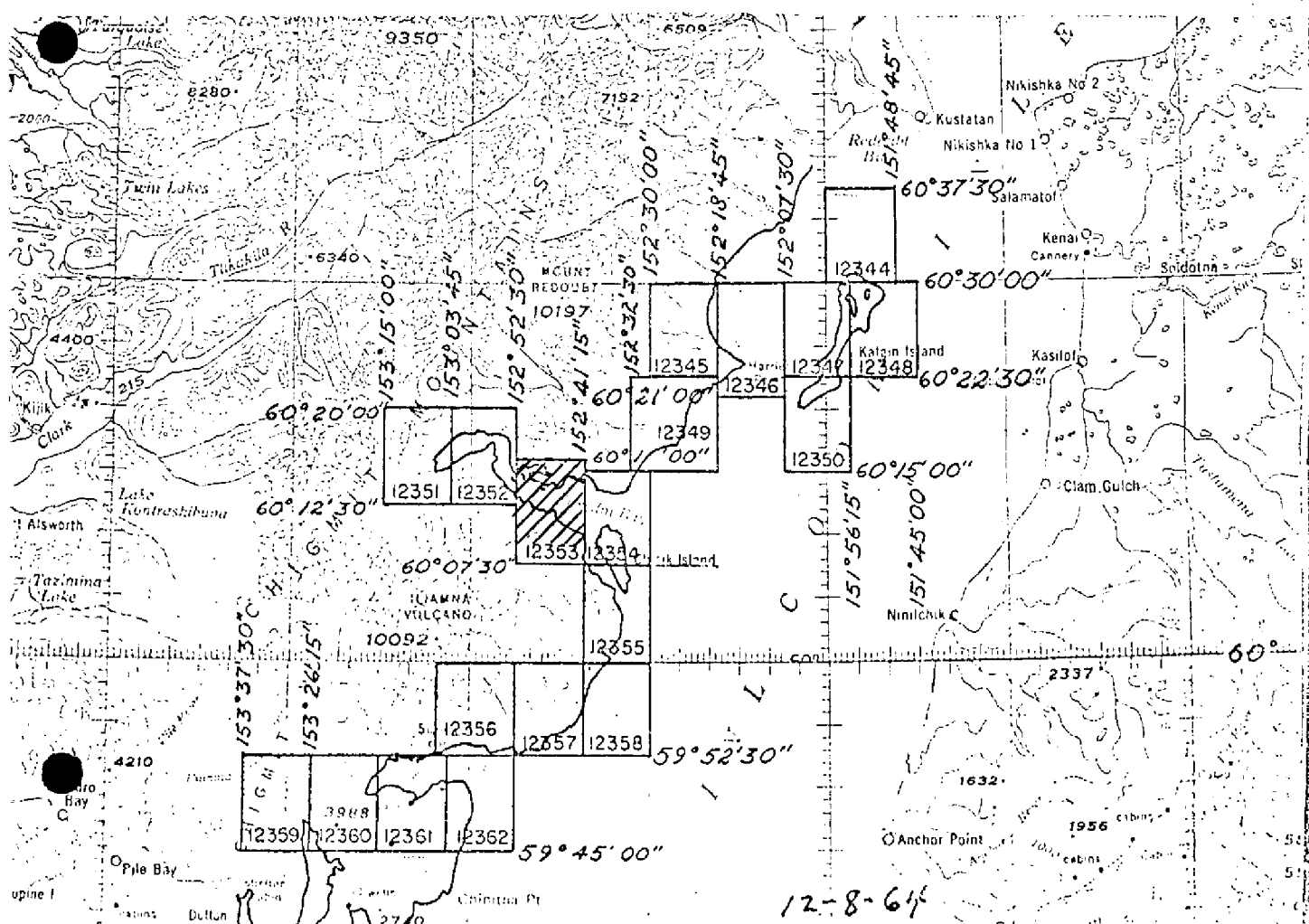
Scale 1:20000
ALASKA

COOK INLET

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Area Sq. Mile	Lin. Mile Shoreline	Sheet No.	Area Sq. Mile	Lin. Mile Shoreline
T-12344	2	4	T-12354	11	22
T-12345	3	6	T-12355	8	16
T-12346	3	6	T-12356	3	6
T-12347	8	16	T-12357	7	14
T-12348	4	8	T-12358	2	4
T-12349	5	10	T-12359	3	6
T-12350	4	9	T-12360	4	7
T-12351	4	9	T-12361	10	19
T-12352	10	21	T-12362	4	8
T-12353	11	22			

Totals - Area 106 sq. mile; Shoreline 213 sq. mile



6

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12353

This 1:20,000 scale Final shoreline map is one of nineteen 1:20,000 scale maps designated as project PH-6301 Part II, Southern Part, Cook Inlet, Alaska.

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 during the 1970 field season consisted of recovery and premarking of horizontal control for aerotriangulation.

This map area was photographed in July 1970 with the RC-9 "M" camera at 1:60,000 scale using panchromatic film. The map area was also photographed in July 1970 with the RC-8 "E" camera at 1:40,000 and 1:20,000 scale using color film.

Aerotriangulation was completed at the Washington office in June 27, 1975.

This map was compiled at the Norfolk office in April 1977.

Field edit was acquired for T-12353 during the 1978 field season. Field edit was applied at AMC in November 1978.

Final review was accomplished at the Atlantic Marine Center in November 1986. A Chart Maintenance Print was prepared and forwarded to the Marine Charts Branch.

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.

Photogrammetric Plot Report
Cook Inlet, Alaska
PH-6301

21. Area Covered

The area covered by this report is the western shoreline along Cook Inlet, Alaska, from Chinita Bay to Tuxedni Bay. This area is covered by 13 1:20,000 sheets; T-12349, T-12351-12362.

22. Method

Three strips of 1:60,000 scale black-and-white panchromatic photography were bridged by analytic aerotriangulation methods.

Common points were located on the bridging photography and the 1:20,000 color photography being used for ratio purposes. In addition, common points were located on the bridging and 1:30,000 photography being used for compilation. Tie points were used on all three strips to insure an adequate junction of all photography during the strip adjustment. Ratio prints were ordered. The T-sheet manuscripts were plotted on the Coradomat.

23. Adequacy of Control

Control checked within map accuracy standards, but due to the fact that this area is within the 1964 earthquake zone, some local stations could have moved.

Station F00, 1970, could not be held in the strip adjustment and this is believed to be the cause.

On September 3, 1975, Geodesy informed this office that not enough data was available to make any significant changes on the horizontal control in this area.

24. Supplemental Data

USGS Quadrangles were used to provide vertical control for the adjustment.

25. Photography

The coverage, overlap, and quality of the photography was adequate for the job.

Approved and forwarded:

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

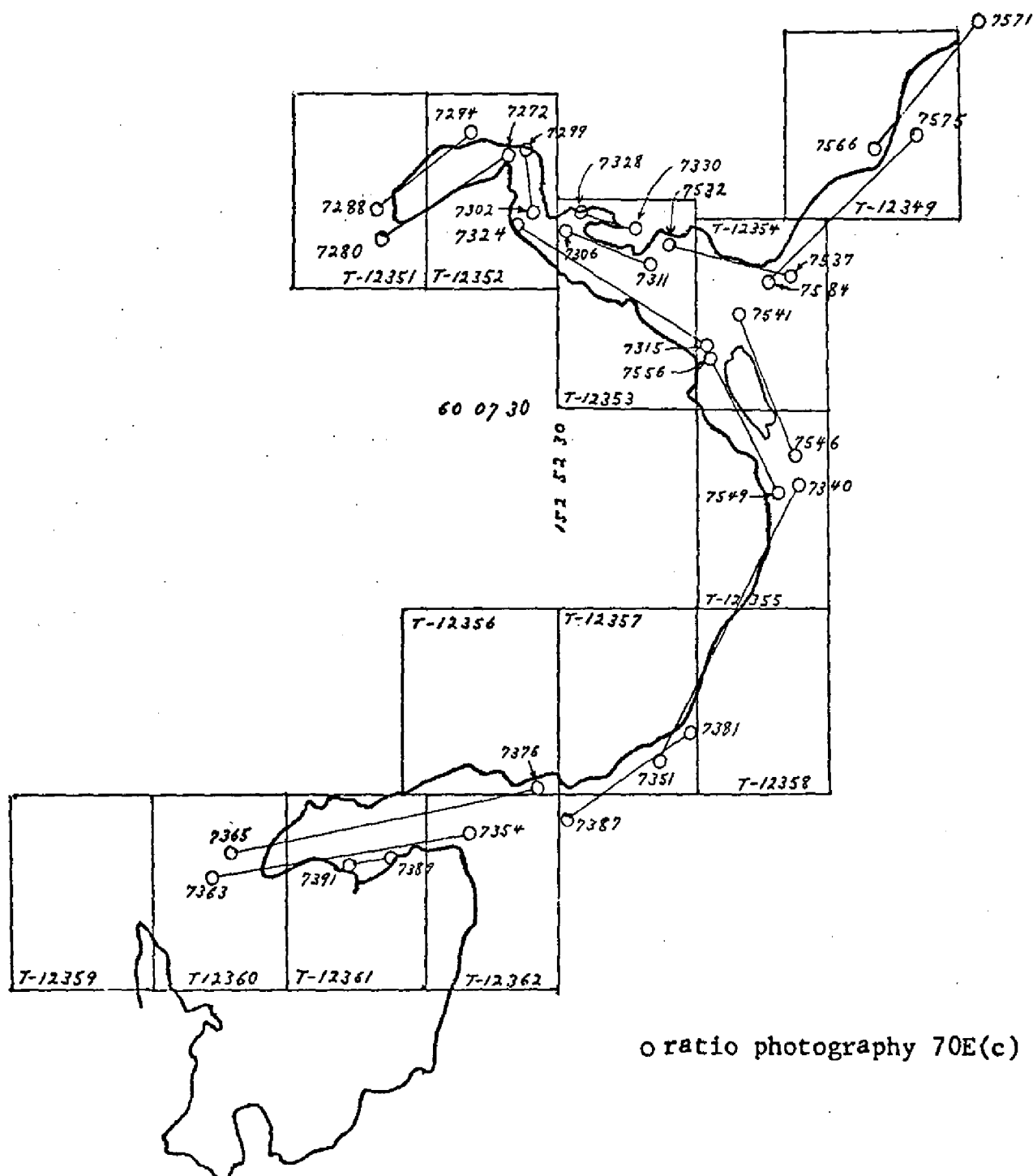
Chief, Aerotriangulation Section

Submitted by,

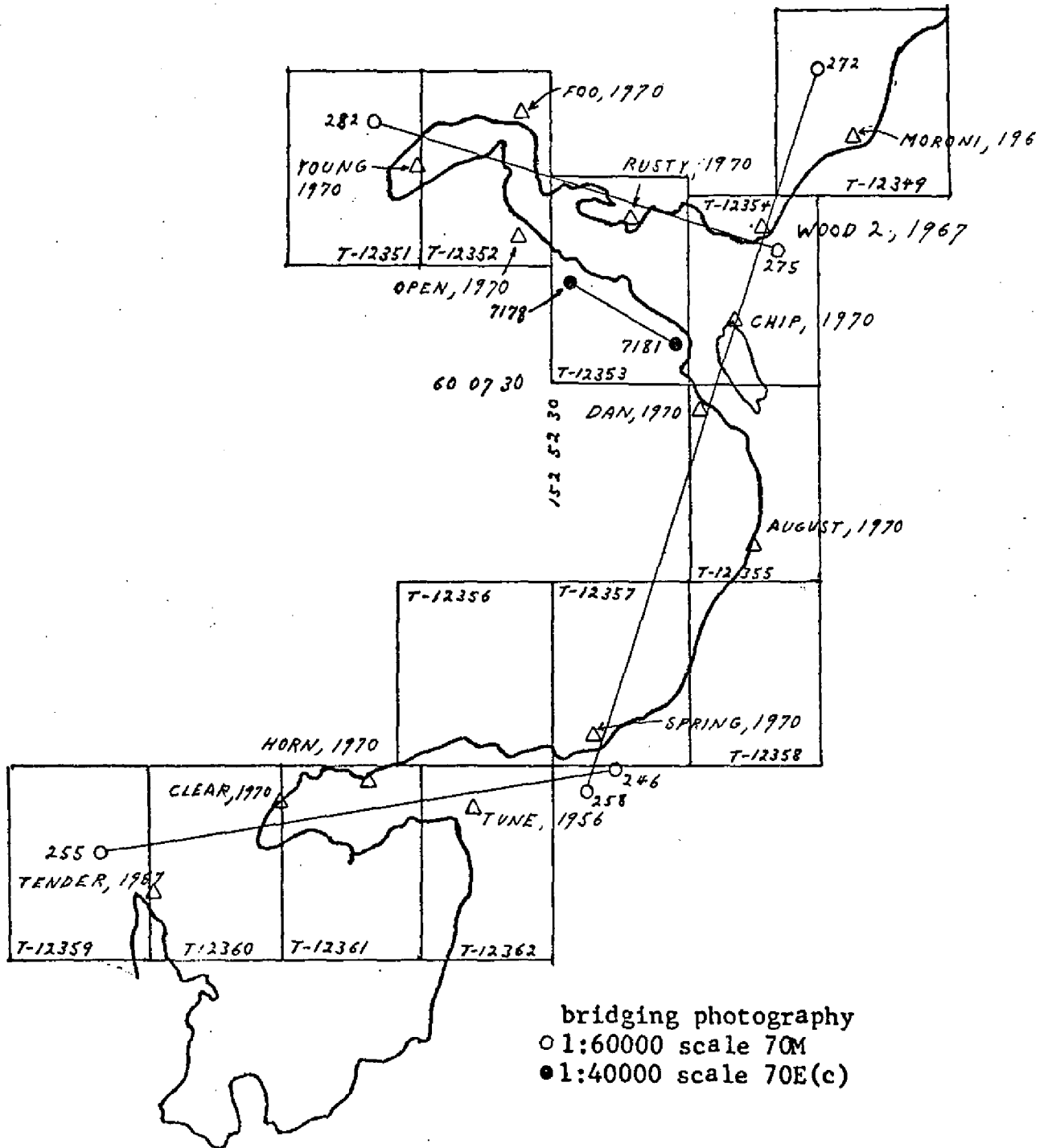
Stephen H. Solbeck
Stephen H. Solbeck

29 SEP 75

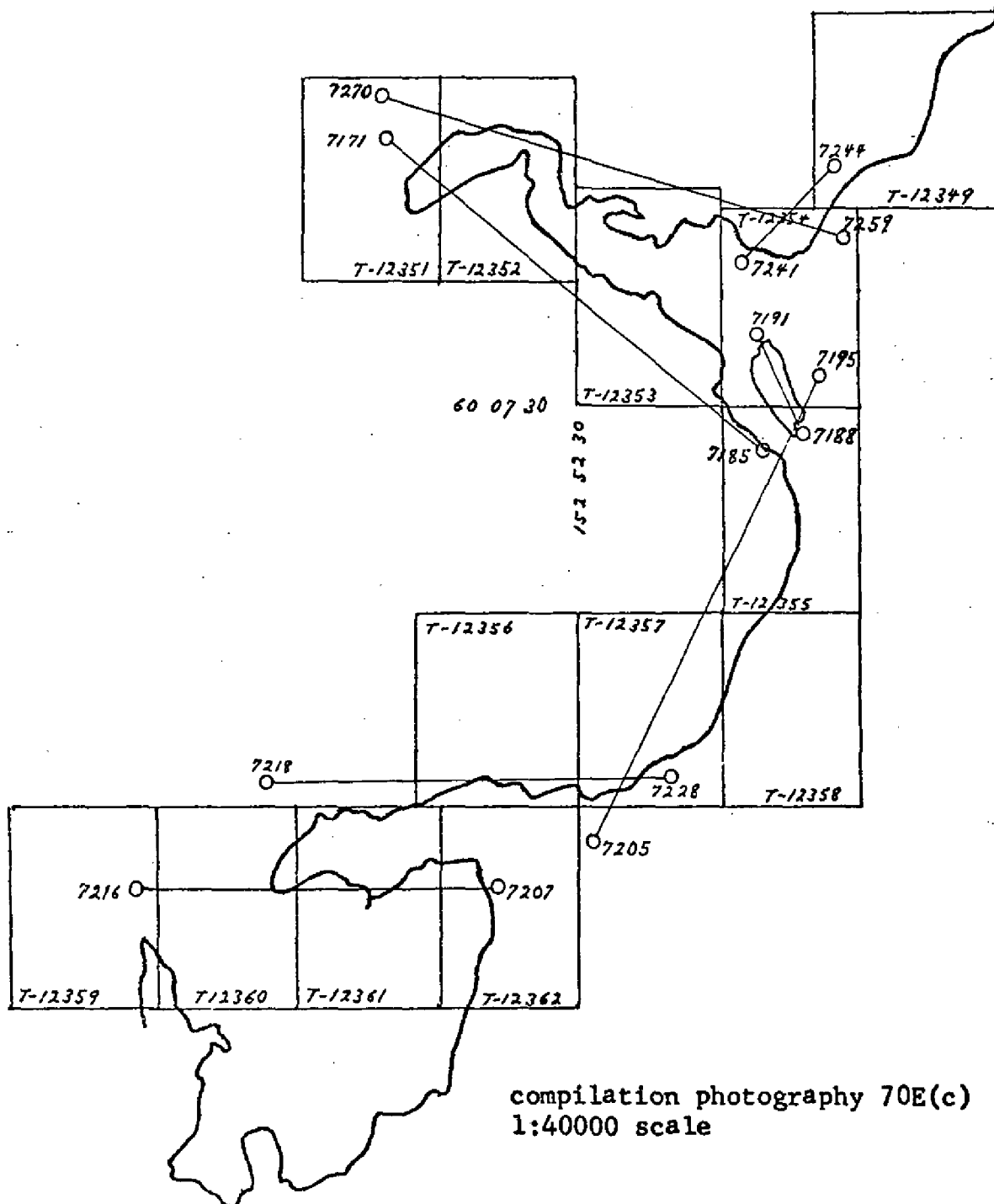
AEROTRIANGULATION SKETCH
 COOK INLET ALASKA
 PART-2
 PH-6301
 September, 1975



AEROTRIANGULATION SKETCH
 COOK INLET ALASKA
 PART-2
 PH-6301
 September, 1975



AEROTRIANGULATION SKETCH
COOK INLET ALASKA
PART-2
PH-6301
September, 1975



COMPILATION REPORT

T-12353

31 - DELINEATION

Delineation was accomplished by using the Wild B-8 stereoplotter with 1:40,000 scale photography. Routine compilation procedure was followed and no unusual problems were encountered. The photography was adequate.

32 - CONTROL

See the attached Photogrammetric Plot Report, dated September 29, 1975.

33 - SUPPLEMENTAL DATA

None

34 - CONTOURS AND DRAINAGE

Contours are not applicable to the project. Drainage was delineated by using the Wild B-8 stereoplotter from compiler's interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

Alongshore details were delineated using the Wild B-8 stereoplotter from compiler's interpretation of the photographs.

The mean high water line was office edited and refined from the ratioed photographs.

36 - OFFSHORE DETAILS

Offshore details were delineated from compiler's interpretation of the photographs.

37 - LANDMARKS AND AIDS

There were no landmark or aids to navigation noted during compilation.

38 - CONTROL FOR FUTURE SURVEYS

None

T-12353

39 - JUNCTIONS

See the attached Form 76-36B, item #5 of the Descriptive Report concerning junctions. Junctions are in agreement.

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report, dated September 29, 1975.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the U. S. Geological Survey Quadrangle: Kenai (A-8), ALASKA, scale 1:63,360, dated 1958.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the National Ocean Survey chart: No. 16640, scale 1:200,000 dated May 25, 1974, 13th ed.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

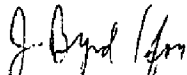
None.

Submitted by:



J. R. Minton
Cartographic Technician
Date: April 13, 1977

Approved:



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

Feb. 6, 1987

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6301 (Cook Inlet, Alaska-Part 2)

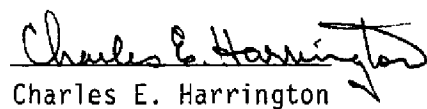
T-12353

Difficult Creek

Magnetic Island

Tuxedni Bay

Prepared by:

A handwritten signature in cursive script, reading "Charles E. Harrington".

Charles E. Harrington

Staff Geographer

Field Edit Report
OPR-P114-FA-78
Redoubt Point, Tuxedni Bay

GENERAL

This report covers field edit work done on topographic manuscripts T-12349 and T-12351 through T-12355. Work was performed by LTjg Crowell, ENS Finke and ENS Roberts during the months of June, July and August 1978.

RECOMMENDATIONS

It could be very helpful if color photographs were supplied to parties assigned to field work in addition to black and white photographs. Many features which are obvious in the field do not show up at all on black and white photographs.

Submitted by



Robert B Crowell
LTjg, NOAA

Approved by



Bruce I Williams
Commanding Officer
NOAA Ship Fairweather

T-12353
Upper Tuxedni Bay

DESCRIPTION

The area is marked by an east to west change from gravel beach to a marsh shoreline. Bluffs and steep hillsides back most of the beach areas, though they are usually well back from shore in the marshy areas. The river's affect on tides extends as far as Magnetic Island, if not further. Local information indicates that winter ice can cause movement of offshore rocks, though evidence shows that such movement is significant only over many years.

METHOD

Field edit work was done from a skiff and on foot. Shoreline features were verified visually from close inshore, examining the ozalids and the photographs in the field. All work was done at higher tidal stages due to the extensive tidal flats and shallow areas.

Control for fixes was by sextant angles, using both established stations and physical features, and rough measurements of distances. Some positions were estimated in relation to shoreline features.

ADEQUACY AND COMPLETENESS OF COMPILATION

Office and field compilation of the manuscript are adequate for the purpose of nautical charting. Field work on the manuscript is complete.

MANUSCRIPT ACCURACY

The position of station RUSTY 1970 in relation to shoreline features agrees well with the manuscript.

RECOMMENDATIONS

Due to the influence of the river on tides, mean lower low water has limited meaning on the western portions of the sheet. Consult the descriptive report for survey H-9771 for details.

REVIEW REPORT T-12353
SHORELINE

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 the following Hydrographic Survey:

H-9771 1:20,000 scale dated June 30, 1980

There were no conflicts.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS chart 16661, scale 1:100,000, dated July 27, 1985.

The chart 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

J. Byrd Jr.
James L. Byrd, Jr.
Final Reviewer

Approved for forwarding

Billy H. Barnes

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved

Lucy O. Robinson
Chief, Photogrammetric Production Sect.

A. Y. Bynum
Chief, Photogrammetry Branch

