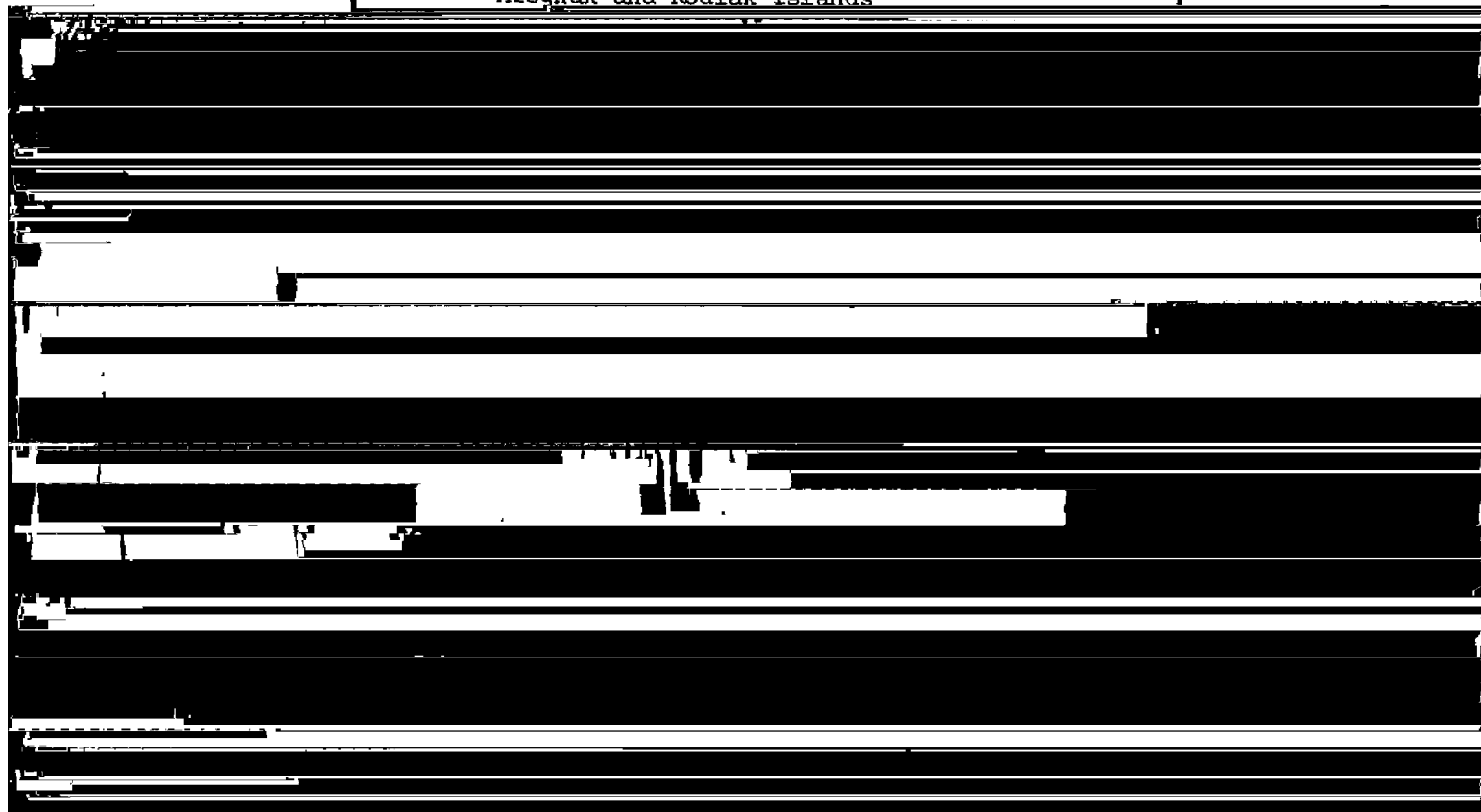


TP-00294

TP-00294

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h1>DESCRIPTIVE REPORT</h1>	
This Map Was Field Edited	
Map No. TP-00294	Edition No. One
Job No. PH-7017	
Map Classification Final Field Edited Map	
Type of Survey Shoreline	
<h2>LOCALITY</h2>	
State Alaska	
General Locality Afognak and Kodiak Islands	



DESCRIPTIVE REPORT

TP-00294

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NOAA FORM 76-36A
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

☒ ORIGINAL☐ RESURVEY☐ REVISED

SURVEY TP. 00294

MAP EDITION NO. (1)

MAP CLASS Final

JOB PH. 7017

PHOTOGRAMMETRIC OFFICE

Atlantic Marine Center
Norfolk, Virginia

OFFICER-IN-CHARGE

Jeffrey G. Carlen, Cdr. NOAA

LAST PRECEDING MAP EDITION

TYPE OF SURVEY

☐ ORIGINAL☐ RESURVEY☐ REVISED

JOB PH. _____

MAP CLASS _____

SURVEY DATES:

19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE

Aerotriangulation Instr. Nov. 19, 1971
 Office Instr. Apr. 17, 1972
 Office Instr., Supplement 1 May 11, 1973
 Office Instr., Amendment 1 Not Dated

2. FIELD

Field Support Instr. May 03, 1971

II. DATUMS

1. HORIZONTAL:

☒ 1927 NORTH AMERICAN

OTHER (Specify)

2. VERTICAL:

(partial)

☒ MEAN HIGH-WATER
☐ MEAN LOW-WATER
☒ MEAN LOWER LOW-WATER
☐ MEAN SEA LEVEL

OTHER (Specify)

3. MAP PROJECTION

Polyconic

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	D. Norman	Mar. 1972
METHOD: Analytic	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	D. Phillips	Apr. 1972
METHOD: Coradomat	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT	PLANIMETRY BY	R. R. White	May 1972
COMPILATION	CHECKED BY	L. O. Neterer	May 1972
INSTRUMENT Wild B-8 Stereoplotter	CONTOURS BY	N/A	
SCALE: 1:20,000	CHECKED BY	N/A	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	B. Wilson	June 1972
	CHECKED BY	A. L. Shands	June 1972
	CONTOURS BY	N/A	
METHOD: Smooth Drafted	CHECKED BY	N/A	
	HYDRO SUPPORT DATA BY	B. Wilson	June 1972
SCALE: 1:20,000	CHECKED BY	A. L. Shands	June 1972
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	A. L. Shands	June 1972
6. APPLICATION OF FIELD EDIT DATA	BY	C. Blood & F. Margiotta	Apr. 1978
	CHECKED BY	J. Byrder	Apr. 1978
7. COMPILATION SECTION REVIEW	BY	D. Butler	Jan. 1986
8. FINAL REVIEW	BY	J. Massey	Dec. 1986
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY		
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	E. L. DAUGHERTY	JUN '87

NOAA FORM 76-36A

SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00294
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-9 "M" (88.20mm F.L.) Wild RC-8 "E" (152 71mm F.L.)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		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				MERIDIAN 150th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
71 M (P) 323 - 325	08/03/71	09:00	1:60,000	7.6 ft. above MLLW	
71 E (C) 6114 - 6115	07/04/71	13:50	1:20,000	7.8 ft. above MLLW	
71 E (C) 6724 - 6729*	07/10/71	10:25	1:20,000	0.2 ft. above MLLW	
71 E (C) 6739 - 6743	07/10/71	10:37	1:20,000	0.9 ft. above MLLW	
71 E (C) 7352 - 7356	08/03/71	11:51	1:20,000	11.1 ft. above MLLW	

REMARKS * A partial mean lower low water line was compiled thru an office interpretation of the color photography listed above. See the Review Report included as part of this Descriptive Report, item 67, for additional information on this subject.

2. SOURCE OF MEAN HIGH-WATER LINE:

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

3. SOURCE OF [REDACTED] MEAN LOWER LOW-WATER LINE:

A partial mean lower low water line was delineated from the July 10, 1971 photography listed above.

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	TP-00295	TP-00300	TP-00293

REMARKS

TP-00294

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD ~~RESEARCH~~ OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Lanier	1971
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (<i>Triangulation Stations</i>) BY LOCATED (<i>Field Methods</i>) 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	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

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*)

None

TP-00294

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	K. Jeffers	May 1973
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
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 <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	M. H. Allen
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

71M(P)-323 thru 71M(P)-325

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)

One field edit ozalid and field edit report.

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. P. Randall	May 1977
2. HORIZONTAL CONTROL	RECOVERED BY: None 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 (Triangulation Stations) BY: None LOCATED (Field Methods) BY: None IDENTIFIED BY: None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY: M. Molchan	May 1977
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY: NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED None		2. VERTICAL CONTROL IDENTIFIED NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
3. PHOTO NUMBERS (Clarification of details) 71 E (C) 6730, 6738 and 6739 71 M (P) 324 thru 326			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS Sketch in field edit report			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) One film field edit ozalid and field edit report			

TP-00294
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	June 1972	Class III manuscript superseded	5/19/72	6/15/72
Partial field edit	Mar 1977	Class III Manuscript Superseded	None	None
Field edit applied Compilation complete	Apr 1978	Class I Manuscript	5/1/78	5/1/78

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: None3. ☐ 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: 6/3/87

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

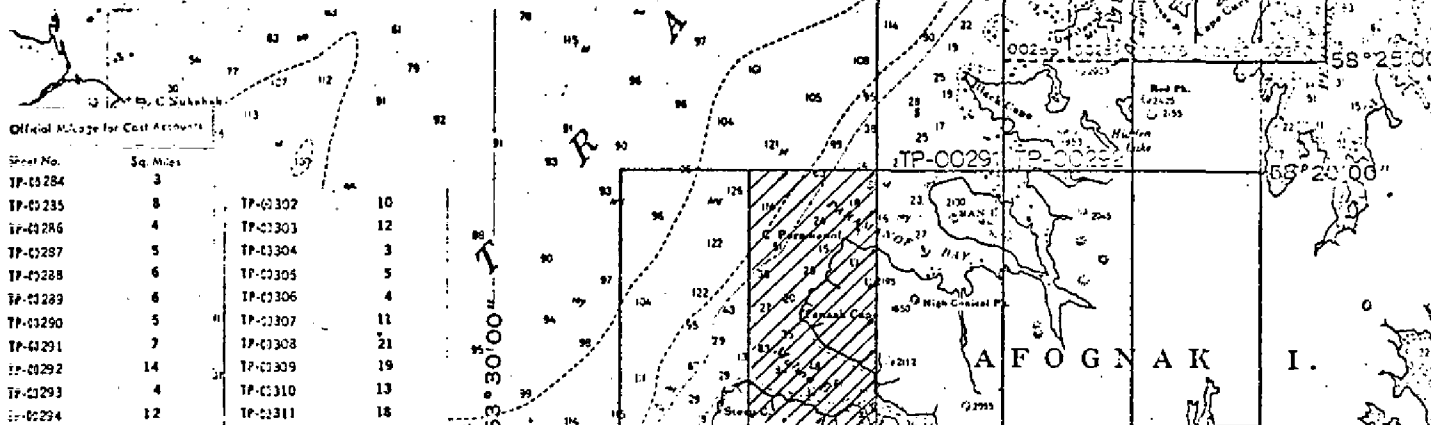
SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	<input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	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-7017

AFOGNAK & KODIAK ISLANDS ALASKA

SHORELINE MAPPING

SCALE 1:10,000 & 1:20,000



Official Mileage for Cost Accounts

Sheet No.	Sq. Miles		
TP-0284	3	TP-0302	10
TP-0285	8	TP-0303	12
TP-0286	4	TP-0304	3
TP-0287	5	TP-0305	5
TP-0288	6	TP-0306	4
TP-0289	6	TP-0307	11
TP-0290	5	TP-0308	21
TP-0291	7	TP-0309	19
TP-0292	14	TP-0310	13
TP-0293	4	TP-0311	18
TP-0294	12		

SUMMARY

Project PH-7017, Afognak and Kodiak Islands, Alaska, consists of 33 maps. Seven, TP-00284 through TP-00290, are at 1:10,000 scale and 26, TP-00291 through TP-00316, are at 1:20,000 scale. The project area is the northwestern coast line of Kodiak and Afognak Islands and their interface with Shelikof Strait. The project extends from Big Bay in the northeast to Cape Ugat in the southwest. The photogrammetric survey depicts the shoreline and other cartographic features of mapping interest in the coastal areas and navigable waterways bisecting the islands.

The purpose of the project was to provide shoreline data for maintenance of the Nautical Charting Program and in support of hydrographic survey operations planned for the area.

Field operations consisted of recovery, establishment, and identification (premarking) of horizontal control necessary for aerotriangulation. No field inspection was conducted for this project. Panchromatic photographs required for aerotriangulation of the entire project area and subsequent compilation of the 1:20,000-scale maps were obtained with the RC-9 "M" camera at 1:60,000 scale. Supplemental color photographs at 1:20,000 scale were acquired for those areas to be mapped at 1:20,000 scale using the RC-8 "E" camera. Areas to be mapped at 1:10,000 scale were covered by 1:30,000-scale color compilation photographs also obtained with the RC-8 "E" camera. The 1:30,000-scale compilation photographs were controlled by aerotriangulated points derived from the 1:60,000-scale panchromatic photographs. All calculations pertaining to the vertical relationship of the photographs to the datums, mean lower low water and mean high water, were derived from predicted tidal information.

A field edit was performed by personnel of the Pacific Marine Center's hydrographic survey vessels, while conducting hydrographic survey operations in selected areas. These field edits, occurring over four field seasons, were limited to the boundaries of the hydrographic surveys, thereby creating numerous partially field edited maps. Field edits occurred during the 1972, 1973, 1977, and 1981 field seasons.

7
The aerotriangulation of the project was divided into two phases (Part I and II), in order to expedite the delivery of photogrammetric map data in support of hydrographic survey operations. Eighteen strips of photographs were bridged using analytic aerotriangulation methods. Horizontal control used was field identified (premarked). Vertical control was taken from U. S. Geological Survey quadrangles. Aerotriangulated control proved adequate and meets the requirements of the National Standards of Map Accuracy.

Compilation was performed in the Coastal Mapping Section, Atlantic Marine Center, Norfolk, Virginia. Delineation was accomplished using a Wild B-8 stereoplotter through application of standard shoreline mapping techniques. This was supplemented by graphic compilation techniques in selected areas. Delineation was based on an office interpretation of the 1:60,000 scale panchromatic, and 1:20,000- and 1:30,000-scale natural color, photographs. All line work on the base maps was smooth drafted. In areas where the stage of tide for individual photographs, based on predictions, was determined to be within the required 1 foot of the vertical datum mean lower low water, the approximate datum was delineated on the map using graphic compilation techniques.

Final review was performed in the Coastal Mapping Unit, Rockville Maryland, office. The base maps and associated data of this project meet the requirements of the National Standards of Map Accuracy. The base maps and reports comply with the project instructions.

The Descriptive Reports prepared for each map contain all the information pertaining to the completion of each map.

FIELD INSPECTION

TP-00294

Field inspection was limited to the recovery and identification of horizontal control for aerotriangulation.

PHOTOGRAMMETRIC PLOT REPORT
Afognak Island, Alaska Part I
Job PH-7071-17
March 1972

21. Area Covered

This report pertains to 13 sheets on Afognak Island. The sheets are TP-00284 thru TP-00290 at 1:10,000 scale and TP-00291 thru TP-00296 at 1:20,000 scale. The area covered is the northwest shoreline of Afognak Island.

22. Method

Eight strips of photography were bridged by analytic aerotriangulation methods and adjusted to ground on the Alaska state plane coordinate system, zone 5. Strips 1 and 2 of 1:60,000 scale photography were adjusted as a block and used to control the six strips of 1:30,000 scale photography.

23. Adequacy of Control

The horizontal control is sparse in both strips of 1:60,000 scale photography. However the project should still meet the map accuracy standards.

24. Supplemental Data

Vertical control was taken from USGS topographic quadrangles.

25. Photography

The photography was adequate.

Respectfully submitted:

Don O. Norman

Don O. Norman
Cartographer

Approved and forwarded:

Henry P. Eichert

Henry P. Eichert, Chief
Aerotriangulation Section

Afognak Island, Alaska

Fit to Control
(x, y) feet

Strips 1 & 2 (block adjustment)

1	BANKS, 1907	(+0.1, +0.1)
2	BEN, 1926 subpoint	(-0.5, -0.5)
3	BLUE, 1926	(0.0, +0.4)
4	TIE, 1941 subpoint	(-0.2, -0.4)
5	NUN, 1941	(+0.1, +0.3)
6	BAY COVE POINT, 1907	(+0.5, +0.1)
7	DOLPHIN POINT LT., 1941	(-6.0, +5.2)
8	RASPBERRY STRAIT LT., 1941	(+4.9, -3.4)

Strip 3

76801	(+3.8, -3.1)
76802	(0.0, 0.0)
77801	(+2.7, +2.7)
77802	(0.0, 0.0)
79801	(0.0, 0.0)
79802	(+1.5, +4.5)

Strip 4

33801	(+10.9, -10.9)
34801	(0.0, 0.0)
35801	(0.0, 0.0)
36801	(-2.3, -0.6)
38801	(0.0, 0.0)
38802	(-6.9, +2.6)

Strip 5

18801	(0.0, 0.0)
19801	(-1.3, -0.2)
BEN, 1926 subpoint	(0.0, 0.0)
22801	(+5.4, +1.1)
23801	(+2.2, +0.1)

Strip 6

22801	(0.0, 0.0)
45801	(-4.8, -4.4)
BLUE, 1926	(-4.0, +0.2)
47801	(0.0, 0.0)

2

Strip 7

90801	(0.0, 0.0)
91801	(+2.3, -0.9)
92801	(0.0, 0.0)
92802	(-1.1, -0.7)

Strip 8

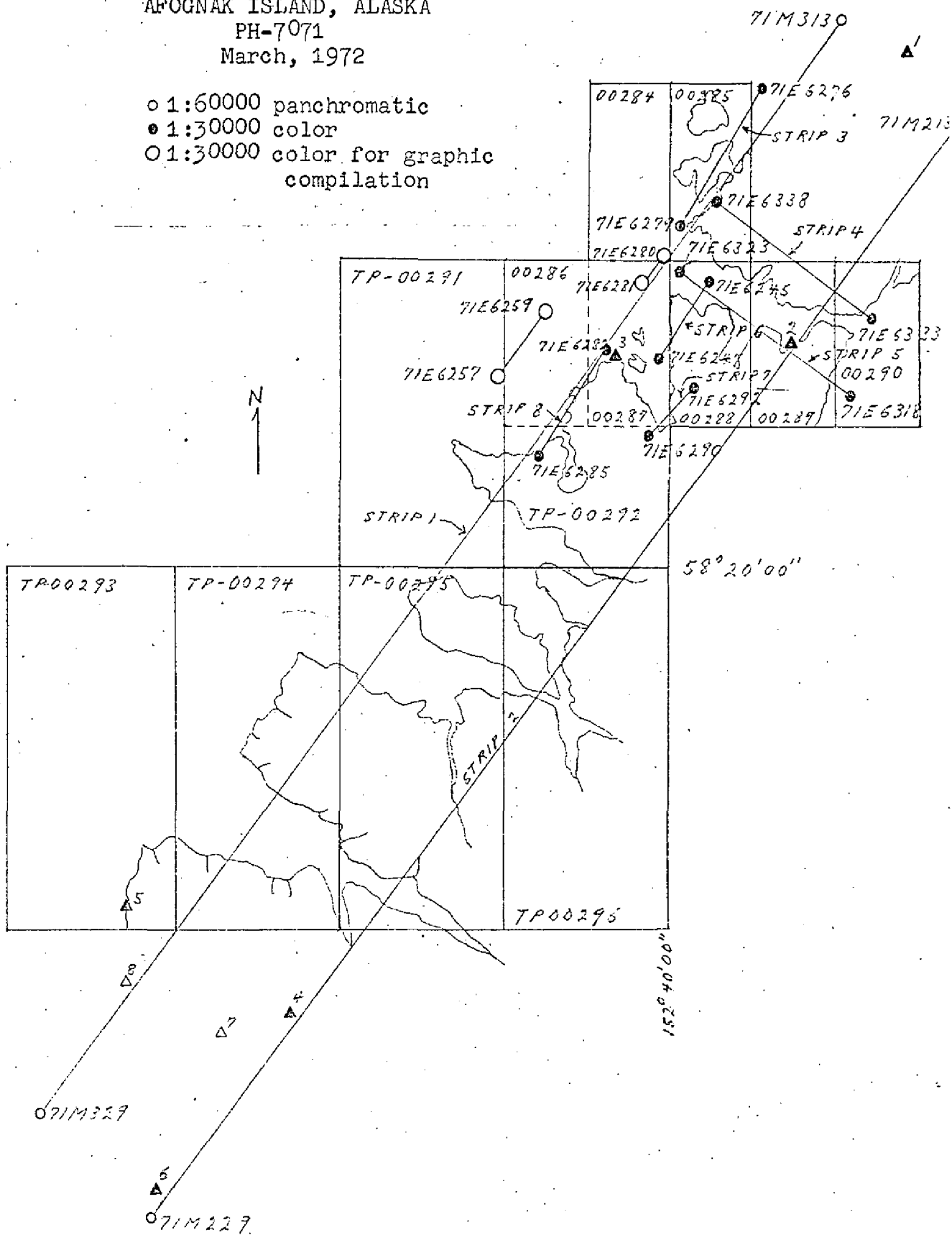
82801	(-2.2, +0.6)
82802	(0.0, 0.0)
84801	(0.0, 0.0)
85801	(-10.7, +4.6)
85802	(0.0, 0.0)

AEROTRIANGULATION SKETCH
AFOGNAK ISLAND, ALASKA
PH-7071
March, 1972

- ```

o 1:60000 panchromatic
* 1:30000 color
O 1:30000 color for graphic
 compilation

```





## COMPILATION REPORT

TP-00294

31. DELINEATION:

Delineation was by the Wild B-8 Stereoplotter, except for the mean lower low water line and some foreshore detail which was added graphically.

The photography was adequate except that the low water coverage was incomplete.

There was no field inspection prior to compilation.

32. CONTROL:

See Photogrammetric Plot Report, dated March 1972.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The mean high water line and alongshore details were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS:

One island was delineated in Malina Bay at the entrance to Malka Bay. Photograph coverage and quality was such that no problems were encountered.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See form 76-36b, item #5, of the Descriptive Report.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following USGS quadrangles: AFOGNAK(A-4), ALASKA, scale 1:63,360, dated 1953 and AFOGNAK (B-4), ALASKA, scale 1:63,360, dated 1954.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following National Ocean Survey charts: 8533, scale 1:78,000, 4th edition, April 7, 1969 and 8534, scale 1:78,000, 5th edition, January 30, 1971.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

*Albert C. Rauck, Jr. FOR*  
B. Wilson  
Cartographic Technician  
June 13, 1972

Approved:

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

## FIELD EDIT REPORT

OPR-478-73

NOAA SHIP RAINIER

CDR. K.W. JEFFERS,  
Commanding



#### INTRODUCTION METHODS

Field edit was accomplished by personnel of the NOAA SHIP RAINIER, between 15 May and 19 August 1973. Work was done in a sixteen foot skiff, making landings where it was necessary to verify shoreline character.

Field edit work was begun in the area north of Black Cape, on Afognak Island, at the mouth of Devil Inlet, and extended southwestward to the landward end of the main part of Malina Bay. The shoreline from Cape Paramanof to Cape Tanaak was not inspected. See the reference sketch of field editing completed for precise delineation of work accomplished. Field editing was completed on manuscripts TP-00291, TP-00292, and TP-00296. Field editing was begun but not finished on manuscripts TP-00294 and TP-00295. No field edit was done on manuscript TP-00293.

All additions and corrections are noted in purple on the field edit discrepancy sheets and in red on the field edit film ozalids. Deletions are noted or accented in green. Photographs used in this field edit were from PH-7017. Values for distances to the mean high water line and rock heights were estimated. All time observations are referenced to 135° West longitude.

Following the text is an appendix comprised of:

- 1) Sketch of field edited shoreline
- 2) List of detached positions
- 3) Complete listing of photo-hydro signal tape
- 4) Copies of triangulation recovery notes for stations used for photo-hydro control

#### ADEQUACY OF COMPILATION

The compilation of the mean high water line was generally good. Compilation of offshore and foreshore features was often incomplete: several rocks readily identifiable on the photographs were omitted. Time and height data for these items are have been included on the photographs.

#### DISCUSSTION AND RECOMMENDATIONS

TP-00286 (completed) No special recommendations are required.

TP-00291 (completed) No special recommendations are required.

TP-00292 (completed) No special recommendations are required.

TP-00293, No field edit was done on this sheet.


TP-00294 (not completed) The shoreline of Paramanof Bay on this sheet was field edited as far west as Cape Paramanof. No field edit was done from Cape Paramanof to Tanaak Cape. The shoreline from Tanaak Cape eastward to  $153^{\circ} 00'00''\text{W}$  longitude was field edited, as well as the southern shore of Malina Bay between  $153^{\circ} 01'00''$  and  $153^{\circ} 02'00''\text{W}$  longitude. The rest of the

shoreline of Malina Bay was not inspected. No special recommendations are required.

TP-00295 (not completed) Only the shoreline of Paramanof Bay was field edited. None of the Malina Bay shoreline was field edited. No special recommendations are required.

TP-00296 (completed) No special recommendations are required.

respectfully submitted,

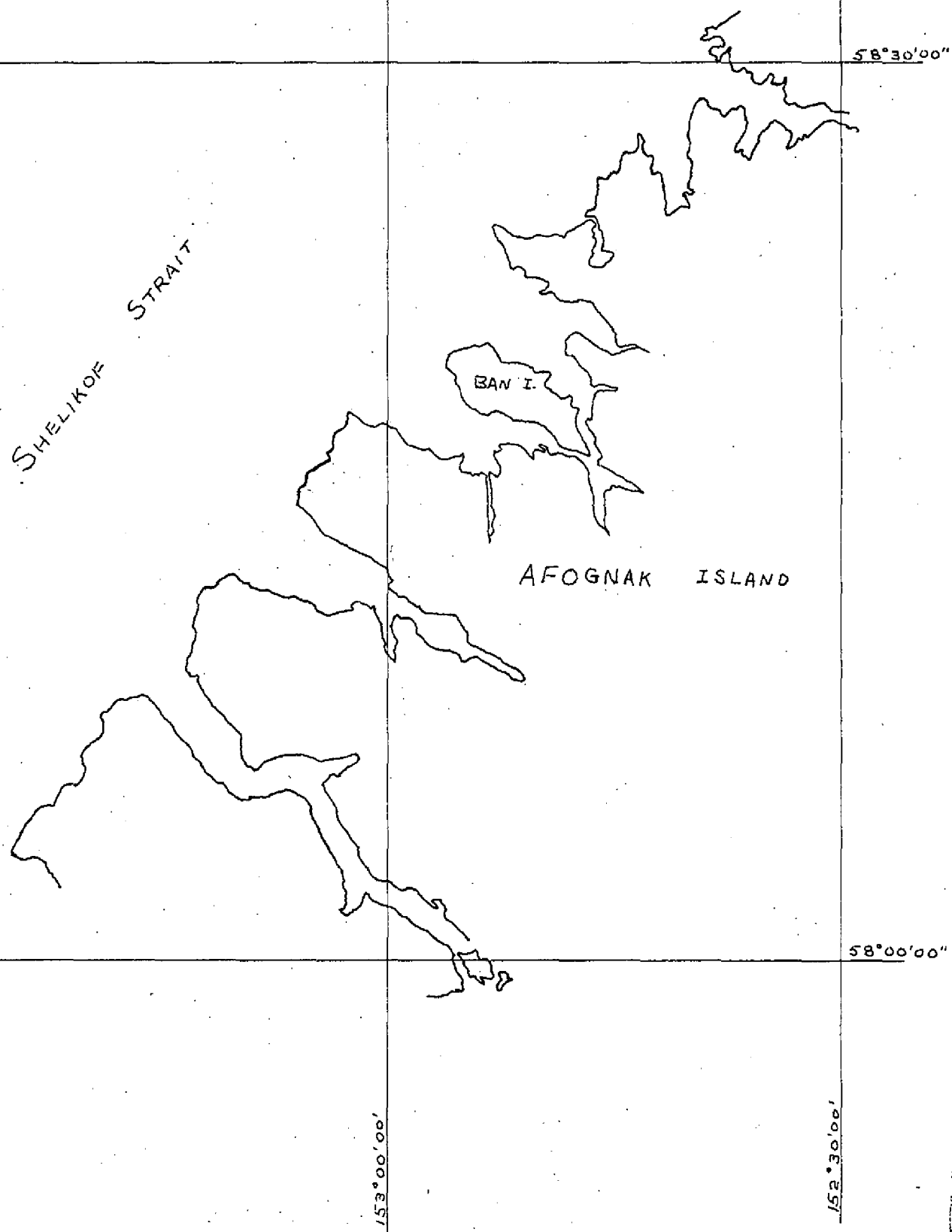


## APPROVAL SHEET

The Field Edit Report is approved as submitted.

*K. W. Jeffers*  
K.W. Jeffers  
Commander, NOAA

OPR-478, 1973 - FIELD EDITED SHORELINE-INDICATED IN BLACK



NOAA FORM 76-35

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

## DESCRIPTIVE REPORT

Type of Survey FIELD EDIT

Job No. JOB-7071 7010 Map No. TP-00294

Classification No. OPR-478-RA-77 Edition No.

## LOCALITY

State ALASKA

General Locality AFOGNAK ISLAND

Locality MALINA BAY

1977 TO 19

## REGISTRY IN ARCHIVES

DATE



## FIELD EDIT REPORT

TP-00294

JOB-7071-7077

OPR-478-RA-77

AFOGNAK ISLAND, ALASKA  
MALINA BAY

1 FIELD UNIT

MAY 16, 1977 - JUNE 28, 1977

JD (136 - 179)

51 METHODS

The sections of shoreline that required field edit are noted in purple on TP-00294. Shoreline and topographic detail are noted on black and white photographs #324, #325 and on color photos #6730 and #6739. The portions of Malina and Malka Bays that lie east of  $153^{\circ} 02' 00''$  W and south of  $58^{\circ} 12' 40''$  N involved both field edit and photo control for visual Hydrography on (H-9684), RA-10-1-77.

To minimize discrepancies of identification and location of rocks, a letter designator A-Z and AA-ZZ was assigned to each rock and transferred to the boatsheet from the various sources. The lettered rocks are included on both TP-00294 and TP-00295. A master listing is included in Table 1, Section 53.

Heights of rocks were estimated at close range by comparing with objects of known elevation. Depths of submerged rocks were determined with a lead line or measured with a tape. The times noted are GMT, (local +9 hours).

Red ink was used for additions or corrections to features on TP-00294. Deletions were noted in green. Purple was used for verifying features.

The field and shipboard routine was executed in the following order:

- 1) Completion of field edit on shoreline not included on hydrographic boatsheet RA-10-1-77.
- 2) Transfer of collected information to black and white chronapaque photographs #324, #325 and color chronapaque photos #6730, #6739.
- 3) Photo signal location for Hydrographic Survey RA-10-1-77 concurrent with field edit.
- 4) Radial plot of photo signals from photographs #6729, #6738, #6739, #6740, #224 and #225 to TP-00294.
- 5) Building signals.
- 6) Annotating dangers on boatsheet RA-10-1-77.
- 7) Returning to areas where rocks were charted but not found at minus tides to confirm or disprove their existence.

52 ADEQUACY OF COMPILATION

The compilation of manuscript TP-00294 is complete and adequate. Compilation of MHWL was excellent requiring no changes. For further in-

formation refer to Descriptive Report H-9684, RA-10-1-77.

### 53 MAP ACCURACY

The following pages include Figure 5, Table 1 and descriptions of rocks involving additions or corrections. Figure 5 was transferred directly from rough boatsheet RA-10-2-77, (H-9684) providing a pictorial view of each rock and its source. Table 1 is a master list of all rocks in common with Hydrographic Survey (H-9684) and TP-00294 and TP-00295. It lists the rock's geographic position, source, height and time and the action taken upon them. Also included is a narrative description of those rock investigations not adequately described by Table 1.

#### Rk "CC" (transferred from TP-00294)

This rock is correctly positioned on TP-00294 and is accompanied by an uncharted rock 25 meters inshore from it. It is recommended that both rocks be charted. The rocks were identified as two rocks submerged 2' at 0000Z May 27, 1977 (JD 149) and color photograph 6730 was so annotated.

#### Rk "DD" (transferred from chart 16604, 1:78,000)

After a thorough investigation of this area at a tide state lower than +2' and inspection of the low water color photography, rock "DD" does not exist at its charted location. It is also felt by the field editor that rock "DD" was merely a misplacement of the previous rock "CC" which lies 30 - 40 meters northwest of the charted rock "DD". Rock "CC" is correctly charted on the T-sheet. Refer to color photo 6738. Note: Rock "DD" has been transferred from chart 16604, 1:78,000 scale. Accurate positioning could have been lost in the scale transfer from 1:78,000 to 1:10,000 scale.

#### Rk "SS" (transferred from chart 16604, 1:78,000)

Rock "SS" which was transferred to the rough boatsheet from chart 16604 falls 30 meters north of a tip of shoreline. A search pattern was run in a circle with a radius of 100 meters at a +3' tide state and no rocks were visible or submerged in rock "SS"'s charted position. However, a rock bearing 4' at 0153Z June 28, 1977 (JD 179) was found approximately 10 meters north of the point and is annotated on photograph #6730. It is recommended this rock be placed inshore of the charted rock position from chart 16604.

#### Rk "VV" (1,2,3) (transferred from TP-00294, 1:10,000 & chart 16604, 1:78,000)

Rocks "VV<sub>1</sub>" and "VV<sub>2</sub>" are from TP-00294 and their positions have been verified. "VV<sub>3</sub>" was transferred to the 1:10,000 scale boatsheet from

1:78,000 scale chart 16604. Color photograph #6739 (taken at +1' tide state) clearly shows rocks in "VV<sub>1</sub>" and "VV<sub>2</sub>" positions and no rock was found in "VV<sub>3</sub>"'s charted position. It is clear "VV<sub>3</sub>" is offset due to the scale change and should be deleted having "VV<sub>1</sub>" and "VV<sub>2</sub>" as the correct rock positioning. VV<sub>1</sub>=Rk2' 1922Z May 26, 1977 on color 6739. VV<sub>2</sub>=Rk4' 1921Z May 26, 1977 on color 6739.

56 MISCELLANEOUS (Photo Signals)

Field edit operations for JOB PH-7071, TP-00294, Scale 1:20,000 included the identification and location of 15 visual signals for hydrographic survey operations RA-10-1-77, H-9684, OPR-478-RA-77. Fourteen of the signals were directly identified and one signal (#371) was located by the subpoint method. Programs RK 300 and RK 407 were used to compute the geographic position of the subpointed signal. Field computations for each photo signal and hydro signal are included in the Photo Signal Computations section of the "Separates Following the Text" of Descriptive Report H-9684.

Respectfully submitted,



Marianne Molchan, ENS  
Field Edit Officer

Approved by,



James P. Randall, CAPT, NOAA  
Commanding Officer



TABLE 1: ROCK INVESTIGATIONS

| Rock     | Latitude                 | Longitude                | T-sheet  | Height/time                         | Source      | D  |
|----------|--------------------------|--------------------------|----------|-------------------------------------|-------------|----|
| A        | 58/10/04.5               | 152/52/48                | TP-00295 | ----                                | Chart 16604 | No |
| B        | 58/10/01.5               | 152/52/43.5              | " "      | Rock submerged<br>1', 0227Z, JD179  | Chart 16604 | V  |
| C        | 58/10/00                 | 152/52/47                | " "      | Rock Awash,<br>0227Z, JD 179        | Chart 16604 | V  |
| D<br>new | 58/10/21<br>58/10/19.2   | 152/53/42<br>152/53/41.1 | " "      | Rock sp't, tip<br>awash, (MHWL)     | H-2973      | C  |
| E        | 58/10/04.1               | 152/53/33.1              | " "      | Rock, 2'<br>2025Z, JD 166           | H-2973      | V  |
| F        | 58/10/02                 | 152/53/29                | " "      | Rock, 3'<br>2023Z, JD 166           | H-2973      | V  |
| G        | 58/10/43                 | 152/55/01                | " "      | Rock, submerged<br>3', 2320Z, JD149 | TP-00295    | V  |
| H        | 58/10/49.5               | 152/55/17.5              | " "      | Rock, 4'<br>1700Z, JD 179           | " "         | V  |
| I        | 58/11/02                 | 152/54/59                | " "      | Rock 3' 1712Z<br>JD 179             | Chart 16604 | V  |
| J<br>new | 58/11/07.5<br>58/11/08.5 | 152/55/12.5<br>152/55/12 | " "      | Rock, 7' 1705Z<br>JD 179            | " "         | C  |



Rock Lattice

|   |         |
|---|---------|
| K | 58/11/1 |
| L | 58/11/2 |
| M | 58/10/2 |
| N | 58/10/2 |
| O | 58/11/3 |
| P | 58/11/4 |
| Q | 58/11/4 |
| R | 58/11/3 |
| S | 58/11/3 |
| T | 58/11/4 |

Rock Latitude Longitude

|               |          |           |
|---------------|----------|-----------|
| U             | 58/11/47 | 152/59/08 |
| V             | 58/11/42 | 152/59/30 |
| W             | 58/11/54 | 152/59/48 |
| X             | 58/11/57 | 152/59/55 |
| Y             | 58/11/58 | 153/00/01 |
| Z             | 58/12/02 | 153/00/00 |
| North<br>of Z | 58/12/03 | 153/00/00 |
| AA            | 58/12/15 | 152/59/38 |
| BB            | 58/12/03 | 153/00/17 |

TABLE 1: ROCK INVESTIGATIONS

| Rock | Latitude               | Longitude                | T-sheet       | Height/time                                                               | Source                 | Disposition                    | Techniques | Remarks                |
|------|------------------------|--------------------------|---------------|---------------------------------------------------------------------------|------------------------|--------------------------------|------------|------------------------|
| CC   | 58/11/46.5<br>58/11/47 | 153/00/06<br>153/00/06.5 | TP-00294<br>" | Rock submerged 2'<br>0000Z, JD 149<br>Rock submerged<br>21, 0000Z, JD 149 | TP-00294<br>Field Edit | Verified<br>Additional<br>Rock | F.E.       | New rock next to, "CC" |
| DD   | 58/11/45               | 153/00/05                | TP-00294      | Could not find<br>(scale change = 1000 ft)<br>Rock, 31' 0050Z<br>JD 179   | Chart 16604            | Delete                         | "          |                        |
| EE   | 58/11/41               | 152/59/47.5              | TP-00295      | Rock, 31' 0050Z<br>JD 179                                                 | TP-00295               | Verified                       | "          |                        |
| FF   | 58/11/39               | 152/59/50                | "             | Rock, 61' 2350Z<br>JD 178                                                 | Chart 16604            | Verified                       | "          |                        |
| GG   | 58/11/28               | 152/59/55                | "             | Rock, 41' 0130Z<br>JD 149                                                 | Chart 16604            | Verified                       | "          |                        |
| HH   | 58/11/28               | 152/59/55                | "             | Ledge submerged<br>21, 1805Z JD179                                        | TP-00295               | "                              | "          |                        |
| II   | 58/11/26               | 152/59/53                | "             | Not found                                                                 | Chart 16604            | Delete                         | "          |                        |
| JJ   | 58/11/23               | 152/59/38                | "             | Rock submerged<br>31' 0150Z, JD149                                        | Field Edit             | Addition                       | "          | New rock found         |
| KK   | 58/11/35               | 152/59/35                | "             | Rock submerged<br>41, 1745Z JD179                                         | TP-00295               | Verified                       | "          |                        |
|      |                        |                          |               |                                                                           |                        |                                |            |                        |

TABLE 1: ROCK INVESTIGATIONS

| Rock      | Latitude             | Longitude              | T-sheet              | Height/time                          | Source              | Disposition        | Techniques | Remarks                     |
|-----------|----------------------|------------------------|----------------------|--------------------------------------|---------------------|--------------------|------------|-----------------------------|
| LL        | 58/11/18             | 152/59/43              | TP-00295             | Rock, 3' 1775Z<br>JD 178             | H-2973              | Verified           | F.E.       |                             |
| MM        | 58/11/19             | 152/59/41              | "                    | Rock 1' 2036Z<br>JD 147              | "                   | "                  | "          |                             |
| NN        | 58/10/47.0           | 152/59/30              | "                    | Not Found                            | "                   | Delete             | "          | Delete                      |
| OO        | 58/10/42             | 152/59/30              | "                    | "                                    | "                   | "                  | "          | "                           |
| PP        | 58/10/35             | 152/59/33              | "                    | "                                    | "                   | "                  | "          | "                           |
| QQ        | 58/11/33             | 153/00/33              | TP-00294             | Rock submerged<br>8', 1815Z, JD179   | TP-00294            | Verified           | "          |                             |
| RR        | 58/11/56             | 153/00/46              | "                    | Rock awash<br>2331Z JD 146           | "                   | "                  | "          |                             |
| SS<br>new | 58/12/00<br>58/11/59 | 153/00/53<br>152/00/56 | TP-00294<br>TP-00294 | Not found<br>Rock 4' 0513Z<br>JD 179 | Chart 16604<br>F.E. | Delete<br>Addition | "          | Position changed for<br>"S" |
| TT        | 58/11/57             | 153/01/12              | TP-00294             | Rock, 3' 1937Z<br>JD 146             | TP-00294            | Verified           | "          |                             |

Rock Latitude Longitude T-sheet Height

|     |          |           |          |                    |
|-----|----------|-----------|----------|--------------------|
| UU  | 58/12/01 | 153/01/17 | TP-00294 | Rock, 9<br>JD 146  |
| VV1 | 58/12/07 | 153/01/25 | " "      | Rock 2'<br>JD 146  |
| VV2 | 58/12/11 | 153/01/23 | " "      | Rock 4'<br>JD 146  |
| VV3 | 58/12/12 | 153/01/21 | " "      | Not Fou            |
| WW  | 58/12/06 | 153/01/38 | " "      | Rock su<br>71.2340 |
| WW  | 58/12/03 | 153/01/36 | " "      | Rock sl<br>2340Z,  |
| XX  | 58/11/28 | 152/59/37 | TP-00295 | Rock 5<br>JD 180   |
| YY  | 58/11/40 | 152/59/20 | " "      | Rock 1<br>JD 180   |
| ZZ  | 58/10/05 | 152/53/07 | " "      | Rock 1<br>JD 149   |

## SEPARATES FOLLOWING THE TEXT

- 1) Progress Sketch
- 2) Manuscript Layout
- 3) Manuscript Photo Index
- 4) Photo Flight Line



FROM CHART H6580 (Formerly C B GS 8006)

\* DISTANCE TO A FROM INCLUDED IN SEC. DISTANCE

20. N.E. SOUNDING  
L.N.M. MISCELLANEOUS DISTANCE  
L.N.M. DISTANCE TO & FROM  
L.N.M. SOUNDING LINE  
BOTTOM SAMPLES (SABR)  
WATER SAMPLES ANALYZED (SALINITY  
CONTROL STATIONS) (ELECTRONIC)  
TEMPERATURE, DENSITY, CONDUCTIVITY  
WATERMAN CASE  
TIDE GAUG & TIDE STAFF  
STATIONS LOCATED BY TRANSVERSE

## LEGEND

JOB PH-7017

Photo-hydro support data to be furnished by May 1, 1972

# GNIAK & KODIAK ISLANDS ALASKA

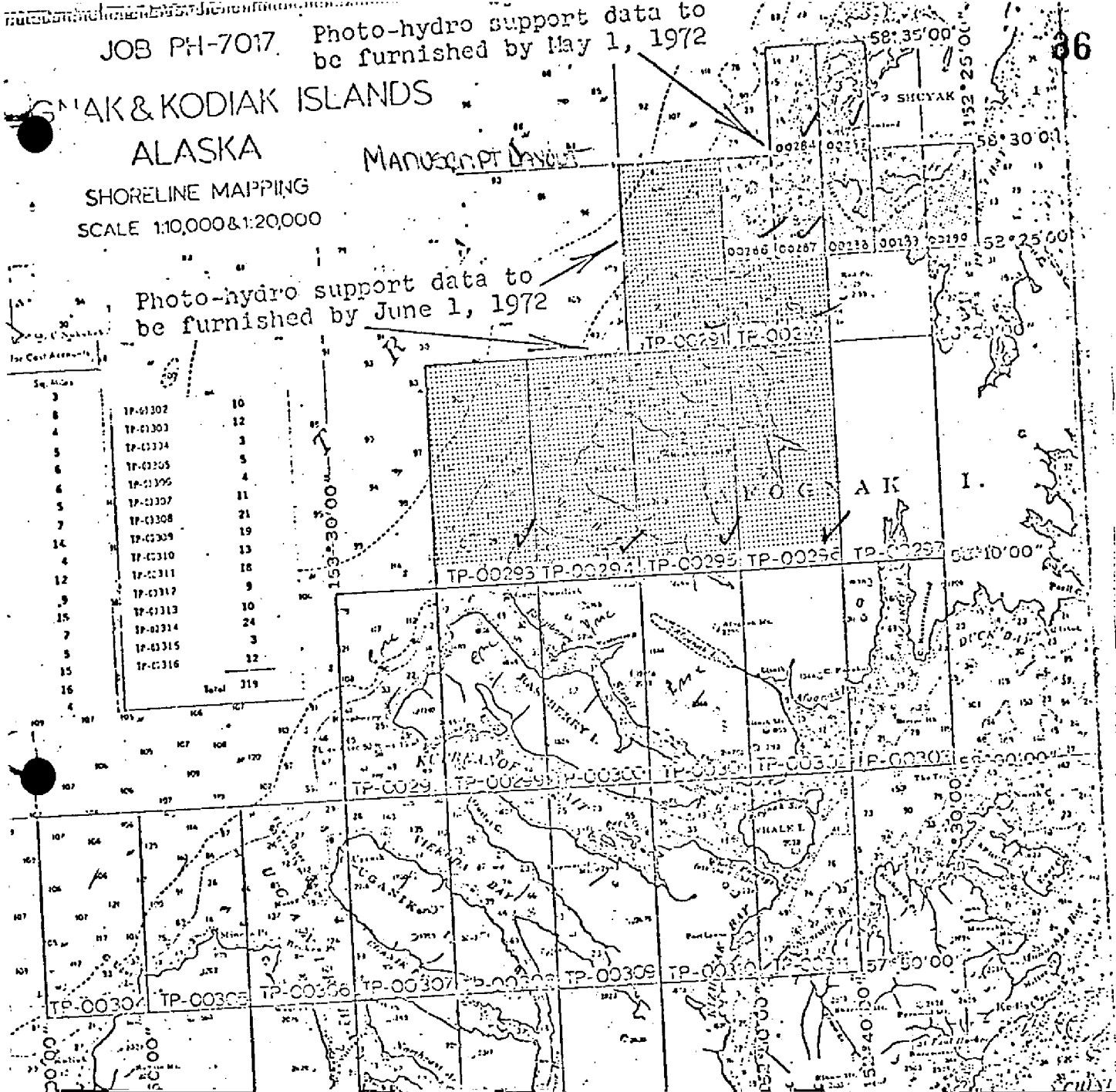
SHORELINE MAPPING  
SCALE 1:10,000 & 1:20,000

MANUSCRIPT DRAWING

Photo-hydro support data to be furnished by June 1, 1972

For Cost Accounts

| Sq. Miles |          |     |
|-----------|----------|-----|
| 3         | TP-01302 | 10  |
| 8         | TP-01303 | 12  |
| 4         | TP-01304 | 3   |
| 5         | TP-01305 | 5   |
| 6         | TP-01306 | 4   |
| 5         | TP-01307 | 11  |
| 7         | TP-01308 | 21  |
| 14        | TP-01309 | 19  |
| 4         | TP-01310 | 13  |
| 12        | TP-01311 | 18  |
| 9         | TP-01312 | 9   |
| 15        | TP-01313 | 10  |
| 7         | TP-01314 | 24  |
| 5         | TP-01315 | 3   |
| 15        | TP-01316 | 12  |
| 16        |          |     |
| 4         |          |     |
|           | Total    | 319 |





## MANUSCRIPT/PHOTOGRAPH INDEX

TP-00294

| <u>Photograph</u> | <u>Dates</u>                          |
|-------------------|---------------------------------------|
| 324 (B&W)         | MAY 25 - MAY 26, 1977 (JD 145 - 146)  |
| 325 (B&W)         | MAY 26 - MAY 28, 1977 (JD 146 - 148)  |
| 6730 (Color)      | MAY 26 - JUNE 28, 1977 (JD 146 - 179) |
| 6739 (Color)      | MAY 26 - JUNE 27, 1977 (JD 146 - 178) |

T R A I T

71 E(C) 6271

71 E(C) 6272

71 E(C) 6237

Review Report  
TP-00294

61. General Statement

Refer to the summary bound with this Descriptive Report for an overview of the photogrammetric operations related to the production of this map and associated data.

62. Comparison with Registered Topographic Surveys

Comparison with registered topographic surveys was not a requirement for this project.

63. Comparison with Maps of Other Agencies

Refer to item 46 of the Compilation Report bound with this Descriptive Report for detailed information on this topic.

64. Comparison with Hydrographic Surveys

Comparison with hydrographic surveys was not a requirement.

65. Comparison with Nautical Charts

Refer to item 47 of the Compilation Report bound with this Descriptive Report for information on this topic.

66. Adequacy of Results and Future Surveys

This map meets the National Standards of Map Accuracy and the requirements specified in the project instructions.

67. Mean Lower Low Water Line

An approximate mean lower low water line was delineated within the confines of Malina Bay as it appears on this manuscript. The symbolized line was delineated thru an office interpretation and application by graphic compilation techniques of the 1:20,000-scale "E" camera, color photography listed on NOAA Form 76-36 B, item #1, compilation photography. The stage of

tide indicated for the photographs was based on predicted tides. The mean lower low water line depicted should be considered approximate and advisory only. For more information on the datum, mean lower low water, refer to the contemporary hydrographic survey of the area.

68. Delineation

Map detail was compiled on the Wild B-8 stereoplotter using the 1:60,000-scale "M" camera, panchromatic photography. This was supplemented by office interpretation and graphic compilation techniques of the 1:20,000-scale "E" camera, color photography, both of which are listed on NOAA Form 76-36 B, compilation photography.

Submitted by,

D. Butler  
Office Reviewer

James W. Massey  
Final Reviewer

Approved by,

Jay O. Babson  
Acting Chief, Photogrammetric Production Section

R. V. Bryson CD12 NOAA  
Chief, Photogrammetry Branch



40

INDEX TO PROJECT DATA AND MATERIAL ON FILE

PH-7017

AFOGNAK AND KODIAK ISLANDS, ALASKA

NATIONAL ARCHIVES/FEDERAL RECORDS CENTER

BROWN JACKETS: \* Denotes Field Edit Information

1 of 3: - Project Map Diagram/Photogrammetric Flight  
Line Layout

- \* - 1 Paper & 2 Film Ozalids, TP-00286
- \* - 1 Paper & 2 Film Ozalids, TP-00287
- \* - 1 Paper & 2 Film Ozalids, TP-00288
- \* - 1 Paper & 1 Film Ozalid, TP-00289
- \* - 1 Paper & 1 Film Ozalid, TP-00290
- \* - 1 Paper Ozalid, TP-00291
- \* - 1 Paper Ozalid, TP-00292
- \* - 1 Film Ozalid, TP-00293
- \* - 1 Paper & 1 Film Ozalid, TP-00294
- \* - 1 Paper & 1 Film Ozalid, TP-00295
- \* - 1 Paper Ozalid, TP-00296

## PHOTOGRAPHS 9X9 FORMAT

- \* - NOS 3 Aug. 71 E (C) 7352 thru 7355
- \* - NOS 3 Aug. 71 E (C) 7269, 7270, 7272, 7294, 7295
- \* - NOS 10 Jul. 71 E (C) 6708 thru 6710, 6726 thru 6730, 6734, 6736, 6738, 6739, 6741 thru 6743
- \* - NOS 10 Jul. 71 E (C) 6642, 6645, 6646, 6648, 6649, 6668
- \* - NOS 6 Jul. 71 E (C) 6362 thru 6370
- \* - NOS 5 Jul. 71 E (C) 6217 thru 6226
- \* - NOS 4 Jul. 71 E (C) 6113
- \* - NOS 5 Jul. 71 E (C) 6141, 6151, 6152
- \* - NOS 4 Jul. 71 E (C) 6044 thru 6047, 6049, 6050, 6076 thru 6078, 6081, 6091 thru 6094
- \* - NOS 4 Jul. 71 E (C) 5995, 5996

## PHOTOGRAPH SEGMENTS

- \* - NOS 4 Jul. 71 M (P) 220
- \* - NOS 4 Jul. 71 M (P) 221
- \* - NOS 4 Jul. 71 M (P) 222
- \* - NOS 4 Jul. 71 M (P) 225, Parts A,B,C
- \* - NOS 3 AUG. 71 M (P) 319
- \* - NOS 3 Aug. 71 M (P) 320
- \* - NOS 3 Aug. 71 M (P) 322
- \* - NOS 3 Aug. 71 M (P) 323
- \* - NOS 3 Aug. 71 M (P) 324, Parts A,B
- \* - NOS 3 Aug. 71 M (P) 325
- \* - NOS 3 Aug. 71 M (P) 326, Parts A,B
- \* - NOS 5 Jul. 71 E (C) 6246
- \* - NOS 5 Jul. 71 E (C) 6247
- \* - NOS 6 Jul. 71 E (C) 6282
- \* - NOS 6 Jul. 71 E (C) 6281
- \* - NOS 6 Jul. 71 E (C) 6283
- \* - NOS 6 Jul. 71 E (C) 6284
- \* - NOS 6 Jul. 71 E (C) 6290
- \* - NOS 6 Jul. 71 E (C) 6291
- \* - NOS 6 Jul. 71 E (C) 6318
- \* - NOS 6 Jul. 71 E (C) 6321
- \* - NOS 6 Jul. 71 E (C) 6323
- \* - NOS 6 Jul. 71 E (C) 6333
- \* - NOS 6 Jul. 71 E (C) 6334
- \* - NOS 6 Jul. 71 E (C) 6335

## PROJECT COMPLETION REPORT

## AGENCY ARCHIVES

Registration Copy of the Map  
Descriptive Report of the Map

## PHOTOGRAMMETRIC ELECTRONIC DATA LIBRARY

There is no digital data for this project

## REPRODUCTION BRANCH

8X Reduction Negative of Map

## OFFICE OF THE STAFF GEOGRAPHER

Geographic Names Standard



