T P-00264

T P-00264

NOAA FORM 76-35
(6-80)

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

DESCRIPTIVE REPORT

Map No.	*Edition No.*
TP-00264	1

Job No.
CM-7211

Map Classification
CLASS III (FINAL), PARTIALLY FIELD EDITED

Type of Survey
SHORELINE

LOCALITY

State
ALASKA

General Locality
VALDEZ ARM, WEST SIDE

Locality
SAWMILL BAY

19 72 TO 19

REGISTERED IN ARCHIVES

DATE

*U.S. GOVERNMENT PRINTING OFFICE: 1980-665-115

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

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TP. 00264

MAP EDITION NO. (1)

MAP CLASS III (FINAL)

JOB PH-CM-7211

PHOTOGRAMMETRIC OFFICE: Coastal Mapping Unit, Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE: A. Y. Bryson, CDR

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-

MAP CLASS

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE		2. FIELD	
Aerotriangulation	August 18, 1972	Horizontal Control (Premarking)	April 17, 1972
Compilation	September 22, 1972		

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [ ] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Polyconic Projection

4. GRID(S): STATE: Alaska; ZONE: 3

5. SCALE: 1:20,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	D. Norman	Sept. 1972
METHOD: Analytic	LANDMARKS AND AIDS BY	N.A.	
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	D. Phillips	Sept. 1972
METHOD: Coradomat	CHECKED BY	D. Phillips	Sept. 1972
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	L. O. Neterer, Jr.	Oct. 1972
	CHECKED BY	R. White & A. Shands	Oct. 1972
INSTRUMENT: Wild B-8	CONTOURS BY	N.A.	
SCALE: 1:30,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	L. O. Neterer, Jr.	Nov. 1972
	CHECKED BY	R. White	Nov. 1972
METHOD: Smooth drafted	CONTOURS BY	N.A.	
	CHECKED BY	N.A.	
SCALE: 1:20,000	HYDRO SUPPORT DATA BY	L. O. Neterer, Jr.	Nov. 1972
	CHECKED BY	R. White	Nov. 1972
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	R. White	Nov. 1972
6. APPLICATION OF FIELD EDIT DATA (Partial field edit)	BY	W. McLemore, Jr.	Aug. 1984
	CHECKED BY	J. Hancock	Sept. 1984
7. COMPILATION SECTION REVIEW ADVANCED CLASS III	BY	W. McLemore, Jr.	Sept. 1984
8. FINAL REVIEW FINAL CLASS III	BY	W. McLemore, Jr. /Hancock	Sept. 1984
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	J. Hancock	Sept. 1984
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	P. Hawkins	DEC 1984
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R. S. KORNSPAN	FEB 1985

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

*U.S. GOVERNMENT PRINTING OFFICE-1977-765-092

NOAA FORM 76-36B
(3-72)

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

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-9 "M" (M=88.20mm)
Wild RC-8 "E" (E=152.71 mm)

TIDE STAGE REFERENCE
- [X] PREDICTED TIDES
- [ ] REFERENCE STATION RECORDS
- [ ] TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: Alaska — [X] STANDARD
MERIDIAN: 150th — [ ] DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
72 M(P) 1283 - 1287	July3,1972	13:04	1:60,000	4.2 ft. above MLLW
72 E(C) 4453 - 4459	July3,1972	13:26	1:30,000	5.1 ft. above MLLW
				Mean Tide Range =9.5 ft.

REMARKS Photographs based on predicted tide data are referenced to Reference Station Cordova, Alaska and Subordinate Station Jackson Cove, Glacier Island, Alaska.

2. SOURCE OF MEAN HIGH-WATER LINE:

The Mean High Water Line was compiled from office interpretation of the above listed 1:60,000 scale compilation/bridging panchromatic photographs using stereo instrument methods and the above listed 1:30,000 scale color photographs ratioed to the 1:20,000 map scale using graphic methods.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER 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
H-9422	1974	Registered			
H-9388	1973	Registered			

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No survey	T-12991 T-12994 (PH-6411 T-12997 1:10,000)	TP-00265 (PH-6411) T-12997 (1:10,000)	No survey

REMARKS

NOAA FORM 76-36B
(3-72)

*U.S. GOVERNMENT PRINTING OFFICE:1977-765-092

NOAA FORM 76-36C
(3-72)

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

TP-00264

HISTORY OF FIELD OPERATIONS

1. [X] FIELD ~~INSPECTION~~ OPERATION (PREMARKING) [ ] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	June 1972
2. HORIZONTAL CONTROL	RECOVERED BY	R. Melby	June 1972
	ESTABLISHED BY	R. Melby	June 1972
	PRE-MARKED OR IDENTIFIED BY	L. Riggers & R. Melby	June 1972
3. VERTICAL CONTROL	RECOVERED BY	N.A.	
	ESTABLISHED BY	N.A.	
	PRE-MARKED OR IDENTIFIED BY	N.A.	
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: [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [X] NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None	
7. *BOUNDARIES AND LIMITS*	SURVEYED OR IDENTIFIED BY	None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
Premarked (Paneled)

2. VERTICAL CONTROL IDENTIFIED
N.A.

PHOTO NUMBER	STATION NAME
72 M(P)1283	ELF, 1947 (Paneled direct)
72 M(P)1286	DEVISH, 1965 (Sub. Pt. paneled)
72 M(P)1285	FRAM, 1972 (Sub. Pt. paneled)

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 [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

3 Forms 152 (CSI Cards)

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36C
(3-72)

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

TP-00264

HISTORY OF FIELD OPERATIONS

1. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION (PARTIAL)

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY	(NOAA Ship DAVIDSON)	M. Fleming	May 1974
2. HORIZONTAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
3. VERTICAL CONTROL	RECOVERED BY	N.A.	
	ESTABLISHED BY	N.A.	
	PRE-MARKED OR IDENTIFIED BY	N.A.	
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 ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	BY	
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

N.A.

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 ☒ 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 Paper Field Edit Print
1 Field Edit Report

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36D
(3-72)

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

TP-00264

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	Nov. 1972	Class III manuscript	Dec. 15,1972	Dec.12,1972
Partial field edit applied. Compilation complete.	Sept. 1984	Advanced Class III manuscript	None	None
Final Review, Class III	Sept. 1984	Final Class III map		

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: _____
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:

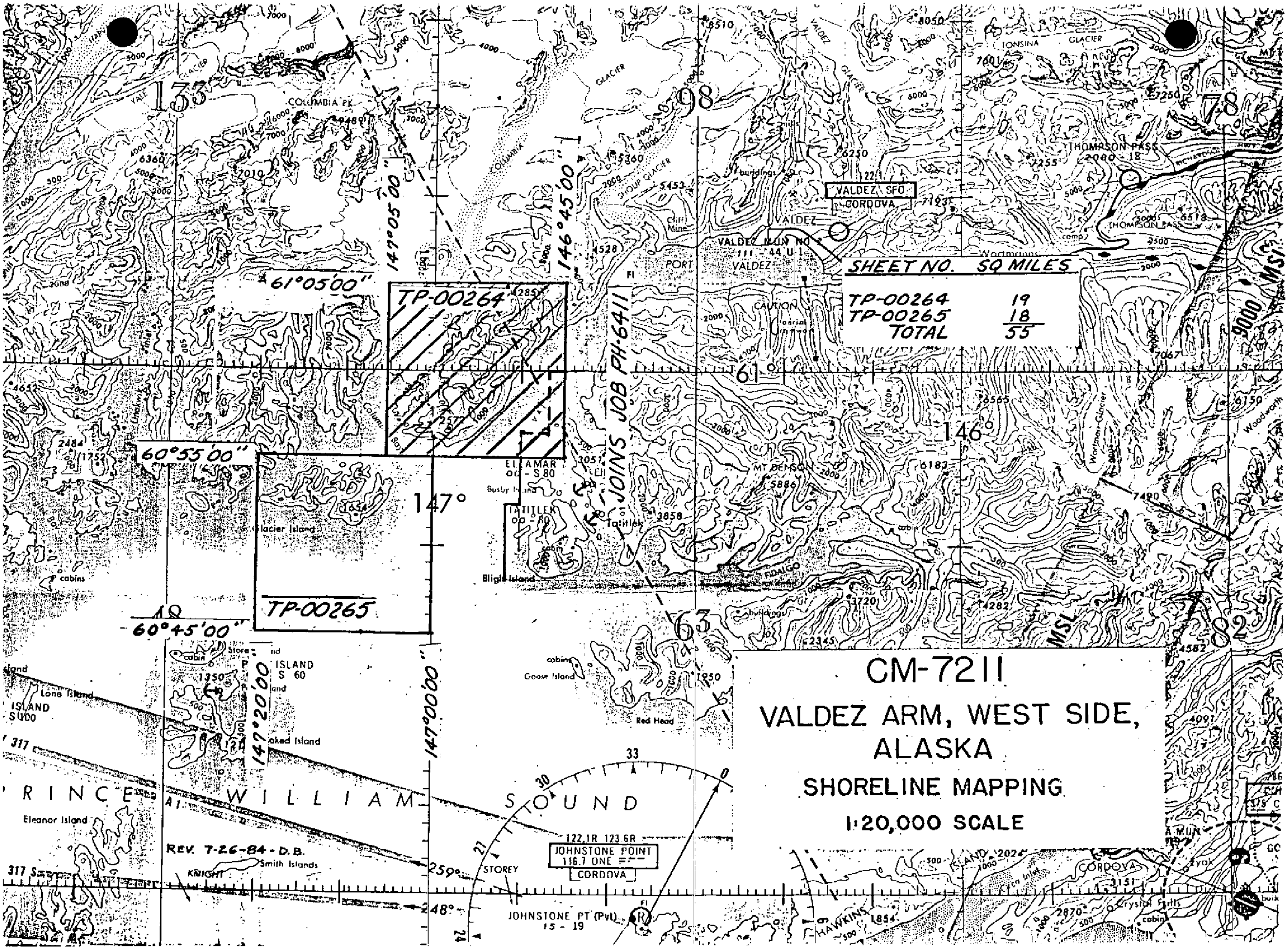
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
SECOND EDITION	TP - _____ (2)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH- _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL

NOAA FORM 76-36D

*U.S. GOVERNMENT PRINTING OFFICE:1977-765-092


CM-7211
VALDEZ ARM, WEST SIDE,
ALASKA
SHORELINE MAPPING
1:20,000 SCALE
SHEET NO. SQ MILES
TP-00264 19
TP-00265 18
TOTAL 55
TP-00264
TP-00265
JOINS JOB PH-6411
61°05'00"
60°55'00"
60°45'00"
147°05'00"
146°45'00"
147°20'00"
147°00'00"
REV. 7-26-84 - D.B.
PRINCE WILLIAM SOUND
VALDEZ
PORT VALDEZ
THOMPSON PASS
COLUMBIA PK
Glacier Island
Bligh Island
Goose Island
Red Head
Smith Islands
Eleanor Island
JOHNSTONE POINT
CORDOVA

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT
TP-00264

This 1:20,000 scale final Class III shoreline map is one of two maps that comprise project CM-7211, Valdez Arm, West Side, Alaska. The project originally included a third 1:20,000 scale map (TP-00263) west of TP-00264, but it was canceled because of incomplete photographic coverage.

The purpose of this map was to provide data in support of hydrographic operations and updating of nautical charts.

This map portrays the shoreline along most of the western side of Valdez Arm and the eastern portion of Columbia Bay.

Photo coverage for this map was adequately provided by 1:60,000 scale panchromatic and 1:30,000 scale color photographs taken July 3, 1972. The panchromatic photos were taken with the RC-9 (M) camera and the color photos were taken with the RC-8 (E) camera. The panchromatic photographs were used for aerotriangulation, compilation and photo-hydro support. The color photographs were ratioed to map scale and used in some areas for graphic compilation of shoreline and alongshore detail and hydro support.

Field work prior to compilation consisted of the recovery, establishment, and identification (premarking) of horizontal control necessary for aerotriangulation. Also, the field party was responsible for assisting in obtaining aerial photography. This activity was performed in June/July 1972.

Analytic aerotriangulation was adequately provided by the Washington Science Center in September 1972. This activity also included ruling the base manuscripts and providing ratio photographs for compilation.

Compilation by interpretation of the mapping photographs was performed at the Coastal Mapping Unit, Atlantic Marine Center in November 1972. Photo-hydro support data involving the original Class III manuscript was forwarded to the hydrographer.

A partial field edit was conducted May 1974 by hydrographic personnel assigned to the NOAA Ship DAVIDSON. The area of edit was restricted to the navigable area survey limits of H-9422. Only a quick check of the shoreline for major discrepancies, and the location of some alongshore and offshore rocks were accomplished within the hydro survey limits. This partial field edit data was returned to the coastal mapping office and applied to the manuscript in August 1984.

Final review was performed at the Atlantic Marine Center September 1984. A Chart Maintenance Print was prepared and forwarded to the Marine Chart Branch.

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

FIELD INSPECTION

TP-00264

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

PHOTOGRAMMETRIC PLOT REPORT
Prince William Sound, Alaska
Valdez Arm, West Side
Job CM-7211
September 1972

21. Area Covered

This report pertains to two sheets on the west side of Valdez Arm near the Port of Valdez, Alaska. The sheets covered are TP-00264 and TP-00265 at 1:20,000 scale.

22. Method

One strip (72-M-1280 thru 1288) of 1:60,000 scale panchromatic photography was bridged by analytic aerotriangulation methods. This strip was adjusted to Alaska state plane ground coordinates, zone 3. Points were established for determining ratios of 1:30,000 scale color support photography. Sufficient points for setting models were plotted on the Coradomat.

23. Adequacy of Control

The control was adequate. All points used in the adjustment were unadjusted field positions. Additional control points were plotted on the manuscripts. The positions for YOKE 1947, HEATHER 1947, DICK 1947 and POLE 1947 were from 1960 published data. All other plotted points are from 1970 published data.

24. Supplemental Data

No supplemental data was used.

25. Photography

The photography was adequate.

Respectfully submitted,

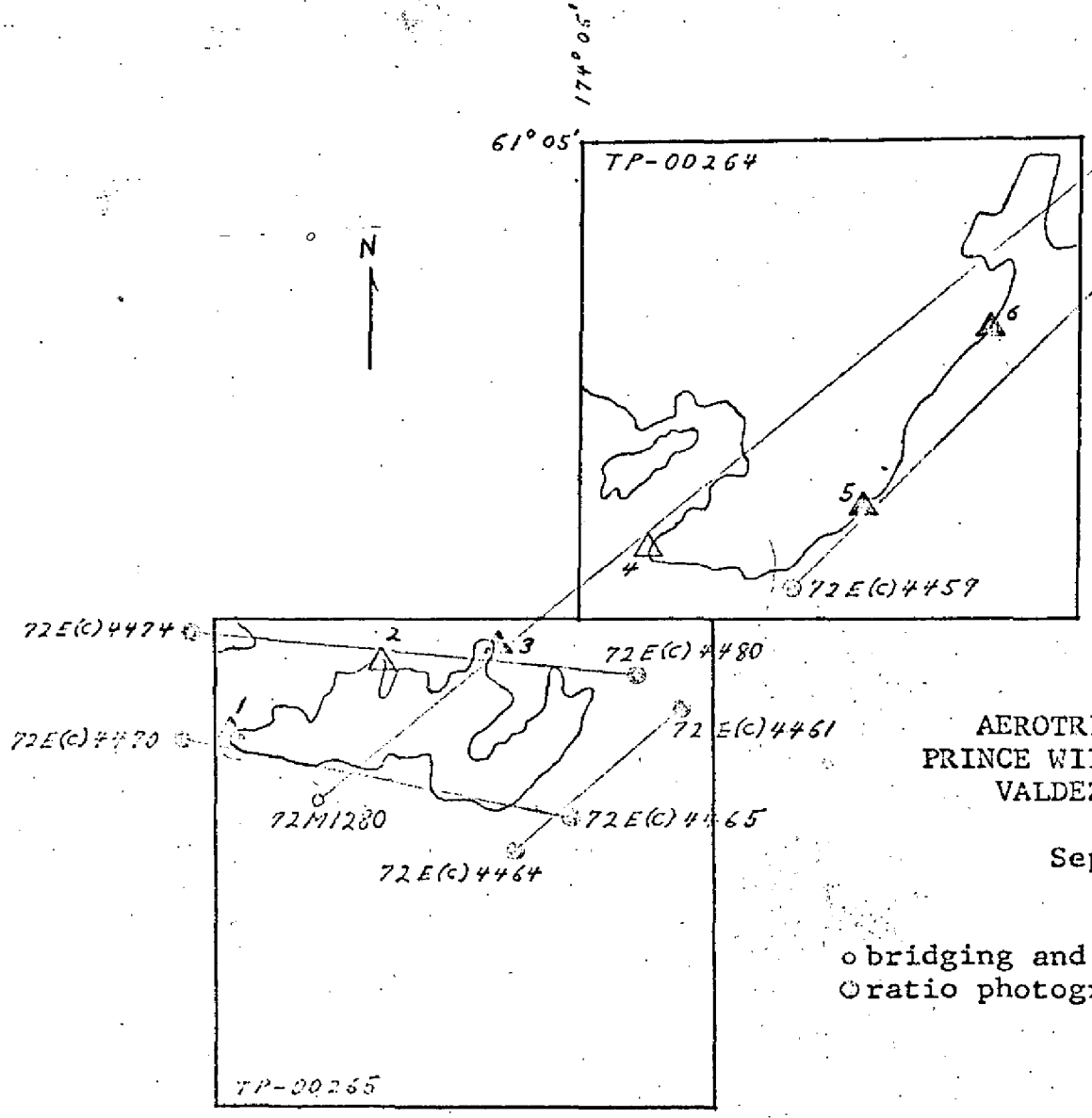
Don O. Norman

Don O. Norman, Cartographer

Approved and forwarded,

John D Perrow Jr

John D. Perrow, Jr.
Acting Chief
Aerotriangulation Section



1 CALL (+0.3 -0.1)
2 EXIT (-3.4 +3.2)
3 GROWLER (-2.9 +2.3)
4 ELF (-3.6 +2.1)
5 FRAM (+5.7 -2.1)
6 DEVISH (-3.0 -0.4)
7 BUNCH (+1.5 -0.6)

AEROTRIANGULATION SKETCH
PRINCE WILLIAM SOUND, ALASKA
VALDEZ ARM, WEST SIDE
CM-7211
September, 1972

o bridging and compilation photography
○ ratio photography

NOAA FORM 76-41
(6-75)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00264	CM-7211	N.A. 1927	Coastal Mapping Unit, AMC, Norfolk, VA

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE Alaska ZONE 3	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS
DEVISH, 1965	Field position	86100	x= 358,139.82 y= 2,567,829.84	φ λ	
FRAM, 1972	Field position	84100	x= 337,748.02 y= 2,539,943.86	φ λ	
ELF, 1947	G.P. Vol.6 Pg. 15	83100	x= y=	φ 60°56'38.621" λ 147°03'16.785"	
HATCH, 1947	G.P. Vol.6 Pg. 2	3	x= y=	φ 60°58'14.567" λ 146°51'58.533"	
FREE, 1942	G.P. Vol.6 Pg. 3	5	x= y=	φ 60°56'32.206" λ 146°55'29.775"	
MANTLE, 1942	G.P. Vol.6 Pg. 3	6	x= y=	φ 60°55'51.421" λ 146°58'11.516"	
HEATHER, 1947	G.P. Vol.6 Pg. 16	7	x= y=	φ 60°57'18.861" λ 147°03'42.757"	
STEP, 1942	G.P. Vol.6 Pg. 3	4	x= y=	φ 60°57'25.064" λ 146°53'30.505"	
FLOW, 1901	G.P. Vol.6 Pg. 3	10131	x= y=	φ 60°57'43.965" λ 146°52'48.825"	
			x= y=	φ λ	

COMPUTED BY	DATE	COMPUTATION CHECKED BY	DATE
LISTED BY A. C. Rauck, Jr.	DATE 10/4/72	LISTING CHECKED BY C. Parker	DATE 10/5/72
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY	DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT
TP-00264

31 - DELINEATION

Delineation was accomplished using stereo instrument and graphic compilation methods. The Wild B-8 stereoplotter was used to delineate shoreline, alongshore and interior detail based upon office interpretation of the 1:60,000 scale bridging/compilation panchromatic photographs.

Color photographs at 1:30,000 scale were ratioed (1.50 times) to map scale and used to graphically delineate some shoreline and alongshore detail.

All photographs used to compile this map are listed on NOAA Form 76-36B. The photography was adequate.

32 - CONTROL

Refer to the Photogrammetric Plot Report dated September 1972.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable to this project. Drainage was compiled by office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

The mean high water line and alongshore details were compiled by instrument and graphic methods as described in item #31.

No mean lower low water line was compiled due to the stage of tide of the compilation photographs being 4.2 feet and 5.1 feet above mean lower low water.

36 - OFFSHORE DETAILS

Offshore detail was compiled by instrument and graphic methods as described in item #31.

37 - LANDMARKS AND AIDS

There are no charted landmarks or navigational aids within the mapping limits of this manuscript.

TP-00264

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

Refer to the Data Record Form 76-36B, Item 5. This map junctions with project PH-6411.

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report dated September 1972.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey Quadrangles: Anchorage (A-1), Alaska, dated 1960, scale 1:63,360; Valdez (A-8), Alaska, dated 1960, scale 1:63,360; Cordova (D-8), Alaska, dated 1952, scale 1:63,360; and Seward (D-1), Alaska, dated 1952, scale 1:63,360.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following U.S. Coast and Geodetic Survey Chart: 8519, 8th edition, dated May 17, 1965, scale 1:79,291.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

Lowell O. Neterer Jr.

Lowell O. Neterer, Jr.
Cartographic Technician
November 14, 1972

Approved,

William T. McLemore, Jr.
for
Albert C. Rauck, Jr.
Chief, Coastal Mapping Unit, AMC

ADDENDUM TO THE COMPILATION REPORT TP-00264
CM-7211

Partial field edit was performed for this map in May 1974 in conjunction with Hydrographic Survey H-9422. Since this hydro activity was a navigable area survey, it was not concerned with shoreline detail. The field edit operation involved the location of some alongshore rocks and a quick check of the shoreline for major discrepancies. All field edit data was abstracted in the edit report.

Edit for this map was done with Mini-Ranger, although sextant fixes were given for comparison. The Mini-Ranger arcs failed to define a point, but scribed open triangles in many cases. The sextant fixes were computed and plotted on the original manuscript. No check angles were given for any of the sextant fixes. Because of this, only data that could be verified on the photographs was applied to the manuscript.

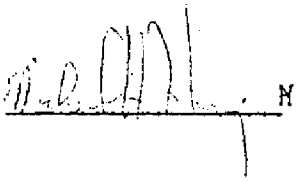
FIELD EDIT REPORT

OPR-999 1974

HYDROGRAPHIC SURVEY # H-9422

Field Number DA-20-1-74

by NOAA Ship DAVIDSON



N.H. Fleming, COMDG

1. INTRODUCTION

Field editing was not a requirement for this navigable area survey of Valdez Arm, from Rocky Point in the south to a mile north of Entrance Point day beason in Prince William Sound. In spite of the fact that there was no requirement, it was decided to quickly check the shoreline for major discrepancies of off-lying rocks that would be a hazard to navigation in this area. This generally consisted of obtaining fixes at the limit of reefs, islands, and points which extended to seaward. Also, no final shoreline plot was available of the area from Sawmill Bay to one mile north of Potato Point. This area is covered on T-12991, and a final (field) plot of the shoreline was made by taking fixes and simultaneous sketches of the beach; then later piecing this data together to obtain the high water line, rocks, bluffs and low water line. (See Section 2 for further explanation of this technique.)

2. METHODS

The shoreline plotted on the final smooth boat sheet came from following sheets:

CM-7211	TP-00264	Sawmill Bay, Alaska (paper Ozalid)
	T-12991	Potato Point, Alaska
	T-12994	Galena Bay, Alaska
	T-12992	Entrance Point, Alaska

TP-00264 was a 1:20000 scale manuscript; whereas, the three T-sheets listed were initially drawn at 1:10,000 and photo-reduced to 1:20,000, which enabled us to use them directly to trace the shoreline onto the position and sounding overlays and to plot fixes. (All position information has been denoted on these four sheets in violet ink.)

The eastern shore of Valdez Arm was edited conventionally, using three-point sextant fix for control. Triangulation stations were used as objects for all these fixes (numbers 3 through 40). A somewhat different approach was taken on the western side. Mini-Ranger III by Motorola, a range-range electronic navigator, as well as sextant angles, were used for fixes 2001 to 2053. The mini-ranger navigator was mounted in an 18' Monarch aluminum skiff with an 85 horsepower outboard. The antenna was placed atop a ten foot 2X4 which was stayed-down to the corners of this square skiff, and two 12 volt car batteries were used for power. This skiff had draft of about 2.2 feet with the engine down and about 1.3 feet with the engine up, and this includes three people necessary for the operation. To take a fix with the mini-ranger gear, the skiff would be driven to the rock, bluff, low water line, or reef in question; and then when in position, a "hold display" button depressed on the navigator would "freeze" the two ranges so they could be copied by the recorder. At the time of the fix, sextant angles were also taken to various triangulation stations. The sextant angles were only meant to provide a solid check on the system and also as

further data with which accuracy of the mini-ranger could be examined (i.e., knowing the accuracy of the sextant fixes).

Plotting of all field edit data was initially done on the 1:20,000 scale boat sheet, position overlay. This was done because none of the T-sheets were large enough to plot all the triangulation, and also the position overlay already had the mini-ranger arcs drawn, as the mini-ranger was used entirely to control hydrography on this sheet. Once the positions (fixes) were plotted on the position overlay, they were then transferred to the appropriate shoreline manuscript. Next the field editor would go back to the smooth boat sheet and draw in the verified or compiled shoreline from these fixes plus sketches and field verification of shoreline features. No plotting or notes were made on the photographs.

Also, another item that was accomplished during the field editing was that all field notes in the form of fixes were "smoothed" out and logged on a homemade form. This was done so that notes would not become useless due to the fact that they could not be interpreted by someone other than the recorder. Also, this form would be an excellent start in plotting field edit positions with a computer-plotter. This form includes the time (all times are Zulu, 0° meridian), Julian Date, position number, a brief description of the feature, and the positional information, whether that be mini-ranger, sextant angles, or both. The data from this form could easily be digitized and, consequently, computer-plotted for quick verification.

3. ACCURACY

A complete analysis of the accuracy of the manuscript or the positional information was not undertaken at this time. Generally 3 to 5 meter discrepancies were found when comparing computed ranges with sextant angles - ranges obtained from the mini-ranger system. No attempt was made to compute differences between the simultaneous sextant cuts and mini-ranger fixes; however, the data for this is being inserted in this report for further development.

4. ADEQUACY OF COMPILATION

The manuscript appears to be adequate except, of course, in the area where no shoreline was available. Positions taken at high water and low water agree very well with those shown on the T-sheets. Again it is emphasized that a complete field edit job was not the intent, but simply a check of any overlooked rocks, ledges, and the delineation of the shoreline north of Sawmill Bay.

5. RECOMMENDATIONS

There are several recommendations I would like to suggest:

a. Complete shoreline manuscript of the area from Sawmill Bay north should be photogrammetrically compiled.

b. Make a computer plot of fixes; then compare these with the manuscript. I feel that my numbers are more accurate than the method in which they were plotted (i.e., with odeyssey and 3-arm protractors).

c. The paper Ozalids are very prone to destruction when inundated by water, namely rain. The Alaskan climate is very wet, plus the fact that field edit on the DAVIDSON in Alaska is entirely done from a skiff which is further susceptible to salt spray. This paper becomes impossible to work with when even the slightest bit wet. Is there a better surface?

d. As an aid in determining the accuracy of the mini-ranger for use in field edit applications, the given data could be analyzed.

Submitted by

John L Oswald

John L.Oswald
Lt jg NOAA

REVIEW REPORT TP-00264
SHORELINE

61. GENERAL STATEMENT

Final review for this final Class III map was accomplished at the Atlantic Marine Center in September 1984. For a schedule of the office and field operations, refer to the Summary included in this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with the following U.S.G.S 1:63,360 scale quadrangles: Anchorage (A-1), Alaska, 1960; Valdez (A-8), Alaska, 1960; Cordova (D-8), Alaska, 1952; and Seward (D-1), 1952.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with registered copies of the following contemporary hydrographic surveys: H-9388, 1:20,000 scale, field surveyed August 1973; and H-9422, 1:20,000 scale, field surveyed in 1974.

Partial field edit was accomplished by the hydrographer to that area common to the hydrographic (navigable area) survey limits of H-9422. Field edit primarily consisted of locating alongshore and offshore rocks by hydrographic survey methods.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS Charts: 16707, scale 1:40,000, 3rd edition, dated February 27, 1982; and 16708, scale 1:79,291, 16th edition, dated October 3, 1981.

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,

Jerry L. Hancock

Jerry L. Hancock
Final Reviewer

Approved for forwarding,

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved,

Chief, Photogrammetric Section, Rockville

Chief, Photogrammetry Branch,
Rockville

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7211 (Valdez Arm, West Side, Alaska)

TP-00264

Columbia Bay

Columbia Glacier

Devish Lake

Elf Point

Emerald Cove

Fault Creek

Heather Island

Point Freemantle

Point Lowe

Prince William Sound

Sawmill Bay

Stellar Creek

Twin Falls Creek

Valdez Arm

Approved by:

Charles E. Harrington

Charles E. Harrington
Chief Geographer
Nautical Charting Division

FORM C&GS-8352
(3-28-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. ____________

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected char
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Re

CHART	DATE	CARTOGRAPHER	REMARKS
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			Drawing No.
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			Drawing No.
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FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.