

T- 12996

T- 12996

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
THIS MAP EDITION WILL NOT BE FIELD EDITED	
Map No. T-12996	Edition No. 1
Job No. PH-6411	
Map Classification CLASS III (FINAL)	
Type of Survey SHORELINE	
LOCALITY	
State ALASKA	
General Locality VALDEZ ARM	
Locality THE LAGOON	
19 65 TO 19	
REGISTERED IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY <del>XX</del> T-12996	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. (1)	
				<input type="checkbox"/> RESURVEY		MAP CLASS III (FINAL)	
				<input type="checkbox"/> REVISED		JOB PH. 6411	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Atlantic Marine Center, Norfolk, VA				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE  Jeffrey G. Carlen, CDR				TYPE OF SURVEY		JOB PH. _____	
				<input type="checkbox"/> ORIGINAL		MAP CLASS _____	
				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Compilation (Prelim. Hydro Support) Dec. 30, 1964				Horizontal Control June 3, 1965			
Memo (Proj. Planning) May 28, 1965				(Premarking)			
Aerotriangulation Sept. 2, 1965							
Aerotriangulation (Amend I) Oct. 11, 1965							
Compilation (Suppl. I) Nov. 09, 1965							
Compilation (Amend I) Feb. 07, 1966							
Aerotriangulation Nov. 08, 1966							
Compilation (Amend II) Jan. 09, 1967							
Compilation (Suppl. II) Feb. 07, 1972							
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH-AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER				OTHER (Specify)			
<input type="checkbox"/> MEAN LOW-WATER							
<input type="checkbox"/> MEAN LOWER LOW-WATER							
<input type="checkbox"/> MEAN SEA LEVEL							
3. MAP PROJECTION				4. GRID(S)			
Polyconic Projection				STATE Alaska		ZONE 3	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				W. Heinbaugh		Nov. 1965	
METHOD: Stereoplanigraph LANDMARKS AND AIDS BY							
2. CONTROL AND BRIDGE POINTS PLOTTED BY				A. Roundtree		March 1966	
METHOD: Coradomat CHECKED BY				R. Glaser		March 1966	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				A. Shands		May 1966	
COMPILATION CHECKED BY				L. Neterer, Jr.		May 1966	
INSTRUMENT: Kelsh				NA			
SCALE: 1:6,000				NA			
4. MANUSCRIPT DELINEATION PLANIMETRY BY				R. Smith		Feb. 1967	
CHECKED BY				R. Pate		Feb. 1967	
METHOD: Smooth drafted				NA			
CHECKED BY				NA			
SCALE: 1:10,000 HYDRO SUPPORT DATA BY				R. Pate		Feb. 1967	
CHECKED BY				R. Smith		Feb. 1967	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				R. Smith		Feb. 1967	
6. APPLICATION OF FIELD EDIT DATA BY				None			
CHECKED BY				None			
7. COMPILATION SECTION REVIEW BY				R. Pate		Feb. 1967	
8. FINAL REVIEW FINAL CLASS III BY				J. Hancock		July 1984	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				J. Hancock		Aug. 1984	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				P. Hawkins		DEC 1984	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				R. J. KORNSPAN		FEB 1985	

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

T-12996

## COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "L" (L=152.21mm)		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR X (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE Alaska	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 150th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
65 L(P) 4404 - 4406	7/06/65	09:25	1:30,000	4.7 feet above MLLW	
				Mean Tide Range=9.6 ft.	

REMARKS: Compilation/bridging photographs based on predicted tide data are referenced to Reference Station Cordova, Alaska, and Subordinate Station Rocky Point, Alaska.

## 2. SOURCE OF MEAN HIGH-WATER LINE:

The Mean High Water Line was compiled from office interpretation of the above listed compilation/bridging panchromatic photographs using stereo instrument 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

## 5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No survey	No survey	No Survey	T-12995 T-12999

REMARKS

T-12996

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION (PREMARKING) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Watkins, Jr.	6/65
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	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None

## 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 (No control falls within the limits of this map).

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

T-12996

## 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.	Feb. 1967	Class III	* June 1966	* June 1966
Final Review Class III No field edit performed	July 1984	Final Class III Map		
*Shoreline detail for this map was originally compiled on adjoining map T-12999. This Class III compilation was forwarded to Charts and Hydro via map T-12999.				

## 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: \_\_\_\_\_

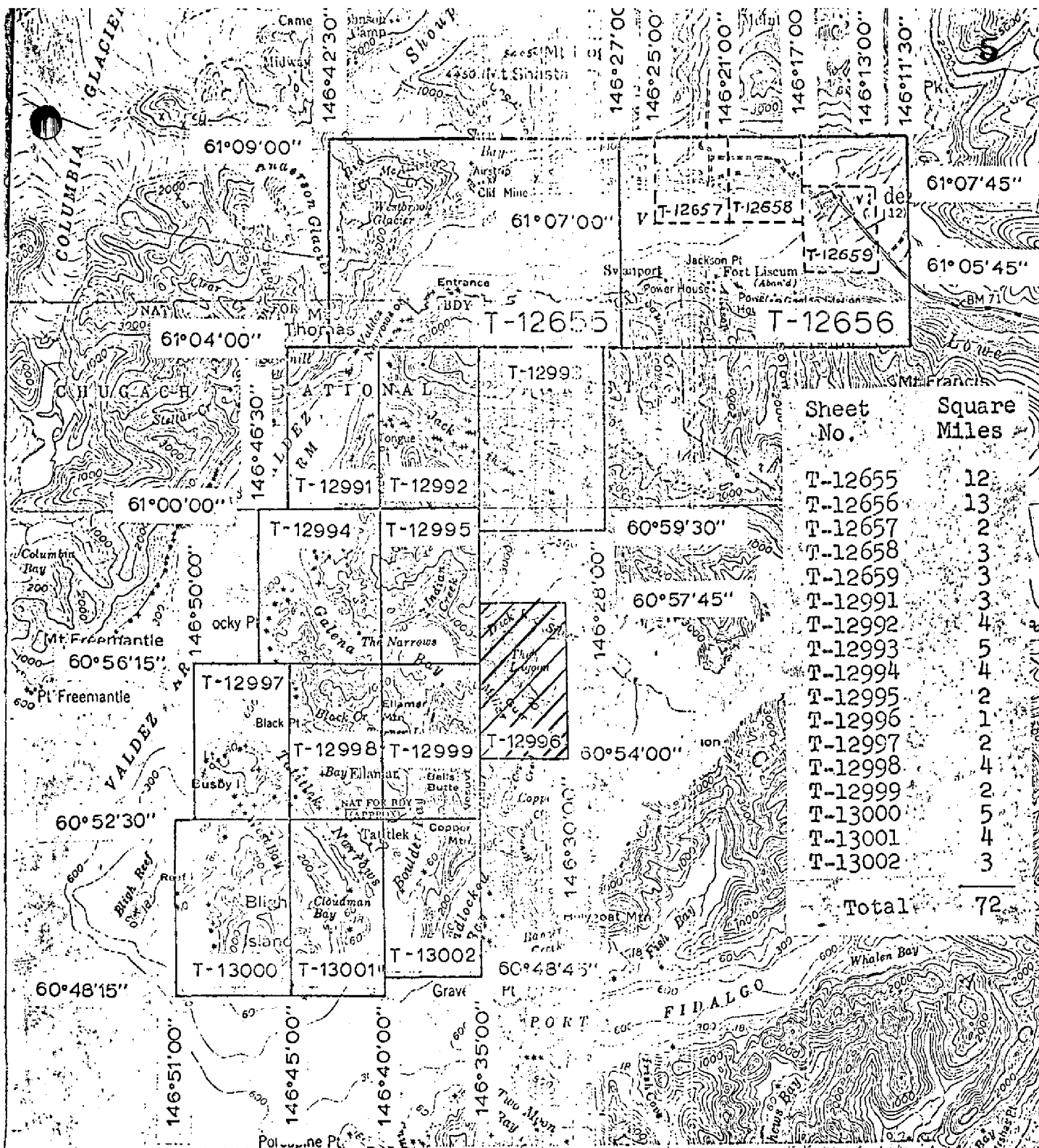
## III. FEDERAL RECORDS CENTER DATA

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)

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	



# JOB PH-6411 SHORELINE MAPPING

1:5,000, 1:10,000 & 1:20,000 SCALE

VALDEZ ARM  
ALASKA

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT  
T-12996

This 1:10,000 scale final Class III shoreline map is one of seventeen maps that comprise project PH-6411, Valdez Arm, Alaska. The project consists of two 1:20,000, three 1:5,000 and twelve 1:10,000 scale maps. The project originally pertained to the Port Valdez area but was extended south to include the east shore of Valdez Arm and Tatitlek Narrows.

The purpose of this map was to provide shoreline data in support of hydrographic operations.

This map portrays a small portion of interior shoreline that extends from Galena Bay. This area, known as The Lagoon, appears to be very shallow and has no significant navigational value.

Photo coverage for this map was adequately provided by 1:30,000 scale panchromatic and 1:15,000 scale color photographs. All photography was taken July 6, 1965 with the RC-8 (L) camera. The panchromatic photographs were used for aerotriangulation, compilation, and photo-hydro support. The low altitude color photographs were used to assist the compiler in offshore interpretation.

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 the aerial photography. This activity was performed in June/July 1965.

Analytic aerotriangulation was adequately provided by the Washington Science Center November 3, 1965. This activity also included ruling the base manuscripts and providing ratio photographs for compilation.

Compilation by interpretation of the 1:30,000 scale photographs was performed at the Coastal Mapping Section, Atlantic Marine Center, May 1966. Color contact photographs at 1:15,000 scale were used to assist in the interpretation of offshore features. Photo-hydro support data involving the original Class III manuscript was forwarded to the hydrographer.

Field edit was not accomplished for this map.

Final review was performed at the Atlantic Marine Center July 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 manuscripts and related data were forwarded to the Washington Science Center for final registration.

## FIELD INSPECTION

T-12996

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.



Project 21423(4)  
Valdez, Alaska  
June, 1965

All horizontal control stations required for photo control were identified with the exception of CROMBIE, 1941 (T-12656). This station was on a high ridge still covered with considerable snow. Identification would probably have been doubtful. Station FILL (temporary) was established by tellurometer traverse and its substitute stations are identifiable on the same flight line of photographs that would cover CROMBIE. Station PIT (temporary) was determined by triangulation methods. Stations PIT and FILL replaces VALDEZ SOUTHEAST BASE, 1941 and VALDEZ NORTHWEST BASE, 1941.

Station MAS (temporary) (t-12655) was determined by triangulation intersection methods. Station SPIT 2 (temp.) was determined by triangulation methods to replace station SPIT, 1901.

Station HUT 3, 1965 was identified in lieu of station HUT 2 which was reported lost. The unadjusted field position was not available at the time of identification as the geodetic party had only recently occupied the station.

Submitted:

*JBW*  
*RM* Robert B. Melby

Approved:

*John B. Watkins, Jr.*  
John B. Watkins, Jr.  
Chief of Party

Project 21423(11)  
Tatilek Narrows, Alaska  
June 1965

All horizontal control stations required for photo control were identified and paneled. Two new stations were located by triangulation intersection methods and six by closed loop tellurometer traverse.

Station MAS (temp.) was located and its position is submitted with the Valdez, Alaska field data, project 21423(4). The recovery note for HUT3, 1965 was also submitted with the Valdez field data.

Submitted:

*RBm*

Robert B. Melby

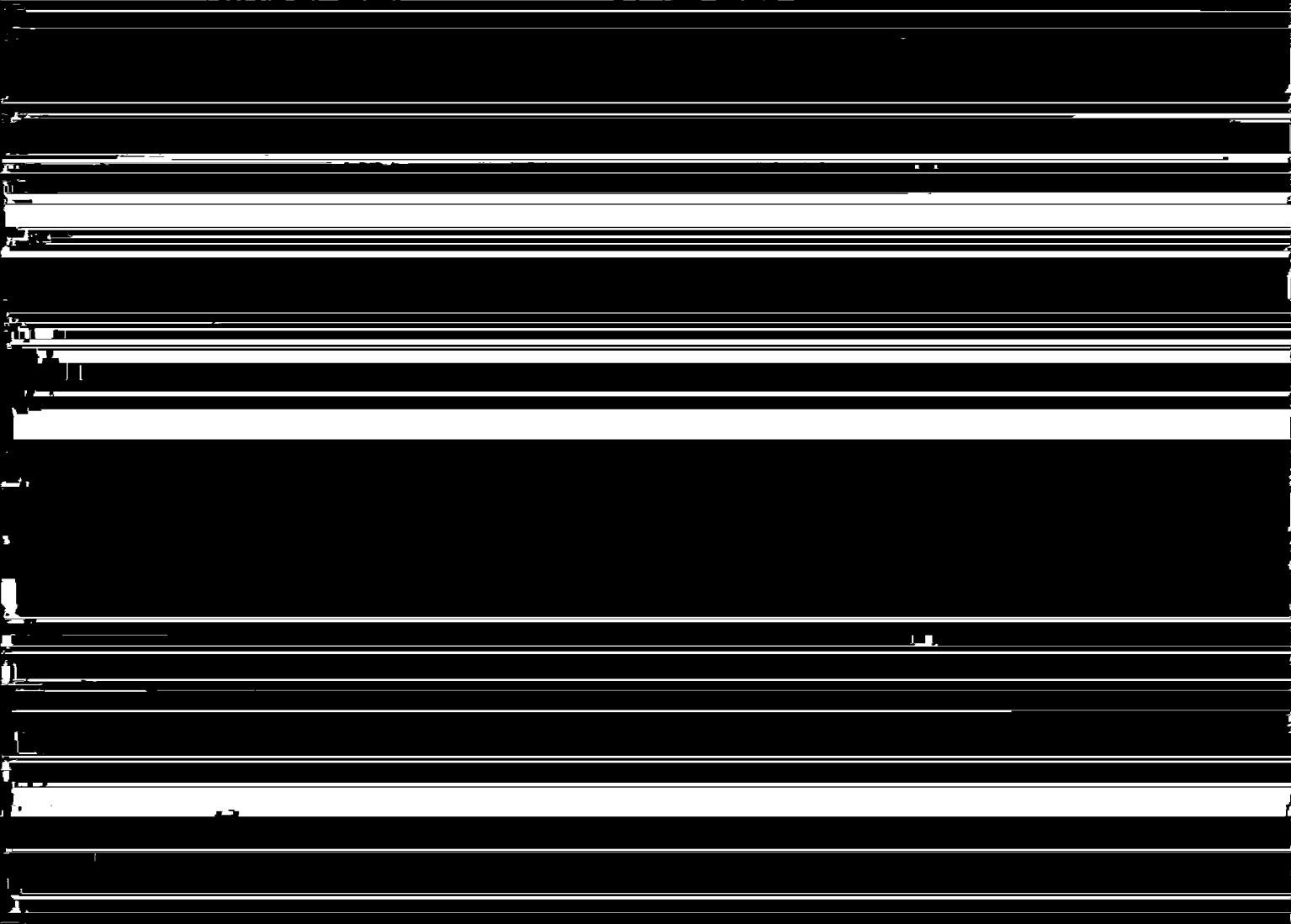
Approved:

*JBW*  
John B. Watkins, Jr., CDR, C&GS  
Comdg., Ship HODGSON

Photogrammetric Plot Report  
Tatitlek Narrows, Alaska  
Job PH-6411

21. Area Covered

The project covers the east shore of Valdez Arm and all of  
Tatitlek Narrows area. The T-sheets in this area are: T-12991



Six bridges were run on the stereoplanigraphs and adjusted by  
IBM 1620 methods. All tie points between strips were averaged.  
Tie points were also established in the area of Port Valdez.

26. Plotting Constants

Plotting constants for 1:10,000 scale manuscripts were provided for all bridge points.

27. Ratios

Ratios for 1:10,000 scale photography were provided for all strips.

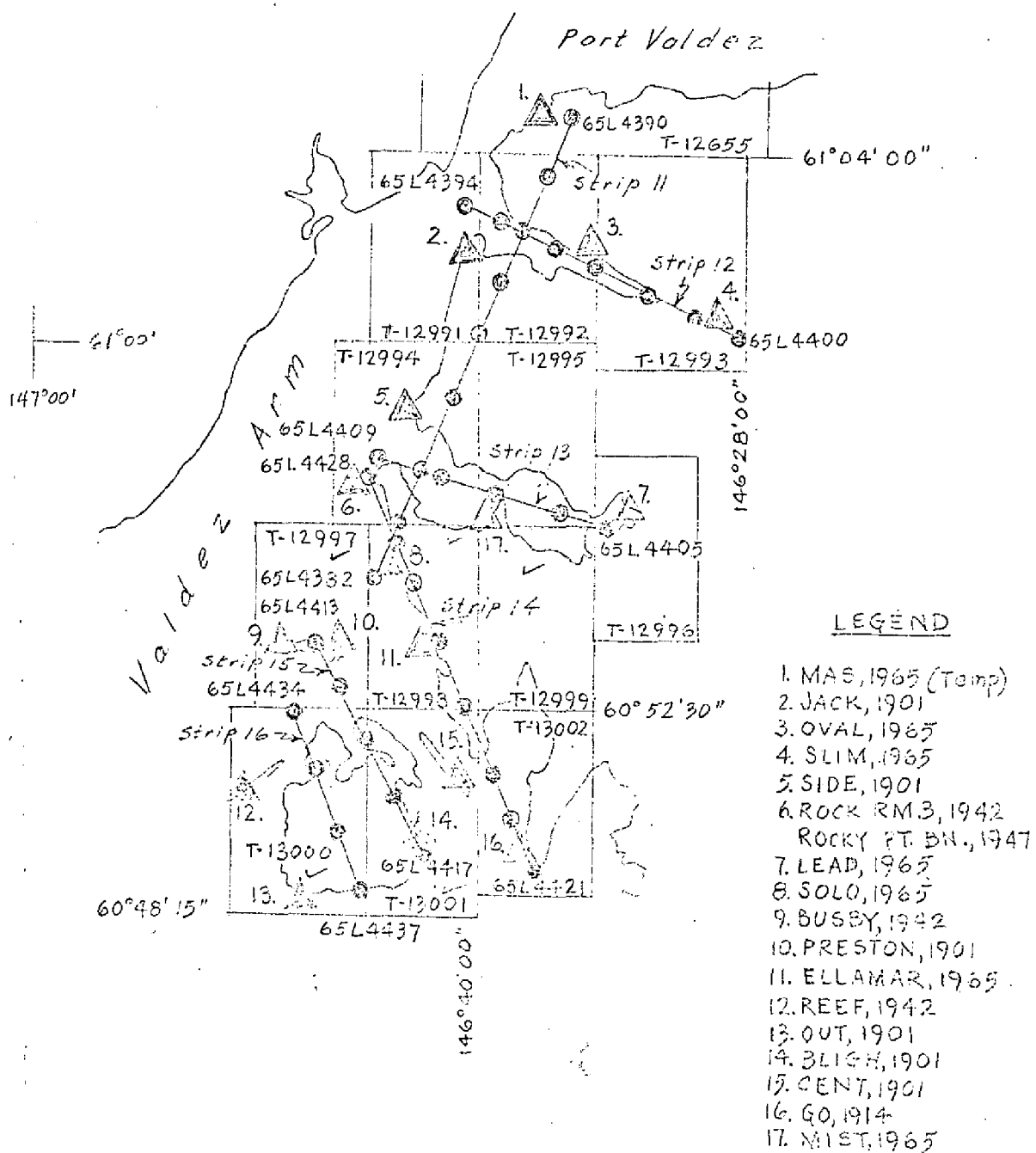
Submitted by:

Wallace Heinbaugh  
Wallace Heinbaugh

Approved by:

November 3, 1965

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



TATITLEK NARROWS, ALASKA

PH-3411

Nov. 1965

## DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. T-12996	JOB NO. PH-6411	GEODETIC DATUM NA 1927	ORIGINATING ACTIVITY Division, AMC, Norfolk, Virginia
STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	COORDINATES IN FEET STATE _____ ZONE _____
			$\phi$ LATITUDE $\lambda$ LONGITUDE
NONE			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
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			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
			$\phi$
			$\lambda$
COMPUTED BY		COMPUTATION CHECKED BY	DATE
LISTED BY		LISTING CHECKED BY	DATE
HAND PLOTTING BY		HAND PLOTTING CHECKED BY	DATE

COMPILATION REPORT  
T-12996

31 - DELINEATION

Delineation was accomplished using stereo instrument compilation methods. The Kelsh plotter was used to delineate shoreline, alongshore and interior detail based upon office interpretation of the 1:30,000 scale bridging/compilation panchromatic photographs.

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 November 3, 1965.

33 - SUPPLEMENTAL DATA

Color contact photographs 65 L(C) 4516, 4517 were provided at 1:15,000 scale to assist in the interpretation of alongshore and offshore details.

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 was compiled from office interpretation of the compilation photographs. Shallow, ledge and foul limits were delineated as an aid to the hydrographer and should be evaluated during field edit.

No mean lower low water line was compiled due to the stage of tide of the compilation photographs being 4.7 feet above MLLW.

36 - OFFSHORE DETAILS

Offshore detail was compiled by instrument methods as described in item #31. Offshore rocks are to be verified by the field editor.

37 - LANDMARKS AND AIDS

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

38 - CONTROL FOR FUTURE SURVEYS

None.

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39 - JUNCTIONS

Junctions are in agreement with T-12995 and T-12999 to the west.  
There are no contemporary surveys to the north, east and south.

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report dated November 3, 1965.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following USGS Quadrangle: Cordova (D-7), Alaska, scale 1:63,360, dated 1952.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Service Chart: 8519, scale 1:79,291, 8th edition, dated May 17, 1965.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

*Garry L. Hancock*  
for R. Smith  
Cartographer  
February 1967

Approved,

*Garry L. Hancock*  
for Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section, AMC



REVIEW REPORT T-12996  
SHORELINE

61. GENERAL STATEMENT

Final review for this final Class III Map was accomplished at the Atlantic Marine Center in June 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 USGS Quadrangle Cordova (D-7), Alaska, 1:63,360 scale, dated 1952.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

No hydrographic survey was performed in the area common to this map.

65. COMPARISON WITH NAUTICAL CHARTS

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

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

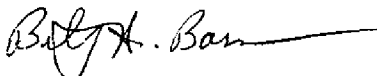
This map complies with the Project Instructions, and meets the requirements for National Standards of Map Accuracy.

Submitted by,



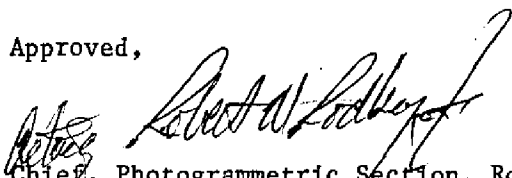
Jerry L. Hancock  
Final Reviewer

Approved for forwarding,




Billy H. Barnes  
Chief, Photogrammetric Section, AMC

Approved,



Robert W. Lockyer  
Chief, Photogrammetric Section, Rockville



Ronald K. Brewer  
Chief, Photogrammetry Branch  
Rockville

June 11, 1984

GEOGRAPHIC NAMES

FINAL NAME SHEET

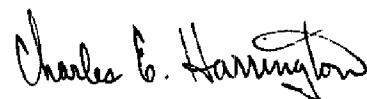
PH-6411 (Valdez Arm - Tatitlek Narrows, Alaska)

TP-12996

Duck River

The Lagoon

Approved by:



Charles E. Harrington  
Chief Geographer  
Nautical Charting Division

