

T 012313

T- 012313

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. T-12313	Edition No. 1
Job No. PH-6705	
Map Classification CLASS III, FINAL (PARTIAL FIELD EDIT)	
Type of Survey SHORELINE	
LOCALITY	
State ALASKA	
General Locality THORNE ISLAND AND WHALE PASSAGE	
Locality KASHEVAROF PASSAGE	
19 66 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 <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TRK <u>12313</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III(Final)</u> JOB PH. <u>6705</u>	
<b>DESCRIPTIVE REPORT - DATA RECORD</b>							
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Atlantic Marine Center, Norfolk, Virginia				LAST PRECEEDING MAP EDITION			
OFFICER-IN-CHARGE  Jeffrey G. Carlen, CDR				TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
<b>I. INSTRUCTIONS DATED</b>							
<b>1. OFFICE</b>				<b>2. FIELD</b>			
Aerotriangulation      October 31, 1966 Planning (Memo)      February 8, 1967 Compilation      February 27, 1967 Compilation (Supp. I)      November 29, 1967 Compilation (Supp. II)      January 20, 1972				Horizontal Control      September 8, 1966 Supplement I      March 2, 1967			
<b>II. DATUMS</b>							
<b>1. HORIZONTAL:</b> <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
<b>2. VERTICAL:</b> <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
<b>3. MAP PROJECTION</b>  Polyconic				<b>4. GRID(S)</b>			
				STATE Alaska		ZONE 1	
<b>5. SCALE</b> 1:10,000				STATE		ZONE	
<b>III. HISTORY OF OFFICE OPERATIONS</b> *See Compilation Report & Summary							
<b>OPERATIONS</b>				<b>NAME</b>		<b>DATE</b>	
<b>1. AEROTRIANGULATION</b> BY				*V. McNeel		Sept 1967	
METHOD: Analytic      LANDMARKS AND AIDS BY							
<b>2. CONTROL AND BRIDGE POINTS</b> PLOTTED BY				*J. Steinberg		Jan 1968	
METHOD: Coordinatograph      CHECKED BY				R. Minton		Jan 1968	
<b>3. STEREOSCOPIC INSTRUMENT</b> PLANIMETRY BY				*A. Shands		Mar 1968	
COMPILATION      CHECKED BY							
INSTRUMENT: Wild B-8      CONTOURS BY				N.A.			
SCALE: 1:10,000      CHECKED BY				N.A.			
<b>4. MANUSCRIPT DELINEATION</b> PLANIMETRY BY				*A. Shands		Mar 1968	
*Preliminary aerotriangulation and checked BY				C. Bishop		Apr 1968	
compilation performed 2/67 & 4/67 CONTOURS BY				N.A.			
METHOD: Smooth Draft      CHECKED BY				N.A.			
SCALE: 1:10,000      HYDRO SUPPORT DATA BY				*A. Shands		Mar 1968	
				C. Bishop		Apr 1968	
<b>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</b> BY							
<b>6. APPLICATION OF FIELD EDIT DATA</b> BY				*A. Shands		Jan 1968	
(Partial) checked BY				C. Bishop		Apr 1968	
<b>7. COMPILATION SECTION REVIEW</b> (Class III) BY				C. Bishop		Apr 1968	
<b>8. FINAL REVIEW</b> (Class III) BY				J. Hancock		May 1986	
<b>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</b> BY				J. Hancock		June 1986	
<b>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</b> BY				S. Dempsey		Sept. 1986	
<b>11. MAP REGISTERED - COASTAL SURVEY SECTION</b> BY				S. Dempsey		Sept 1986	

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

T-12313

## COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8"L", L=152.21 mm Wild RC-9"M", M= 88.20 mm		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE	<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Pacific	<input type="checkbox"/> DAYLIGHT
				MERIDIAN	120th
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
66L(P)5813-5814	Jul.12,1966	13:39	1:30,000	4.6 ft. above MLLW	
66L(P)5844-5846	Jul.12,1966	13:54	1:30,000	4.6 ft. above MLLW	
66L(C)5919-5921	Jul.12,1966	15:08	1:20,000	4.9 ft. above MLLW	
66L(C)5879-5882	Jul.12,1966	14:48	1:20,000	4.6 ft. above MLLW	
66L(C)5901-5902	Jul.12,1966	15:03	1:20,000	4.9 ft. above MLLW	
66M(C)234-236*	Jul.12,1966		1:60,000		
67M(P)636-637*	May 31,1967		1:60,000		

## REMARKS

\*Bridging photographs

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

The MHW Line was compiled from the above listed 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
H-8945	1967	Registered	H-9754	1978	Registered
H-8946	1967	Registered	(See Review Report Item #64)		

## 5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No Survey	No Survey	T-12402	T-12312

## REMARKS

T-12313

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION ☐ FIELD EDIT OPERATION  
Photoidentification

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. B. Watkins	Sept 1966
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 <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		2. VERTICAL CONTROL IDENTIFIED	
None		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: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS			
None			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)			
None			

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## HISTORY OF FIELD OPERATIONS

NOTE: Partial field edit

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATIONperformed and Premarking for  
new bridging photography

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	W.L.M.	Apr/May 1967
2. HORIZONTAL CONTROL	RECOVERED BY L.L.R.	Apr 1967
	ESTABLISHED BY L.L.R.	Apr 1967
	PRE-MARKED OR IDENTIFIED BY L.L.R.	Apr 1967
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 <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY Hydrographer/field editor	May 1967
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

Panêled

2. VERTICAL CONTROL IDENTIFIED

N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
67M636	BEST, 1916 (Sub. Station panêled)		

3. PHOTO NUMBERS (Clarification of details)

66L(P)5843-5846 (Field annotated 1:10,000 matte ratios)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

1 - Form C&amp;GS 152 (Fix data for rocks submitted with contemporary hydro survey)

NOTE: No Field Edit Report nor Field Edit Print is available for the record!

NOAA FORM 76-36D  
(3-72)

T-12313

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

## 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.	Apr. 1967	Preliminary Manuscript	April 1967	April 1967
Manuscript recompiled from new bridge data; partial field edit applied	Apr. 1968	Map advanced to Class I; however field edit was incomplete	May 1968	May 1968
Final Review	May 1986	Final Class III Map		

## II. LANDMARKS AND AIDS TO NAVIGATION

## 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)

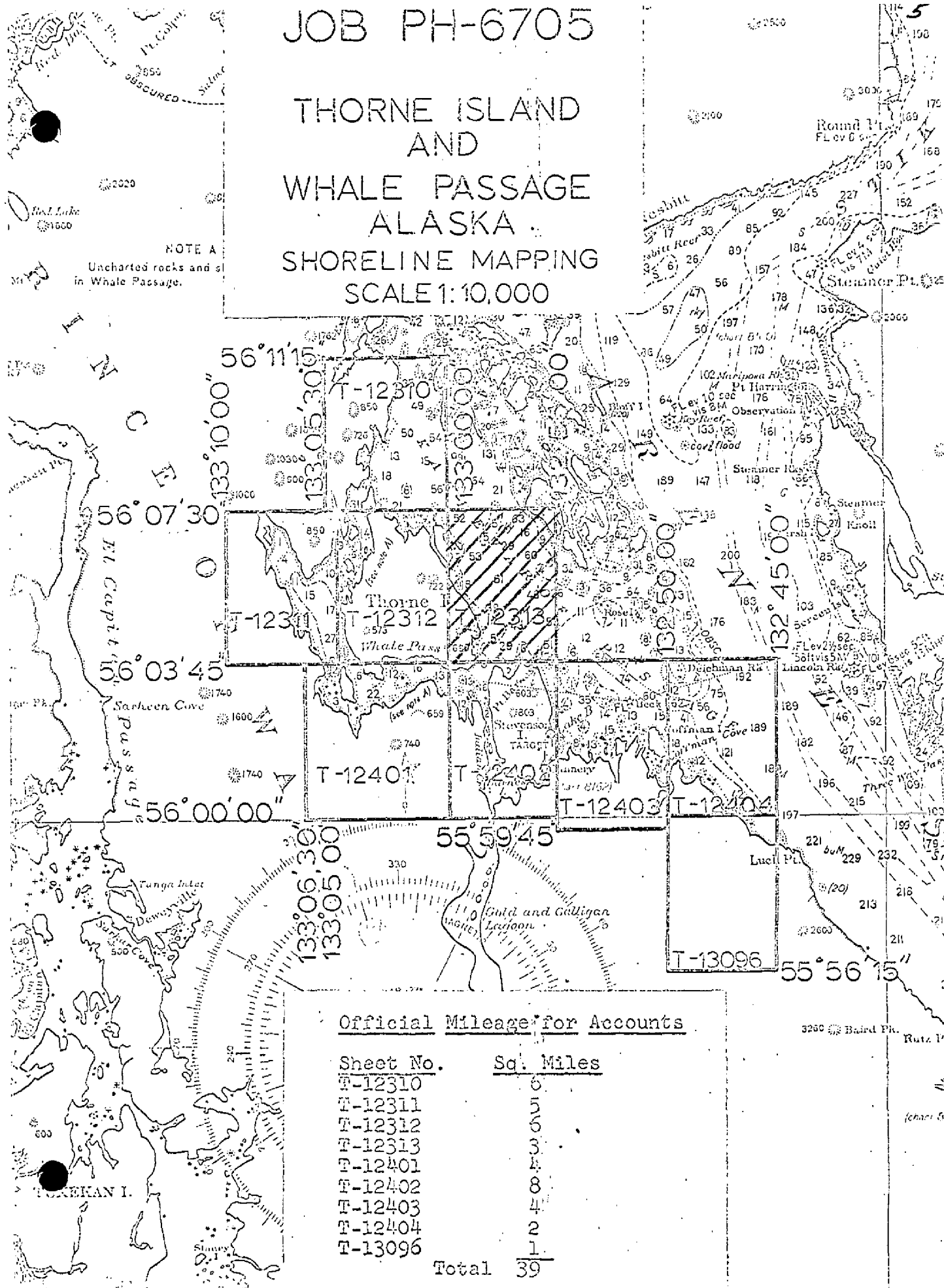
SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY  MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	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-6705

## THORNE ISLAND AND WHALE PASSAGE ALASKA SHORELINE MAPPING SCALE 1:10,000

NOTE A

Uncharted rocks and s  
in Whale Passage.



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

T-12313

This 1:10,000 scale Final Class III shoreline map is one of nine maps that comprise project PH-6705, Thorne Island and Whale Passage, Alaska. The project was originally assigned as 6 maps (T-12310 thru T-12313, T-12401 and T-12402); however, 3 additional maps (T-12403, T-12404, and T-13096) were included at a later date in order to support an extended area of proposed hydrography. This map is the result of recompilation based upon preliminary compilation, partial field edit of the preliminary manuscript and revised bridging data.

The purpose of this map was to provide support data to assist hydrographic operations in the vicinity of Whale Passage.

This map portrays a portion of shoreline along Kashevarof Passage located between Thorne Island and Blashke Island.

Photo coverage for the project was provided in July 1966 with 1:60,000 scale, 1:30,000 scale, and 1:20,000 scale photographs. The 1:60,000 scale color photographs were taken with the RC-9 "M" camera for aerotriangulation. Panchromatic photographs at 1:30,000 scale were taken with the RC-8 "L" camera for aerotriangulation and instrument compilation. Supplemental color photographs at 1:20,000 scale were also taken with the "L" camera in order to assist compilation and to provide photo coverage for hydro support. Because of inadequate aerotriangulation results, additional panchromatic bridging photographs at 1:60,000 scale were flown in May 1967 with the "M" camera. The stage of tide for all photographs was based upon predicted tide data. No MLLW photographs were provided.

Field work prior to aerotriangulation consisted of the recovery and establishment of horizontal control by photoidentification methods. This activity was performed in September 1966. Additional field work was performed in April 1967 in order to establish horizontal control by premarking methods for new bridging photography. At this same time, field edit for preliminary compilation of T-12310 thru T-12313, T-12401, and T-12402 was also accomplished.

Analytic aerotriangulation was provided by the Washington Science Center in February 1967; however, adequate bridging results could not be obtained. In order to accommodate the hydrographer, the aerotriangulation office forwarded the project data to compilation with the agreement that the six initial manuscripts would be classified as preliminary. New bridging photography, as requested by aerotriangulation, was provided in May 1967. Though six manuscripts had been compiled using the original bridging results, new aerotriangulation activity was performed in September 1967. Consequently, new and adjusted horizontal control was provided and the compilation of new manuscripts was required.



## T-12313

Compilation of preliminary manuscripts T-12310 thru T-12313, T-12401 and T-12402 was performed in 1967 at the Coastal Mapping Section, Atlantic Marine Center. With the anticipation of obtaining new photography, preliminary manuscript copies were submitted to the hydrographer for field edit and hydrographic support. When new aerotriangulation results were provided as a result of the new bridging photography, recompilation of the preliminary manuscripts was accomplished. This compilation utilized the field edit data that was performed by the hydrographer during the 1967 field season. Compilation of three additional manuscripts, T-12403, T-12404, and T-13096 was completed in January 1972.

Field edit and hydrographic support data for the contemporary hydro surveys were submitted in two stages. A tabulated summary of the six preliminary and three later Class III manuscripts is provided.

<u>DATA SUBMITTED FOR FIELD EDIT</u>	<u>DATE OF EDIT</u>	<u>EDITOR</u>	<u>CONTEMPORARY HYDRO SURVEY</u>
T-12310 (Preliminary)	May 1967 (Partial Edit)	C&GS Ship LESTER JONES	H-8946
T-12311 (Preliminary)	May 1967	C&GS Ship LESTER JONES	H-8945 & H-8946
T-12312 (Preliminary)	May 1967	C&GS Ship LESTER JONES	H-8945 & H-8946
T-12313 (Preliminary)	May 1967 (Partial Edit)	C&GS Ship LESTER JONES NOAA Ship RAINIER	H-8945 & H-8946 H-9754
T-12401 (Preliminary)	May 1967	C&GS Ship LESTER JONES	H-8945
T-12402 (Preliminary)	May 1967 (Partial Edit) May 1978 (Completion of Edit)	C&GS Ship LESTER JONES NOAA Ship RAINIER	H-8945 H-9754
T-12403 (Class III)	May 1978	NOAA Ship RAINIER	H-9754 & H-9756
T-12404 (Class III)	May 1978	NOAA Ship RAINIER	H-9756
T-13096 (Class III)	May 1978	NOAA Ship RAINIER	No Survey

T-12313

Field edit for this map was applied at the time of recompilation. The manuscript was advanced to Class I status; however, it should have remained Class III because field edit was not performed in the northeast segment of the sheet.

Final review for this Final Class III map was performed at the Atlantic Marine Center in May 1986. The map was reclassified to final Class III because of the partial field edit accomplished. A comparison was made with the common nautical charts and hydrographic survey(s). The original base manuscript and related data along with a final Chart Maintenance Print and a Notes to Hydrographer Print were forwarded to the Washington Science Center for registration and distribution.

FIELD INSPECTION REPORT  
T- 12313  
Whale Passage to Thorne Island  
Project PH-6705

There was no field inspection prior to compilation of the PRELIMINARY manuscripts. These were compiled from office inspection, using bridge points established by the preliminary photogrammetric plot as control. Copies of the PRELIMINARY manuscripts, hydro support data, and field edit ozalids were furnished to the hydrographer for the 1967 field season. Additional horizontal control was established and partial field edit was performed.

Control data was returned to the office in the fall of 1967 and a new photogrammetric plot was run. The manuscripts were re-compiled, using new coordinates for the same bridge points used for the PRELIMINARY manuscripts, and classified as ADVANCE. The field edit performed in 1967 was used as field inspection for the new compilation.

Refer to PHOTOGRAMMETRIC PLOT REPORT dated February 15, 1967 and PHOTOGRAMMETRIC PLOT REPORT dated September 25, 1967, both submitted with this report.

PHOTOGRAMMETRIC PLOT REPORT  
JOB PH-6705  
THORNE ISLAND AND  
WHALE PASSAGE, ALASKA

February 15, 1967

21. Area Covered

The area covered in this report is in the vicinity of Thorne Island. The sheets covered are T-12310, T-12311, T-12312, T-12313, T-12401, T-12402 and T-12403. Only part of T-12404 and none of T-13096 are covered by present photography. Because of inadequate bridging photography and poor placement of control, it is recommended by this office that the manuscripts be classified as "Preliminary".

22. Method

Five strips of photography were bridged by analytic aerotriangulation. Strip 1 (scale of 1:60,000, RC-9 color) was adjusted to ground with field identified control points. Strips 2, 3, 4 and 5 (scale of 1:30,000, RC-8 panchromatic) were adjusted to ground with common points transferred from Strip 1.

23. Adequacy of Control

The distribution of the field identified control was not optimum for a proper analysis of the adjustment of Strip 1. The control is located near both ends of the strip with nothing in the middle.

Two of the identified subpoints could not be held in the bridge. They are ROSE 1916, subpoint A and POLE 1916, subpoint A. The two points would not hold because they could not be positively identified in the office.

24. Supplemental Data

None

25. Photography

The RC-9 color photography was inadequate. The fiducial marks were not visible and the image definition was poor.

Respectfully submitted:

*Don O. Norman*  
Don O. Norman

Approved and Forwarded:

*Henry P. Eichert*  
Henry P. Eichert

FM  
HPS

THORNE ISLAND AND  
WHALE PASSAGE, ALASKA  
CLOSURES TO CONTROL (FT.)

STRIP 1

1. LAKE BAY MAGNETIC STATION 1916

subpoint A	+ 1.2	- 1.8
subpoint B	- 1.0	- 0.4

2. BARNACLE ROCK 1916

subpoint A	+ 1.8	- 2.6
subpoint B	+11.1	-11.7
subpoint C	+ 7.4	+ 8.0

3. ROSE 1916

subpoint A	+15.4	-34.6
subpoint B	+ 1.6	- 1.1
subpoint C	- 2.7	+ 0.6

4. POLE 1916

subpoint B	+ 4.0	+19.4
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5. RAG 1916

subpoint A	+ 4.6	- 1.6
subpoint B	+ 5.1	+ 0.5

6. MOSS 1916

subpoint A	- 3.7	+ 0.4
subpoint B	- 7.2	+ 9.2

STRIP 2

05801	- 1.3	+ 0.6
05802	- 8.0	+14.3
04801	- 4.7	- 9.5
02802	- 1.5	+ 3.7
02803	+ 4.4	-32.1
02801	+ 2.9	+ 1.9
01801	- 1.4	- 2.0
01802	+12.8	+12.3

STRIP 3

## LAKE BAY MAGNETIC STATION, 1916

	subpoint A	- 0.2	- 2.6
	subpoint B	- 0.2	+ 2.4
01801	- 6.3	- 0.9	
01802	+11.5	+ 9.7	
02804	+ 1.5	+ 2.4	
02801	+ 0.7	+ 1.9	
02802	+ 2.3	+ 4.4	
02803	+ 5.8	-31.0	
04801	- 1.4	+ 0.1	
05802	+ 3.8	+26.3	

## RAG, 1916

	subpoint B	+ 1.9	- 1.3
05803	+ 3.0	- 5.5	
05804	+ 7.8	+ 1.2	

STRIP 4

03801	- 0.8	- 0.5
03802	+ 9.1	+ 2.5
04802	+ 2.8	+ 2.8

## POLE, 1916

	subpoint A	+ 2.1	- 0.9
	subpoint B	- 3.5	-20.0
04804	+ 1.8	- 5.4	
04803	- 4.7	+ 2.5	

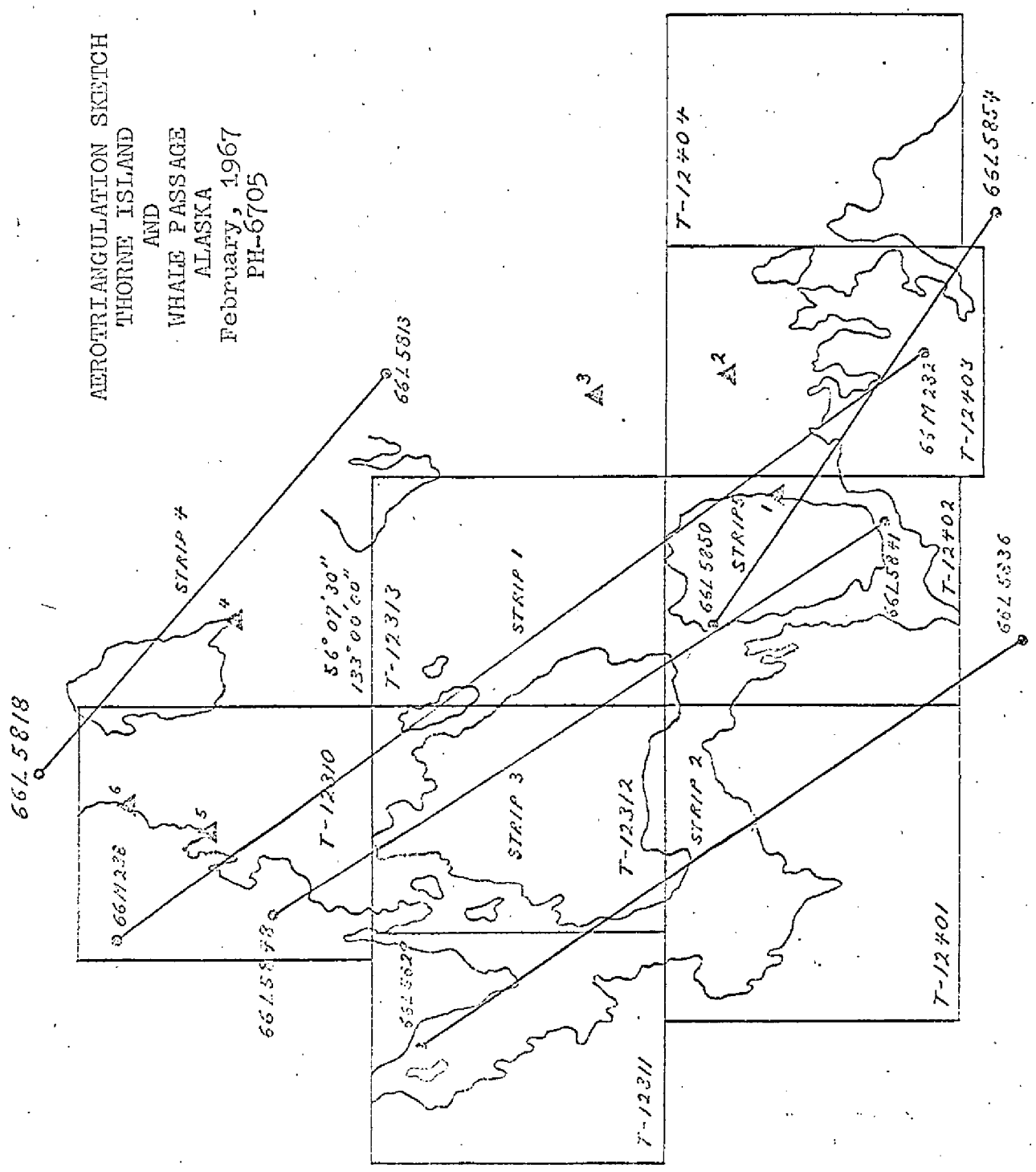
## MOSS, 1916

	subpoint A	+ 0.2	- 0.1
	subpoint B	- 2.8	+ 8.7
06801	- 0.2	0.0	
06802	+ 9.4	-24.1	

STRIP 5

02808	0.0	0.0
01801	+ 0.6	- 1.0
01806	0.0	0.0
01807	+ 0.6	- 0.4
01803	- 3.0	+ 4.8
01804	+ 2.4	- 1.7
01804	0.0	0.0

AEROTRIANGULATION SKETCH  
THORNE ISLAND  
AND  
WHALE PASSAGE  
ALASKA  
February, 1967  
PH-6705



PHOTOGRAMMETRIC PLOT REPORT  
Job PH-6705  
Thorne Island and Whale Passage, Alaska

September 25, 1967

This report supersedes the preliminary report dated February 15, 1967. The original bridge strip of "M" photography flown in 1966 proved to be inadequate for the major portion of the area. It was, therefore, necessary to obtain a new bridge strip of "M" photography which was flown in May, 1967.

21. Area Covered

The area covered is in the vicinity of Thorne Island, Alaska. The sheets covered are T-12310 thru T-12313, T-12401 thru T-12404 and T-13096.

22. Method

Five strips of photography were included in this job.

Strip 1 (scale of 1:60,000, RC-9 panchromatic) was bridged by analytic aerotriangulation and adjusted to ground with field identified control points. The bridges from the preliminary report of February 15, 1967, were retained for Strips 2, 3 and 4 (scale of 1:30,000, RC-8 panchromatic). Strips 2 and 3 were readjusted using new values for common points established by the adjustment of Strip 1. Strip 4 could not be readjusted since it had no points in common with Strip 1. The preliminary adjustment of February 15, 1967, is considered adequate for Strip 4 and should be retained. Strip 5 (scale of 1:30,000, RC-8 panchromatic) was increased by three photographs -- 66-L-5855 thru 5857. It was bridged by analytic aerotriangulation and adjusted using values for common points established by the adjustment of Strip 1.

23. Adequacy of Control

Horizontal control was adequate and complied with the project instructions. Closures to control are tabulated and attached.

24. Supplemental Data

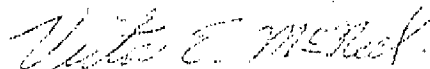
USGS quadrangles were utilized to obtain vertical control needed for strip adjustment.



25. Photography

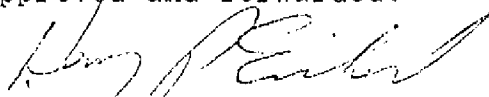
The coverage of the photography was adequate. The diapositives were of good quality.

Respectfully submitted:



Victor E. McNeel

Approved and forwarded:



Henry P. Eichert  
Chief, Aerotriangulation Section

CLOSURES TO CONTROL (FEET)  
Job PH-6705  
Thorne Island and Whale Passage, Alaska

STRIP #1

	$\Delta X$	$\Delta Y$
LUCK POINT SOUTH BASE, 1915 (32100)	-0.3	0.0
LUCK POINT NORTH BASE, 1924 (34100)	+0.5	+0.8
LAKE BAY MAGNETIC STATION (35100)	+0.8	+1.8
BEST, 1916, Substation (36100)	+1.5	+1.4
DAVID, 1967 (37100)	-3.7	-6.2
RAG, 1916 (38100)	+0.3	+0.1

STRIP #2

	$\Delta X$	$\Delta Y$
5801	-0.3	-0.7
4801	+0.3	+1.7
2802	+0.4	-1.5
2803	+3.8	+4.8
1801	+0.2	+0.4

STRIP #3

	$\Delta X$	$\Delta Y$
LAKE BAY MAGNETIC STATION, Subpoint A, 01101	0.0	0.0
02804	-4.2	0.0
02802	-0.3	- 0.5
02803	+1.9	- 3.3
04801	+0.3	+ 0.1
RAG, 1916, Subpoint B 05104	-0.1	0.0
05805	+4.1	-11.7

STRIP #5

	$\Delta X$	$\Delta Y$
02805	+0.3	-0.2
01803	-3.3	-6.4
35801	-1.9	+0.5
35802	-5.8	-4.2
34801	+1.9	-1.4
34802	+1.0	+3.3
33801	-1.6	-0.3
32801	+4.8	-3.2
32802	+0.5	+0.2

## AEROTRIANGULATION SKETCH

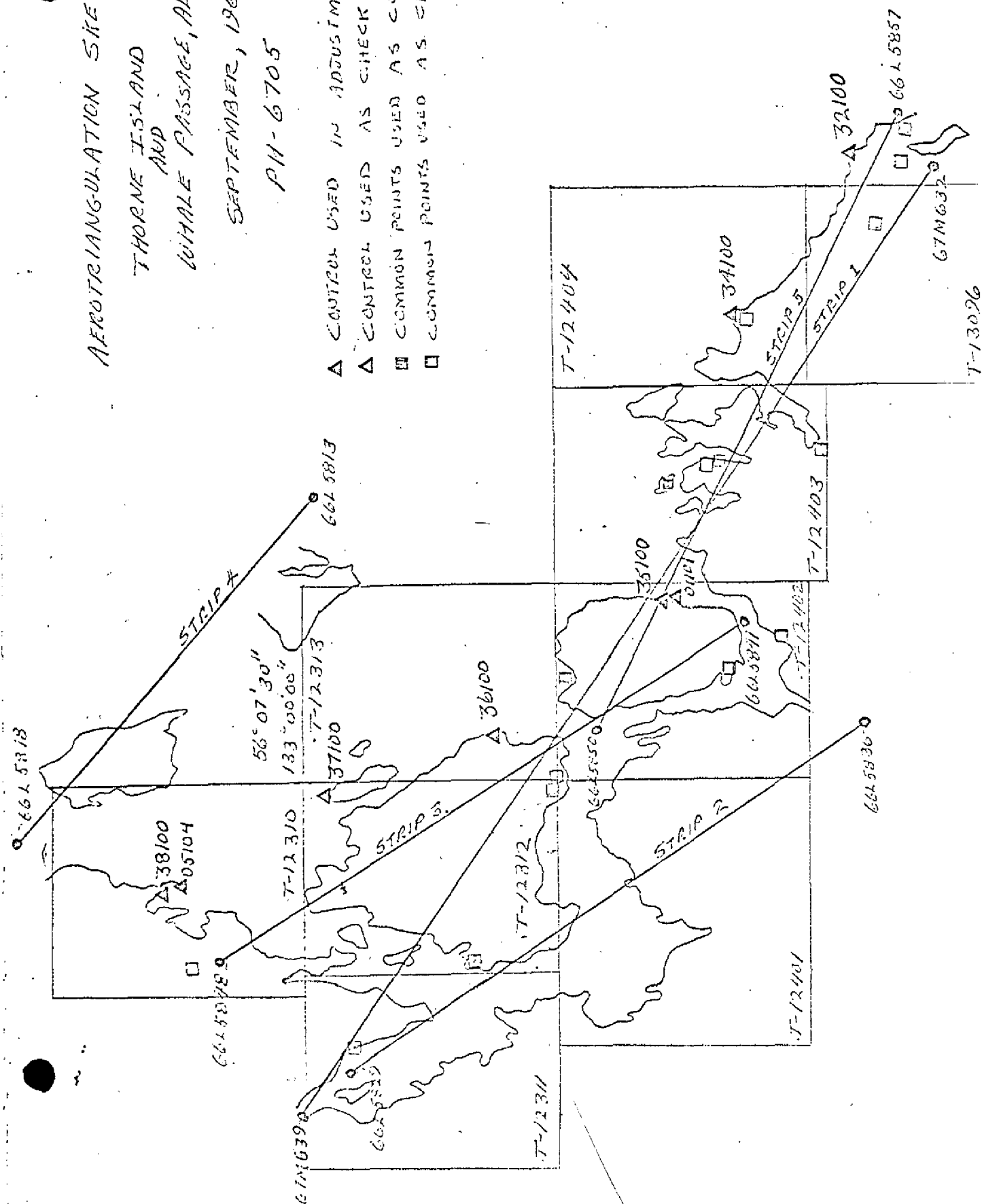
THORNE ISLAND  
AND

WHALE PASSAGE, ALASKA

SEPTEMBER, 1967

PH-6705

- △ CONTROL USED IN ADJUSTMENT
- △ CONTROL USED AS CHECK
- COMMON POINTS USED AS CONTROL
- COMMON POINTS USED AS CHECK



## DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETIC DATUM N.A. 1927	COORDINATES IN FEET STATE Alaska ZONE 1	GEOGRAPHIC POSITION $\phi$ LATITUDE $\lambda$ LONGITUDE	REMARKS
T-12313	PH-6705	ERN, 1916	G.P. Vol. 1 pg. 156			$x =$	$\phi$ 56 05 18.311	
							$y =$	
		BEST, 1916	G.P. Vol. 1 pg. 156			$x =$	$\phi$ 56 04 33.397	
							$y =$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
						$x =$	$\phi$	
						$y =$	$\lambda$	
COMPUTED BY	A. C. Rauck, Jr.			DATE 3/23/67	COMPUTATION CHECKED BY JIG			DATE 3/29/67
LISTED BY				DATE	LISTING CHECKED BY			DATE
HAND PLOTTING BY				DATE	HAND PLOTTING CHECKED BY			DATE

COMPILATION REPORT  
T-12313  
PH-6705

31. DELINEATION

A preliminary manuscript was compiled with the Kelsh Plotter in 1967. Cronaflex copies of this manuscript and photo-hydro support data were furnished to the hydrographer for the 1967 field season. Additional control was established, all data was returned to the office, and a new photogrammetric plot was run using the same photography and drill points that were used for the preliminary manuscript.

New projections were furnished and the plates were re-set using the Wild B-8 instrument. The pass points used for the preliminary manuscript and hydrographic signal positions were dropped on the new projection. A new manuscript was compiled by transferring the shoreline from the preliminary manuscript, using pass points for control.

Partial field edit was performed in 1967 and applied to the new manuscript.

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

32. CONTROL

See Photogrammetric Plot Reports dated February 15, 1967 and September 25, 1967.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline and alongshore details were compiled from office interpretation of the photographs and from the partial field edit data that was obtained for the preliminary manuscript.

36. OFFSHORE DETAILS

As the compilation photography was taken at a time when the tide was 5 ft. above MLLW, many of the offshore details appearing on this manuscript are shown from the data supplied by the field editor. All rock elevations are supplied by the field editor.

//

T-12313

37. LANDMARKS AND AIDS

There are no landmarks or aids on this sheet.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Junctions are in agreement with T-12312 to the west and T-12402 to the south. There are no contemporary surveys to the north or east.

40. HORIZONTAL AND VERTICAL ACCURACY

Map accuracy was upgraded as a result of additional premarked control, bridging photography, and new aerotriangulation activity.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with USGS Quadrangle  
PETERSBURG (A-3), Alaska, scale 1:63,360, dated 1953.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 8160, scale 1:80,000, 7th edition,  
dated December 19, 1966.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted

*for* *Henry L. Hancock*  
A. L. Shands  
Cartographer

Approved

*for* *Henry L. Hancock*  
A. C. Rauck, Jr.  
Chief, Coastal Mapping Division

ADDENDUM TO COMPILATION REPORT  
NOTES FOR THE SMOOTH PLOTTER, PACIFIC MARINE CENTER  
T-12313  
Project Ph66705

Rock positions were transferred from the position overlay to the cronaflex copy of the Preliminary Manuscript by holding projection ticks; then these positions were transferred from the cronaflex copy to the Advance Manuscript by holding pass points as control.

The following items explain differences in rock positions on the position overlay and the Advance Manuscript. Space is left after each item for comments. We would appreciate the return of your comments, as we wish to correct the original manuscript.

1. There are two positions for 5124; one is penciled, the other is printed. See DISCREPANCY OZALID.

2. In vicinity of Signals 211 and 212, locations of rocks on Field Photo 66-L-5843 and the computer position overlay do not agree. Position locations on the overlay are confusing because of over-printing and apparent sextant plotting. Rock data was applied to the positions indicated on the overlay.

3. Position 5117 in different location on Photo 5843 than on overlay; overlay position was used.

4. Dropped positions of Hydro Signals 210, 211, 212, and 216 are shifted slightly from the same positions on the hydrographer's cron-aflex copy of the PRELIMINARY MANUSCRIPT.

5. See notes on DISCREPANCY OZALID.



<sup>14</sup>  
APR 30 1986

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6705 (Thorne Island and Whale Passage, Alaska)

T -12313

Blashke Islands

Kashevarof Passage

Thorne Island

Whale Passage

Approved:



Charles E. Harrington  
Chief Geographer  
Nautical Charting Division  
Charting and Geodetic Services

## FIELD EDIT REPORT

Submitted for "rock" on T-12313

OPR-0910-RA-78

T-12402

STEVENSON ISLAND, ALASKA

Thorne Island and Whale Passage

2 Field Units

May 2, 1978 - May 21, 1978

JD (122-141)

## 51 METHODS

The project involved the investigation of a rock considered doubtful but charted in mid-channel, Whale Passage, S. E. Alaska. By chart and project instructions the rock position is  $56^{\circ}03'6''\text{N}$ ,  $132^{\circ}58'4''\text{W}$ ; however, the T-sheet position differed by 1/10 minute in latitude ( $56^{\circ}03'7''\text{N}$ ). To avoid any chance of an error, both areas were investigated. Refer to the Separates Following the Text for complete information on Hydrographic Operations conducted mid-channel in Whale Passage.

Hydrography was also run along the eastern edge of Stevenson Island (see progress sketch in Separates Following the Text). Field edit was conducted on Stevenson Islands eastern shore prior to and concurrent with hydrography. Edit was also performed in Whale Passage around area of investigation and was conducted by skiff and foot. Shoreline and topographic detail are noted on black and white chronapaque photographs 66L(C)-5850 and 5851. Colors with the following acceptable meaning were used on both the Manuscript and the photographs: violet-verification of features, red-additions or corrections of features, green-deletion of features. Any photogrammetrically located additions or corrections to manuscript compilation are noted directly on the photographs. All deletions of features on the manuscript determined by either hydrographic means or photogrammetric means are noted on the Field Edit Sheet.

Heights of rocks, islets and ledges were estimated at close range. Depths of submerged rocks were determined with leadline. All rock heights are referenced to GMT.

## ADEQUACY OF COMPILATION

An islet located at Lat.  $56^{\circ}02'15''$  Long.  $132^{\circ}55'34''$  is on chart 17401 1:10,000 scale (7th ed June 18/77) but is not on T-12402. (refer to photograph 5851 for islet location).

Approximately one-half mile of foul limit lines were deleted on the northern shoreline of Stevenson Island. The shore is gravel with no offshore dangers to navigation for small craft.

## 53 MAP ACCURACY

In addition to the rocks in Whale Passage (Lat.  $56^{\circ}03'42''$  Long.  $132^{\circ}58'26''$ ) a rock off the northeastern shore of Stevenson Island (Lat.  $56^{\circ}03'07''$  Long.  $132^{\circ}55'21''$ ) was disproved by hydrography. See Descriptive Report, RA-5-1-78 (H-9754) for the procedures used in the search for this non-existent rock.

South of Thorne Island heights were added to those rocks to which they had not been applied during the original Field Edit. The estimates were made at a near zero tide, close-on from a Boston Whaler.

-2-

The southeastern offshore region of Thorne Island contained the following errors:

- 1) Five rocks charted approximately 100 meters south of Thorne Island were not seen.
  - a) a search was made from a Boston Whaler at a 0' tide state with 10' - 15' visibility in the water. Photograph 66L-5850 shows what could easily be in the location of the five rocks.
- 2) An islet charted off the southeast tip of Thorne Island is actually submerged at high tide. It lies in a ledge area and is merely a misjudgement of MHWL during office compilation.

These discrepancies along with others indicated on black and white photo 66L-5850 are cause for concern.

54 COMMENTS

The original field edit of this and the surrounding T-sheets was poorly done, however even had it been done exceptionally well, hydrography was needed to provide an accurate, reliable chart of the Whale Passage - Lake Bay area.

Respectfully submitted,

*Marianne Molchan LTJG*  
Marianne Molchan, LTJG  
Field Edit Officer

Approved by,

*James P. Randall*  
James P. Randall, Captain, NOAA  
Commanding Officer



-1-

Rock Investigation Hydrographic Report  
Whale Passgae AK.

Hydrography was conducted in Whale Passage between Thorne Island and Stevenson Island. The area surveyed was rectangular covering waters between Lat. 56°03'23"N and 56°04'09"N and between Long. 132°58'00"W and 132°58'48"W.

The hydrography was run in support of field edit to disprove a rock at midchannel in Whale Passage. A total of three rocks were disproved during hydrographic operations. They are as follows:

<u>Charted Rock Position</u>	<u>Source</u>	<u>Reason to Disprove</u>
56°03'36.0" 132°58'24.0"	Chart 17382 1:80,000 scale 11th Ed. Mar. 26,77	Project Inst. OPR-910-RA-78 Field Edit ask to disprove this rock.
56°03'42.0" 132°58'26.0"	T-12402	Believe to be same rock as above. Different charted position.
<u>56°03'48.0"</u> <u>132°58'33.0"</u>	<i>T-12313</i> Chart 17382 1:80,000 scale 11th Ed. Mar. 26,77	Subm. rock approx. 250m NE of the above charted rocks.

Three crosslines were run north and south to check sounding agreement and to verify accurate positioning control. Each of the three crosslines had been plotted in red ink on the boatsheet and was run directly over three charted rock or submerged rock positions. None of the crosslines or the mainscheme lines which ran over the charted rock positions showed any indication of peaks or even the slightest shoaling to the bottom configuration.

All soundings are plotted in fathoms. Crossline soundings agree within one fathom of the mainscheme soundings. The shoalest corrected depth over any of the three charted rock positions is twenty-one fathoms.

Detached postions were taken on each of the three charted rock positions. Positioning for the "D.P."s included two mini-ranger rates and a check angle.

Mainscheme lines were run at fifty meter spacing beginning at the southern end of the sheet working north. After completion of main-scheme lines the hydrographer returned to the area and ran 'splits' on either side of the three rocks reducing the spacing to twenty-five meters.



-2-

Upon the completion of the sounding lines the areas of each of the three charted rock positions was returned to and a spiral search pattern was run using a wide beam (45°) transducer.

All search efforts supported the same conclusion. Neither the three rocks nor even traces of these rocks were found by the hydrographer. It is recommended that the submerged rock at Lat. 56°03'48" Long. 132°58'33.0" and rock at Lat. 56°03'36.0" Long. 132°58'24.0" be removed from C-17382 1:80,000 scale 11th ed. 3/26/77 chart. It is also recommended that the rock at Lat. 56°03'42.0" Long. 132°58'26.0" be removed from Manuscript T-12402.

REVIEW REPORT  
SHORELINE

T-12313

61 - GENERAL STATEMENT

Final review for this final Class III map was accomplished at the Atlantic Marine Center in May 1986. For a schedule of the office and field operations, refer to the Summary included with 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 Petersburg (A-3), Alaska, dated 1953, scale 1:63,360.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Portions of two contemporary hydrographic surveys, H-8945 and H-8946, at 1:10,000 scale and field surveyed in 1967 are common to this map. A comparison was made with a registered copy of both surveys.

A discrepancy was noted with survey H-8945 concerning a prominent rock that was compiled on the shoreline map at Lat. 56°03'48", Long. 132°58'33". This "rock" was not delineated on the hydrographic survey. No original source data could be found in the compilation or field edit records. However, there was a thorough field investigation for this feature by the hydrographer/field editor in 1978 in conjunction with adjoining map T-12402 and contemporary hydro survey H-9754. A rock investigation report for T-12402 adequately describes the procedure and results in disproving the existence of the "rock". This "rock" was removed from the final map and a copy of the field editor's report for T-12402 was submitted with the Descriptive Report for this map.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with NOS chart 17382, 12th edition, dated July 25, 1981, 1:80,000 scale.

The "rock" mentioned in item 64 (comparison with contemporary hydrographic surveys) was apparently charted from a previous copy of this shoreline map. This "rock" does not exist and was removed from the final map; it should be removed from the chart. A final Chart Maintenance Print will be submitted with a supporting explanation and recommendation for chart removal.

T-12313

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



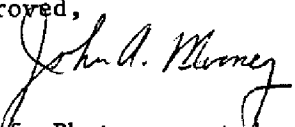
Jerry L. Hancock  
Final Reviewer

Approved for forwarding

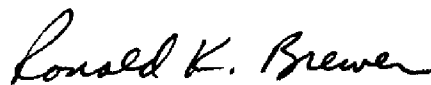


Billy H. Barnes  
Chief, Photogrammetric Section, AMC

Approved,



Chief, Photogrammetric Operations,  
Rockville



Chief, Photogrammetry Branch,  
Rockville



