

TP-00357

TP-00357

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. TP-00357	Edition No. 1
Job No. CM-8412	
Map Classification CLASS III (FINAL)	
Type of Survey SHORELINE	
LOCALITY	
State MICHIGAN	
General Locality SAINT MARYS RIVER	
Locality POINT AUX FRENES	
1984 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 TP. 00357	
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 RM-CM-8412	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit Atlantic Marine Center, Norfolk, Virginia OFFICER-IN-CHARGE A. Y. Bryson, CDR				LAST PRECEDING MAP EDITION			
				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			
Aerotriangulation October 18, 1984				Horizontal Control April 19, 1984			
Compilation April 5, 1985				(Premarking)			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER Water level <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
				International Great Lakes Datum (1955)			
3. MAP PROJECTION				4. GRID(S)			
Transverse Mercator Projection				STATE		ZONE	
				Michigan		East	
5. SCALE				STATE		ZONE	
1:20,000							
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				L. Harrod, Jr.		Jan 1985	
METHOD: Analytic LANDMARKS AND AIDS BY				L. Harrod, Jr.		Jan 1985	
2. CONTROL AND BRIDGE POINTS PLOTTED BY				W. McLemore, Jr.		Mar 1985	
METHOD: Xynetics 1201 CHECKED BY				W. McLemore, Jr.		Mar 1985	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				R. Kravitz		May 1985	
COMPILATION CHECKED BY				W. McLemore, Jr.		May 1985	
INSTRUMENT: Wild B-8				CONTOURS BY		N.A.	
SCALE: 1:20,000				CHECKED BY		N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY				R. Kravitz		May 1985	
CHECKED BY				W. McLemore, Jr.		June 1985	
METHOD: Smooth Drafted				CONTOURS BY		N.A.	
CHECKED BY				N.A.			
SCALE: 1:20,000 HYDRO SUPPORT DATA BY				N.A.			
CHECKED BY				N.A.			
5. OFFICE INSPECTION PRIOR TO Final Review BY				W. McLemore, Jr.		June 1985	
6. APPLICATION OF FIELD EDIT DATA BY				N.A.			
CHECKED BY				N.A.			
7. COMPILATION SECTION REVIEW Class III BY				W. McLemore, Jr.		June 1985	
8. FINAL REVIEW Class III BY				J. Hancock		June 1985	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				J. Hancock		July 1985	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				P. Dempsey		SEPT. 1985	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				E. L. GAUGHERY		SEP 1985	

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00357
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-10(Z) (Z=153.15mm)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
NOAA FORM 76-36B Water Level Gage		(C) COLOR		ZONE	
<input type="checkbox"/> PREDICTED TIDES		(P) PANCHROMATIC		Eastern	
<input checked="" type="checkbox"/> REFERENCE STATION RECORDS *		(I) INFRARED		MERIDIAN	
<input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				75th	
				<input checked="" type="checkbox"/> STANDARD	
				<input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF XXXX River	
84Z(P) 3719-3721	5-16-84	08:50	1:40,000	579.53 feet	
84Z(P) 3747-3753	5-16-84	09:09	1:40,000	579.53 feet	
84Z(P) 3768-3769	5-16-84	09:28	1:40,000	579.53 feet	
Level					

REMARKS

*Water level at the time of photography is indicated as recorded from the DeTour Village, Michigan gage.

2. SOURCE OF MEAN HIGH-WATER LINE:

The term "Mean High Water Line" is not applicable. The shoreline is defined as the visible line of contact on the photographs between land and water. Delineation of the shoreline was derived by photointerpretation of the above listed black-and-white compilation/bridging photographs.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

This item is not applicable to the project.

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
TP-00354	No Survey	TP-00360	TP-00356

REMARKS

NOAA FORM 76-36C (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
TP-00357 HISTORY OF FIELD OPERATIONS			
I. <input checked="" type="checkbox"/> FIELD INSPECTION OPERATION (Premarking) <input type="checkbox"/> FIELD EDIT OPERATION			
OPERATION	NAME	DATE	
1. CHIEF OF FIELD PARTY	J. Dunford	May 1984	
2. HORIZONTAL CONTROL	RECOVERED BY N.A. ESTABLISHED BY R. James PRE-MARKED OR IDENTIFIED BY R. James	May 1984 May 1984	
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 N.A. LOCATED (Field Methods) BY N.A. IDENTIFIED BY N.A.		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY N.A.		
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.		
II. SOURCE DATA			
1. HORIZONTAL CONTROL IDENTIFIED Premarked (Paneled)		2. VERTICAL CONTROL IDENTIFIED None	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
84Z(P) 3752	KOLOS, 1984 (Field Position) (Paneled direct)		
3. PHOTO NUMBERS (Clarification of details) N.A.			
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			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) 1 Form 76-53 (CSI card) Project Field Report			

TP-00357
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete	June 1985	Class III Manuscript	None	None
Final Review, Class III	June 1985	Final Class III Map	8-9-85	8-9-85

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER (pages)	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		8-9-85	Nonfloating Aids for Charts

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

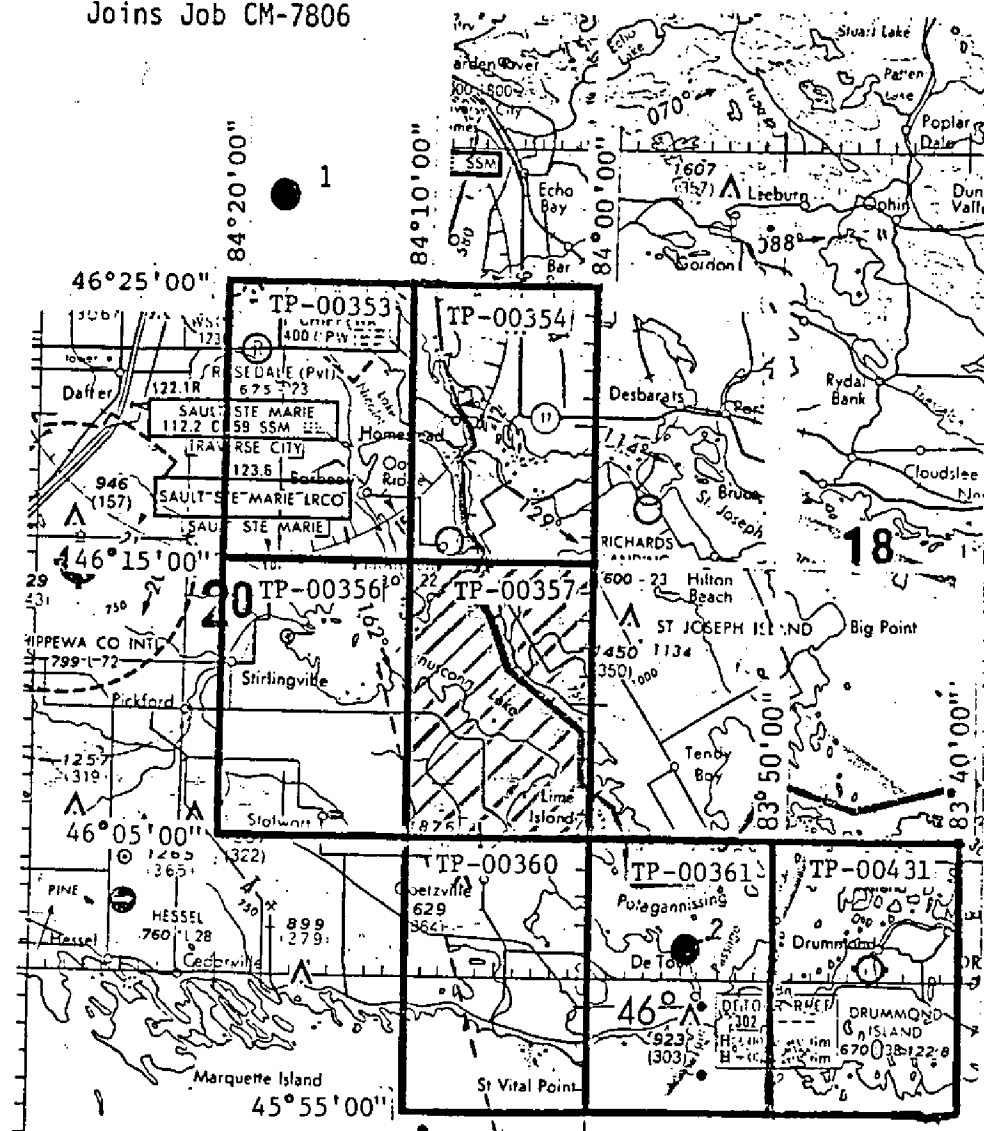
1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 76-40 ⁷⁶⁻⁴⁰ ~~282~~ SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

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	

Joins Job CM-7806



● = Water Level Gage Site

- 1 - Frechette Point
- 2 - Detour Village

JOB CM-8412
 SAINT MARYS RIVER
 SUGAR ISLAND TO POTAGANNISSING BAY
 MICHIGAN
 SHORELINE MAPPING
 SCALE 1:20,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00357

This 1:20,000 scale final Class III shoreline map is one of 7 maps (TP-00353, TP-00354, TP-00356, TP-00357, TP-00360, TP-00361, and TP-00431) that comprise project CM-8412, Sugar Island to Potagannissing Bay, St. Marys River, Michigan. This project junctions with a previous project, CM-7806, which features the northern region of St. Marys River.

This map portrays the shoreline at the southern end of Munuscong Channel and features the eastern region of Munuscong Lake.

The purpose of this map is to provide current charting information for nautical chart maintenance and to furnish shoreline support data for hydrographic survey operations.

Field work prior to photography was adequately provided in May 1984. This involved the recovery, establishment and identification (premarking) of horizontal control necessary for aerotriangulation. There was no field inspection performed.

Photo coverage was adequately provided by 1:40,000 scale panchromatic photography taken May 16, 1984 with the Wild RC-10(Z) camera. At the time of photography, a water level reading of 579.53 was recorded at the DeTour Village, Michigan gage. This established the shoreline datum for the map based on the 1955 International Great Lakes Datum.

Analytic aerotriangulation was adequately provided by the Washington Science Center in January 1985. Included in the bridge are two supplemental horizontal control substations previously photoidentified for adjoining project CM-7806. Aerotriangulation activity also included determining ratio values for the photographs and locating some of the visible navigational aids.

Compilation was performed at the Coastal Mapping Unit, Atlantic Marine Center in June 1985. Delineation of map detail was accomplished using stereo instrument methods based upon interpretation of the mapping photographs.

Final review was performed at the Atlantic Marine Center in June 1985. A Chart Maintenance Print was prepared and forwarded to the Marine Chart Branch. Also, a Notes to Hydrographer Print was prepared for future hydrographic activity.

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-00357

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

PHOTOGRAMMETRIC PLOT REPORT
CM-8412
Saint Marys River, Michigan
January 1985

21. Area Covered

The area covered by this report is in the vicinity of the Saint Marys River from Sugar Island Southeastward to Potagannissing Bay, Michigan. It is covered by seven 1:20,000-scale manuscripts; TP-00353, TP-00354, TP-00356, TP-00357, TP-00360, TP-00361, and TP-00431.

22. Method

Eight strips of 1:40,000-scale photographs were bridged by analytic aerotriangulation methods and adjusted to ground on the Michigan State Plane Coordinage System, Michigan East Zone, using our Analytic Strip Adjustment program. Panned control was provided. Aids and landmarks were located on bridging photographs. Ratio values were determined for the 1:40,000-scale bridging photographs. A magnetic tape for plotting points and for ruling the base manuscripts were prepared. The Traverse Mercator projection was used.

23. Adequacy of Control

The horizontal control provided, proved to be adequate, was sparse in some areas. Tie points were used to supplement these areas. DIKE 387, 1984 Horizontal Panel No. 4 would not fit with the tie points and control points of the adjacent strip. The lack of fit is -19.86 feet in X and 6.51 feet in Y. It was not used in the adjustment. All positions established by aerotriangulation methods meet the National Standards of Map Accuracy.

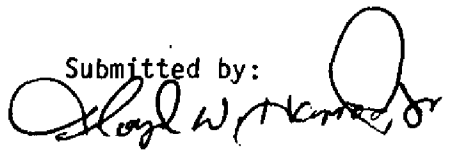
24. Supplemental Data

Vertical control was taken from USGS quads.

25. Photography

The coverage and quality of the photographs proved adequate for the project in most cases. The end lap in model 3810-3811 in strip 7 was computed to be about 51 percent, which is below the desired amount. This made it difficult to select and read pass points in some areas.

Submitted by:


Lloyd W. Harrod, Jr.

Approved and Forwarded:


Don O. Norman
Chief, Aerotriangulation Unit

Saint Marys River
Michigan
CM-8412

Fit to Control -X and Y in Feet

<u>STRIP 1</u>				<u>PT. NO.</u>	<u>X</u>	<u>Y</u>
2	Home	CHS(9598)	1981 Horizontal Panel No. 2	(774100)	-1.2	7.5
Δ 2A	"	"	" " Sub. Sta. A	(774101)	-1.6	7.7
Δ 12A	55 USLS -	Sugar Island	East Base 1878	(773101)	-3.5	3.9
	Tie from	Strip 2		(742801)	1.6	0.4
	Tie	"	" "	(744801)	-0.1	-3.9
	Tie	"	" "	(745801)	1.2	-2.8
	Tie	"	" "	(746801)	0.6	-2.2
	Tie	"	" "	(747801)	0.1	-2.8
	Tie	"	" "	(748801)	2.7	-0.6
	Tie	"	" "	(749801)	-0.7	0.3
	Tie	"	" "	(750801)	0.5	-1.1
	Tie	"	" "	(751801)	-0.7	1.0
<u>STRIP 2</u>						
Δ 1	Cass	1943		(739100)	-0.1	-0.6
Δ 3	Ref. Mon.	16, 1911		(747100)	-0.5	3.4
Δ 5	Kolos	1984		(752100)	-0.1	-4.4
Δ 6	Ramp	1984		(755100)	-3.1	-0.1
	Tie from	Strip 6		(793803)	2.8	1.6
<u>STRIP 3</u>						
	Tie from	Strip 2		(748804)	-1.2	-0.8
	Tie	"	" "	(746804)	1.7	1.0
	Tie	"	" "	(745805)	-0.2	0.9
	Tie	"	" "	(744805)	0.5	-2.4
	Tie	"	" "	(743801)	1.0	-0.9
	Tie	"	" "	(742804)	-2.1	-1.6
	Tie	"	" "	(741805)	-1.0	5.8
	Tie	"	" "	(740801)	1.3	-2.1
<u>STRIP 4</u>						
	Tie from	Strip 6		(792303)	0.5	-3.4
	Tie	"	" "	(792802)	1.0	-4.4
	Tie	"	" 2	(713802)	-4.2	5.0
	Tie	"	" "	(714801)	-1.1	2.0
	Tie	"	" "	(715801)	1.7	0.9
	Tie	"	" "	(716801)	1.5	0.4
	Tie	"	" "	(717801)	1.2	0.8
	Tie	"	" "	(718802)	1.2	-0.7
	Tie	"	" "	(719801)	-1.8	-0.7

STRIP 5

	Tie from Strip 3	(721801)	-0.5	0.3
	Tie " " "	(722801)	0.4	-0.4
	Tie " " "	(719804)	1.0	-0.6
	Tie " " "	(720801)	-0.9	0.7
4	Dike 387, 1984	(700100)	-19.9	6.5

STRIP 6

Δ 7	McKay 1984	(788100)	-0.6	-0.0
Δ 8	Tour 1980	(793100)	3.8	-0.1
8A	Tour 1980 Sub Pt. A	(793110)	3.8	-0.8
	Tie from Strip 7	(811803)	1.4	1.6
	Tie " " "	(813801)	-1.1	-3.5
	Tie " " "	(815801)	-2.7	-1.0
	Tie " " "	(818801)	-2.4	1.9
	Tie " " "	(818803)	-2.3	2.1

STRIP 7

Δ 11	Clear 388 1984	(809100)	0.3	-0.1
Δ 10	Marina 1984	(813100)	-1.3	0.2
Δ 9	State 1984	(815100)	1.5	0.3
Δ 6	Ramp 1984	(818100)	-0.4	-0.1

STRIP 8

	Tie from Strip 7	(811805)	0.2	0.2
	Tie " " "	(813804)	0.7	-0.2
	Tie " " "	(816804)	-3.2	-1.0
	Tie " " "	(817806)	2.0	-1.2
	Tie " " "	(817807)	1.7	0.1
	Tie " " "	(817808)	-0.7	2.0

Δ Stations held in the strip adjustments

Saint Marys River, Michigan

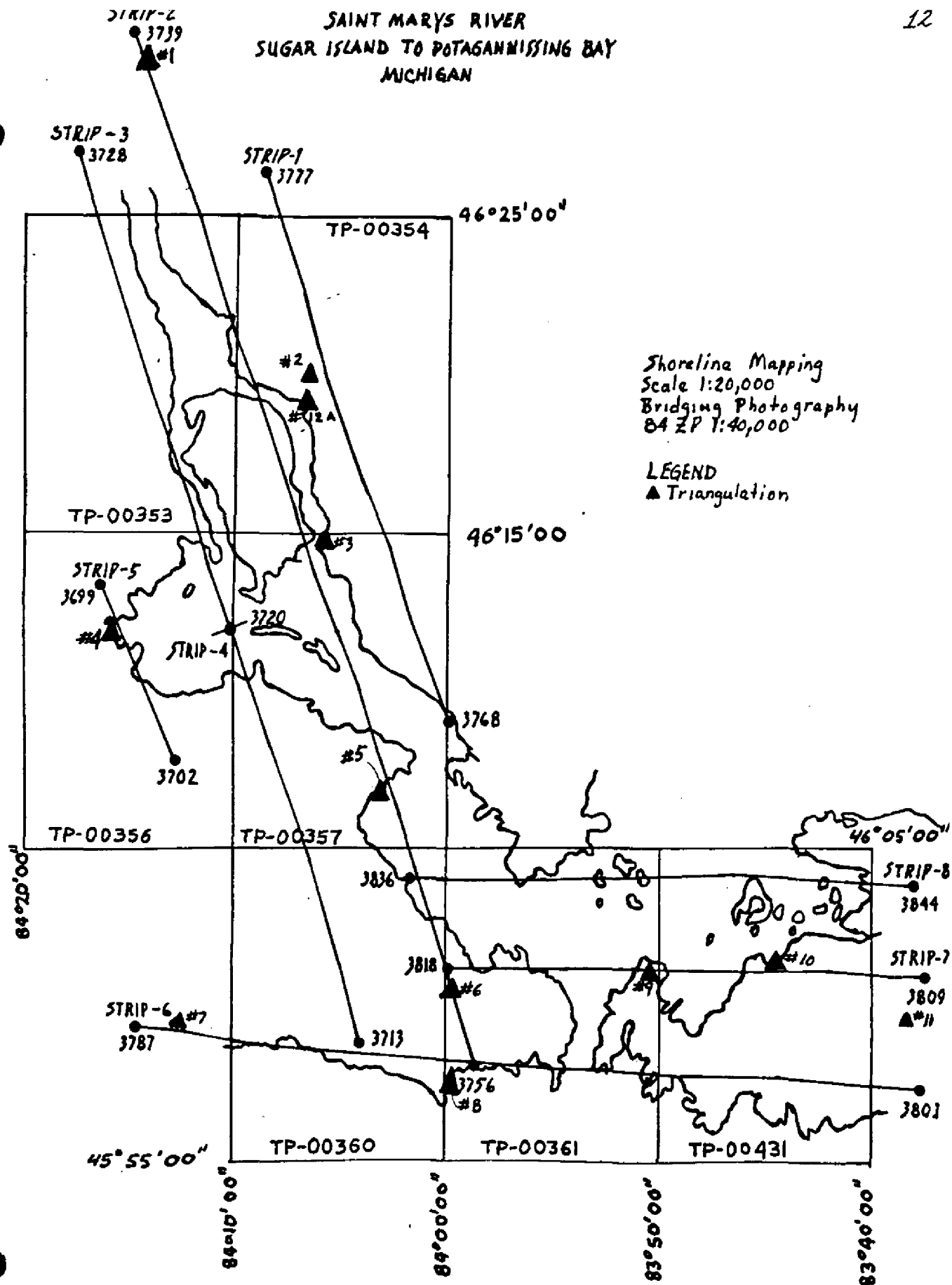
CM-8412

January 1985

Ratio values for 1:40,000 scale, black and white bridging
photographs.

84 ZP 3768-3777	x2.03
3739-3756	x2.03
3720-3728	x2.03
3713-3720	x2.04
3699-3702	x2.05
3790-3801	x2.04
3811-3818	x2.04
3836-3844	x2.04

SAINT MARYS RIVER
SUGAR ISLAND TO POTAGAMISSING BAY
MICHIGAN



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. TP-00357	JOB NO. CM-8412	GEOELECTRIC DATUM N.A. 1927		ORIGINATING ACTIVITY Unit, AMC, Norfolk, VA		
STATION NAME KOLOS, 1984 (Field position)	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER 5	COORDINATES IN FEET STATE Michigan ZONE East		GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	REMARKS
	Project Control Record Bk		X=		ϕ 46 06 52.037	
			Y=		λ 84 03 11.727	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
			X=		ϕ	
			Y=		λ	
COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE	
LISTED BY R. Kravitz		DATE 5-3-85	LISTING CHECKED BY W. McEmore, Jr.		DATE 5-23-85	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE	

COMPILATION REPORT
TP-00357

31 - DELINEATION

Delineation was accomplished using stereo instrument compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:40,000 scale bridging/compilation black-and-white photographs. All photographs used to compile this map are listed on NOAA form 76-36B. The photography was adequate.

32 - CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated January, 1985.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

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

35 - SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details were compiled from office interpretation of the photographs. The shoreline compiled was the visible line of contact between land features and the water surface at the time of photography. Based on the International Great Lakes Datum (1955) the water level taken at DeTour Village, Michigan gage was 579.53 feet.

36 - OFFSHORE DETAILS

Offshore details were compiled by instrument methods as described in item #31.

37 - LANDMARKS AND AIDS

There are 1 landmark and 13 aids within the mapping limits of this manuscript. Among these, no landmarks and 6 aids were located photogrammetrically. Two of the aids, Winter Point Range Front Light and Winter Point Range Front Passing Light are located on the same structure.

Appropriate information was prepared on the 76-40 form and submitted with this map.

38 - CONTROL FOR FUTURE SURVEYS

None.

TP-00357

39 - JUNCTIONS

Refer to the Data Record Form 76-36B, Item 5 of the Descriptive Report.

40 - HORIZONTAL AND VERTICAL ACCURACY

See Item #32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Quadrangles:
Munuscong, Mich., dated 1953, photorevised 1976, scale 1:24,000
Munuscong NE, Mich.-Ontario, dated 1953, photorevised 1976, scale 1:24,000
Goetzville, Mich.-Ontario, dated 1964, scale 1:24,000
Sault Ste Marie, Canada-USA, 41k, dated 1977, scale 1:250,000

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts:
14882, 27th edition, dated October 2, 1982, scale 1:40,000
14883, 35th edition, dated December 13, 1980, scale 1:40,000
14880, 26th edition, dated December 12, 1981, scale 1:120,000
14860, 29th edition, dated March 10, 1984, scale 1:500,000

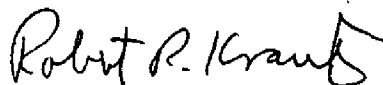
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

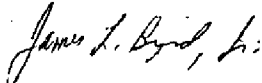
None.

Submitted by:



Robert R. Kravitz
Cartographic Technician
17 May 1985

Approved:



James L. Byrd, Jr.
Chief, Coastal Mapping Unit

JUL 10 1985

GEOGRAPHIC NAMES

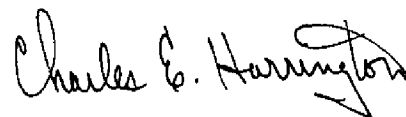
FINAL NAME SHEET

CM-8412 (St. Marys River, Michigan)

TP-00357

Birch Point
Court Point
Everens Point
~~Gogmain River~~ Gogomain River *GH*
Hay Point
Lime Island
Moon Island
Munuscong Channel
Munuscong Lake
Neebish Island
Pilot Island
Point aux Frenes
Raber
Raber Bay
Rains Island
Richardson Creek
Richardson Point
Rocky Point
Round Island
Saint Joseph Island
Saint Marys River
Twin Islands
Two Tree Island
Two Tree River
Winter Point

Approved by:



Charles E. Harrington
Chief Geographer
Nautical Charting Division

REVIEW REPORT
TP-00357
SHORELINE

61 - GENERAL STATEMENT

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. and Canadian quadrangles:

Munuscong, Mich., dated 1953, photorevised 1976, scale 1:24,000

Munuscong NE, Mich.-Ontario, dated 1953, photorevised 1976, scale 1:24,000

Goetzville, Mich.-Ontario, dated 1964, scale 1:24,000

Sault Ste Marie, Canada-USA, 41k, dated 1977, scale 1:250,000

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

No contemporary hydrographic survey was conducted prior to this shoreline mapping project.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts:

14882, 27th edition, dated October 2, 1982, 1:40,000 scale

14883, 35th edition, dated December 13, 1980, 1:40,000 scale

There are numerous areas which indicate significant shoreline discrepancies with the map. Also, there are various differences between the charted nonfloating navigational aids and the 1985 U.S. Coast Guard Light List.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

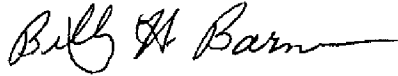
Submitted by:

Jerry L. Hancock

Jerry L. Hancock
Final Reviewer

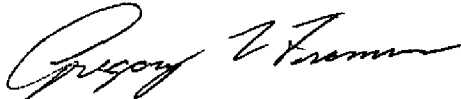
TP-00357

Approved for forwarding:

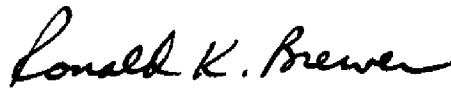


Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved:



Chief, Photogrammetric Operations,
Rockville



Chief, Photogrammetry Branch,
Rockville

Replaces C&GS Form 367.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

ORIGINATING ACTIVITY	
<input type="checkbox"/> HYDROGRAPHIC PARTY	<input type="checkbox"/> PHOTO FIELD PARTY
<input type="checkbox"/> GEODETIC PARTY	<input checked="" type="checkbox"/> COMPILATION ACTIVITY
<input type="checkbox"/> PHOTO FIELD PARTY	<input type="checkbox"/> FINAL REVIEWER
<input type="checkbox"/> QUALITY CONTROL & REVIEW GRP.	<input type="checkbox"/> COAST PILOT BRANCH

(See reverse for responsible personnel)

CHARTING NAME	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
	Coastal Mapping Unit	Michigan	Saint Marys River	May 1985

The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO. JOB NUMBER SURVEY NUMBER DATUM

CM-8412 TP-00357 N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION				METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
		LATITUDE		LONGITUDE		OFFICE	FIELD	
		° /	// D.M. Meters	° /	// D.P. Meters			
LIGHT	Round Island Light	46 06	33.1	84 01	11.6	84Z (P) 3752 5-16-84	14882 14860 14880	
LIGHT	Point Aux Frenes Light 21	46 08	14.9	84 01	17.0	84Z (P) 3751 5-16-84	14882	
LIGHT	*Winter Point Range Front Light	46 13	33.860	84 08	38.739	84Z (P) 3748 5-16-84	14883	
LIGHT	*Winter Point Range Front Passing Light (on same structure as Range Front Light)	46 13	33.860	84 08	38.739	84Z (P) 3748 5-16-84	14883	
LIGHT	Winter Point Range Rear Light	46 14	04.2	84 09	12.7	84Z (P) 3721 5-16-84	14883	
LIGHT	West Neebish Channel (Downbound) Light 14	46 13	10.2	84 09	57.9	84Z (P) 3721 5-16-84	14883	
	*Position determined by aerotriangulation.							

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	Robert R. Kravitz
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE 1. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions* require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection P - Photogrammetric Vis - Visually 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. TP-00357 (CM-8412)

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

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 Review.

[illegible]