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	
Map No.	Edition No.
TP-00361	1
Job No.	
CM-8412	
Map Classification	
CLASS III, FINAL	
Type of Survey SHORELINE	
LOCALIT	Y
State	
MICHIGAN	
General Locality	
SAINT MARYS RIVER	
Locality	
DETOUR VILLAGE	
1984 TO 19)
REGISTERED IN A	RCHIVES
DATE	

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	TYPE OF SURVEY	SURVEY TP- 00361
	☑ ORIGINAL	MAP EDITION NO. (1)
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS III (Final)
	☐ REVISED	лов <u>вик СМ-8412</u>
PHOTOGRAMMETRIC OFFICE	-	
Coastal Mapping Unit	TYPE OF SURVEY	JOB PH
Atlantic Marine Center, Norfolk, Virginia	ORIGINAL	MAP CLASS —
OFFICER-IN-CHARGE	RESURVEY	SURVEY DATES:
	A REVISED	19TO 19
A. Y. Bryson, CDR 1. INSTRUCTIONS DATED	<u></u>	
1. OFFICE	2,	FIELD
,		
Aerotriangulation October 18, 1984	Horizontal Control	April 19, 1984
	(Premarking)	
		·
II. DATUMS	OTHER (Co. 161)	
1. HORIZONTAL: XX 1927 NORTH AMERICAN	OTHER (Specify)	
	OTHER (Specify)	
MEAN HIGH-WATER MEAN LOW-WATER	,	
2. VERTICAL: MEAN LOWER LOW-WATER		
Water level MEAN SEA LEVEL 3. MAP PROJECTION	International Grea	t Lakes Datum (1955)
3. MAP PROJECTION	STATE 4.	GRID(S)
Transverse Mercator Projection	Michigan	East
5. SCALE 1:20,000	STATE	ZONE
III. HISTORY OF OFFICE OPERATIONS	L'AME	DATE
OPERATIONS 1. AEROTRIANGULATION BY	L. Harrod	Jan 1985
METHOD: Analytic LANDMARKS AND AIDS BY		Jan 1985
2. CONTROL AND BRIDGE POINTS PLOTTED BY	W. McLemore	Mar 1985
METHOD: Xynetics 1201 CHECKED BY	W. McLemore	Mar 1985
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	R. Kravitz	May 1985
COMPILATION CHECKED BY	W. McLemore	May 1985 _
INSTRUMENT: Wild B-8 CONTOURS BY SCALE: 1:20,000 CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY	R. Kravitz	June 1985
CHECKED BY	F. Mauldin	June 1985
contours by METHOD: Smooth drafted	N.A.	
CHECKED BY	N.A.	
SCALE: 1:20,000 HYDRO SUPPORT DATA BY	N.A.	
5. OFFICE INSPECTION PRIOR TO KNEXEMENT Final Reviews	F. Mauldin	Juhe 1985
ВУ	N.A.	Junga 1905
6. APPLICATION OF FIELD EDIT DATA CHECKED BY	N.A.	
7. COMPILATION SECTION REVIEW Class III BY	F. Mauldin	June 1985
8. FINAL REVIEW Class III BY	J. Hancock	July 1985
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	J. Hancock	July 1985
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	P. DEMPSEY E. L. DAUGHERTY	SEPT. 1985 SEP 1985

NOAA FORM 76-36B				NAT	TIONAL OCEA			T OF COMMERCE
(3-70)			TP-00	361		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		OCEAN SURVEY
		CO	MPILATIO	N SOURC	CES			
1. COMPILATION PHOT	OGRAPHY						 	
CAMERA(S)	OUKAI III		TVDE	S OF PHOT	FOCRABUY	<u> </u>		
Wild RC-10Z	(Z=153	.15 mm)	I TIPE	LEGEN			TIME REFE	RENCE
TXDEXXMGEXREGEREN	k Water	Level Gage	1			ZONE		Т
PREDICTED TIDES			(C) CO	LOR NCHROMAT	nc.	East		x 3€TANDARD
REFERENCE STATIS				FRARED		MERIDI	AN	DAYLIGHT
TIDE CONTROLLED	PHOTOGRA	-H1				75th		
NUMBER AND T	YPE	DATE	TIM	E _	SCALE		STAGE OF	TXDEXRiver
84Z(P)3793-379	7/	5-16-84	09:58	,	1.40.000	- 570	E 2 EL /	Level
84Z(P)3/93-3/9 84Z(P)38 1 5-3818		5-16-84	10:17		1:40,000		53 ft. 53 ft.	
84Z(P) 3836-3840	a contract of	5-16-84	10:17		1:40,000		53 ft.	
042(1)3636-3640	,	5-10-64	10:37	'	1:40,000	, 519.	J3 IC.	
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		1						
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REMARKS			• .					
1		the time of	photogr	caphy is	: indicat	ed as r	ecorded i	rom DeTour
Village	e, Michie	gan gage.						
2. SOURCE OF MEAN H	IIGH-WATER	LINE:						
1 · The ter	m "Mean	High Water I	ine" ic	not an	mlicable	The	choreline	ic Jenion
		ble line of o		_	_			
		tion of the s				_		
		black-and-wh					_	
				·	, , -		- 51	
								•
3. SOURCE OF MEAN L	OW-WATER	OR MEAN LOWER L	OW-WATER	LINE:	·			
This ite	em is not	t applicable	to the	project				
				•				
								<u> </u>
4. CONTEMPORARY HY	OROGRAPH	IC SURVEYS (List of	only those s	urveys that	are sources fo	r photogram	metric survey i	n(ormation.)
SURVEY NUMBER (DATE(S)	SURVEY CO	PY USED	SURVEY	NUMBER	DATE(S)	SUBVE	Y COPY USED
TOME TO THE TENT		35721 00]	.,9,5561	27. (2)	30,00	
								1
5. FINAL JUNCTIONS								
NORTH	ŢE	AST		SOUTH		T T	WEST	
No Survey_	1	TP-00431		N/a	Survey]	TP-0	0360
REMARKS		11 00404			OUT ACA			
								}

NOAA FORM 76-36 (3-72)	c		NATIONAL OCEAN	IIG AND ATMOSPHERI	
		HISTORY OF FIELD	OPERATIONS	NATION	IAL OCEAN SURVEY
I. EXXFIELDXXX	HECTION KOPE	·	D EDIT OPERATION	·	
	OP	ERATION	N/	AME	DATE
1. CHIEF OF FIEI	LD PARTY		J. Dunford		May 1984
		RECOVERED BY	R. James		May 1984
2. HORIZONTAL	CONTROL	ESTABLISHED BY	R. James		April/May84
		PRE-MARKED OR IDENTIFIED BY	R. James		April/May84
		RECOVERED BY	N.A.		
3. VERTICAL CO	NTROL	ESTABLISHED BY	N.A.		
,		PRE-MARKED OR IDENTIFIED BY	N.A.		
	R	ECOVERED (Triangulation Stations) BY	N.A.	· · · · · · · · · · · · · · · · · · ·	
 LANDMARKS A AIDS TO NAVIG 		LOCATED (Field Methods) BY	N.A		<u> </u>
7103 10 11710		IDENTIFIED BY	N.A.		
		TYPE OF INVESTIGATION			<u> </u>
 GEOGRAPHIC I INVESTIGATIO 		COMPLETE BY	1		
1117237104710	•••	SPECIFIC NAMES ONLY			
		XX NO INVESTIGATION	N.A.		
6. PHOTO INSPEC		CLARIFICATION OF DETAILS BY	N.A.		
7. BOUNDARIES A		SURVEYED OR IDENTIFIED BY	N.A.		<u></u>
I. HORIZONTAL		NTIFIED	2. VERTICAL CONT	TROL IDENTIFIED	
Premarked	(paneled)		N.A.		
PHOTO NUMBER	(panorea)	STATION NAME	PHOTO NUMBER	STATION DE	SIGNATION
		 .	PHO TO NOMBER	31ATION DE	SIGNATION
84Z(P)3815	E .	1984 (paneled direct)			
84Z (P) 3793		980 (paneled direct)	1		
84Z(P)3818	RAMP, IS	984 (paneled direct)			
			,		
3. PHOTO NUMBE	RS (Clatificati	on of details)			
N. 7					
N.A.	ND AIDS TO N	AVIGATION IDENTIFIED			
4. LANDMARKS A	ND AIDS IO N	AVIGATION IDENTIFIED			
None		,			
PHOTO NUMBER		OBJECT NAME	PHOTO NUMBER	OBJECT	NAME.
THO TO HOMOLK		OBJECT HAME	PHOTO NOMBER	083201	NAME
					:
	1				

7.	SUPPLEMENTAL	MAPS AND PLANS
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5. GEOGRAPHIC NAMES:

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

REPORT

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6. BOUNDARY AND LIMITS:

3 Forms 76-53 (CSI Cards) Project Field Report

XX NONE

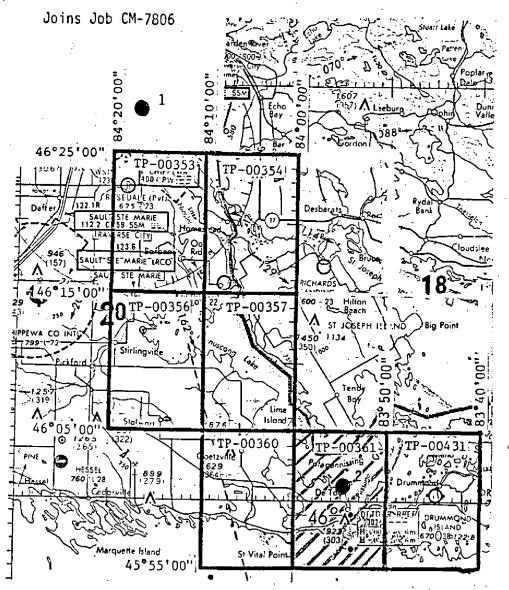
REPORT

NOAA FORM 76-36D (3-72)		NATIONAL OCEANIC	U. S. DEPARTMEN AND ATMOSPHERIC	
	RECO	RD OF SURVEY USE		
I. MANUSCRIPT COPIES	MPILATION STAGE		DATE MANUSCRI	PT FORWARDED
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	
Compilation complete	June 1985	Class III Manuscript	none	none
Final Review, Class III	July 1985	Final Class III Map	8/9/85	8/9/85
II. LANDMARKS AND AIDS TO NAVIG	ATION			
1. REPORTS TO MARINE CHART	IVISION, NAUTICAL	DATA BRANCH		
NUMBER CHART LETTER	DATE FORWARDED	REI	MARKS	
2	8-9-85	Landmarks and Aids for	Charting	
				•
		PILOT BRANCH. DATE FORWARDER, AERONAUTICAL DATA SECTION.		
III. FEDERAL RECORDS CENTER DA	·			

ACCOUNT FOR EXCEPTIONS:

			•
4.	DATA TO ESDEDAL DECORDS CENTER	DATE FORWARDED.	

IV. SURVEY	EDITIONS (This section shall b	e completed each time a new n	mep edition is registered)
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
SECOND	TP(2)	PH	REVISED RESURVEY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS
		ľ	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
THIRD	TP(3)	РН	AEVISED RESURVEY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS
			□ □ □ □ □ □ □ □ V. □ □ FINAL
<u></u> .	SURVEY NUMBER	JOB NUMBER /	TYPE OF SURVEY
FOURTH	TP(4)	PH	REVISED RESÚRVÉY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS
EDITION		i	DII. DIII. DIV. DV. DFINAL



= 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-00361

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 along the southern portion of St. Marys River at DeTour Passage which leads to Lake Huron.

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 July 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-00361

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. Paneled 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

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Chief, Aerotriangulation Unit

Don O. Norms

Saint Marys River Michigan CM-8412

Fit to Control -X and Y in Feet

	STR	IP 1	PT. NO.	<u>x</u>	<u>Y</u>
Δ	2 2A	Home CHS(9598) 1981 Horizontal Panel No. 2 " " " Sub. Sta. A	(774100) (774101)	-1.2 -1.6	7.5 7.7
Δ	12A	55 USLS - Sugar Island East Base 1878 Tie from Strip 2 Tie " " " Tie " " "	(773101) (742801) (744801) (745801) (746801) (747801) (748801) (749801) (750801) (751801)	-3.5 1.6 -0.1 1.2 0.6 0.1 2.7 -0.7 0.5 -0.7	3.9 0.4 -3.9 -2.8 -2.2 -2.8 -0.6 0.3 -1.1 1.0
	STR	IP_2			
Δ Δ Δ	5	Cass 1943 Ref. Mon. 16, 1911 Kolos 1984 Ramp 1984 Tie from Strip 6	(739100) (747100) (752100) (755100) (793803)	-0.1 -0.5 -0.1 -3.1	-0.6 3.4 -4.4 -0.1
	STR	<u></u>			
	CTD.	Tie from Strip 2 Tie " " "	(748804) (746804) (745805 (744805) (743801) (742804) (741805) (740801)	-1.2 1.7 -0.2 0.5 1.0 -2.1 -1.0 1.3	-0.8 1.0 0.9 -2.4 -0.9 -1.6 5.8 -2.1
	<u>51R.</u>	IP 4	(702002)	0.0	2.4
		Tie from Strip 6 Tie " " 2 Tie " " 2 Tie " " "	(792303) (792802) (713802) (714801) (715801) (716801) (717801) (718802) (719801)	0.5 1.0 -4.2 -1.1 1.7 1.5 1.2 1.2	-3.4 -4.4 5.0 2.0 0.9 0.4 0.8 -0.7

	STRIP 5	(=01001)	, 0 E	0.3
4	Tie from Strip 3 Tie " " " Tie " " " Tie " " " Dike 387, 1984	(721801) (722801) (719804) (720801) (700100)	-0.5 0.4 1.0 -0.9 -19.9	-0.4 -0.6 0.7 6.5
△ 7 △ 8 8A	STRIP 6 McKay 1984 Tour 1980 Tour 1980 Sub Pt. A Tie from Strip 7 Tie " " " Tie " " " Tie " " " Tie " " " Tie " " "	(788100) (793100) (793110) (811803) (813801) (815801) (818801) (818803)	-0.6 3.8 3.8 1.4 -1.1 -2.7 -2.4 -2.3	-0.0 -0.1 -0.8 1.6 -3.5 -1.0 1.9 2.1
△ 11 △ 10 △ 9 △ 6	STRIP 7 Clear 388 1984 Marina 1984 State 1984 Ramp 1984	(809100) (813100) (815100) (818100)	0.3 -1.3 1.5 -0.4	-0.1 0.2 0.3 -0.1
	Tie from Strip 7 Tie " " "	(811805) (813804) (816804) (817806) (817807) (817808)	0.2 0.7 -3.2 2.0 1.7 -0.7	0.2 -0.2 -1.0 -1.2 0.1 2.0

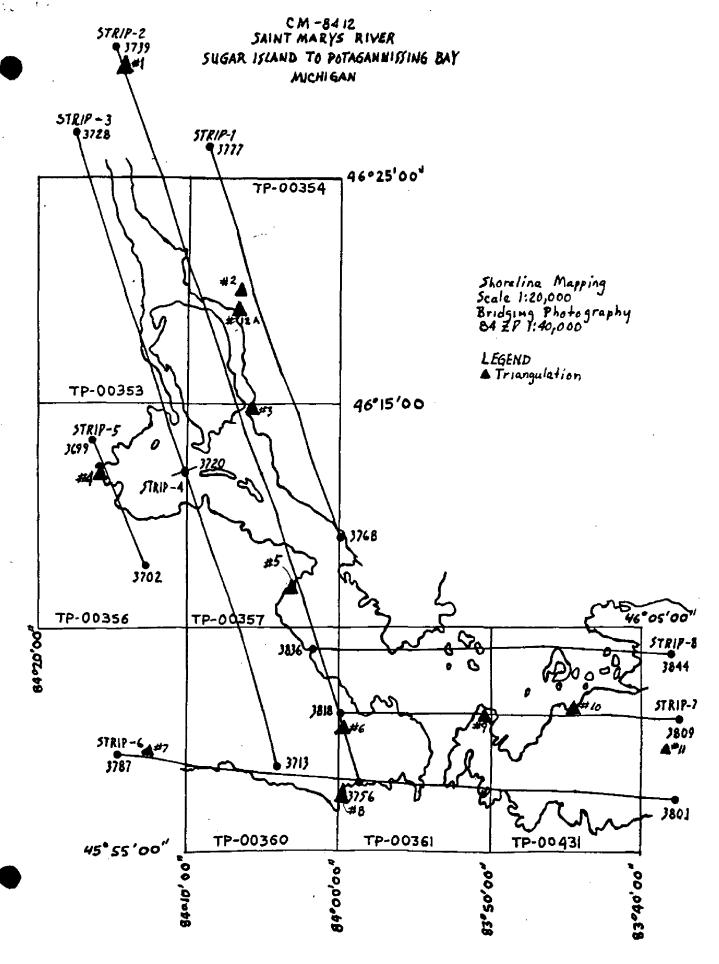
Stations held in the strip adjustments

Δ

Saint Marys River, Michigan CM-8412 January 1985

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

84	ΖP	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



NOAA FORM 76-41 (6-75)					U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
		DESCRIPIN	DESCRIPTIVE REPORT CONTRUL RECORD		
MAP NO.	JOB NO.		GEODETIC DATUM	ORIGINATING ACTIVITY	IVITY Coastal Mapping
TP-00361	CM-8412	12	N.A. 1927	AMC,	
	SOURCE OF	AEROTRI-	COORDINATES IN FEET Michigan	C POSITION	
STATION NAME	INFORMATION (Index)	POINT	STATE East	φ LATITUDE λ LONGITUDE	REMARKS
	Project	1	=χ	φ 46 00 36.010 ´	
RAMP, 1984	Control Record Bk	755100	j-		Field Position
ŀ	Project		χ=	57	
TOUR, 1980	Control Record Bk	, 8	ĝ=	59	Field Position
	Project		χ=	00	
STATE, 1984	Control Record Bk	9 '	y=	51 14	Field Position
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			<i>y</i> =	γ	
			=χ	ф	
			y:	~	
COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE
Listep BY R, Kravitz		DATE 5-20-85	LISTING CHECKED BY F. Mauldin		DATE 6-10-85
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE
		SUPERSEDES NO	ES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE	:H IS OBSOLETE,	

COMPILATION REPORT TP-00361

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

A comparison was made with the following Canadian chart: 2295, 4th edition, Jan. 25, 1985, scale 1:75,000.

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 $\underline{5}$ landmarks, and $\underline{9}$ aids within the mapping limits of this manuscript. Among these $\underline{5}$ landmarks and $\underline{8}$ aids were either located or verified photogrammetrically. Appropriate information was prepared on the 76-40 forms and submitted with this map.

38 - CONTROL FOR FUTURE SURVEYS

None.

TP-00361

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. and Canadian Quadrangles: Whitney Bay, Mich., 1964, photorevised 1976, scale 1:24,000 Lime Island, Mich.-Ont., 1964, scale 1:24,000 DeTour Village, Mich., 1964, scale 1:24,000 Burnt Island, Mich.-Ont., 1964, photoinspected 1976, scale 1:24,000 St. Joseph Island, 41J/4, Edition 3, 1975, scale 1:50,000 (Canadian).

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS chart: 14882, 27th edition, scale 1:40,000, dated October 2, 1982 14880, 26th edition, scale 1:120,000, dated December 12, 1981 14881, 24th edition, scale 1:80,000, dated September 11, 1982.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by: .

Cartographic Technician

7 June 1985

Approved:

James L. Byrd, Jr.

Jane J. By of fr.

Chief, Coastal Mapping Unit

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8412 (St. Marys River, Michigan)

TP-00361

Andrews Island Andrews Reef Archibald Island Arnold Island Barbed Island (Does not exist) Barbed Point Bellevue Island Bennett Point Big Trout Island Bird Island Black Rock Point Butterfield Island Carlton Bay Cass Island Crab Island Crow Island De Tour Passage De Tour Village Dix Point Drummond Island Duck Island Duncan Island Elliot Island - Point gatt Espanore Island Fairview Cove Fisher Island Frying Pan Island Gaffney Point Garden Island Gut Port Janden Island Jones Island Lake Huron Sweets Island ALA Sweets Point GAH

La Pointe Lime Island Little Cass Island Little Lime Island Little Trout Island Macomb Island 914 Maple Island Maud Bay Old Fort St. Joe Point Olmstead Bay Olmstad Bay OKH Parish Lake Peters Island Pipe Island Pipe Island Twins Pirate Island Point Anderson Point De Tour Potagannissing Bay Rains Point Rice Point Roggs Bay Saint Joseph Island Saint Marys River Saint Vital Bay Saint Vital Point Seymour Bay Sims Point Squaw Island Strawberry Island Sturgeon Bay -Sturgeon-Island Surgeon Island Whitney Bay

Approved by:

Charles E. Harrington Chief Geographer

Nautical Charting Division

REVIEW REPORT TP-00361 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:
Lime Island, Mich.-Ont., 1964, scale 1:24,000
DeTour Village, Mich., 1964, scale 1:24,000
Burnt Island, Mich.-Ont., 1964, photoinspected 1976, scale 1:24,000
Whitney Bay, Mich., 1964, photorevised 1976, scale 1:24,000
St. Joseph Island, 41J/4, edition 3, 1975 scale 1:50,000

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 (1:20,000 scale inset) 14881, 24th edition, dated September 11, 1982, 1:80,000 scale.

There are various areas which indicate shoreline discrepancies with the map. These discrepancies were addressed on the Chart Maintenance Print.

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

TP-00361

Approved for forwarding:

Billy H. Barnes

Chief, Photogrammetric Section, AMC

Approved:

Chief, Photogrammetric Operations, Rockville

Chief, Photogrammetry Branch, Rockville

	(8-74)			1 4 4 5 5 5	350 350	A MCONTON	C ADMINISTRATION	HYDROGRAPHIC PARTY	JARTY
Replaces C&GS Form 567.	:	XXXIDEXBR L	MARKS !	FOR CHA	RTS		ANDWARKS FOR CHARTS		,
XXTO BE CHARTED TO BE REVISED	ED REPORTING UNIT (Field Perty, Ship or Office) D Coastal Mapping Unit	STATE		LOCALITY			DATE		T1V1TY /
TO BE DELETED		Michigan		Saint M	Saint Marys River	ver	6/1/85	COAST PILOT BRANCH	ANOH SENER
I he following objects OPR PROJECT NO.	jects MAVE MAVE NOT XX been inspected from segward to determine their value as landmarks.	SURVEY NUMBER	Ward to det	ermine thei	r value as	fandmarks.		(see tavelse for tesponsible personnel)	ising bersonner)
			N	N.A. 1927	7		METHOD AND DA	METHOD AND DATE OF LOCATION	
	CM-8412	TP-00361		POSITION	NOI		(See instructions	(See instructions on reverse side)	CHARTS
CHARTING (F	DESCRIPTION (Record resson for deletion of landmark or aid to navigation. Show triengulation station names, where applicable, in parentheses)	or aid to navigation. papplicable, in parentheses)	• / D.M.	UDE /// /// D.M. Meters	LONGITUDE	TUDE // D.P.Meters	OFFICE	FIELD	AFFECTED
R RELAY MAST			45 58	35.5	83 54	53.8	842(P)3795 5~16-84		14882
STACK*			45 59	07.312	83 52	42.044	84Z(P)3795 5-16-84		14882
TANK*			45 59	29.298	83 54	13.821	84Z (P) 3795 5-16-84		14882
SPIRE*		·	45 59	35.913	83 54	05.308	84Z(P)3795 5-16-84		14882
SPIRE*			45 59	39.634	83 54	07.786	84Z(P)3795 5~16-84		14882
	*Positioned by aerotria	aerotriangulation.							
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A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbol Enter the applicable data by symbol P - Photogramme P - Photogramme L - Located Vis - Visually V - Verified Vis - Field ident 1 - Triangulation 5 - Field ident 2 - Traverse 6 - Theodolite 3 - Intersection 7 - Planetable 4 - Resection 8 - Sextant	FFICE (DENTIFIED AND LOG FFICE (DENTIFIED AND LOG nter the number and data ay, and year) of the pho- dentify and locate the and XAMPLE: 75E(C)6042 8-12-75	FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	FUSITIONS DETERMINED AND/OR VERIFIED	OBJECTS INSPECTED FROM SEAWARD	TYPE OF ACTION
of of	VED OR VERIFIED data by symbols as follows: - Photogrammetric /is - Visually - Field identified - Theodolite / - Planetable - Sextant	(Consult Photogrammetric Instructions No. 64, FIELD (Cont'd) B. Photogram entry of date of graph used to EXAMPLE:	NATE OF THE CONTRACT OF THE PROPERTY OF THE PR	Robert R. Kravitz		RESPONSIBLE PERSONNEL
8-12-75 TRIC FIELD r in part, mmetric me	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a t angulation station is recovered, enter ' Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 8-12-75 Enter 'V+Vis.' and date. FXAMPLE: V-Vis	n → ⇒ i	THOD AND DATE OF LOCATION	,		SONNEL
POSITIONS are dependent upon control established thods.	ION RECOVERED aid which is also a tri- is recovered, enter 'Triang. recovery. Rec. VISUALLY ON PHOTOGRAPH date.	Cont'd) Cont'd) Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photo- graph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(t)2982	REVIEWER QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	FIELD ACTIVITY REPRESENTATIVE	PHOTO FIELD PARTY HYDROGRAPHIC PARTY GEODETIC PARTY OTHER (Specify)	ORIGINATOR

NOAA FORM 75-40 (8-74)

SUPERSEDES NOAA FORM 76-40 (2-71) WHICH IS OBSOLETE, AND EXISTING STOCK SHOULD BE DESTROYED UPON RECEIPT OF REVISION.

☆ U.S.GPO:1975-0-865-080/1155

NOAA FORM 76-40	e		Z Z	FOO LANCITAN	U ONE AND	S. DEPARTA	U.S. DEPARTMENT OF COMMERCE	ORIGINATING ACTIVITY	CTIVITY
Replaces C&GS Form 567	m 567.	NONFLOATING AIDS XOR XXANDMARKS FOR CHARTS	MAKKE	FOR CH	ARTS			HYDROGRAPHIC PARTY GEODETIC PARTY DHOTO FIELD BABTY	ARTY 17.
X TO BE CHARTED TO BE REVISED	ED REPORTING UNIT (Fleid Parry, Ship or Office) Coastal Mapping Unit	stATE Unit	 	LOCALITY			DATE	KA COMPILATION ACTIVITY FINAL REVIEWER	TIVITY
TO BE DELETED		Michigan	,]	Saint	Saint Marys River	River	6/7/85	COAST PILOT BRANCH	L & KEVIEW GK
The following objects OPR PROJECT NO.	ects H	AVE HAVE NOT XX been inspected from seaward to determine their value as landmarks JOB NUMBER SURVEY NUMBER DATUM	ward to de	termine the	ir value as	landmarks		(See reverse for responsible personnel)	sible personnell
			N.	.A. 1927			METHOD AND DATE OF LOCATION	FE OF LOCATION	
	CM-8412	TP-00361		POSITION	NOI		(See instructions	(See instructions on reverse side)	CHARTS
CHARTING (7	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentl	N k or aid to navigation. • applicable, in perentheses)	O / D.M.	r UDE // // // D.M. Meters	LONGITUDE	TUDE // D.P.Meters	OFFICE	FIELD	AFFECTED
EIGHT* (HORN)	DeTour Reef Light		45 56	56,810	83.54	11.097	84Z(P)3795 / 5-16-84		14882 /
LIGHT	Frying Pan Island Light	,	45 59	09,4	83 53	41.4	84Z(P)3816 / 5-16-84		14882
LIGHT*	DeTour Harbor Entrance	Light 2	45 59	44,203	83 53	56.789	84Z(P)3795 / 5-16-84		14882
LIGHT	Watson Reefs Light		46 00	23.5	83 53	58.6	84Z(P)3816 × 5-16-84		14882
LIGHT*	Pipe Island Light		46 00	58.873	83 53	57.380	84Z(P)3816 5-16-84		14882
LIGHT*	Pipe Island Twins Light	4	46 01	34,300	83 53	29.162	84Z(P)3816 5-16-84		14882
LIGHT*	Squaw Island Light		46 02	20,111	83 54	14.980	84Z(P)3817′ 5-16-84		14882
richt*	Sweets Point Light		46 02	19.297	83 56	09.636	84Z(P)3817 5-16-84		14882
	*Positioned by aerotria	aerotriangulation.							
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A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	Enter the applicable data by symbols F - Field P - Photogrammet L - Located Vis - Visually V - Verified 5 - Field identi 1 - Triangulation 5 - Field identi 2 - Traverse 6 - Theodolite 3 - Intersection 7 - Planetable 4 - Resection 8 - Sextant	OFFICE IDENTIFIED AND LOCATED OBJECTS L. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the bject. EXAMPLE: 75E(C)6042 FIELD FIELD		FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES.	FUSITIONS DETERMINED AND/OR VERIFIED	OBJECTS INSPECTED FROM SEAWARD	TYPE OF ACTION	
require entry of method of of field work. ermined by field obserupon ground survey methods.	data by symbols as follows: P - Photogrammetric Vis - Visually 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant	ATED OBJECTS (including month, tograph used to bject.	INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE O (Consult Photogrammetric Instructions No. 64,		Robert R. Kravitz		NAME	RESPONSIBLE PERSONNEL
翼っ 岩		FIELD (Cont'd) B. Photogrammetric field positions** entry of method of location or ver date of field work and number of t graph used to locate or identify t EXAMPLE: P-8-V 8-12-75 74L(C)2982	IC Instructions No. 64,	-	7			ERSONNEL
8-12-75 IC FIELD POSITIONS are dependent in part, upon control established etric methods.	aid which is also a tri- is recovered, enter 'Triang. recovery. lec.	mmetric field positions** require method of location or verification, field work and number of the photoed to locate or identify the object. P-8-V 8-12-75 74L(C)2982		REVIEWER QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	FIELD ACTIVITY REPRESENTATIVE	PHOTO FIELD PARTY HYDROGRAPHIC PARTY GEODETIC PARTY OTHER (Specity)	ORIGINATOR	

NOAA FORM 75-40 (8-74)

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SUPERSEDES NOAA FORM 76~40 (2~71) WHICH IS OBSOLETE, AND Existing stock should be destroyed upon receipt of revision.

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. __TP-00361 (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 Revie

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Pan Before After Verification Review Inspection Signed Via
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