

T-12098

T- 12098

NOAA FORM 76-35  
(6-80)U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## DESCRIPTIVE REPORT

THIS MAP WILL NOT BE FIELD EDITED

<i>Map No.</i> T-12098	<i>Edition No.</i> 1
<i>Job No.</i> PH-7118	
<i>Map Classification</i> FINAL CLASS III	
<i>Type of Survey</i> SHORELINE	
LOCALITY	
<i>State</i> MICHIGAN	
<i>General Locality</i> DETROIT RIVER	
<i>Locality</i> GROSS ILE-SOUTH	
19 71 TO 1978	
REGISTERED IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit, Atlantic Marine Center, Norfolk, VA		SURVEY TP. <u>12098</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III FINAL</u> JOB PH. <u>7118</u>	
OFFICER-IN-CHARGE  A. Y. Bryson, CDR		LAST PRECEDING MAP EDITION 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>	
Compilation August 11, 1977 Supplement I September 30, 1977 Supplement II December 06, 1978 Registration Class III May 14, 1984		Memo: Director, Lake Survey April 16, 1971 Control October 04, 1971	
<b>II. DATUMS</b>			
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 <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify) _____  International Great Lakes Datum 1955	
3. MAP PROJECTION  Lambert Conformal		4. GRID(S) STATE Michigan ZONE South	
5. SCALE 1:15,000		STATE _____ ZONE _____	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
<b>OPERATIONS</b>		<b>NAME</b>	
1. AEROTRIANGULATION BY METHOD: <u>Analytic</u> LANDMARKS AND AIDS BY		D. Brant June 1972 H. Eichert June 1972	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: <u>Coradomat</u> CHECKED BY		D. Brant August 1977 H. Eichert August 1977	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: <u>Wild B-8</u> SCALE: <u>1:15,000</u> CONTOURS BY		J. Roderick March 1979 J. Byrd, Neterer, Kravitz March 1979 N.A. N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: <u>Smooth drafted and graphic</u> CONTOURS BY SCALE: <u>1:15,000</u> CHECKED BY HYDRO SUPPORT DATA BY		J. Roderick May 1979 L. O. Neterer, Jr. Feb. 1980 N.A. N.A. N.A. N.A.	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		L. O. Neterer, Jr. Feb. 1980	
6. APPLICATION OF FIELD EDIT DATA BY		N.A.	
7. COMPILATION SECTION REVIEW CLASS III BY		N.A.	
8. FINAL REVIEW CLASS III BY		C. Blood June 1983	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		L. O. Neterer, Jr. July 1984	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		L. O. Neterer, Jr. "	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		P. Hawkins DEC. 1984 R. S. KORNSPAN FEB 1985	

T-12098  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) (Focal length L=152.21mm) Wild RC-8 "L","E" (Focal length E=		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED	TIME REFERENCE	
TIDE STAGE REFERENCE 152.71 <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY			ZONE Central MERIDIAN 90th	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
71 L(C) 4722-4727	May 4, 1971	Not needed	1:30,000	N.A.
71 L(C) 4712-4719	May 4, 1971	"	1:30,000	N.A.
71 L(C) 5103-5107	May 10, 1971	"	1:30,000	N.A.
77 E(C) 1068-1072	May 28, 1977	"	1:20,000	N.A.
77 E(C) 1094	May 28, 1977	"	1:20,000	N.A.
77 E(P) 9632-9635	April 26, 1978	"	1:20,000	N.A.

REMARKS The shoreline datum is the river level at the time of the May 14, 1971 photography. On this date the river level measured at the Gibraltar Gage was 571.96 feet or 3.36 feet above Lake Erie Low Water Datum.

2. SOURCE OF ~~MEAN HIGH-WATER LINE~~ SHORELINE:

The river level on May 4, 1871 was 571.57 feet. The river level on May 10, 1971 571.92 feet. The river level on May 28, 1977 was 571.96 feet. The river level on April 26, 1978 was 572.60 feet. All river levels were measured at the Gibraltar Gage.

Delineation of the shoreline was derived by photo interpretation of the above listed color 1971 compilation/bridging photographs and updated on the American side with the 1972 color photography and on the Canadian side with the 1978 panchromatic photography.

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

Not applicable.

## 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
T-12097	No survey	No survey	No survey

REMARKS

T-12098

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	NO INFORMATION AVAILABLE	
2. HORIZONTAL CONTROL	RECOVERED BY	
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY	
3. VERTICAL CONTROL	RECOVERED BY	
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED ( <i>Triangulation Stations</i> ) BY	
	LOCATED ( <i>Field Methods</i> ) BY	
	IDENTIFIED BY	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE BY	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (*Clarification of details*)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

NONE

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

NONE

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## 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	May 1979	Class III manuscript	Aug. 4, 1980	Aug. 4, 1980
Final Review, Class III	July 1984	Final Class III map No field edit performed	NOV 30 1984	

## II. LANDMARKS AND AIDS TO NAVIGATION

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

PAGES NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
7		NOV 30 1984	Aids for navigation.
2		NOV 30 1984	Landmarks 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 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	



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

T-12098

This 1:15,000 scale shoreline map is one of four maps that makeup project PH-7118, Detroit River, Michigan.

This project encompasses the Detroit River from the south entrance at Lake Erie, latitude  $42^{\circ}00'30''$  to the north entrance at Lake St. Clair, latitude  $42^{\circ}22'00''$ .

Correspondence from the Chief, Photogrammetry Branch dated May 14, 1984, called for the four maps to be registered as Class III Final maps.

Information concerning field work prior to compilation was not available.

Photographic coverage was provided in May 1971 for aerotriangulation using color film with the "L" camera (focal length 152.21 mm) at 1:30,000 scale. The same photography was used for compilation. Additional photography was taken in May 1977 and April 1978 to update compilation using the original control. The 1977 photography was used to update the American side of the river and the 1978 photography was used to update the Canadian side of the river. The 1977 photography was taken with color film using the "E" camera (focal length 152.71 mm) at 1:20,000 scale. The 1978 photography was taken with panchromatic film using the "E" camera at 1:20,000 scale.

Analytic aerotriangulation was performed at the Washington Science Center in April 1971.

Compilation was performed at the Atlantic Marine Center from office interpretation of the 1971, 1977 and 1978 photography in February 1980. The problem with the lower left corner of this map, referred to in the Project Instructions, was solved during compilation without the need of any additional photography.

Final Review was performed at the Atlantic Marine Center in July 1984. This map is to be registered as a Final Class III map.

This Descriptive Report is comprised of all information pertinent to the construction of this map.

The original base manuscript and all relevant data were forwarded to the Washington Science Center for final registration.

## FIELD INSPECTION

T-12098

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



PHOTOGRAMMETRIC PLOT REPORT  
Detroit River

June 1972

21. Area Covered

This report covers an area of the Detroit River south from latitude  $42^{\circ} 22'$  to latitude  $42^{\circ} 00'$ . This job was bridged for the Lake Survey Center and will be compiled direct on the Kelsh Plotter at a scale of 1:6,000.

22. Method

Four (4) strips of photographs (strips 1 thru 4) were bridged using analytical aerotriangulation methods. All Strips except strip 4 were adjusted to either premarked control stations or to control stations identified direct. A tie point (common image point) from strip 3 was used as a terminal control station in strip 4. This was necessary because the target for GRASSY was not visible on the photography. Ties were made between all strips. The accompanying sketch shows the location of the strips of photographs and the horizontal control stations used in the bridging. Data for the 1:6,000 scale compilation of work sheets were plotted by the Coradomat on the Michigan (south zone) Coordinate System. 571 P. 1111

23. Adequacy of Control

All horizontal control stations were premarked except for the following:

TRENTON RADIO STATION WGAR (center mast)  
WYANDOTTE MUNICIPAL WATER TANK  
WINDSOR AMBASSADOR BRIDGE North Tower  
WINDSOR AMBASSADOR BRIDGE South Tower  
WINDMILL PT' L.H.

Station GRASSY (USLS) was marked with a four (4) foot square. This target could not be seen on the 1:30,000 scale bridging photography and was not used in the adjustment. Horizontal control was adequate.

24. Supplemental Data

USCS quadrangles and maps (Mines and Technical Surveys of Canada) were used to provide vertical control for the strip adjustment.

2

25. Photography

The following RC-8 photography was used in bridging:

1:30,000 scale

Strip 1 - 71-L(C)-5611 thru 5618  
Strip 2 - 71-L(C)-4722 thru 4735  
Strip 3 - 71-L(C)-4707 thru 4715  
Strip 4 - 71-L(C)-5097 thru 5109

The photography was dark in the corners. This was not only troublesome during the bridging operation but may cause difficulty during compilation.

Respectfully submitted:

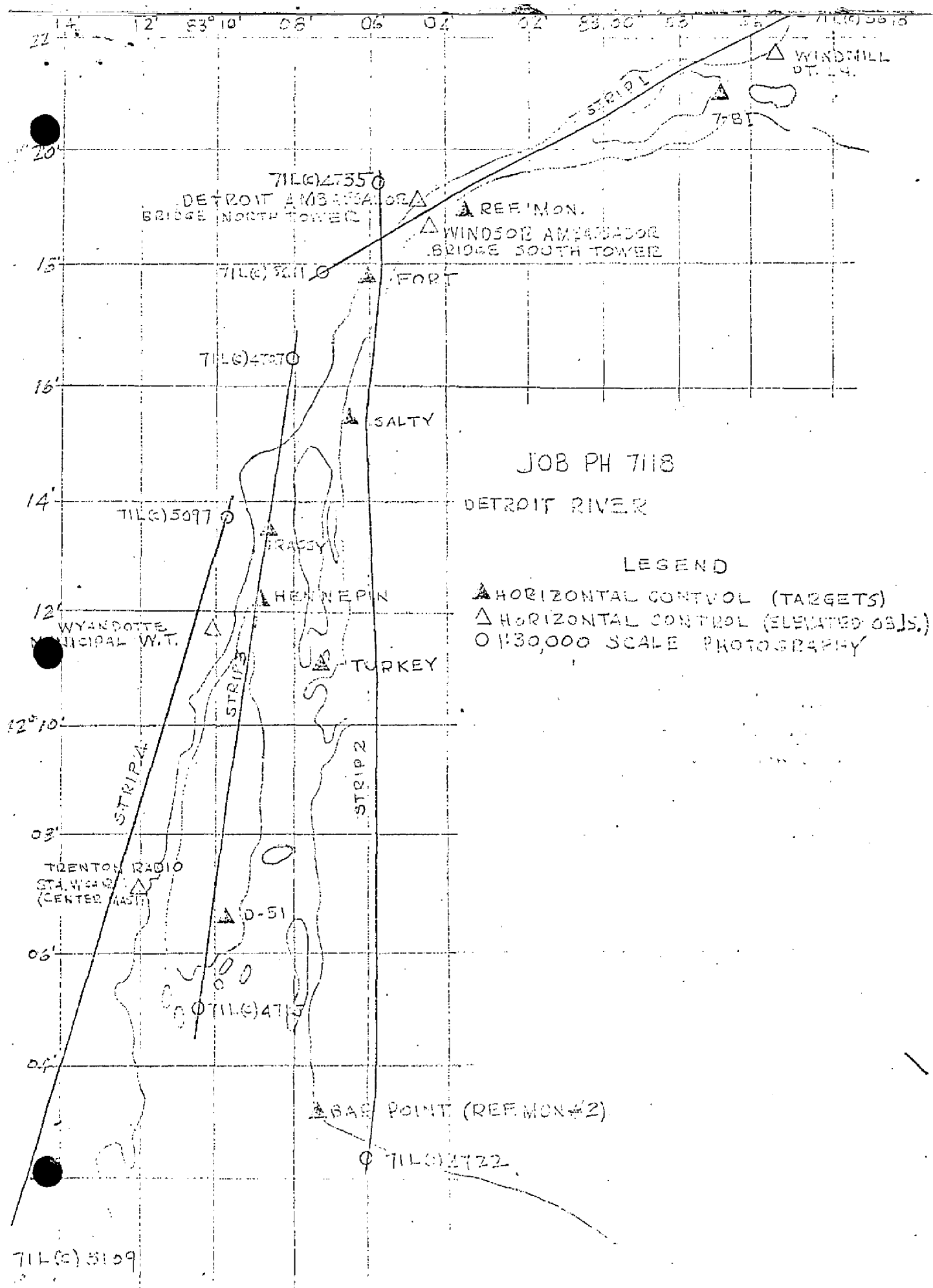


Donald M. Brant  
Cartographer

Approved and forwarded:



Henry P. Eichert, Chief  
Aerotriangulation Section



NOAA FORM 76-41  
(6-75)U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

## DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.		JOB NO.		GEODEIC DATUM		ORIGINATING ACTIVITY	
T-12098		PH-7118		N.A. 1927		Coastal Mapping Unit, AMC	
STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE ZONE		GEOGRAPHIC POSITION $\phi$ LATITUDE $\lambda$ LONGITUDE		REMARKS
TRENTON RADIO STATION, WCAR, CENTER MAST, 1957	420832 1084	02100	X= 2,308,122.26 Y= 244,636.33		$\phi$ 42°06'38.461" $\lambda$ 83°11'52.247"		
D-51, 1957	420832 1133	14100	X= 2,319,746.62 Y= 223,736.19		$\phi$ 42°06'38.461" $\lambda$ 83°11'52.247"		
REFERENCE MONUMENT NO. 2, (I.B.C.)	L.S.	23100	X= 2,330,604.399 Y= 240,621.574		$\phi$ 42°06'38.461" $\lambda$ 83°11'52.247"		
BAR POINT (USLS), 1910	420832 1003		X= 2,330,537.40 Y= 204,642.37		$\phi$ 42°06'38.461" $\lambda$ 83°11'52.247"		
POINT MOUILLEE(USE), 1957	420832 1017		X= 2,313,121.68 Y= 189,660.14		$\phi$ 42°06'38.461" $\lambda$ 83°11'52.247"		
DETROIT RIVER LIGHT NO. 24, 1942	IBC 12	26124	X= 42°07'17.228" Y= 83°07'28.320"		$\phi$ 42°07'17.228" $\lambda$ 83°07'28.320"		
DETROIT RIVER LIGHT NO. 21, 1942	IBC 12	26121	X= 42°06'49.959" Y= 83°07'38.518"		$\phi$ 42°06'49.959" $\lambda$ 83°07'38.518"		
DETROIT RIVER LIGHT NO. 19, 1942	IBC 12		X= 42°06'21.214" Y= 83°07'42.934"		$\phi$ 42°06'21.214" $\lambda$ 83°07'42.934"		
AMHERSTBURG CHURCH SPIRE, 1942	IBC 11	25112	X= 42°06'10.670" Y= 83°06'14.593"		$\phi$ 42°06'10.670" $\lambda$ 83°06'14.593"		
BOIS BLANC LIGHTHOUSE, 1942	IBC 11	25114	X= 42°05'12.920" Y= 83°07'10.509"		$\phi$ 42°05'12.920" $\lambda$ 83°07'10.509"		
COMPUTED BY F. Margiotta		DATE 8/23/77	COMPUTATION CHECKED BY A. C. Rauck, Jr.			DATE 9/15/77	
LISTED BY A. C. Rauck, Jr.		DATE 8/23/77	LISTING CHECKED BY F. Margiotta			DATE 8/23/77	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY			DATE	

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

COMPILATION REPORT  
T-12098

31 - DELINEATION

Delineation was accomplished using the B-8 stereoplotting instrument and graphic compilation methods. The map is based on office interpretation of the May 1971, 1:30,000 scale bridging/compilation color photographs. Supplemental photographs, flown in May 1977 and April 1978, were used to graphically update the American and Canadian sides, respectively, based on the original 1971 control. All photographs used to compile the map are listed on form 76-36B. The photography was adequate. The Pointe Mouillee area was adequately compiled using another strip of May 1971 photography. The additional bridging mentioned in the Project Instructions was not necessary. The times of photography were not needed because the river levels are recorded as a daily mean, since there is no actual tide.

32 - CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report dated June 1972.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

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

35 - SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details were compiled from office interpretation of the compilation photographs with the supplemental photographs used to update the map as described in Item #31. The shoreline compiled was the visible line of contact between land features and the water surface at the time of photography.

36 - OFFSHORE DETAILS

No unusual problems.

37 - LANDMARKS AND AIDS

Appropriate copies of 76-40 forms are submitted with this report.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

See the attached form 76-36B, item 5 of the Descriptive Report concerning junctions.

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Report dated June 1972.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey Quadrangles: Rockwood, Michigan-Ontario, scale 1:24,000, 1967, photorevised 1973; and Wyandotte, Michigan-Ontario, scale 1:24,000, 1967, photorevised 1973.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Survey chart: 14853, scale 1:15,000, 7th edition, dated April 17, 1976.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

*Joanne Roderrick*  
Joanne Roderrick  
Cartographer  
May 11, 1979

Approved,

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

REVIEW REPORT  
SHORELINE  
T-12098

61. GENERAL STATEMENT

See Summary included with this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with U.S.G.S. Quadrangles: Rockwood, Michigan-Ontario, dated 1967, photorevised 1973, scale 1:24,000; and Wyandotte, Michigan-Ontario, dated 1967, photorevised 1973, scale 1:24,000.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There is no contemporary hydrographic survey within the limits of this map.

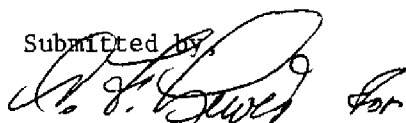
65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with NOS Charts: 14848, 45th edition, scale 1:30,000, dated August 21, 1982; 14853, 8th edition, scale 1:15,000, dated April 14, 1979; 14854, 9th edition, scale 1:15,000, dated October 15, 1983; and 14846, 7th edition, scale 1:15,000, dated April 10, 1982.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Submitted by,

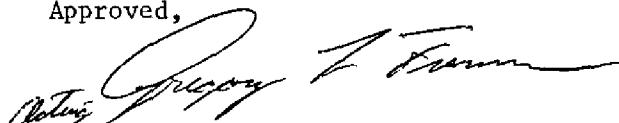
  
Lowell O. Neterer, Jr.  
Final Reviewer

Approved for forwarding,

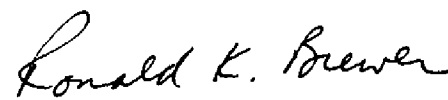


Billy H. Barnes  
Chief, Photogrammetric Section, AMC

Approved,



Gregory T. Funn  
Chief, Photogrammetric Section, Rockville



Ronald K. Brewer  
Chief, Photogrammetry Branch, Rockville

May 16, 1984

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7118 (Detroit River, Michigan)

TP-12098

Amherstburg ✓  
Amherstburg Channel ✓  
Bar Point ✓  
Bois Blanc Island ✓  
Brownstown Creek ✓  
Calf Island ✓  
Celeron Island ✓  
Cherry Island (locality) ✓  
Conrail (RR) ✓  
Detroit River ✓  
East Lead ✓  
Edmond Island ✓  
Elba Island ✓  
Fox Island ✓  
Frank and Poet Drain ✓  
Frenchman Creek ✓  
Gibraltar ✓  
Gibraltar Bay ✓  
Grosse Ile ✓  
Grosse Ile Municipal Airport ✓  
Hall Island ✓  
Hickory Island ✓

Hole-in-the-Wall ✓  
Horse Island ✓  
Huron River ✓  
Lake Erie ✓  
Livingston Channel ✓  
Maple Beach (locality) ✓  
Meso Island ✓  
Milleville Beach (locality) ✓  
Millman Island ✓  
Mouillee Marsh ✓  
Pointe Mouillee ✓  
Powder House Island ✓  
Round Island ✓  
Silver Creek ✓  
Stony Island ✓  
Sturgeon Bar ✓  
Sugar Island ✓  
Sunset Beach (locality) ✓  
Swan Island ✓  
Thorofare Canal ✓  
Vermer Channel ✓  
West Lead ✓

Approved by:

*Charles E. Harrington*

Charles E. Harrington  
Chief Geographer  
Nautical Charting Division



NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY	
NONEXHAUSTIVE LANDMARKS FOR CHARTS				LOCALITY		DATE		<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)	
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE			
Coastal Mapping Unit, AMC, Norfolk, VA <td colspan="2">Michigan <td colspan="2">Detroit River <td colspan="2">Oct. 1977 <td colspan="2"></td> </td></td></td>		Michigan <td colspan="2">Detroit River <td colspan="2">Oct. 1977 <td colspan="2"></td> </td></td>		Detroit River <td colspan="2">Oct. 1977 <td colspan="2"></td> </td>		Oct. 1977 <td colspan="2"></td>			
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.		SURVEY NUMBER		DATUM		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)	
OPR PROJECT NO.		JOB NUMBER		LATITUDE		LONGITUDE		OFFICE	
NA		PH-7118		T-12098		N.A. 1927			
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE ° / ' / D.M. Meters		LONGITUDE ° / ' / D.P. Meters		CHARTS AFFECTED	
R. MAST	North Westerly	42 06	40.77 1258	83 11	58.72 1349	77 E(C) 1072 May 28, 1977	14848		
R. MAST	North Center	42 06	40.68 1255	83 11	53.23 1200	"	"		
R. MAST	North Easterly	42 06	40.51 1250	83 11	45.66 1049	"	"		
R. MAST	West Center	42 06	38.63 1192	83 11	58.89 1353	"	"		
R. MAST	Center (Trenton Radio Station WCAR, Center Mast, 1957)	42 06	38.461	83 11	52.247	"	"		
R. MAST	East Center	42 06	38.44 1186	83 11	45.75 1051	"	"		
R. MAST	South Westerly	42 06	36.49 1126	83 11	58.89 1353	"	"		
R. MAST	South Center	42 06	36.40 1123	83 11	52.23 1200	"	"		
R. MAST	South Easterly	42 06	36.23 1118	83 11	45.74 1051	"	"		

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	FIELD ACTIVITY REPRESENTATIVE  OFFICE ACTIVITY REPRESENTATIVE  <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>8. 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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 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 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	<b>III. TRIANGULATION STATION RECOVERED</b> When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 <b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (6-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY							
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED				REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA				LOCALITY Detroit River				DATE Oct. 1977			
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.				STATE Michigan				SURVEY NUMBER T-12098				CHARTS AFFECTED			
OPR PROJECT NO. N.A.				JOB NUMBER PH-7118				DATUM N.A. 1927				METHOD AND DATE OF LOCATION (See instructions on reverse side)			
CHARTING NAME				DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)				POSITION				FIELD			
								LATITUDE ° / ' "				LONGITUDE ° / ' "			
								D.M. Meters				D.P. Meters			
*TR				42 05	12.920	83 07	10.509	78 E(C) 9634 April 26, 1978							
*TANK				42 06	50.88	83 06	30.82	78 E(P) 9633 April 26, 1978							
CHY				42 07	23.98	83 10	53.45	77 E(C) 1072 May 28, 1977							
CHY				42 07	22.07	83 10	53.20	"							
TANK				42 06	58.47	83 11	18.33	"							
ELEV ATOR				42 06	19.28	83 11	55.17	77 E(C) 1071 May 28, 1977							
STACK				42 07	18.50	83 10	50.93	77 E(C) 1072 May 28, 1977							
STACK				42 07	20.90	83 10	52.41	77 E(C) 1072 May 28, 1977							
* STACK				42 07	15.75	83 06	26.03	78 E(P) 9633 April 26, 1978							

\*These landmarks are on the Canadian side of the river.

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW	OFFICE ACTIVITY REPRESENTATIVE
ACTIVITIES	<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 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	<b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>
<b>*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</b>	



RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW	OFFICE ACTIVITY REPRESENTATIVE
ACTIVITIES	<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 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	<b>III. TRIANGULATION STATION RECOVERED</b> When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 <b>II. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
**FIELD POSITIONS are determined by field observations based entirely upon ground survey methods. **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
NONFLOATING AIDS <del>OR</del> <b>FOR CHARTS</b>										ORIGINATING ACTIVITY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)									
TO BE CHARTED <input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED		REPORTING UNIT (If not Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA		STATE Michigan		LOCALITY Detroit River		DATE Oct. 1977		METHOD AND DATE OF LOCATION (See instructions on reverse side)									
OPR PROJECT NO. N.A. 1927		JOB NUMBER PH-7118		SURVEY NUMBER T-12098		DATUM N.A. 1927		POSITION											
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE ° / ' / D.M. Meters		LONGITUDE ° / ' / D.P. Meters		OFFICE		FIELD		CHARTS AFFECTED							
**LIGHT	Detroit River Pier Light 24D	42 02	24.21 747	83 08	4.17 96	78 E(P) 9635 April 26, 1978	NOT IDENTIFIABLE		14848										
**LIGHT	Bar Point Pier Light 29D	42 04	13.51 417	83 07	25.84 594	78 E(P) 9634 April 26, 1978		14848 14853											
**LIGHT	Bar Point Range Front Light 49D	42 04	37.47 1156	83 07	18.14 417	"		"											
**LIGHT	Bar Point Range Rear Light	42 04	43.11 1330	83 07	15.14 348	"		"											
**LIGHT	Hackett Reach Light 51D	42 05	12.70 392	83 07	3.95 91	"		"											
**LIGHT	Hackett Reach Light 53D	42 05	48.23 1488	83 06	48.35 1111	"		"											
**LIGHT	Hackett Reach Range Front Light	42 05	57.30 1768	83 06	45.08 1036	"		"											
**LIGHT	Hackett Reach Range Rear Light	42 05	1.36 42	83 07	3.13 72	"		"											
**LIGHT	Amherstburg Reach Light 61D	42 06				"		"											

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW	
ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> 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	<b>II. TRIANGULATION STATION RECOVERED</b> When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 <b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	



NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				NONFLOATING AIDS OR LANDMARKS FOR CHARTS				ORIGINATING ACTIVITY			
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED		ORIGINATING ACTIVITY			
TO BE CHARTED <input checked="" type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED		AMC, Norfolk, VA		Michigan		Detroit River		Oct. 1977				<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)			
OPR PROJECT NO.		JOB NUMBER		SURVEY NUMBER		DATUM		POSITION		OFFICE		FIELD			
NA		PH-7118		T-12098		N.A. 1927									
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station name, where applicable, in parentheses.)		LATITUDE ° / ' / D.M. Meters		LONGITUDE ° / ' / D.P. Meters									
**LIGHT	Livingstone Channel Light 14	42 04	16.98 524	83 07	52.18 1199			78 E(P) 9634 April 26, 1978		14848 14853					
**LIGHT	Livingstone Channel Light 15	42 05	08.72 269	83 07	52.22 1200			"		"					
**LIGHT	Livingstone Channel Light 16	42 05	08.23 254	83 07	45.34 1042			"		"					
**LIGHT	Livingstone Channel Light 17	42 05	58.25 1797	83 07	45.77 1052			78 E(P) 9633 April 26, 1978		"					
**LIGHT	Livingstone Channel Light 18	42 05	57.78 1783	83 07	38.70 889			"		"					
**LIGHT	Livingstone Channel Light 19 (Detroit River Light No. 19, 1942)	42 06	21.214	83 07	42.934			"		"					
**LIGHT	Livingstone Channel Light 20	42 06	25.33 781	83 07	35.07 806			"		"					
LIGHT	Livingstone Channel Light 21 (Detroit River Light No. 21, 1942)	42 06	49.959	83 07	38.518			"		"					
**LIGHT	Livingstone Channel Light 22	42 06	49.50 1527	83 07	32.03 736			"		"					

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>B. Photogrammetric field positions*</b> 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
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 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	<b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 <b>**PHOTOGRAMMETRIC FIELD POSITIONS</b> 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.	

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY	
NONFLOATING AIDS OR LANDMARKS FOR CHARTS		LOCALITY		DATE		<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)	
REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA		STATE Michigan		Detroit River		Oct. 1977	
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.		SURVEY NUMBER T-12098		DATUM N.A. 1927			
OPR PROJECT NO. NA		JOB NUMBER TH-7118		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)	
DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE ° / ' " D.M. Meters		LONGITUDE ° / ' " D.P. Meters		CHARTS AFFECTED	
LIGHT	Livingstone Channel Light 23	42 07	17.70 546	83 07	34.74 798	78 E(P) 9633 April 26, 1978	14848 14853
LIGHT	Livingstone Channel Light 24 (Detroit River Light No. 24, 1942)	42 07	17.228	83 07	28.320	"	"
LIGHT	Livingstone Channel Light 25	42 07	45.37 1400	83 07	31.22 717	"	"
LIGHT	Livingstone Channel Light 26	42 07	44.95 1387	83 07	24.68 567	"	"
LIGHT	Elba-Mar Boat Club Front Light					NOT IDENTIFIABLE	"
LIGHT	Elba-Mar Boat Club Rear Light					NOT IDENTIFIABLE	"
LIGHT	Gibraltar North Channel Range Front Light					"	"
LIGHT	Gibraltar North Channel Range Rear Light					"	"
LIGHT	Ford Yacht Club East Basin Range Front Light					"	"
LIGHT	Ford Yacht Club East Basin Range Rear Range					"	"

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64,	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field                      P - Photogrammetric L - Located                  Vis - Visually V - Verified 1 - Triangulation          5 - Field identified 2 - Traverse                6 - Theodolite 3 - Intersection          7 - Planetable 4 - Resection              8 - Sextant  <b>A. Field positions* require entry of method of location and date of field work.</b> EXAMPLE: F-2-6-L 8-12-75	<b>II. TRIANGULATION STATION RECOVERED</b> When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75  <b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75  <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>
<b>*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</b>	

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY			
NONFLOATING AIDS <del>ON CHARTS</del> FOR CHARTS.				LOCALITY				DATE			
REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA				STATE Michigan				Detroit River			
TO BE CHARTED TO BE REVISED TO BE DELETED				HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.				Oct. 1977			
OPR PROJECT NO.				JOB NUMBER				SURVEY NUMBER			
NA				PH-7118				T-12098			
CHARTING NAME				DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)				METHOD AND DATE OF LOCATION (See instructions on reverse side)			
				LATITUDE				LONGITUDE			
				° / ' " D.M. Meters				° / ' " D.P. Meters			
LIGHT				Ford Yacht Club West Basin Range Rear Light						NOT IDENTIFIABLE	14848 14853
LIGHT				Ford Yacht Club West Basin Range North Light						"	"
LIGHT				Gibraltar South Harbor Channel Light 1						"	"
LIGHT				Gibraltar South Harbor Channel Light 2						"	"
LIGHT				Gibraltar South Harbor Channel Range Rear Light						"	"
LIGHT				Gibraltar South Harbor Channel Range Front Light						"	"
LIGHT				Gibraltar South Harbor Channel Light 3						"	"
LIGHT				Gibraltar South Harbor Channel Light 4						"	"
LIGHT				Gibraltar South Harbor Channel Light 5						"	"
LIGHT				Gibraltar Middle Channel North Light						"	"

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE  <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>8. Photogrammetric field positions** require</b> 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
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 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	<b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75  <b>**PHOTOGAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	



RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64,	
OFFICE	FIELD (Cont'd)
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	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	III. TRIANGULATION STATION RECOVERED
1. 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	When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75
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
**FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	
**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	





RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW	OFFICE ACTIVITY REPRESENTATIVE
ACTIVITIES	<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER METHOD AND DATE OF LOCATION: (Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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	<b>FIELD (Cont'd)</b> <b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> 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	<b>II. TRIANGULATION STATION RECOVERED</b> When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 <b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

