

TP-00876

TP-00876

NOAA FORM 76-35 (9-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. TP-00876	Edition No. 1
Job No. CM-7811	
Map Classification FINAL, FIELD EDITED MAP	
Type of Survey SHORELINE	
LOCALITY	
State ILLINOIS - INDIANA	
General Locality CHICAGO LAKE FRONT	
Locality INDIANA HARBOR CANAL	
1978 TO 1981	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP 00876 MAP EDITION NO. (1) MAP CLASS FINAL JOB <del>XPH</del> CM-7811	
DESCRIPTIVE REPORT - DATA RECORD				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__	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division AMC, Norfolk, VA OFFICER-IN-CHARGE Max Ethridge, LCDR							
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation January 24, 1980 Compilation May 27, 1980				Horizontal Control June 12, 1978 Field Edit June 26, 1981			
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 <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify) International Great Lakes Datum, (1955) Lake Michigan Low Water Datum			
3. MAP PROJECTION Transverse Mercator				4. GRID(S) STATE Indiana ZONE W			
5. SCALE 1:10,000				STATE ZONE			
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY R. Kelly						April 1980	
METHOD: Analytic LANDMARKS AND AIDS BY R. Kelly						" "	
2. CONTROL AND BRIDGE POINTS PLOTTED BY R. Cauthorne						" "	
METHOD: Calcomp CHECKED BY R. Cauthorne						" "	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY I. Perkinson						Jan. 1981	
COMPILATION CHECKED BY L. Neterer/F. Mauldin						Jan. 1981	
INSTRUMENT: Wild B-8 CONTOURS BY NA							
SCALE: 1:10,000 CHECKED BY NA							
4. MANUSCRIPT DELINEATION PLANIMETRY BY I. Perkinson						April 1981	
CHECKED BY F. Mauldin						April 1981	
METHOD: Smooth drafted CONTOURS BY NA							
CHECKED BY NA							
SCALE: 1:10,000 HYDRO SUPPORT DATA BY I. Perkinson						April 1981	
CHECKED BY F. Mauldin						April 1981	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY F. Mauldin						April 1981	
6. APPLICATION OF FIELD EDIT DATA BY M. Mozgala						March 1982	
CHECKED BY E. Margiotta						June 1982	
7. COMPILATION SECTION REVIEW BY E. Margiotta						June 1982	
8. FINAL REVIEW BY J. Hancock						Oct. 1982	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY J. Hancock						Oct. 1982	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY R. Kelly						Apr. 1983	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY							

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYTP-00876  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild R.C.-8 "S" (S = 152.29 mm) ✓		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES NA <input type="checkbox"/> REFERENCE STATION RECORDS NA <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY NA		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Central	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 90th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
78 S(P) 8174-8177 ✓	6/5/78 ✓	13:42	1:30,000	N.A. (See below)	
78 S(P) 8203-8204 ✓	6/5/78	14:09	1:30,000		
78 S(P) 8189-8190 ✓	6/5/78	13:54	1:30,000		

REMARKS The lake level at time of photography was 579.05 feet or 2.25 feet above the International Great Lakes Datum. Water levels were taken at the Calumet Harbor gage on June 5, 1978.

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

The term Mean High-Water Line is not applicable. The "shoreline" was delineated from the above listed photographs, and is defined as the visible line of contact on the photographs between land and water.

## 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
TP-00873 ✓ TP-00874 ✓	TP-00877 ✓	No survey ✓	TP-00875 ✓

REMARKS

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

TP-00876

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION (Hor. Control) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	L. Davis	July 1979
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED  
None

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

None

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

REMARK: No horizontal control (photo-identification) coverage fell within the limits of this map.

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

TP-00876

## HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Tibbetts /	Sept. 1981
2. HORIZONTAL CONTROL	RECOVERED BY J. Koster /	July 1981 /
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY R. Tibbetts /	July 1981 /
	IDENTIFIED BY J. Koster	July 1981 /
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY J. Koster /	July 1981 /
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER

STATION NAME

PHOTO NUMBER

STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

78 S(P) 8174, 8203 (1:10,000 scale ratios) /

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER

OBJECT NAME

PHOTO NUMBER

OBJECT NAME

78S(P)8203

Indiana Harbor Boat Club North  
Light

"

Indiana Harbor Boat Club South  
Light(1:10,000  
scale)

5. GEOGRAPHIC NAMES:

☐ REPORT☒ NONE

6. BOUNDARY AND LIMITS:

☐ REPORT☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

2 blueprints for water intake pipeline, East Chicago Water Dept. dated March 11 &amp; 19, 1982

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

1 form 76-109 (Hor. Bk), 3 forms 76-184, 2 forms 76-40,  
1 film Master Field Edit print, 1 Field Edit report.

NOAA FORM 76-36D  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONTP-00876  
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	April 1981	Class III manuscript Superseded	None	None
Field edit completed Compilation complete	June 1982	Class I manuscript	None	None
Final Review	Oct. 1982	Final Map	Jan 7, 1983	None

## 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		Jan 7, 1983	Aid to be charted
1		"	Landmark recommended for deletion

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. (76-40 forms)
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: SEPTEMBER 1983

## 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	

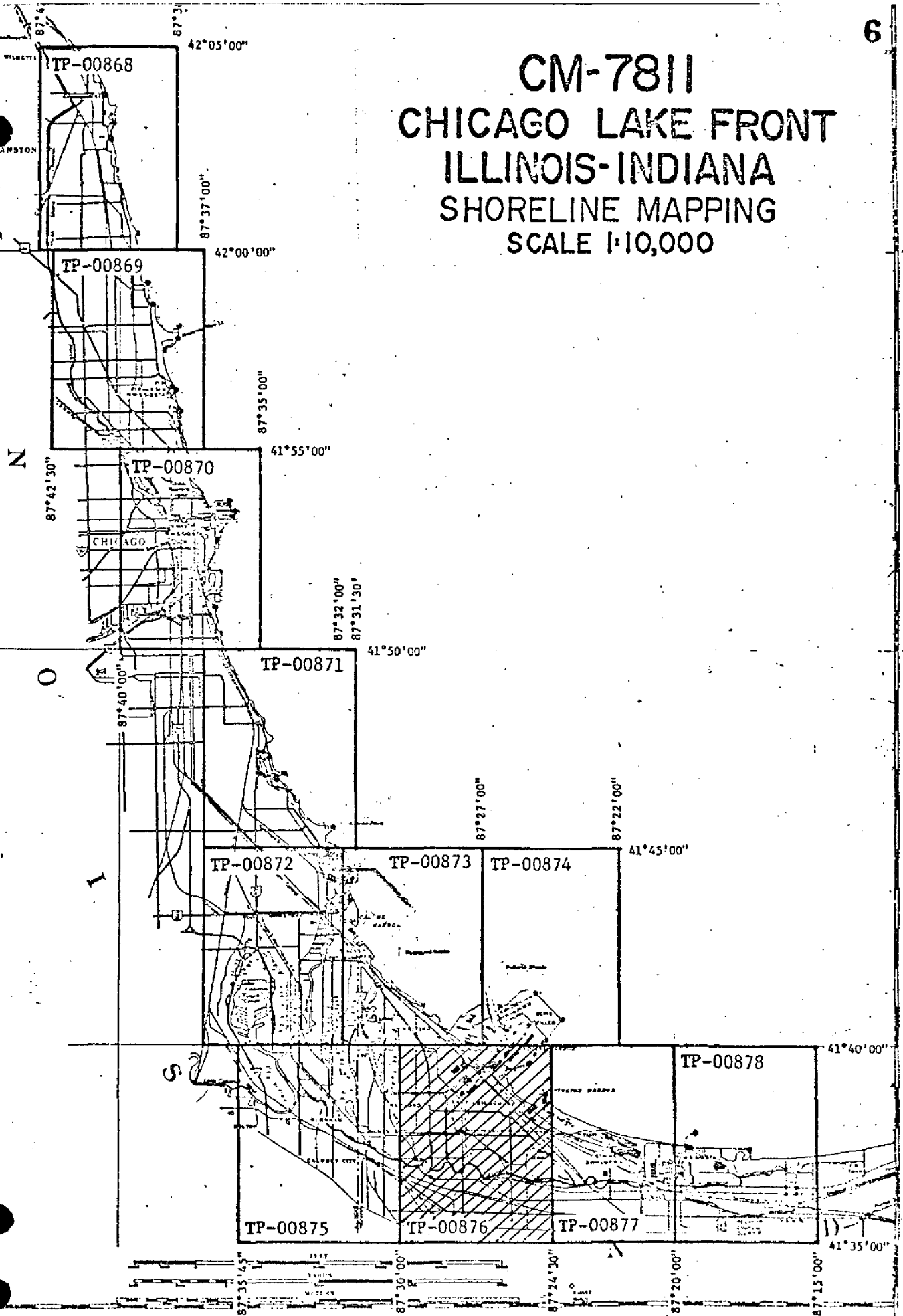
# CM-7811

## CHICAGO LAKE FRONT

### ILLINOIS-INDIANA

#### SHORELINE MAPPING

#### SCALE 1:10,000



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

TP-00876

This 1:10,000 scale final shoreline map is one of eleven maps, TP-00868 through TP-00878, that comprise project CM-7811, Chicago Lake Front, Illinois-Indiana.

The purpose of this project was to provide current charting information for nautical chart maintenance. No hydrographic operations were concurrent with this mapping project.

This final map features portions of the Indiana Harbor area and the inland waterway formed by the Indiana Harbor Canal as it extends into a non-navigable segment of the Grand Calumet River.

Two flight strips of 1:60,000 scale panchromatic photography were obtained for aerotriangulation May 10, 1978 using the RC-10 "Y" camera. Four flight strips of 1:30,000 scale panchromatic photography were obtained for compilation June 5, 1978 using the RC-8 "S" camera. This photography provided adequate coverage for the project.

Field work prior to compilation was accomplished in August 1979; this involved the establishment of horizontal control by field photoidentification methods specified to meet aerotriangulation requirements.

Analytic aerotriangulation was adequately provided by the Washington Science Center in April 1980.

Compilation was performed at the Coastal Mapping Section, Atlantic Marine Center, in April 1981. Copies of the Class III map were submitted for field edit.

Field edit was performed in September 1981 by assigned personnel from the Field Surveys Branch, AMC. Field data acquired during this edit was returned to the original compilation office and applied in June 1982.

Final review was performed at the Atlantic Marine Center in October 1982. At that time, a final Chart Maintenance Print was prepared and submitted for the Marine Chart Division.

This Descriptive Report contains all pertinent information used to compile this Final Map. The original base manuscript and all related data was forwarded to the Washington Science Center for final registration.



## FIELD INSPECTION

TP-00876

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

CM-7811

Chicago Lake Front  
Illinois-Indiana

April 18, 1980

21. Area Covered

This report covers 11 1:10,000 sheets, TP-00868 thru TP-00878 of Chicato Lake Front Illinois-Indiana.

22. Method

Two strips of 1:60,000 scale photography were bridged by analytic aerotriangulation methods and adjusted to ground on the Illinois State Plane Coordinate System, Illinois East Zone. These 2 strips were bridged to established compilation points to control 4 strips of 1:30,000 compilation photography. Aids and landmarks were located in bridging of the 1:60,000 scale photography. Ratio values were determined of the 1:30,000 scale photography and one each black-and-white print film were ordered for compilation and field edit. Ruling of manuscript and plotting of points were done on the CALCOMP and forwarded to AMC.

23. Adequacy of Control

The horizontal control provided was adequate except for Foster, 1977 Substitute Station B, which was the intersection of two paved walkways.

Due to the irregular shape of the intersection an accurate instrument reading was impossible. All other control held within the accuracy required by National Standards of Maps at 1:10,000 scale.

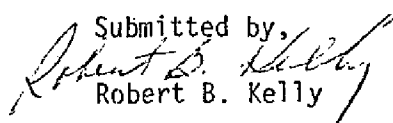
24. Supplemental Data

Local shoreline and U.S. Geological Survey quadrangles were used to provide vertical elevations for vertical adjustments of bridges.

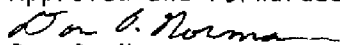
25. Photography

RC-10 "Y" photography was used for the 2 bridging strips. RC-8 "S" Photography was used for the 4 compilation strips. Both RC-10 "Y" and RC-8 "S" photography were adequate as to coverage and definition. Vacuum failure was noticed at the end lap of the RC-8 "S" photography, but this should not effect the compilation.

Submitted by,

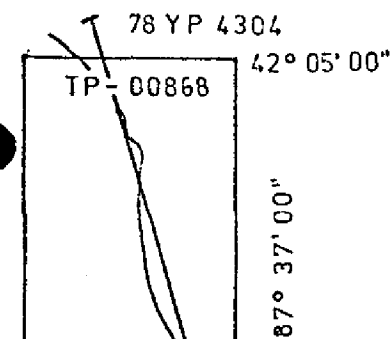
  
Robert B. Kelly

Approved and Forwarded:



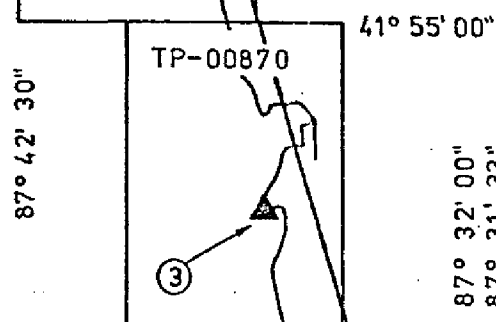
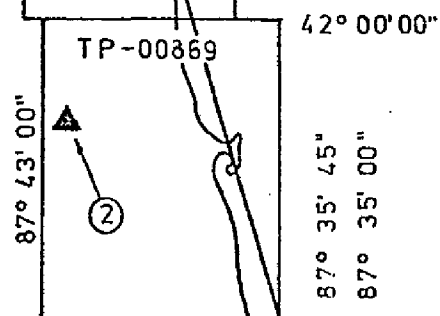
Don O. Norman

Chief, Aerotriangulation Section

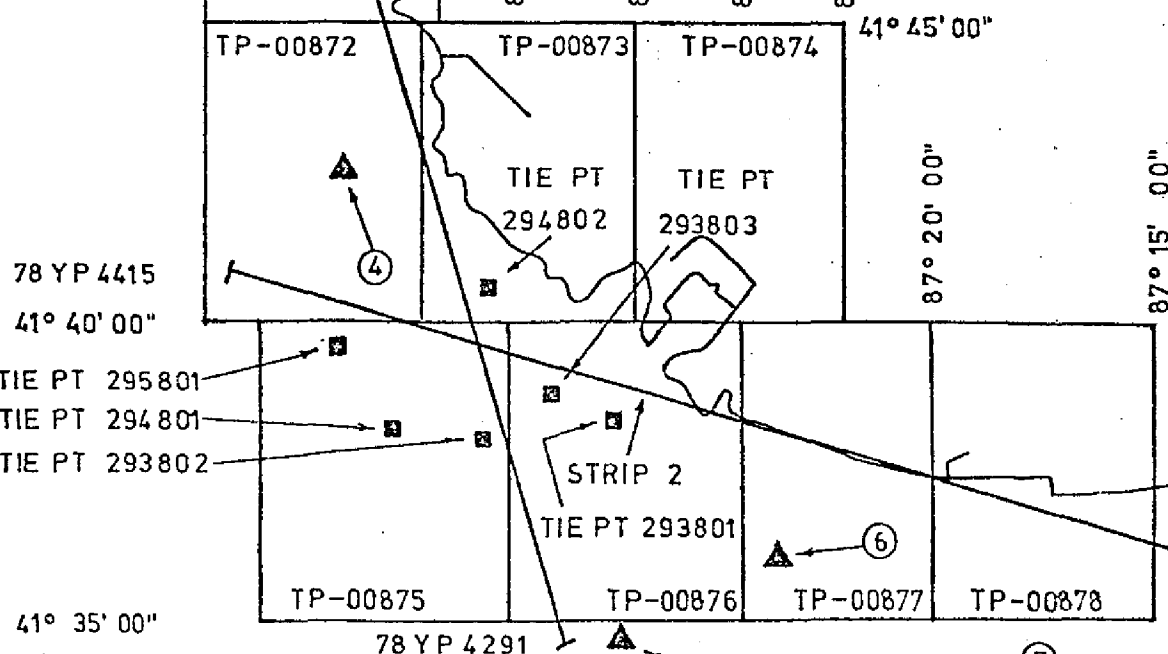
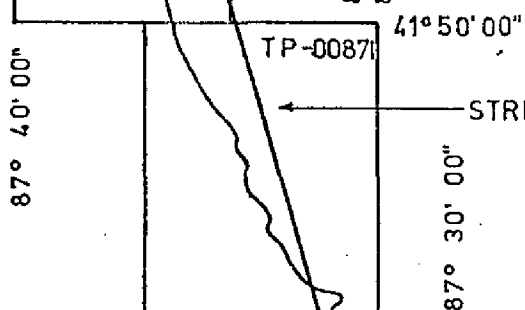


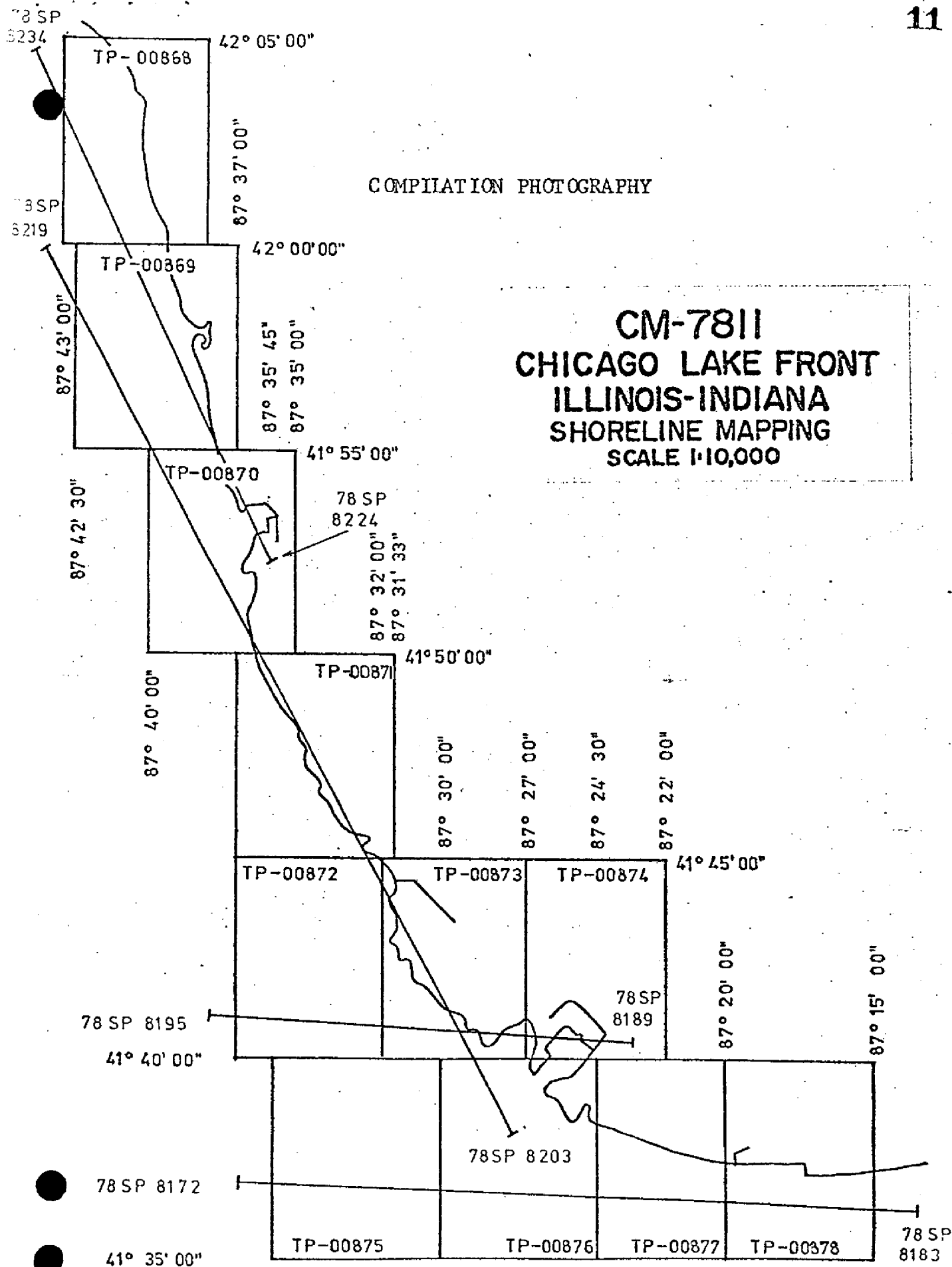
BRIDGING PHOTOGRAPHY

**CM-7811**  
**CHICAGO LAKE FRONT**  
**ILLINOIS-INDIANA**  
**SHORELINE MAPPING**  
**SCALE 1:10,000**



- 1 GLENVIEW, 1956
- 2 FOSTER, 1977
- 3 021 COC
- 4 OSWALD, 1977
- 5 HIGHLAND, 1952
- 6 EDISON, 1952
- 7 HOBART, 1952





## CLOSURES TO CONTROL

## STRIP 1

304101	GLENVIEW, 1956	SUB PT A	4.4	,	-6.6
304102	" "	" " B	3.5	,	-0.7
301101	FOSTER, 1977	SUB PT A	-0.3	,	0.8
301102	" "	" " B	-0.5	,	14.2
298101	021 COC	SUB PT A	1.4	,	-1.8
298102	" "	" " B	0.0	,	-1.3
415101	OSWALD, 1977	SUB PT A	-1.1	,	3.1
415102	" "	" " B	0.2	,	0.8
292101	HIGHLAND, 1952	SUB PT A	-0.0	,	-0.2
292102	" "	" " B	-1.2	,	-4.9

## STRIP 2

415102	OSWALD, 1977	SUB PT B	0.9	,	0.2
295801	TIE POINT		2.5	,	-0.1
294801	" "		-1.5	,	-0.7
294802	" "		0.3	,	2.8
293802	" "		-0.2	,	-1.1
293803	" "		-0.9	,	-0.8
293801	" "		3.9	,	1.5
411101	EDISON, 1972	SUB PT A	-2.4	,	2.5
411102	" "	" " B	-1.9	,	-3.3
409101	HOBART, 1972	SUB PT A	-1.7	,	0.9
409102	" "	" " B	-5.6	,	0.1



## COMPILATION REPORT

TP-00876

31. DELINEATION

Delineation was by instrument methods using the Wild B-8 stereoplotter and by office interpretation of the 1:30,000 scale panchromatic photographs. The compilation photography was adequate. Photographs ratioed at 3.02 times the contact photo size were processed for field edit.

32. CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated April 18, 1980.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are not applicable. Drainage was delineated by the Wild B-8 instrument from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

Refer to form 76-36B, Item 2 for shoreline delineation.

Alongshore details were delineated by the Wild B-8 stereoplotter from office interpretation of the photographs.

36. OFFSHORE DETAILS

No unusual problems.

37. LANDMARKS AND AIDS

Preliminary 76-40 forms consisting of 1 page of Navigational Aids and 1 page of Landmarks for Charts were prepared for field edit.

38. CONTROL FOR FUTURE SURVEYS

None

TP-00876

39. JUNCTIONS

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

40. HORIZONTAL AND VERTICAL ACCURACY

See Item #32.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. quadrangles:  
Highland, Indiana, scale 1:24,000, dated 1968, photorevised 1980;  
Whiting, Indiana, scale 1:24,000, dated 1968

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with N.O.S. Chart No. 14929, scale 1:15,000, dated January 27, 1979, 16th edition; No. 14927, scale 1:60,000, dated May 5, 1979, 17th edition; No. 14926, scale 1:15,000 and 1:60,000 dated July 24, 1976, 3rd edition.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

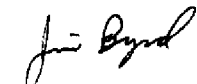
Submitted by,



Irene Perkinson  
Cartographer

Date: April 7, 1981

Approved,



Jim Byrd, Jr.  
Chief, Coastal Mapping Section



## ADDENDUM TO THE COMPILATION REPORT

TP-00876

FIELD EDIT

• Buffington Harbor Range Front and Rear Lights were located by a combination of field observed intersection and traverse methods from field selected photo points. An adequate solution and check was derived by measuring the distance between the lights.

During application of the field edit data, additional information was requested and submitted from the East Chicago Water Department for the 9250 feet submerged intake pipeline. This data (two blueprints) was applied and will be submitted with the field edit package.

FIELD EDIT REPORT  
TP-00876 INDIANA HARBOR CANAL  
CM-7811 CHICAGO LAKE FRONT  
ILLINOIS - INDIANA

51. METHODS

Field Edit was performed in accordance with project instructions. Field Edit Job CM-7811 dated June 26, 1981. This map was edited by boat, truck and by foot. Field Edit annotations will be found on the Master Field Edit Print, and are cross referenced to the proper photographs.

52. ADEQUACY OF COMPILATION

This compilation appears to be good, and will be both complete and adequate upon application of this Edit.

54. RECOMMENDATIONS

No recommendations.

56. GEOGRAPHIC NAMES

There are no additions, changes, or corrections to the geographic names on this map.

57. LANDMARKS AND AIDS

All of the Aids within this sheet are on shore, and were verified by checking their image with nearby detail.

A private front and rear range light was located by photogrammetric methods, and the data is included herein.

The landmarks were checked from seaward. The position of each was verified by checking their photo image with nearby detail.

Approved and Forwarded  
*Robert S. Tibbetts*  
Robert S. Tibbetts  
Chief, Photo Party 62

Submitted 9/9/81  
*Jerome M. Koster*  
Jerome M. Koster  
Surveying Technician

## REVIEW REPORT TP-00876

## 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 1:24,000 scale U.S.G.S. quadrangles:

Whiting, Indiana, dated 1968

Highland, Indiana, dated 1968, photorevised 1980

No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

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

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with the following N.O.S. charts:

No. 14926, 3rd edition, scale 1:15,000/1:60,000, dated July 27, 1976

No. 14929, 16th edition, scale 1:15,000, dated January 27, 1979

No. 14927, 17th edition, scale 1:60,000, dated May 5, 1979.

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

Approved for forwarding,

*Billy H. Barnes*  
Billy H. Barnes

Chief, Photogrammetric Branch, AMC

Approved,

*Gregory M. Bell*  
Chief, Photogrammetric Branch, Rockville

*Lawrence W. Fritz*

Chief, Photogrammetry Division

August 13, 1982

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7811 (Chicago Lakefront, Illinois-Indiana)

TP-00876

Baltimore and Ohio (RR)

Baltimore and Ohio Chicago Terminal (RR)

Buffington

Buffington Harbor

Conrail (RR)

East Chicago

Elgin Joliet and Eastern (RY)

Gary

Grand Calumet River

Hammond

Indiana Harbor

Indiana Harbor (Ppl)

Indiana Harbor Belt (RR)

Indiana Harbor Canal

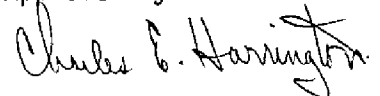
Lake George

Lake George Canal

Lake Michigan

Norfolk and Western (RR)

Approved by:



Charles E. Harrington  
Chief Geographer, OA/C3x

CM-7811

CHICAGO LAKE FRONT, ILL. & IND.

MATERIAL ON FILE

NATIONAL ARCHIVES/FEDERAL RECORDS CENTER

BOX (CONTENTS)

Control Station Identification Cards

Field Identified Horizontal Control Photographs

Field Edit Photographs

Bridging Photographs

Field Edit Copies (Discrepancy Prints)

Project Completion Report

BUREAU ARCHIVES

Registered Maps

Descriptive Reports

REPRODUCTION DIVISION

8x Reduction Negative of Each Map

OFFICE OF STAFF GEOGRAPHER

Geographic Names Standards

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 (If field party, ship or office) Coastal Mapping Div. AMC, Norfolk, VA			STATE Illinois & Indiana			LOCALITY Chicago Lake Front			DATE May 1981			<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 CM-7811			SURVEY NUMBER TP-00876			DATE NA 1927			METHOD AND DATE OF LOCATION (See instructions on reverse side)			CHARTS AFFECTED				
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				
LIGHT	Indiana Harbor South Bulkhead Light	41 39	34.16	87 25	14.82	343	78 S(P)8190	6/5/78	V-VIS	6/16/81	14926								
LIGHT	Indiana Harbor Boat Club North Light	41 39	15.98	87 26	13.14	304			P-5-L	6/18/81	14927								
LIGHT	Indiana Harbor Boat Club South Light	41 39	15.62	87 26	11.58	268			P-5-L	6/18/81	14929								
LIGHT	Buffington Harbor Range Rear Light	41 38	22.40	87 25	16.16	374			*P-3-L	6/18/81	14905								
LIGHT	Buffington Harbor Range Front Light	41 38	27.75	87 25	05.44	126			*P-3-L	6/18/81	"								
LIGHT	Buffington Pierhead Light	41 38	36.37	87 24	42.30	979	78 S(P)8190	6/5/78	V-VIS	6/18/81	"								
LIGHT	Buffington Breakwater Light	41 38	45.54	87 24	37.12	859	78 S(P) 8190	6/5/78	V-VIS	6/18/81	"								
									*Office located from field identified photo points.										
											1984								

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	R. S. Tibbets Chief, Photo Party 62
POSITIONS DETERMINED AND/OR VERIFIED	R. S. Tibbets M. Mozgala LTJg/NOAA
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)  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** 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>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.	





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OBJECTS INSPECTED FROM SEAWARD	R. S. Tibbetts Chief, Photo Party 62
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FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<input checked="" type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)  FIELD ACTIVITY REPRESENTATIVE  OFFICE ACTIVITY REPRESENTATIVE  <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
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