

TP-00874

TP-00874

NOAA FORM 76-35 (3-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. TP-00874	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	
1978 TO 1981	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division AMC, Norfolk, VA		SURVEY TP. 00874 MAP EDITION NO. (1) MAP CLASS Final JOB CM CM-7811	
OFFICER-IN-CHARGE Max Ethridge, LCDR		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__			

I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation	January 24, 1980	Horizontal Control	June 12, 1978
Compilation	May 27, 1980	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	R. Kelly	April 1980
METHOD: Analytic	R. Kelly	" "
LANDMARKS AND AIDS BY	R. Cauthorne	" "
2. CONTROL AND BRIDGE POINTS	R. Cauthorne	" "
METHOD: Calcomp	R. Kravitz	Nov. 1980
3. STEREOSCOPIC INSTRUMENT	F. Mauldin	Nov. 1980
COMPILATION	NA	
INSTRUMENT: Wild B-8	NA	
SCALE: 1:10,000	R. Kravitz	Jan. 1981
4. MANUSCRIPT DELINEATION	F. Mauldin	Feb. 1981
METHOD: Smooth drafted	NA	
SCALE: 1:10,000	NA	
HYDRO SUPPORT DATA BY	R. Kravitz	Jan. 1981
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	F. Mauldin	Feb. 1981
6. APPLICATION OF FIELD EDIT DATA	M. Mozgala	Mar. 1982
7. COMPILATION SECTION REVIEW	W. McLemore	April 1982
8. FINAL REVIEW	W. McLemore	April 1982
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	J. Hancock	Sept. 1982
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	J. Hancock	Oct. 1982
11. MAP REGISTERED - COASTAL SURVEY SECTION	R. Kelly	Apr. 1983

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00874
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild R.C.-8 "S"(S=152.29mm)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(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) 8189-8190	June 5, 1978	13:54	1:30,000	N.A. (See below)	

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 & 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
No survey	No survey	TP-00876 TP-00877	TP-00873
REMARKS			

TP-00874

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 None	
	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 None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY 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.

TP-00874

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	P. B. Walbolt	June 1981
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 P. B. Walbolt	June 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	N. Wike & P. B. Walbolt	June 1981
7. BOUNDARIES AND LIMITS SURVEYED OR IDENTIFIED BY		

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) 8189 (1:10,000 scale ratios)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

(See below)

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
78 S(P)8189	Indiana Harbor East Bulkhead		
	Light		
78 S(P)8189 (1:10,000 scale ratios)	Indiana Harbor Light 2		

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)

4 Forms 76-40
1 Field Edit Report
1 Film Master Field Edit Print

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONTP-00874
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	Jan. 1981	Class III manuscript Superseded	None	None
Field Edit Applied Compilation Complete	March 1982	Class I manuscript	None	None
Final Review	Sept. 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	Landmarks for charts
1		"	Aids for charts
1		"	Landmarks 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

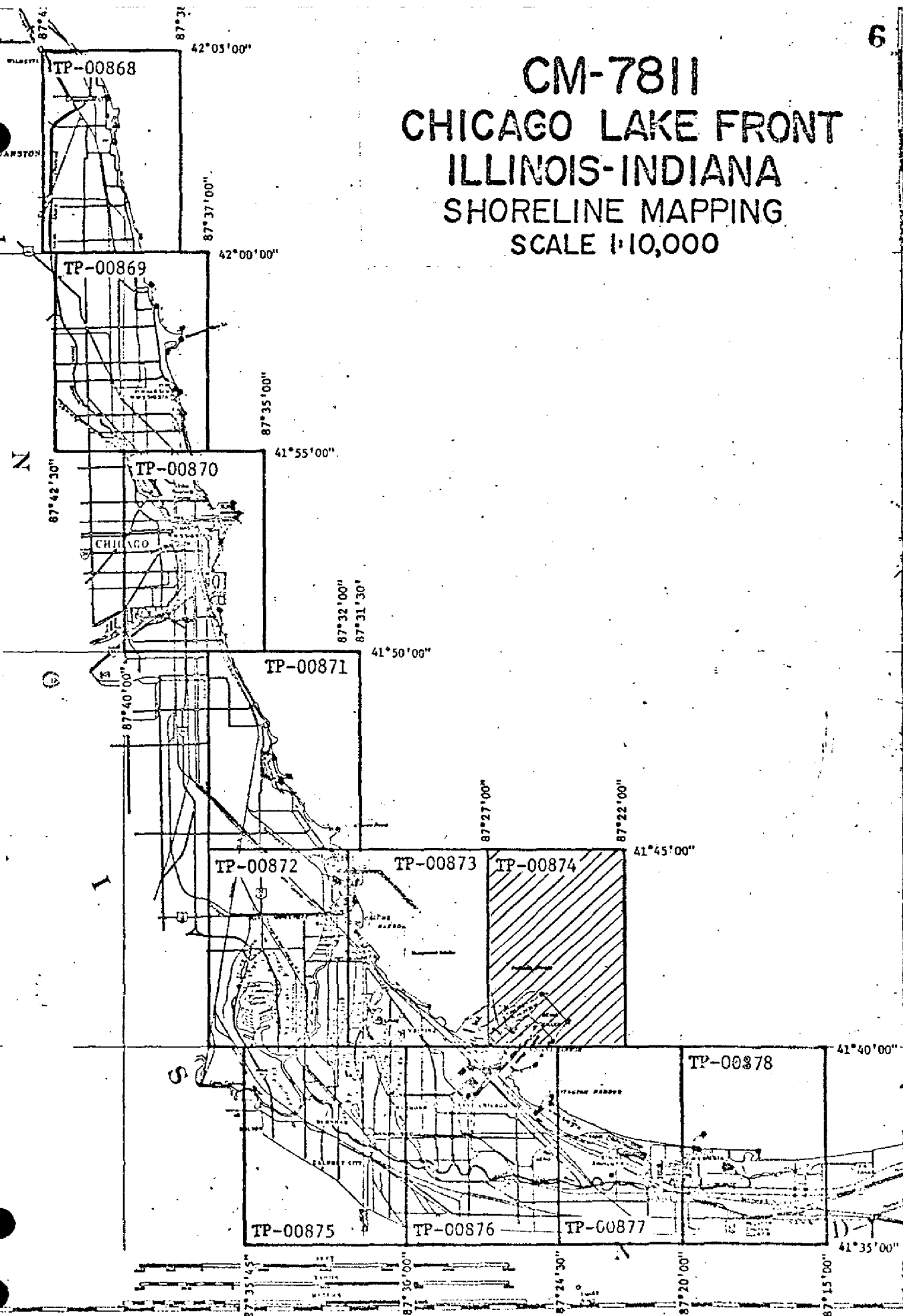
1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS. ~~XXX~~ SUBMITTED BY FIELD PARTIES. Forms 76-40
3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

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-00874

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 portrays a portion of the Indiana shoreline of Lake Michigan featuring the industrial area of Indiana Harbor.

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 photo-identification 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 February 1981. Copies of the Class III map were submitted for field edit.

Field edit was performed in June 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 April 1982.

Final review was performed at the Atlantic Marine Center in September 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-00874

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,

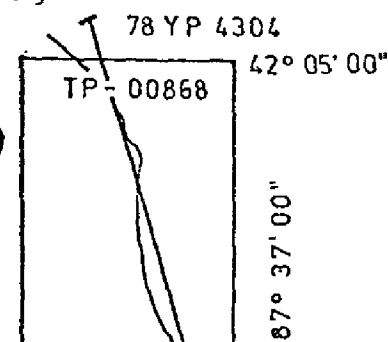
Robert B. Kelly
Robert B. Kelly

Approved and Forwarded:

Don O. Norman

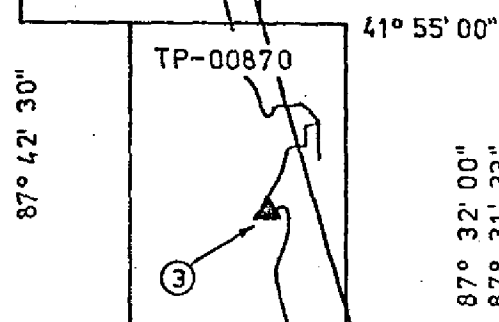
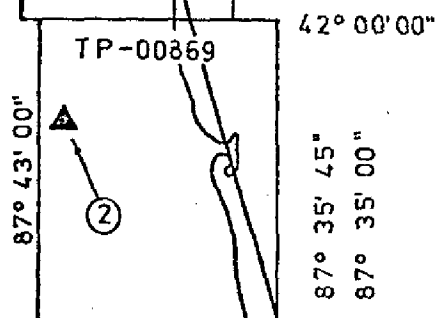
Don O. Norman

Chief, Aerotriangulation Section

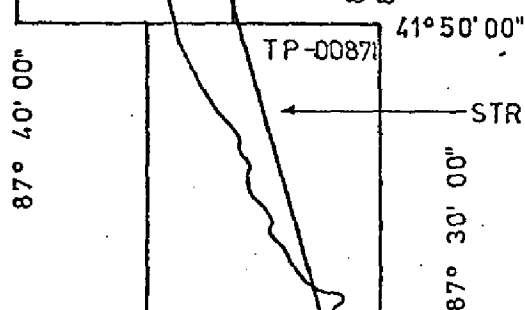


BRIDGING PHOTOGRAPHY

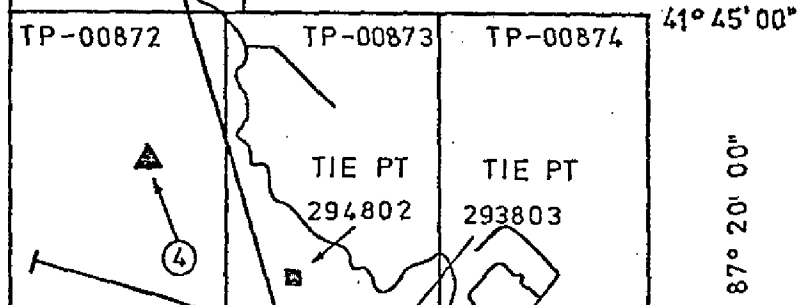
CM-7811
CHICAGO LAKE FRONT
ILLINOIS-INDIANA
SHORELINE MAPPING
SCALE 1:10,000



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



STRIP 1



TIE PT

294802

TIE PT

293803

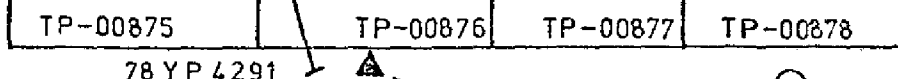
78 YP 4415
41° 40' 00"

TIE PT 295801
TIE PT 294801
TIE PT 293802

STRIP 2

TIE PT 293801

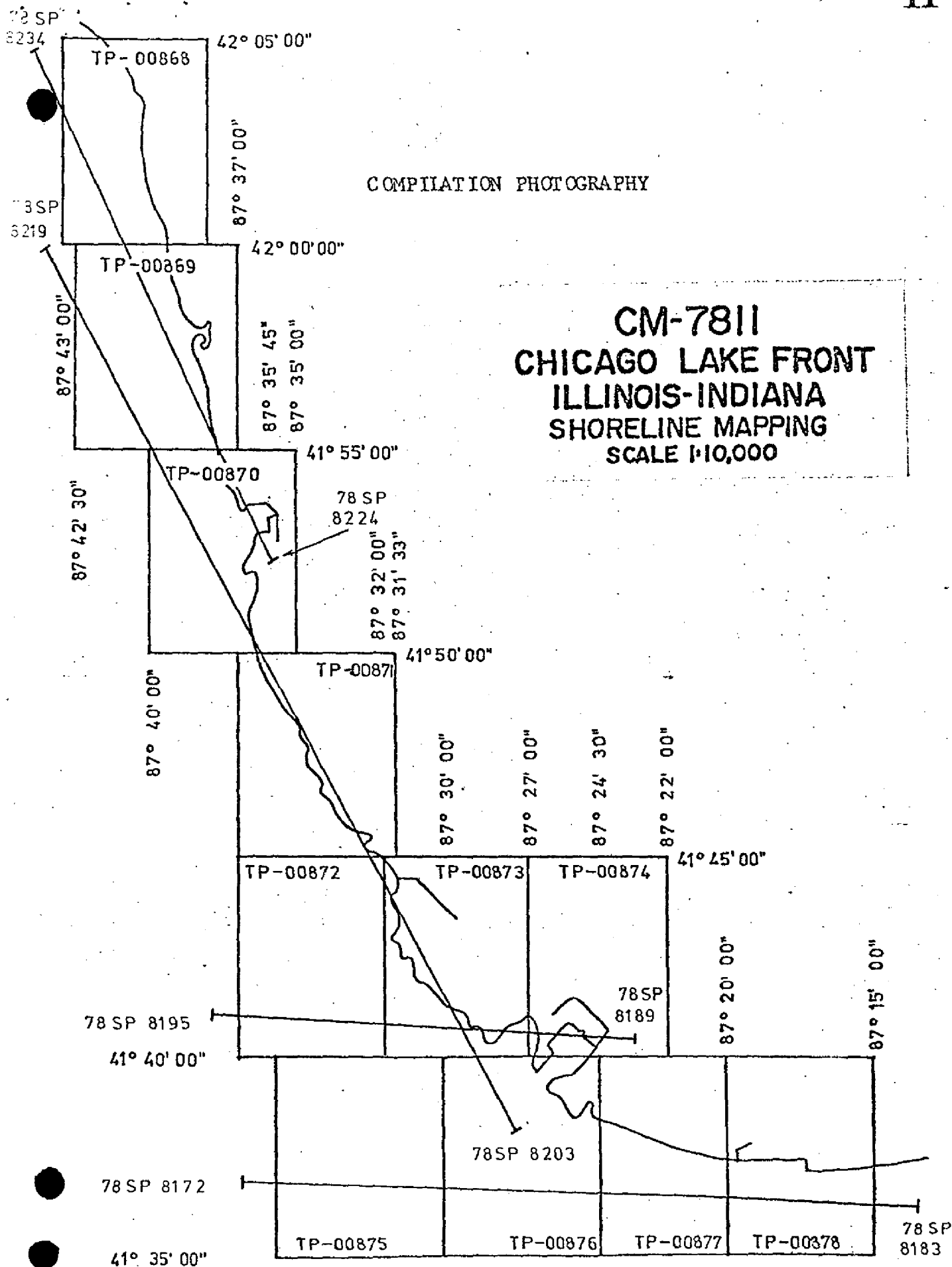
41° 35' 00"



78 YP 4291

78 YP
4408

(7) →



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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY		
TP-00874	CM-7811	NA 1927	Coastal Mapping Division AMC, Norfolk, VA		
STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE Indiana ZONE West	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	REMARKS
None			X=	ϕ	
			Y=	λ	
			X=	ϕ	
			Y=	λ	
			X=	ϕ	
			Y=	λ	
			X=	ϕ	
			Y=	λ	
			X=	ϕ	
			Y=	λ	
			X=	ϕ	
			Y=	λ	
COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE
LISTED BY		DATE	LISTING CHECKED BY		DATE
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE

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

COMPILATION REPORT

TP-00874

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

39. JUNCTIONS

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

TP-00874

40. HORIZONTAL AND VERTICAL ACCURACY

See Item #32.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. quadrangle, Whiting, Indiana, 1968, scale 1:24,000.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with N.O.S. Chart, 14929, 16th edition, January 27, 1979, 1:15,000; 14926, 3rd ed., July 24, 1976, 1:15,000 and 1:20,000; 14927, 17th ed., May 5, 1979, 1:60,000

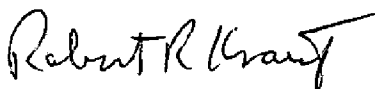
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by,



Robert R. Kravitz
Cartographic Technician

Date: January 23, 1981

Approved:



Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

ADDENDUM TO THE COMPILATION REPORT

TP-00874

FIELD EDIT

An adequate field edit was accomplished.

FIELD EDIT REPORT
TP-00874 INDIANA HARBOR
CM-7811 CHICAGO LAKE FRONT
ILLINOIS - INDIANA

51. METHODS

This Map was edited by boat and by foot. All Landmarks and features were checked from seaward.

52. ADEQUACY OF COMPILATION

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

54. RECOMMENDATIONS

Several slag areas are questioned on the Map. These areas are under constant change, and there is no way to show a permanent outline of them.

56. GEOGRAPHIC NAMES

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

57. LANDMARKS AND AIDS

All Landmarks and Aids were inspected from seaward: two Landmarks which are small and insignificant are deleted; two prominent Stacks are recommended as Landmarks.

Two Lights are shown on Photo 8189. The necessary Forms 76-40 are completed and submitted herein.

58. FIELD EDITOR

Field Edit was by P. B. Walbolt.

24 August 1981

Submitted by:

Philip B. Walbolt

Philip B. Walbolt

Chief, Photo Party 63

REVIEW REPORT TP-00874
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 U.S.G.S. quadrangle Whiting, Indiana, 1:24,000 scale dated 1968. No significant discrepancies were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

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

65. COMPARISON WITH NAUTICAL CHARTS:

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

14926, 3rd edition, 1:20,000 scale, dated July 24, 1976
14929, 16th edition, 1:15,000 scale, dated January 27, 1979
14927, 17th edition, 1:60,000 scale, dated May 5, 1979

The 1:60,000 scale coverage (pg. 29) on Chart 14926 indicates two East Bulkhead Lights (Light List #2160). The most westerly position was field investigated and not found during field edit. This "Light" does not appear on the other charts covering this area and is possibly a charting error. Also, the 1:20,000 scale coverage (pg. 13) on Chart 14926 displays the incorrect position.

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,

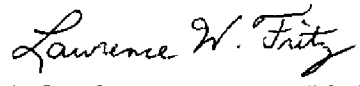
Billy H. Barnes
Billy H. Barnes

Chief, Photogrammetric Branch, AMC

REVIEW REPORT TP-00874
SHORELINE

Approved:


Chief, Photogrammetric Branch, Rockville


Chief, Photogrammetry Division

August 13, 1982

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7811 (Chicago Lakefront, Illinois-Indiana)

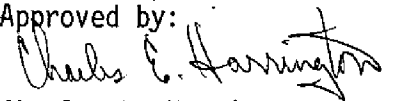
TP-00874

East Chicago

Indiana Harbor

Lake Michigan

Approved by:



Charles E. Harrington
Chief Geographer OA/C3x5

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

Replaces C&GS Form 567.

NONFLOATING AIDS

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

REPORTING UNIT (Field party, Ship or Office)		LOCALITY	DATE
Coastal Mapping Div.		Chicago Lake Front	June 1981
AMC, Norfolk, VA			
INDIANA			

The following objects HAVE ☒ BEEN INSPECTED from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	CM-7811	TP-00874	NA 1927

OPR PROJECT NO.		JOB NUMBER	SURVEY NUMBER		DATUM		METHOD AND DATE OF LOCATION (See instructions on reverse side)				CHARTS AFFECTED
THE FOLLOWING OBJECTS HAVE A DATE NOT BEEN REPRODUCTION SURVEYS TO DETERMINE THEIR EXACT POSITION		CM-7811	TP-00874		NA 1927						
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	LATITUDE		POSITION		LONGITUDE		OFFICE	FIELD		
		° /	D.M. Meters	° /	D.P. Meters	° /	D.P. Meters				
LIGHT	Indiana Harbor Light 8	41 40	03.14 97	87 26	34.71 803	78 S(P) 8190 6/5/78	V-VIS 6/17/81	14926 14927 14929 14905			
LIGHT	Indiana Harbor Light 7	41 40	00.75 23	87 26	30.99 717	78 S(P) 8190 6/5/78	V-VIS 6/17/81	"			
LIGHT	Indiana Harbor Light 6	41 40	22.56 696	87 26	26.24 607	78 S(P) 8190 6/5/78	V-VIS 6/17/81	"			
LIGHT	Indiana Harbor Light 5	41 40	27.45 847	87 26	19.37 448	78 S(P) 8190 6/5/78	V-VIS 6/17/81	"			
LIGHT	Indiana Harbor Light 2	41 41	06.09 188	87 26	49.38 1142	P-5-L 6/17/81 78S(P) 8189		"			
LIGHT	Indiana Harbor East Breakwater Light, Radio Beacon 298 kHz	41 40	50.95 1572	87 26	27.76 642	78 S(P) 8190 6/5/78	V-VIS 6/17/81	"			
LIGHT	Indiana Harbor North Bulkhead Light	41 41	19.84 612	87 25	01.21 28	78 S(P) 8190 6/5/78	V-VIS 6/17/81	"			
LIGHT	Indiana Harbor East Bulkhead Light	41 40	40.91 1262	87 24	04.89 113	P-5-L 6/17/81 78 S(P) 8189		"			

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

[illegible]

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	P. Walbolt
POSITIONS DETERMINED AND/OR VERIFIED	P. Walbolt
	R. Kravitz
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
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