

TP-00877

TP-00877

NOAA FORM 76-35 (3-76) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h1>DESCRIPTIVE REPORT</h1>	
<i>Map No.</i> TP-00877	<i>Edition No.</i> 1
<i>Job No.</i> CM-7811	
<i>Map Classification</i> FINAL, FIELD EDITED MAP	
<i>Type of Survey</i> SHORELINE	
LOCALITY	
<i>State</i> ILLINOIS - INDIANA	
<i>General Locality</i> CHICAGO LAKE FRONT	
<i>Locality</i> GARY.	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1978 TO 1981 </div>	
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 00877 MAP EDITION NO. (1) MAP CLASS Final JOB PM 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 West			
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		Oct. 1980	
COMPILATION CHECKED BY				L. Neterer		Oct. 1980	
INSTRUMENT: Wild B-8				CONTOURS BY		NA	
SCALE: 1:10,000				CHECKED BY		NA	
4. MANUSCRIPT DELINEATION PLANIMETRY BY				I. Perkinson		Oct. 1980	
CHECKED BY				F. Mauldin		Jan. 1981	
METHOD: Smooth drafted				CONTOURS BY		NA	
CHECKED BY				NA			
SCALE: 1:10,000 HYDRO SUPPORT DATA BY				I. Perkinson		Nov. 1980	
CHECKED BY				F. Mauldin		Jan. 1981	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				F. Mauldin		Jan. 1981	
6. APPLICATION OF FIELD EDIT DATA BY				P. L. Evans		Oct. 1981	
CHECKED BY				F. Mauldin		March 1982	
7. COMPILATION SECTION REVIEW BY				F. Mauldin		March 1982	
8. FINAL REVIEW BY				J. Hancock		Sept. 1982	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				J. Hancock		Oct. 1982	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				R. Kelly (ad)		Apr. 1983	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				(S) D. D. [unclear]		OCT 4 1983	

TP-00877
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)-8177-8180	6/5/78	13:42	1:30,000	NA (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 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-00874	TP-00878	No Survey	TP-00876
REMARKS			

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

TP-00877

HISTORY OF FIELD OPERATIONS.

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

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	L. Davis	Aug. 1979
2. HORIZONTAL CONTROL	RECOVERED BY L. Davis	Aug. 1979
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY L. Davis	Aug. 1979
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		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
78Y(P)4411	Edison, 1952		
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: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS			
None			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)			
1-Form 76-53			

NOAA FORM 76-36C
(3-72)

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

TP-00877

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Tibbetts	May 1981
2. HORIZONTAL CONTROL	RECOVERED BY C. Middleton; J. Koster	May 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 None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY C. Middleton	May 1981
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

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) 8178; 8179 (1:10,000 scale)

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)

- 1 Film master field edit print
- 1 Field edit report
- 3 forms 76-40

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D
(3-72)TP-00877
RECORD OF SURVEY USEU. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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 to be charted
1		Jan 7, 1983	Landmark recommended for chart 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

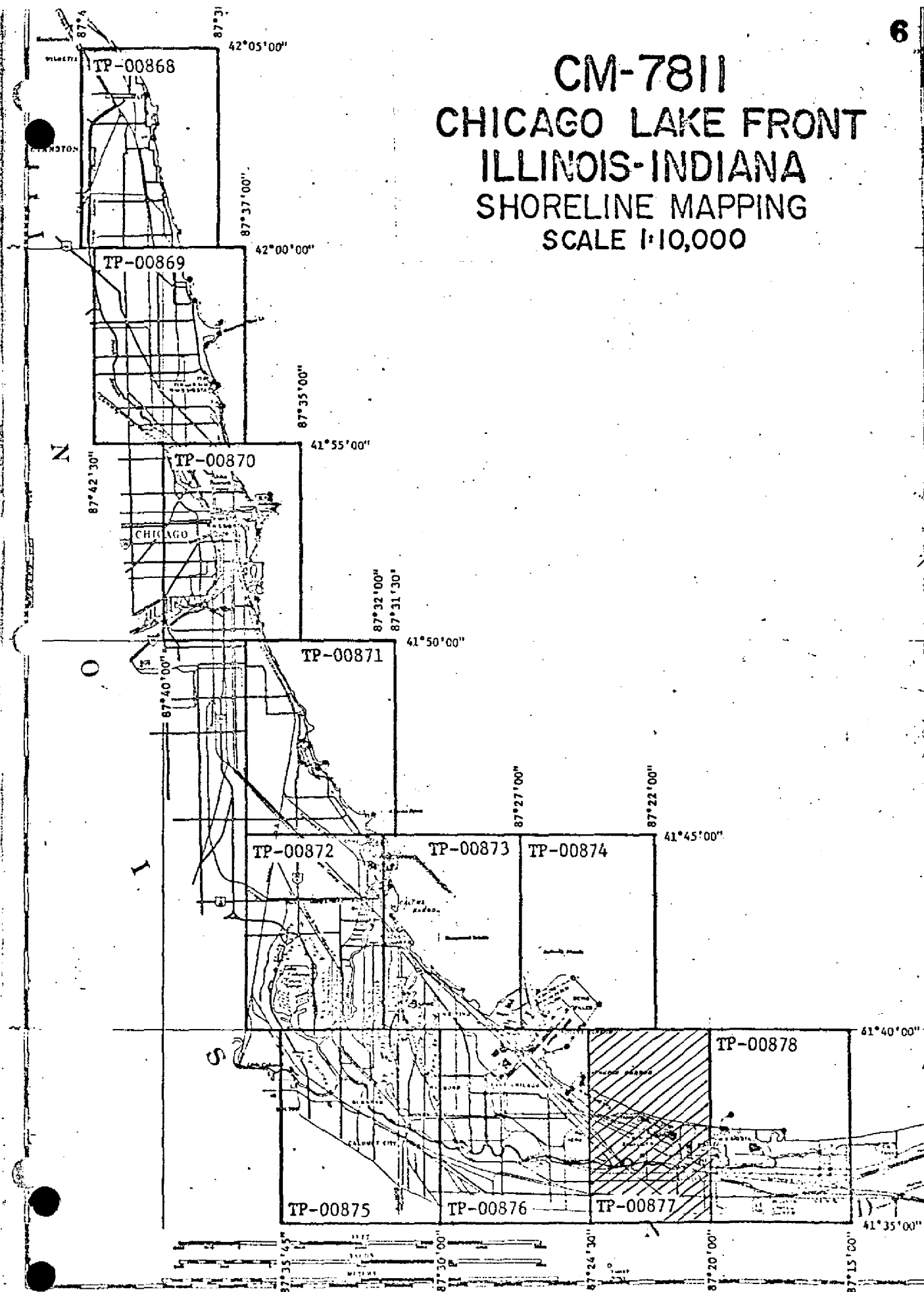
1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS ~~588~~ SUBMITTED BY FIELD PARTIES. (Forms 76-40)
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS:

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	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	

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



7

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00877

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 southern shore of Lake Michigan from Long. 87°20.0' to Long. 87°24.5'. Also featured is an easterly segment of the Grand Calumet River as it extends through Gary, Indiana.

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 January 1981. Copies of the Class III map were submitted for field edit.

Field edit was performed in May 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 March 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-00877

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:

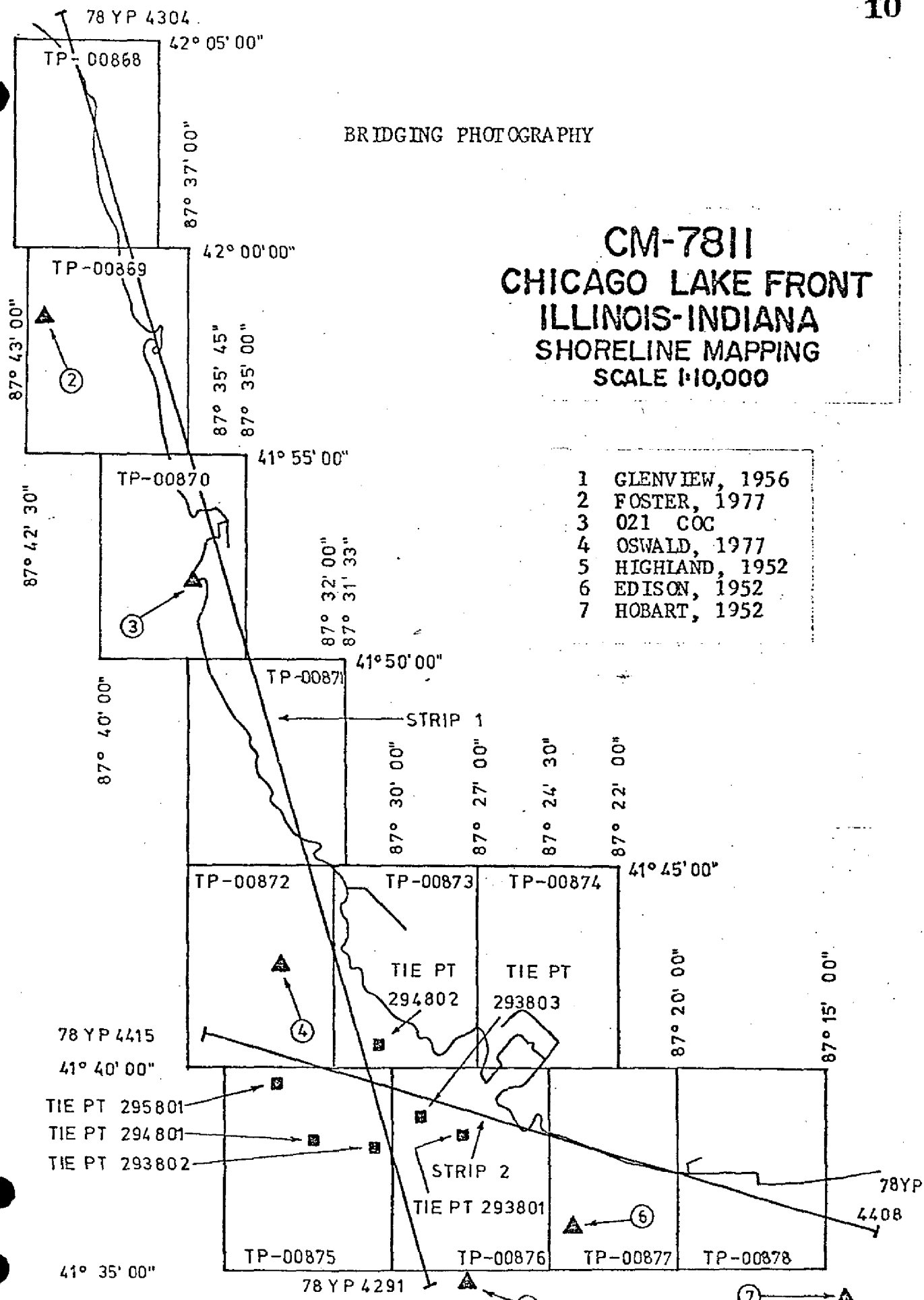
Don O. Norman
Don O. Norman

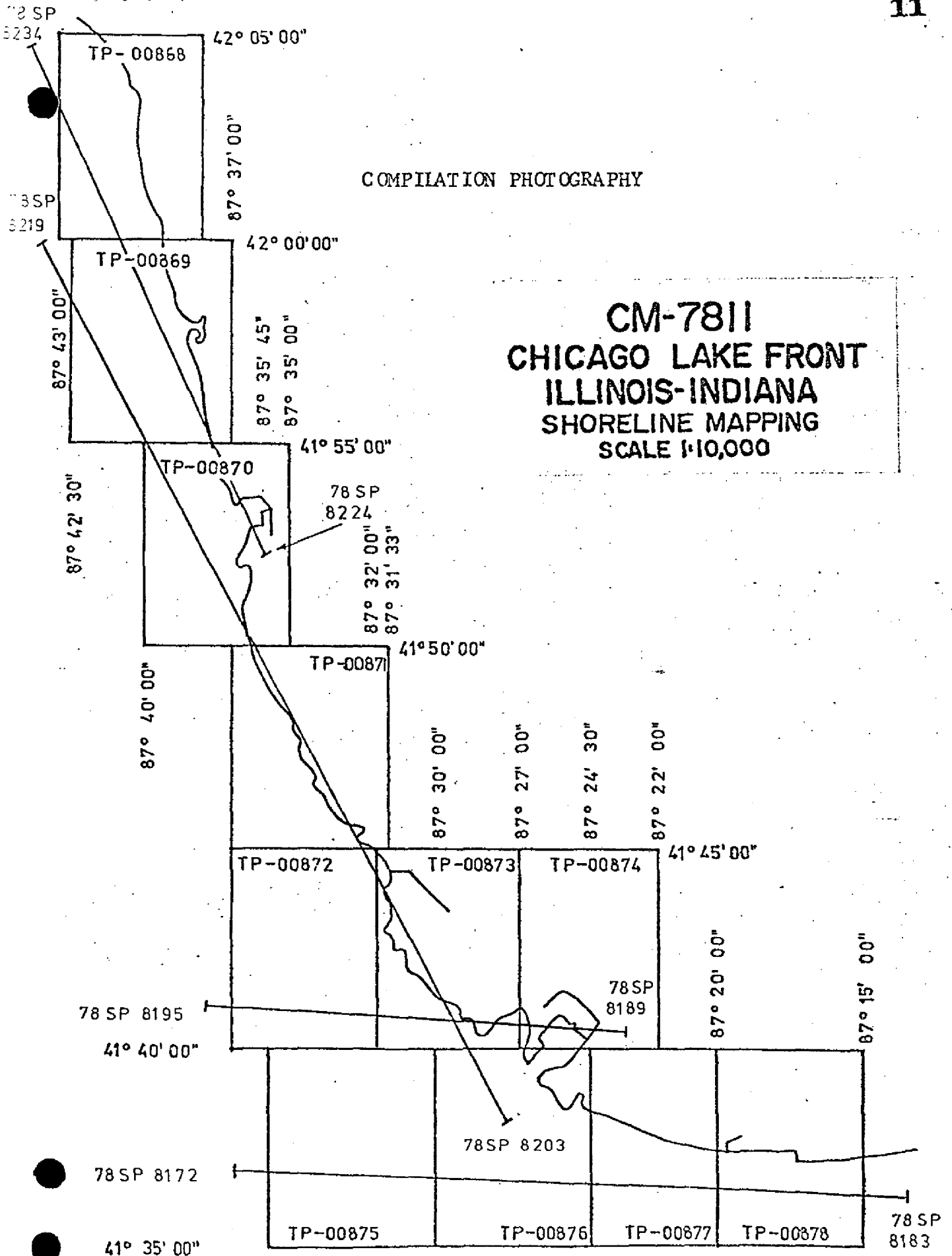
Chief, Aerotriangulation Section

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





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.	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	GEODETTIC DATUM		ORIGINATING ACTIVITY		REMARKS
					NA 1927	COORDINATES IN FEET STATE Indiana ZONE West	Coastal Mapping Division AMC, Norfolk, VA	φ LATITUDE λ LONGITUDE	
TP-00877	CM-7811	STOCKTON 2, 1967	410871 1016		X=	φ 41°37'44.749"	λ 87°23'39.885"	1380.6	470.5
					Y=			923.3	465.6
		EDISON, 1952	410871 1004	411100	X=412,108.54	φ 41°36'09.424"	λ 87°24'16.878"	290.7	1560.4
					Y=1,494,498.18			390.8	998.6
		GARY, MUNICIPAL WATER WORKS, TOWER, 1952	410871 1025	168	X=	φ 41°35'55.606"	λ 87°20'33.433"	1715.5	135.6
					Y=			774.3	615.2
		GARY, LAKE COUNTY, SUPERIOR COURTHOUSE, DOME, 1952	410871 1024		X=	φ 41°36'12.542"	λ 87°20'16.235"	386.9	1464.2
					Y=			375.9	1013.5
					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					COMPUTATION CHECKED BY			DATE	
LISTED BY	A. Rauck, Jr.			5/13/80	F. Margiotta			May 14, 1980	
HAND PLOTTING BY	A. Rauck, Jr.			5/5/80	F. Margiotta			May 14, 1980	
	L. Williams			5/22/80	I. Perkinson			May 22, 1980	

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

COMPILATION REPORT
TP-00877

31. DELINEATION

Delineation was by instrument methods using the Wild B-8 stereo-plotter 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 Photogram-metric 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

A preliminary 76-40 form for Landmarks was prepared for field edit.

38. CONTROL FOR FUTURE SURVEYS

None

TP-00877

39. JUNCTIONS

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

40. HORIZONTAL AND VERTICAL ACCURACY

See Item #32.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with the following 1:24,000 scale U.S.G.S. quadrangles: Highland, Indiana, dated 1968; Gary, Indiana, dated 1968; and Whiting, Indiana, dated 1968.

47. COMPARISON WITH NAUTICAL CHARTS

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

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

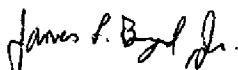
Submitted by,



Irene Perkinson
Cartographer

Date: November 7, 1980

Approved,



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

ADDENDUM TO THE COMPILATION REPORT

TP-00877

FIELD EDIT

An adequate field edit was performed for this shoreline map.

A submerged pipeline at Lat. $41^{\circ}39.7'$, Long. $87^{\circ}24.5'$ was added to the manuscript from field edit data submitted with adjoining map TP-00876.

FIELD EDIT REPORT
TP-00877
CM-7811

51. Methods

The Field Edit was performed as prescribed by Project Instructions dated June 26, 1981 and by the Photogrammetry Instructions of the National Ocean Survey Operations Manual. The Field Edit was conducted from a skiff, by truck, and on foot.

52. Adequacy of Compilation

Adequate pending application of Field Edit.

54. Recommendations

None.


57. Landmarks and Aids

One Landmark previously charted has been recommended for deletion. No new Landmarks were identified. There are no Aids to navigation included within the limits of this sheet. The appropriate forms 76-40 are herein submitted.

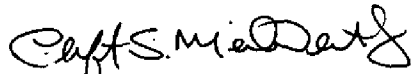
58. Horizontal Control

One Triangulation Station could not be recovered, the remaining three were recovered. The appropriate forms 75-82A are attached.

Approved and forwarded,


Robert S. Tibbetts
Chief, Photo Party 62

Submitted,


Capt. S. M. Datz
Surveying Technician
Photo Party 66

REVIEW REPORT TP-00877
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:

Gary, Indiana, 1968
Whiting, Indiana, 1968
Highland, Indiana, 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:

14926, 3rd edition, 1:15,000/1:60,000 scale, dated July 24, 1976
14927, 17th edition, 1:60,000 scale, 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,

James H. Bace
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-00877

Conrail (RR)

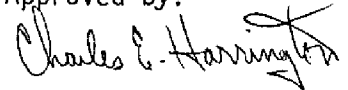
Gary

Grand Calumet River

Lake Michigan

Norfolk and Western (RR)

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

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION LANDMARKS FOR CHARTS										ORIGINATING ACTIVITY			
REPORTING UNIT (If field party, ship or office)		STATE		LOCALITY		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
TO BE CHARTED		TO BE REVISED		TO BE DELETED		HAVE <input checked="" type="checkbox"/> HAVE NOT <input type="checkbox"/>		SURVEY NUMBER		JOB NUMBER		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters	
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE		LONGITUDE		POSITION		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters		D.M. Meters	
OPR PROJECT NO.		JOB NO.		SURVEY NO.		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters		D.M. Meters		D.P. Meters		D.M. Meters	
STACK																							
TANK																							
STACK																							
STACK																							

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	C. Middleton
POSITIONS DETERMINED AND/OR VERIFIED	C. Middleton
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	I. Perkinson
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions* require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection P - Photogrammetric Vis - Visually 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	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.	

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[illegible]

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RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

INSTRUCTIONS

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

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]