### Descriptive Report

**Map No.**
- TP-00878

**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**
- GARY HARBOR

**Date**
- 1978 TO 1981

### Registry in Archives

### DESCRIPTIVE REPORT - DATA RECORD

**PHOTOGRAMMETRIC OFFICE**  
Coastal Mapping Division  
AMC, Norfolk, VA  
OFFICER-IN-CHARGE  
Max Ethridge, LCDR

### LAST PRECEDING MAP EDITION

<table>
<thead>
<tr>
<th>TYPE OF SURVEY</th>
<th>SURVEY TP.</th>
<th>MAP EDITION NO.</th>
<th>MAP CLASS</th>
<th>SURVEY DATES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIGINAL</td>
<td>00878</td>
<td></td>
<td>Final</td>
<td></td>
</tr>
<tr>
<td>REVISED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INSTRUCTIONS DATED

**1. OFFICE**  
Aerotriangulation  
Compilation  
January 24, 1980  
May 27, 1980

**2. FIELD**  
Horizontal Control  
Field Edit  
June 12, 1978  
June 26, 1981

### DATUMS

**1. HORIZONTAL:**  
\[1927\] NORTH-AMERICAN

**2. VERTICAL:**  
\[\text{MEAN HIGH-WATER}\]  
\[\text{MEAN LOW-WATER}\]  
\[\text{MEAN LOWER-LOW-WATER}\]  
\[\text{MEAN SEA LEVEL}\]

**3. MAP PROJECTION**  
Transverse Mercator

**4. GRID(S)**  
STATE: Indiana  
ZONE: West

**5. SCALE**  
1:10,000

### HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
</table>
| 1. AEROTRIANGULATION  
METHOD: Analytic  
LANDMARKS AND AIDS BY: R. Kelly  
R. Kelly  
R. Kelly | April 1980 |
| 2. CONTROL AND BRIDGE POINTS  
METHOD: Calcomp  
CHECKED BY: R. Cauthorne  
R. Cauthorne | Oct. 1980 |
| 3. STEREOSCOPIC INSTRUMENT  
COMPILED: Wild B-8  
SCALE: 1:10,000  
CHECKED BY: NA | Dec. 1980 |
| 4. MANUSCRIPT DELINEATION  
METHOD: Smooth drafted  
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT  
CHECKED BY: F. Mauldin  
| 6. APPLICATION OF FIELD EDIT DATA  
CHECKED BY: F. Mauldin  
F. Mauldin | Mar. 1982 |
| 7. COMPILED SECTION REVIEW  
CHECKED BY: F. Mauldin  
F. Mauldin | Mar. 1982 |
| 8. FINAL REVIEW  
CHECKED BY: J. Hancock  
J. Hancock | Oct. 1982 |
| 9. DATA FORWARD TO PHOTOGRAMMETRIC BRANCH  
CHECKED BY: R. Kelly | Apr. 1983 |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH  
CHECKED BY: | |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION  
CHECKED BY: | |

*U.S. G.P.O. 1972-769382/582 REG. 46*
1. COMPILED PHOTOGRAPHY

CAMERA(S)

Wild R.C.-8 "S" (S = 152.29 mm)

TIDE STAGE REFERENCE

☑ PREDICTED TIDES
☑ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND

(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE

ZONE

Central

MERIDIAN

90th

STANDARD

DAYLIGHT

NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE
--- | --- | --- | --- | ---
78 S(P) 8180-8182 | June 5, 1978 | 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 Harborgage 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
--- | --- | --- | ---
No survey | No survey | No survey | TP-00877

REMARKS
### HISTORY OF FIELD OPERATIONS

**1. FIELD INSPECTION OPERATION**

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIEF OF FIELD PARTY</td>
<td>L. Davis</td>
<td>Aug. 1978</td>
</tr>
<tr>
<td>HORIZONTAL CONTROL</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>VERTICAL CONTROL</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>LANDMARKS AND AIDS TO NAVIGATION</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>GEODETIC NAMES INVESTIGATION</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>PHOTO INSPECTION</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>BOUNDARIES AND LIMITS</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**II. SOURCE DATA**

1. **HORIZONTAL CONTROL IDENTIFIED**
   - PHOTO NUMBER
   - STATION NAME

2. **VERTICAL CONTROL IDENTIFIED**
   - PHOTO NUMBER
   - STATION DESIGNATION

3. **PHOTO NUMBERS** (Clarification of details)
   - None

4. **LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED**
   - None

5. **GEOGRAPHIC NAMES:**
   - REPORT
   - NONE

6. **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 Geodey Division

**REMARK:** No horizontal control (photo-identification) coverage fell within the limits of this map.
### History of Field Operations

#### Operation: Field Inspection Operation  
**NAME:** R. S. Tibbetts  
**DATE:** June 1981

#### Operation: Field Edit Operation  
**NAME:** J. D. Dimare  
**DATE:** June 1981

<table>
<thead>
<tr>
<th>Operation</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Chief of Field Party</strong></td>
<td>R. S. Tibbetts</td>
<td>June 1981</td>
</tr>
<tr>
<td>2. <strong>Horizontal Control</strong></td>
<td>J. D. Dimare</td>
<td>June 1981</td>
</tr>
<tr>
<td>3. <strong>Vertical Control</strong></td>
<td>None</td>
<td>NA</td>
</tr>
<tr>
<td>4. Landmarks and Aids to Navigation</td>
<td>None</td>
<td>NA</td>
</tr>
<tr>
<td>5. Geographic Names Investigation</td>
<td>J. D. Dimare</td>
<td>June 1981</td>
</tr>
<tr>
<td>6. <strong>Photo Inspection</strong></td>
<td>J. D. Dimare</td>
<td>June 1981</td>
</tr>
<tr>
<td>7. Boundaries and Limits</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Source Data

1. **Horizontal Control Identified**  
   None

2. **Vertical Control Identified**  
   None

3. **Photo Numbers (Classification of Details)**
   78 S(?) 8180, 8181, 8182 (1:10,000 scale)

4. **Landmarks and Aids to Navigation Identified**

   (See below)

<table>
<thead>
<tr>
<th>Photo Number</th>
<th>Object Name</th>
<th>Photo Number</th>
<th>Object Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>78S(?)8181</td>
<td>Gary East Pierhead Light</td>
<td>78S(?)8181</td>
<td>Gary West Pierhead Light</td>
</tr>
<tr>
<td>78S(?)8181</td>
<td>(1:10,000 scale)</td>
<td>--------------</td>
<td></td>
</tr>
</tbody>
</table>

5. **Geographic Names:**  
   Report: X  
   None

6. **Boundary and Limits:**  
   Report: X  
   None

7. **Supplemental Maps and Plans**  
   None

### Other Field Records

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

<table>
<thead>
<tr>
<th>DATA COMPILED</th>
<th>DATE</th>
<th>REMARKS</th>
<th>MARINE CHARTS</th>
<th>HYDRO SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compilation complete</td>
<td>Jan. 1981</td>
<td>Class III manuscript Superseded</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Field edit applied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compilation complete</td>
<td>March 1982</td>
<td>Class I manuscript</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Final Review</td>
<td>Sept. 1982</td>
<td>Final Map</td>
<td>Jan 7, 1983</td>
<td>None</td>
</tr>
</tbody>
</table>

### LANDMARKS AND AIDS TO NAVIGATION

1. **REPORT TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH**

<table>
<thead>
<tr>
<th>NUMBER (pages)</th>
<th>CHART LETTER NUMBER ASSIGNED</th>
<th>DATE FORWARDED</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Jan 7, 1983</td>
<td>Landmarks to be charted</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>Landmarks recommended for deletion</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>Aids to be charted</td>
</tr>
</tbody>
</table>

### FEDERAL RECORDS CENTER DATA

1. BRIDGING PHOTOGRAPHS; DUPLICATE BRIDGING REPORT; COMPUTER READOUTS.
2. CONTROL STATION IDENTIFICATION CARDS; FORM NO. 501 SUBMITTED BY FIELD PARTIES.
3. SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.

### SURVEY EDITIONS

<table>
<thead>
<tr>
<th>SECOND EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>DATE OF PHOTOGRAPHY</th>
<th>DATE OF FIELD EDIT</th>
<th>TYPE OF SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>THIRD EDITION</td>
<td>SURVEY NUMBER</td>
<td>JOB NUMBER</td>
<td>DATE OF PHOTOGRAPHY</td>
<td>DATE OF FIELD EDIT</td>
<td>TYPE OF SURVEY</td>
</tr>
<tr>
<td>FOURTH EDITION</td>
<td>SURVEY NUMBER</td>
<td>JOB NUMBER</td>
<td>DATE OF PHOTOGRAPHY</td>
<td>DATE OF FIELD EDIT</td>
<td>TYPE OF SURVEY</td>
</tr>
</tbody>
</table>
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00878

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°15.0' to Long. 87°20.0' featuring Cary Harbor, Indiana. This map defines the southeast limit for the project.

Two flight strips of 1:60,000 scale panchromatic photography were obtained for aerotriangulation May 10, 1978 using the RC-10 "V" 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 September 1981 by assigned personnel from the Field Survey's 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 this 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-00878

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.

Approved and Forwarded:

Robert B. Kelly
Chief, Aerotriangulation Section
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

Bridging Photography
## Closures to Control

**Strip 1**

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Year</th>
<th>Sub-PT A</th>
<th>Sub-PT B</th>
</tr>
</thead>
<tbody>
<tr>
<td>304101</td>
<td>Glenview</td>
<td>1956</td>
<td>4.4</td>
<td>-6.6</td>
</tr>
<tr>
<td>304102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B 3.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>301101</td>
<td>Foster</td>
<td>1977</td>
<td>-0.3</td>
<td>0.8</td>
</tr>
<tr>
<td>301102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B -0.5</td>
<td>14.2</td>
</tr>
<tr>
<td>298101</td>
<td>COC</td>
<td></td>
<td>1.4</td>
<td>-1.8</td>
</tr>
<tr>
<td>298102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B 0.0</td>
<td>-1.3</td>
</tr>
<tr>
<td>415101</td>
<td>Oswald</td>
<td>1977</td>
<td>-1.1</td>
<td>3.1</td>
</tr>
<tr>
<td>415102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B 0.2</td>
<td>0.8</td>
</tr>
<tr>
<td>292101</td>
<td>Highland</td>
<td>1952</td>
<td>-0.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>292102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B -1.2</td>
<td>-4.9</td>
</tr>
</tbody>
</table>

**Strip 2**

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Year</th>
<th>Sub-PT A</th>
<th>Sub-PT B</th>
</tr>
</thead>
<tbody>
<tr>
<td>415102</td>
<td>Oswald</td>
<td>1977</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>295801</td>
<td>Tie Point</td>
<td></td>
<td>2.5</td>
<td>-0.1</td>
</tr>
<tr>
<td>294801</td>
<td>&quot;</td>
<td></td>
<td>-1.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>296802</td>
<td>&quot;</td>
<td></td>
<td>0.3</td>
<td>2.8</td>
</tr>
<tr>
<td>293802</td>
<td>&quot;</td>
<td></td>
<td>-0.2</td>
<td>-1.1</td>
</tr>
<tr>
<td>293803</td>
<td>&quot;</td>
<td></td>
<td>-0.9</td>
<td>-0.8</td>
</tr>
<tr>
<td>293801</td>
<td>&quot;</td>
<td></td>
<td>3.9</td>
<td>1.5</td>
</tr>
<tr>
<td>411101</td>
<td>Edison</td>
<td>1972</td>
<td>-2.4</td>
<td>2.5</td>
</tr>
<tr>
<td>411102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B -1.9</td>
<td>-3.3</td>
</tr>
<tr>
<td>409101</td>
<td>Hobart</td>
<td>1972</td>
<td>-1.7</td>
<td>0.9</td>
</tr>
<tr>
<td>409102</td>
<td>&quot;</td>
<td></td>
<td>&quot; B -5.6</td>
<td>0.1</td>
</tr>
<tr>
<td>MAP NO.</td>
<td>JOB NO.</td>
<td>STATION NAME</td>
<td>SOURCE OF INFORMATION (Index)</td>
<td>AEROTRIANGULATION POINT NUMBER</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>--------------</td>
<td>-------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>TP-00878</td>
<td>CM-7811</td>
<td>JORDAN, 1952</td>
<td>410871</td>
<td>1008</td>
</tr>
</tbody>
</table>

**Computed by:** A. Rauck, Jr.  
**Date:** 5/13/80  
**Computation checked by:** F. Margiotta  
**Date:** May 14, 1980

**Listed by:** A. Rauck, Jr.  
**Date:** 5/5/80  
**Listing checked by:** F. Margiotta  
**Date:** May 14, 1980

**Hand plotted by:** L. Williams  
**Date:** 5/22/80  
**Hand plotting checked by:** I. Parkinson  
**Date:** May 22, 1980
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.
40. **HORIZONTAL AND VERTICAL ACCURACY**

See Item #32.

41. **COMPARISON WITH EXISTING MAPS**

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

47. **COMPARISON WITH NAUTICAL CHARTS**

Comparison was made with N.O.S. charts: No. 14926, 3rd edition, dated July 24, 1976, two pages, 1:15,000 scale and 1:60,000 scale; No. 14927, 1:60,000 scale dated May 5, 1979, 17th edition; No. 14905, 21st edition, dated March 3, 1979, scale 1:120,000.

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY**

None

**ITEMS TO BE CARRIED FORWARD**

None

Submitted by,

*Charles Blood*

Cartographic Technician

Date: December 3, 1980

Approved,

*James L. Byrd, Jr.*

Chief, Coastal Mapping Section
ADDENDUM TO THE COMPILATION REPORT

TP-00878

FIELD EDIT

According to the field editor, there are numerous steel swimming markers posted approximately 200 ft. beyond the shoreline starting at the ramp at Long. 87°16.1' and extending east, parallel to the beach. No location was determined for these markers since they are seasonally used only from June to September and removed during the inactive months.
51. METHODS

The shoreline was inspected by boat and by truck. The portion of this sheet on U.S. Steel Property was checked with one of their engineers who was very helpful with all interior questions asked on this manuscript.

Additions and deletions were noted on the Master Field Edit Print and cross-referenced to the NOAA Form 76-HO.

Field edit information will be found on the Master Field Edit Print and Photographs: 78SP-8180, 8181 and 8182.

52. ADEQUACY OF COMPILATION

The compilation was found to be adequate and will be complete upon application of field edit information.

54. RECOMMENDATIONS

Three charted landmarks are recommended for deletion and two are recommended for charting. Forms 76-HO are submitted.

Joseph D. Di Mare
Surveying Technician

4 September 1981
Approved and forwarded:

Robert S. Tibbetts
Chief, Photo Party 62
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 Gary, Indiana, 1968, 1:24,000 scale. No significant differences 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, 1:15,000/1:60,000 scales, dated July 24, 1976
14927, 17th edition, 1:60,000 scale, dated May 5, 1979
14905, 21st edition, 1:120,000 scale, dated March 3, 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
Final Reviewer

Approved for forwarding,

Billy H. Barnes
Chief, Photogrammetric Branch, AMC

Approved,

Chief, Photogrammetric Branch, Rockville

Chief, Photogrammetry Division
GEOGRAPHIC NAMES
FINAL NAME SHEET
CM-7811 (Chicago Lakefront, Illinois-Indiana)
TP-00878

Gary
Gary Harbor
Grand Calumet River
Grand Calumet River Lagoon
Marquette Park Beach

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
<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD AND DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIGHT</td>
<td>Gary West Pierhead Light</td>
<td>41 37</td>
<td>874 28.3</td>
<td>P-5-L 78 S(P) 8181</td>
<td>14926</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>87 39 30.9</td>
<td></td>
<td>14927</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14905</td>
</tr>
<tr>
<td>LIGHT</td>
<td>Gary East Pierhead Light</td>
<td>41 37</td>
<td>855 27.7</td>
<td>P-5-L 78 S(P) 8181</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>87 39 27.0</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>LIGHT</td>
<td>Gary Breakwater Light</td>
<td>41 37</td>
<td>1523 49.4</td>
<td>78 S(P) 8180 V-VIS</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>87 39 13.1</td>
<td>6/5/78</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/26/81</td>
<td>&quot;</td>
</tr>
<tr>
<td>LIGHT</td>
<td>Gary Bulkhead Light</td>
<td>41 37</td>
<td>812 26.3</td>
<td>78 S(P) 8180 V-VIS</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>87 39 19.8</td>
<td>6/5/78</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/26/81</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
by Photogrammetric methods.

variations based entirely upon ground survey methods.

FIELD POSITIONS are determined by field observer

EXAMPLE: F-2-6-L

LOCATION and date of field work.

A. Field Positions require entry of method of

- Resection
- Intersection
- Traverse
- Field Identified
- Visually
- Located
- Photogrammetric

Enter the applicable data by symbols as follows:

FIELD IDENTIFIED AND LOCATED OBJECTS

1. NEW POSITION DETERMINED OR VERIFIED

FIELD (cont'd)

7L(C) 2929
8L-12-75

EXAMPLE: P-8-A

Identify and locate the object.

day, and year) of the photograph used to

enter the number and date (including month,

Office

INSTRUCTIONS FOR ENTRIES UNDER METHOD AND DATE OF LOCATION

FIELD ACTIVITY REPRESENTATIVE

Field Activity Representative

C. Blood

R. S. Tippets

Responsible Personnel

ORGANIZATION

Name

ACTIVITIES

AND REVIEW GROUP AND FINAL REVIEW

form originated by Quality Control

OBJECTS INSTRUCTED FROM SEAMARK

- passport

- commercial party

- photogrammetric party

- Photo Field Party

- responsible personnel

- QUALITY CONTROL AND REVIEW GROUP

- REVIEWER

- OFFICE ACTIVITY REPRESENTATIVE

- OTHER (Specify)
**LANDMARKS FOR CHARTS**

The following objects **HAVE NOT** been inspected from seaward to determine their value as landmarks.

<table>
<thead>
<tr>
<th>OPR PROJECT NO.</th>
<th>JOB NUMBER</th>
<th>SURVEY NUMBER</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD AND DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CN-7811</td>
<td>TP-00878</td>
<td></td>
<td>RELAY TOWER</td>
<td></td>
<td>41 35</td>
<td>87 17</td>
<td>78 S(P)8180 6/5/78</td>
<td>14926</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30.2</td>
<td>58.2</td>
<td>V-VIS 5/26/81</td>
<td>14927</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>931</td>
<td>1349</td>
<td></td>
<td>14905</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STACK</td>
<td>Prominent stack recommended by field editor for charting as new landmark</td>
<td>41 36</td>
<td>87 18</td>
<td>78 S(P)8180 6/5/78</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35.5</td>
<td>33.9</td>
<td>P-V-VIS 5/17/81</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1096</td>
<td>785</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STACK</td>
<td></td>
<td>41 36</td>
<td>87 18</td>
<td>78 S(P)8180 6/5/78</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35.8</td>
<td>47.6</td>
<td>P-V-VIS 5/17/81</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1104</td>
<td>1103</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DATE**

Chicago Lake Front, May 1981
By photogrammetric methods, field positions are determined by field observer.

**EXAMPLE:** P-2-75

**Field Positions** require entry of method of location and date of field work.

<table>
<thead>
<tr>
<th>Field</th>
<th>NEW Position Determined or Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>82-75</td>
<td></td>
</tr>
</tbody>
</table>

**EXAMPLE:** P-2-75

1. NEW Position Determined or Verified

B. Photogrammetric

Enter the applicable data by symbols as follows:

1. FIELD (Continued)

**EXPLANATION: 7604032**

Enter the number and date (including month, day, and year) of the photography used to identify and locate the object. The symbol used to identify the object and the number of field work are entered on method of location or verification.

**EXAMPLE:** PHOTOGRAPHIC FIELD OBSERVER 2-10-75

1. OFFICE IDENTIFIED AND LOCATED OBJECTS

**ACTIVITIES**

1. Submitting field determination and/or verification forms organized by quality control and final review.

**REVIEWER**

**QUALITY CONTROL AND REVIEW GROUP**

Office Activity Representative

Field Activity Representative

Other (Specify)

Geodetic Party

Photographic Party

Photo Field Party

NAME

RESPONSIBLE PERSONNEL

ACTION
<table>
<thead>
<tr>
<th>Charting Name</th>
<th>Description</th>
<th>Datum</th>
<th>Position</th>
<th>Method and Date of Location</th>
<th>Charts Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWS SIG STA</td>
<td>Signal Station at Gary Harbor is no longer used although the flagpole still remains in place, deletion is recommended.</td>
<td>NA 1927</td>
<td>41°37.4’ N 87°19.5’ W</td>
<td>UNVERIFIED 5/17/81 DELETE</td>
<td>14926 14905</td>
</tr>
<tr>
<td>F P</td>
<td>Flagpole is in disrepair and has no prominent landmark value; deletion is recommended</td>
<td></td>
<td>41°37.2’ N 87°16.1’ W</td>
<td>Unverified 5/17/81 DELETE</td>
<td>14926</td>
</tr>
<tr>
<td>TANK</td>
<td>Ground storage tank is not visible from seaward, surrounding trees are taller, deletion is recommended.</td>
<td></td>
<td>41°35.4’ N 87°16.0’ W</td>
<td>78 S(P) 8180 5/17/81 DELETE</td>
<td>14905</td>
</tr>
</tbody>
</table>

Note: The following objects HAVE BEEN inspected from seaward to determine their value as landmarks.
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.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
</tbody>
</table>