

TP-00951

TP 00951

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey ... Shoreline

Job No. CM-7603 Map No. TP-00951

Classification No. III Edition No. ... 1

This map edition will not be field edited

LOCALITY

State ... Ohio

General Locality ... Lake Erie

Locality ... Sandusky Harbor

19 75 TO 19

REGISTRY IN ARCHIVES

DATE

1 of 23

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY ☒ ORIGINAL ☐ RESURVEY ☐ REVISED		SURVEY TP. 00951 MAP EDITION NO. (1) MAP CLASS JOB PH. CM-7603	
DESCRIPTIVE REPORT - DATA RECORD							
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Norfolk, VA				LAST PRECEDING MAP EDITION TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED			
OFFICER-IN-CHARGE Roy K. Matsushige				JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__			
I. INSTRUCTIONS DATED							
1. OFFICE Aerotriangulation - Oct. 20, 1976 Supplement I - Oct. 28, 1976 Compilation - March 14, 1977 Compilation - Feb. 16, 1979 Correspondance (Field Edit Cancellation) March 5, 1980				2. FIELD Aug. 27, 1975			
II. DATUMS							
1. HORIZONTAL: ☒ 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: ☐ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☐ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL				OTHER (Specify) International Great Lakes Datum			
3. MAP PROJECTION Lambert Conformal Conic				4. GRID(S) STATE Ohio ZONE North			
5. SCALE 1:10,000				STATE ZONE			
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY S. Solbeck				S. Solbeck		Mar 1977	
METHOD: Analytic LANDMARKS AND AIDS BY S. Solbeck				S. Solbeck		" "	
2. CONTROL AND BRIDGE POINTS PLOTTED BY J. Taylor				J. Taylor		Apr 1977	
METHOD: Cal Comp CHECKED BY R. Kravitz				R. Kravitz		Apr 1977	
				"		Oct 1979	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY J. Roderick, L. Neterer, &				J. Roderick, L. Neterer, &			
COMPILATION CHECKED BY F. Mauldin				F. Mauldin		Oct. 1979	
INSTRUMENT: N/A				N/A			
SCALE: 1:10,000				N/A			
4. MANUSCRIPT DELINEATION PLANIMETRY BY R. Kravitz				R. Kravitz		Nov 1979	
				J. Roderick		Dec 1979	
METHOD: Smooth Drafted				N/A			
				N/A			
SCALE: 1:10,000 HYDRO SUPPORT DATA BY R. Kravitz				R. Kravitz		Nov 1979	
				J. Roderick		Dec 1979	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				Field edit concealed		Mar 1980	
6. APPLICATION OF FIELD EDIT DATA BY				N/A			
7. COMPILATION SECTION REVIEW BY L. Neterer				L. Neterer		Sept 1982	
8. FINAL REVIEW BY J. Schad				J. Schad		Nov 1982	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY L. Neterer				L. Neterer		Oct 1982	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY J. Schad				J. Schad		Nov 1982	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY Edward D. Wolfe				Edward D. Wolfe		Oct 4 1983	

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

COMPILATION SOURCES

TP-00951

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-10 "B" 152.74 mm
6" focal lengthTYPES OF PHOTOGRAPHY
LEGEND

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

TIME REFERENCE

ZONE Eastern ☒ STANDARD
MERIDIAN 60th ☐ DAYLIGHT

TIDE STAGE REFERENCE

- ☐ PREDICTED TIDES
☒ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
75B(C) 5456-5464	Sept 14, 75	1400	1:20,000	+3.83 feet
75B(C) 6302-6306	Oct 4, 75	1817	"	+3.48 feet
75B(C) 6331-6333	Oct 4, 75	1842	"	+3.48 feet above Lake Erie Low Water Datum, Toledo Gage

REMARKS Lake level at time of photography was 572.43 feet based on the
International Great Lakes Datum 1955 (Toledo Gage)

2. SOURCE OF MEAN HIGH-WATER LINE:

Photographs listed above.

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

N/A

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 CONTEMPORARY SURVEY -----

REMARKS

HISTORY OF FIELD OPERATIONS

TP-00951

1. ☒ FIELD INSPECTION OPERATION (Premarking) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Tibbetts	Sept 1975
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 ☐ COMPLETE ☐ SPECIFIC NAMES ONLY BY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N/A

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED None		2. VERTICAL CONTROL IDENTIFIED N/A	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
3. PHOTO NUMBERS (Clarification of details) N/A			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED N/A			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
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 Geodesy Division) None			

HISTORY OF FIELD OPERATIONS

TP-00951

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Tibbetts	July 1976
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	L. Davis None L. Davis
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N/A

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
None2. VERTICAL CONTROL IDENTIFIED
None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Refer to NOAA Form 76-40

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
75B(C) 6304	East Cove Jetty Light		
75B(C) 6305	Battery Park Range Front Light		
75B(C) 6305	Battery Park Range Rear Light		

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)

3 forms 76-53

6 forms 76-40

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

RECORD OF SURVEY USE

TP-00951

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Final Reviewed Map	Nov 1982	Class III Map (Final)		

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
6 Pages		Nov 1982	Landmarks/Aids for charting via NOAA Form 76-40

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

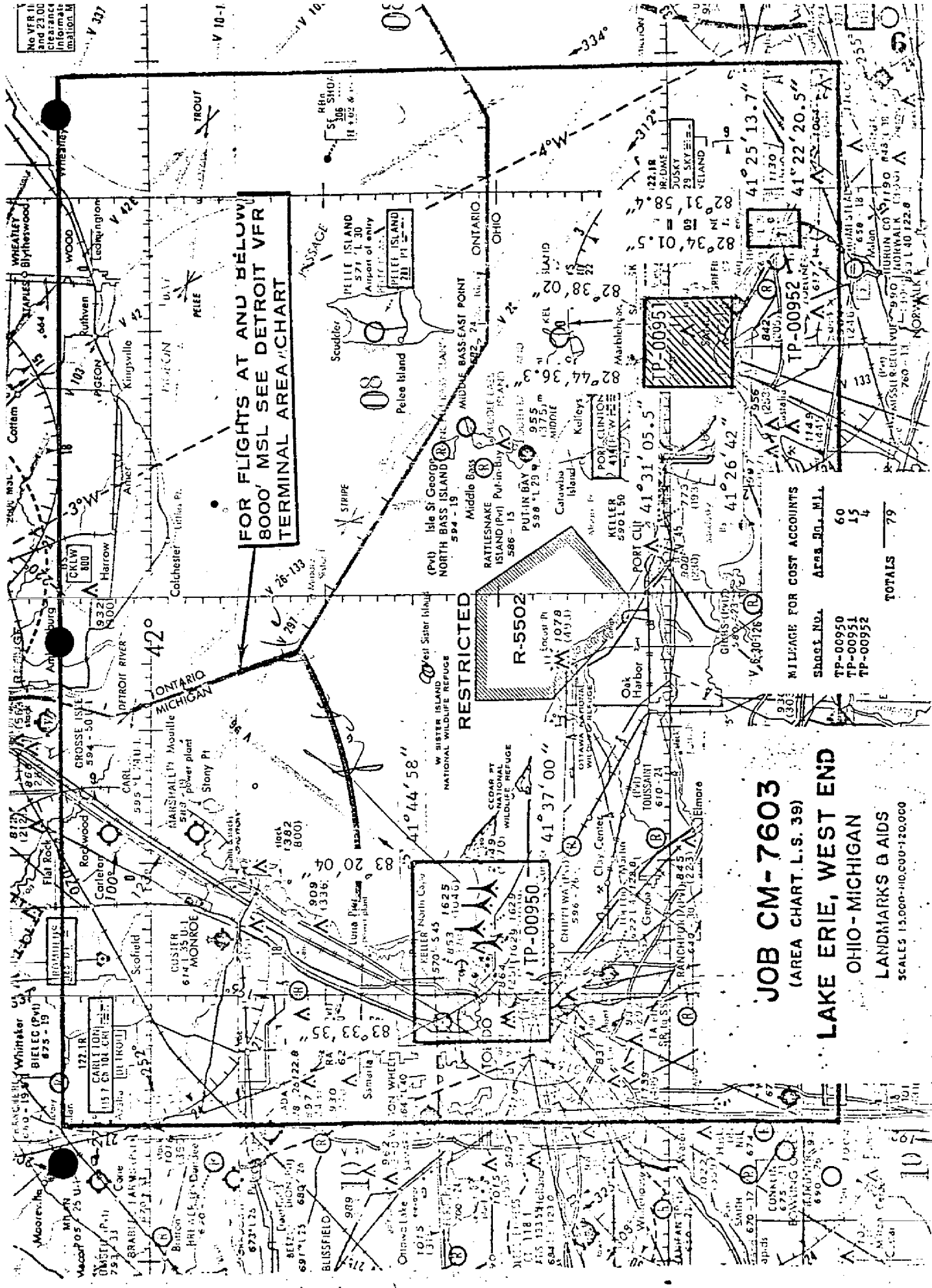
1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS 367 SUBMITTED BY FIELD PARTIES.
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS: NOAA forms 76-55

Duplicate of NOAA form 76-46, Possible Landmark value form

- 4.
- ☐
- DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: FEB 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 ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



FOR FLIGHTS AT AND BELOW
8000' MSL SEE DETROIT VFR
TERMINAL AREA CHART

RESTRICTED

JOB CM-7603

(AREA CHART L.S. 39)

LAKE ERIE, WEST END

OHIO - MICHIGAN

LANDMARKS & AIDS

SCALES 1:5000-1:10000-1:20000

MILEAGE FOR COST ACCOUNTS

Sheet No.	Area, Sq. MI.	TOTALS
TP-00950	60	
TP-00951	15	
TP-00952	79	

Summary
TP-00951

This map is one of three shoreline maps, TP-00950, TP-00951, and TP-00952 that comprise of Job CM-7603. The purpose of this job is to provide contemporary shoreline data and alongshore detail for nautical chart revision. This map portrays the shoreline and alongshore detail of Sandusky Bay from Danbury to Sandusky and east to Cedar Point and the shoreline and alongshore detail of Lake Erie from Danbury to Cedar Point.

Field operation was accomplished in September 1975 and June 1976 and consisted of the provision of aerial photographs, recovery, location and identification of landmarks and aids to navigation. —▷

Natural color photographs were taken September and October 1975, with the Wild RC 10-B camera at 1:20,000 scale, which were provided to aerotriangulation and compilation sections.

Aerotriangulation was performed at the Washington Science Center, Rockville, Maryland. The photographs were bridged using analytic aerotriangulation methods.

Compilation was performed in October 1979 at the Coastal Mapping Division, AMC, Norfolk, Virginia.

Final Review of this map was performed at the Washington Science Center, Rockville, Maryland, in November 1982. This map complies with the National Map Accuracy Standards.

A copy of TP-00951, labeled Chart Maintenance Print, was prepared during the final review and forwarded to the Marine Chart Division. Accompany the above forwarded copy are NOAA Form 76-40 listing the landmarks and nonfloating aids to navigation.

The context of the Descriptive Report contains all pertinent reports and listing of data used to compile this final map.

FIELD INSPECTION :

TP-00951

Field inspection operation consisted of the recovery and establishment of horizontal control and the investigation of landmarks and aids to navigation.

Photogrammetric Plot Report

.. CM-7603

Lake Erie-West End

March 1977

21. Area Covered

This report covers the western shoreline of Lake Erie from Huron, Ohio, clockwise along the Ohio and Michigan shoreline to Point Pelee in Ontario, Canada. Three TP-sheets are to be compiled in the order listed: Toledo, Ohio (1:20,000); Sandusky, Ohio (1:10,000); Huron, Ohio (1:5,000).

22. Method

Twenty-one strips of color photography were bridged by analytic aerotriangulation methods. Seven strips of 1:60,000 scale photography were bridged to provide control for the 1:20,000 scale photography. Fourteen strips of 1:20,000 scale photography were bridged to establish positions for field identifiable landmarks, aids to navigation, pass points and supplemental objects. A portion of the 1:60,000 scale photography was ratioed to provide supplemental coverage to TP-00950. Bridge points were used to determine ratio values for all photography being used for compilation.

23. Adequacy of Control

The control proved adequate according to map accuracy standards. However, in achieving these standards, some difficulties were encountered. Whenever possible, all panels were held in the strip adjustments, otherwise, tie points and home stations were used.

To the west of Huron, Ohio, one panel, Camp Boss, 1956 (C&GS), was barely held within National Map Accuracy Standards for the nearby 1:5,000 scale TP-sheet. It was left in the adjustment as no reason for this result was determined. This TP-sheet is to be compiled from 1:20,000 scale color photography and, thus, adequate control is critical. Except for the above station, no further control problems came up in this immediate area.

To the north of Sandusky Bay, two stations, Port Clinton Municipal Water Tank, 1956 (C&GS), and the sub point to Port Clinton Standard Products Company Water Tank, 1956 (C&GS) varied by as much as nine feet between three strips of photography.

The primary 1:60,000 scale bridging strip covering the Michigan shoreline was held to National Map Accuracy Standards. However, the amount of error was in excess of that normally expected for a project of this type. Two panels (sub points to the home station) are cited: Luna Pier Consumers Power Water Tank (USLS) and Point Aux Peaux Enrico Fermi Water Tank (USLS) (no dates given for either tank). The former was proved in error by verifying the home station, but the latter matched the reading of the home station.

Although the positions attained during aerotriangulation are acceptable, the degree of discrepancy is especially significant as the 1:60,000 scale bridging strips are the primary, if not the sole source, of control for the compilation photography. Any errors occurring in this latter photography will only compound any error in the bridging photography and make the compiler's job more difficult.

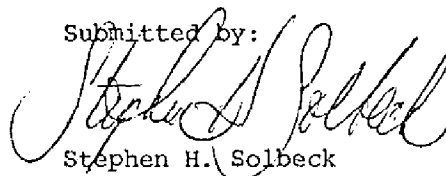
24. Supplemental Data

Elevations derived from USGS quadrangles were used to provide vertical control for the strip adjustments.

25. Photography

The quality of the photography was adequate for the job. The coverage of the 1:20,000 scale compilation photography missed small areas on two of the TP-sheets: To the west of TP-00951, part of Johnson Island is missing. To the east of TP-00950, the tip of Cedar Point is not covered. On this same TP-sheet, part of the 1:20,000 scale strip (75-B(C) 5552-5554) had to be dropped due to lack of control and this eliminated a series of lights extending bayward from Toledo. To the north of Toledo, North Cape and surrounding islands were not covered. In order to alleviate the problems on TP-00950, a portion of the 1:60,000 scale bridging photography was ratioed.

Submitted by:



Stephen H. Solbeck

Approved and Forwarded:



John D. Perrow, Jr.
Chief, Aerotriangulation Section

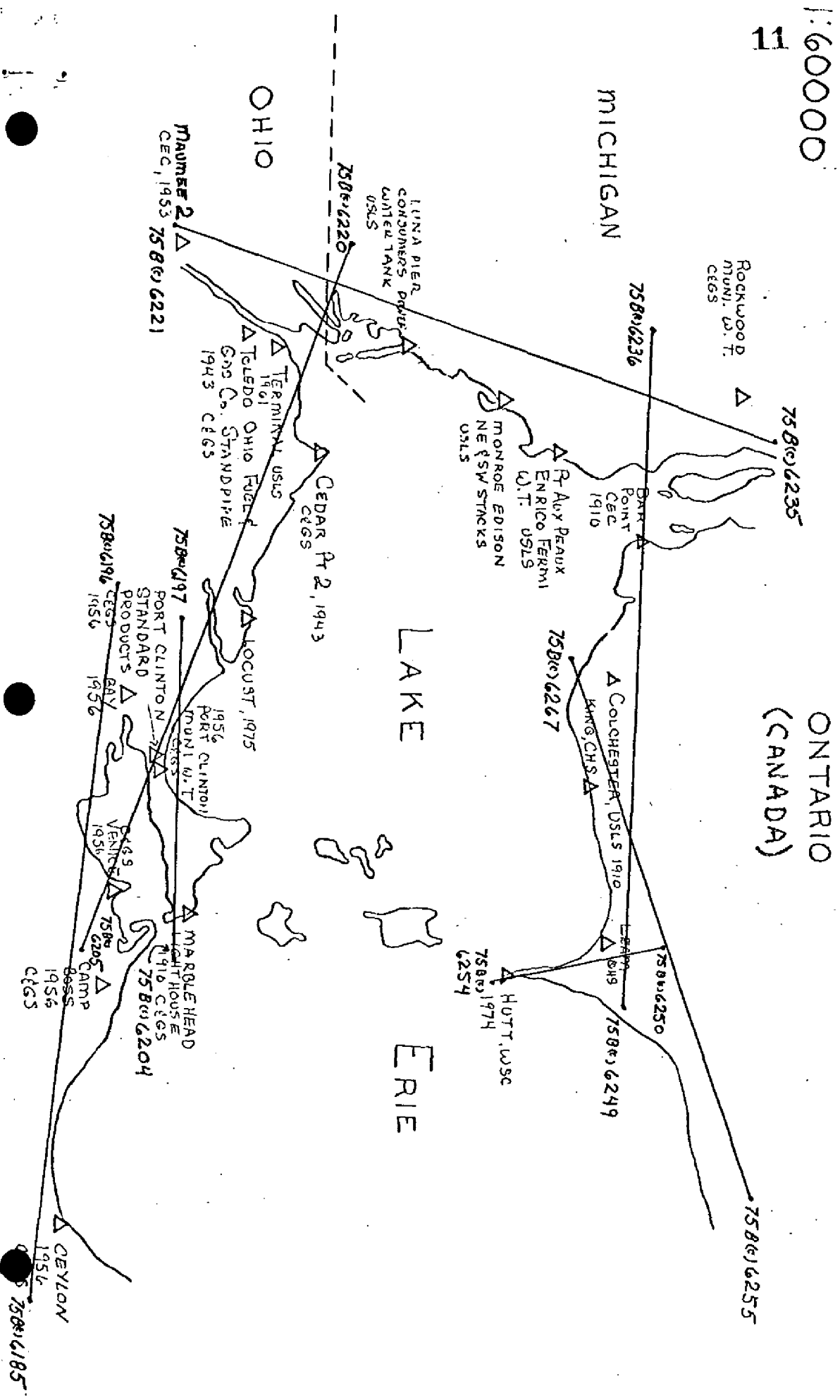
AEROTRIANGULATION SKETCH

CM 7603

LAKE ERIE - WEST END

1:600000

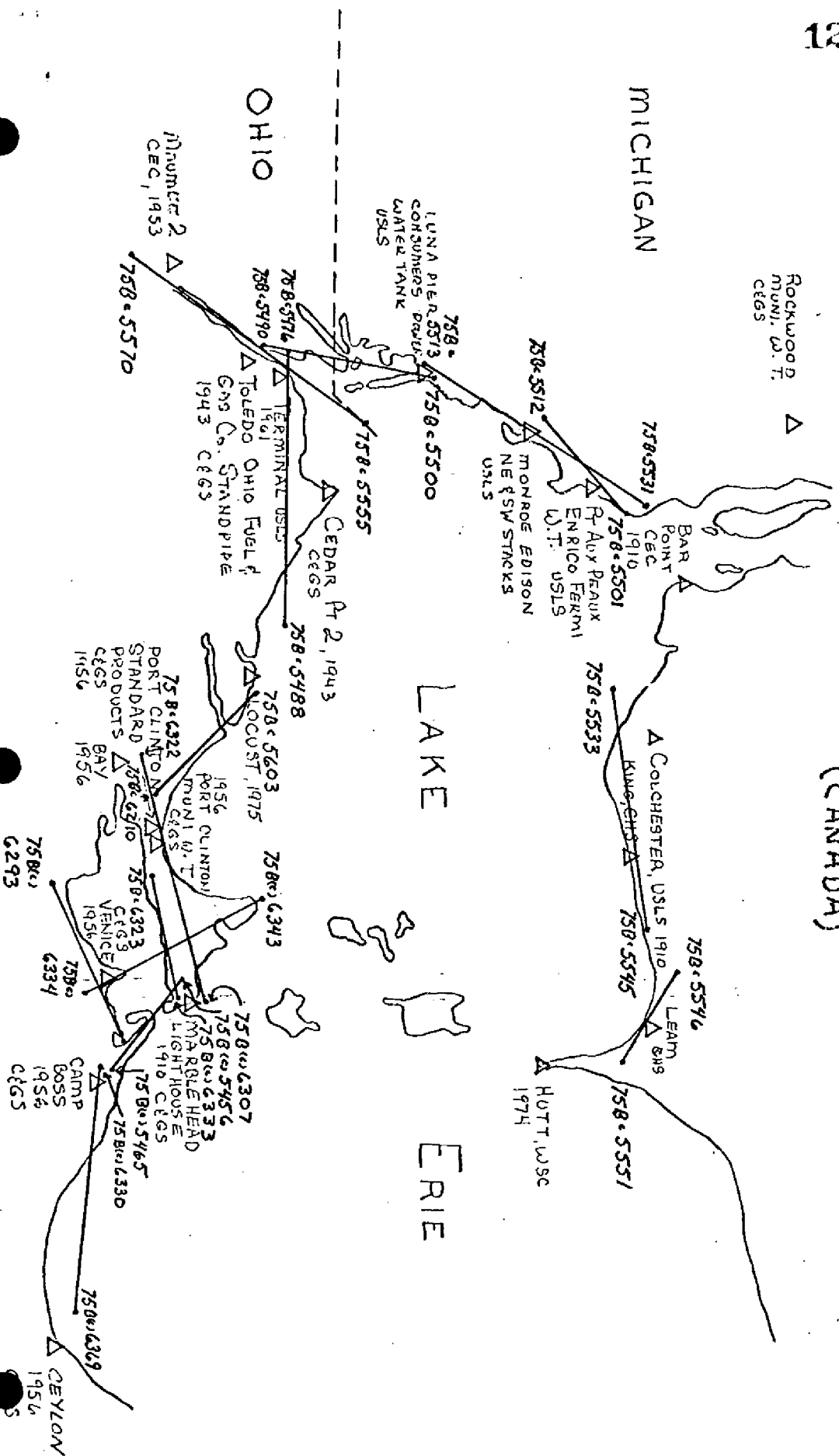
11



LAKE ERIE - WEST END

12

Rockwood
Mum. W. T.
CEGS



185100	Ceylon, 1956
185101	Sub Pt. (Panel)
188100	Camp Boss, 1956
188101	Sub Pt. A (Panel)
191100	Venice, 1956
191101	Sub Pt. (Panel)
192100	Port Clinton Muni Water Tank 1956
193100	Port Clinton Standard Products Co. Water Tank 1956
193101	Sub Pt. (Panel)
194100	Bay 1956
194101	Rm 1 (Panel)
203100	Marblehead Lighthouse 1910
203101	Sub Pt. (Panel)
213100	Locust 1975
213101	Sub Pt. (Panel)
216100	Cedar Pt. 2, 1943 (Panel)
218100	Terminal 1961 (USLS)
218101	Sub Pt. (Panel)
222100	Maumee 2, 1953
222101	Maumee Rm 1 (Panel)
227100	Luna Pier, Consumers Power Co. Water Tank (USLS)
227101	Sub Pt. (Panel)
229102	Monroe Edison SW Stack (USLS)
229103	Monroe Edison NE Stack (USLS)
231100	Point Aux Peaux Enrico Fermi Plant Tank (USLS)
231101	Sub Pt. (Panel)
234100	Rockwood Municipal Water Tank, 1957
234101	Sub Pt. (Panel)
239100	Detroit River Light
240100	Bar Point, 1910
240101	Sub Pt. A
240102	Sub Pt. B
242100	Colchester 1910
242101	Sub Pt. (Panel)
245100	King (CHS) 1910
245101	Sub Pt. (Panel)
247100	Leam (CHS) 1910
247101	Sub Pt. (Panel)
253100	Hutt (CHS) 1974
253101	Sub Pt. A (Panel)
257100	Coat

Where date is not listed, none was available.

STRIP #11

	X	Y	Z
456801	-1.18	-3.716	600.87
456802	- .27	+3.56	592.93
461801	-3.69	+.46	579.18
461802	+2.98	+ .11	574.76
462801	+ .93	+ .30	576.64
462802	+ .57	-2.04	577.39
462803	+ .20	+2.25	577.55
462804	+3.74	+2.85	577.74
463801	-3.24	- .58	575.82
463802	+1.13	-1.77	578.25
465803	-1.15	-1.43	614.08

STRIP #12

188101	+1.98	+3.07	625.94
361801	+ .03	- .98	589.36
361802	-1.55	-1.90	635.12
361803	- .46	-1.22	614.59
363801	-1.17	+1.04	582.51
363802	- .47	- .67	601.92
365801	- .45	- .09	601.22
365802	+1.49	+1.25	613.09
185101	+ 1.01	-1.45	606.04
367802	+1.18	+ .41	621.39
369801	+ .14	+1.05	617.25
369802	-1.74	- .52	748.56

STRIP #13

293801	- .98	- .80	579.06
293802	+2.03	+1.80	584.33
296801	-1.68	-3.20	573.73
296802	- .94	+3.12	588.14
299801	-1.62	+1.01	574.84
299802	+1.58	-3.73	606.98
302801	+3.98	+1.82	597.77
302802	- .20	+ .67	604.71
305801	+ .05	-1.36	583.87
305802	-2.24	+ .67	584.77

Z

STRIP #14 .

193101	+ .04	+2.83	580.39
324801	- .21	-2.35	581.66
324802	+1.25	-2.33	582.77
328801	- .53	- .31	577.52
328802	+1.91	+1.12	586.61
328803	-2.65	+1.07	578.17
203101	- .37	+1.34	583.89
333801	+ .55	-1.37	582.42

STRIP #15

203101	-1.82	- .02	580.25
312801	+2.17	+2.14	591.56
312803	+3.32	- .67	579.87
193101	-2.24	-1.05	578.03
318140	-2.92	-1.30	689.74
318141	-2.98	- .18	725.78
321802	+1.18	+3.31	579.23
322801	+2.27	-2.72	584.63
322802	+1.02	+ .49	579.16

STRIP #16

603801	+ .67	-1.13	577.10
603802	+3.15	+1.69	572.28
603803	-2.79	-2.48	576.51
606801	- .34	+3.24	573.74
606802	- .06	-1.92	576.54
609801	+1.13	+1.27	577.41
609802	-1.62	- .73	575.78
612801	- .37	- .08	576.26
612803	+ .23	+ .14	574.72

STRIP #17

476801	+2.21	+1.33	570.84
476802	- .83	-1.02	567.02
480801	- .79	+ .94	581.71
480802	+1.43	-3.22	584.12
482801	- .11	4.29	580.18
482802	+ .46	-1.92	585.66
484801	-1.44	+1.08	576.59
484802	- .81	-1.01	580.91
487802	- .13	- .47	568.17

x

Y

7.

STRIP #18 .

556801	+3.42	- .23	576.18
566802	-5.44	+3.98	577.69
556803	- .18	+1.77	573.21
558801	-1.66	-2.23	588.14
558802	+ .43	-4.78	570.14
560801	+5.55	+1.49	596.12
560802	+5.37	-3.94	596.92
563802	-3.10	+ .44	598.39
565801	-7.68	+3.47	618.03
565802	+ .94	+1.89	616.93
222101	-1.83	+4.30	627.11
570801	-1.44	-3.17	624.86
570802	+ .40	-2.72	596.47
570803	+5.23	- .28	642.71

STRIP #19

490801	- .98	+ .83	584.34
490802	-1.06	+ .72	594.19
490803	-4.29	- .35	603.12
492801	+9.04	-2.84	587.82
492803	+6.40	+1.03	576.87
494801	-1.33	-1.11	579.71
494802	-5.64	- .50	577.36
497801	- .49	+ .86	575.75
497802	-4.93	+1.50	573.05
500801	+2.85	+ .55	576.00
500802	+ .96	+ .86	579.54
500803	- .53	-1.54	572.54

STRIP #20

513801	+2.22	+1.90	582.45
513802	-2.88	-2.00	571.21
513803	+1.57	- .72	573.34
516802	- .44	- .42	576.53
519802	-2.32	- .07	588.77
522801	+4.95	+1.66	592.49
522802	- .21	- .62	579.85
525802	-3.29	-1.77	579.29
528801	+ .77	+1.51	593.99
528802	+1.28	+1.54	584.12
528803	-1.64	-1.01	579.98

x

Y

Z

STRIP #21 .

501801	- .25	- .67	581.66
501802	- .30	+ .95	575.99
503801	+ .24	-1.05	581.32
503802	+ .72	+1.04	578.75
505801	+ .06	-1.00	603.05
505802	- .47	+ .73	576.53

STRIP #22

533801	+ .50	+ .10	596.31
533802	- .29	- .34	610.47
536801	+ .71	+ .29	653.62
536802	- .32	- .09	625.27
539801	- .19	- .38	585.09
539802	-1.72	+2.39	609.81
542801	+2.04	- .75	601.17
542802	+ .63	-1.98	621.20
545801	- .33	- .47	631.84
545802	-1.04	+1.24	641.93

STRIP #23

547801	+1.32	+ .79	662.21
547802	- .12	-1.00	658.12
548801	-1.61	+ .63	586.36
247101	-.59	- .65	583.74
551801	+ .26	+1.24	584.06
551802	+ .75	-1.01	580.17

STRIP #27

334801	-2.59	-2.54	577.54
334802	- .35	+2.64	587.97
335801	+ .73	.59	577.21
339801	- .58	-3.00	592.11
339802	+2.27	+3.29	588.48
341801	- .12	+ .69	590.07
341802	+1.95	+ .41	583.66
342801	-1.76	+ .67	577.96
342802	+1.25	-1.22	576.92
343801	-1.52	-1.41	591.71
343802	+ .73	- .13	585.82

	X	Y	Z
<u>STRIP #1</u>			
191101	- .69	- .12	581.67
192100	+ .44	+2.75	710.09
193101	+1.45	+2.65	573.71
194101	-2.00	-2.50	546.747
213101	+ .98	+ .26	569.88
216100	+ .69	- .06	574.56
218101	- .45	- .23	609.15

<u>STRIP #2</u>			
218101	+5.50	+2.16	616.68
222101	- .61	- .40	634.56
227100	-2.95	- .66	803.20
227101	-9.21	- .07	586.18
229102	+ .44	- .43	1383.51
229103	- .06	-7.08	1370.03
231100	+9.33	-4.80	771.49
231101	+9.17	- .45	566.78
234100	-2.02	-5.78	690.78
234101	-4.88	-1.17	587.30

<u>STRIP #3</u>			
234100	+2.64	-3.92	697.09
234101	- .73	-2.22	591.23
239100	+3.93	-10.62	585.94
239102	-7.68	+4.70	582.39
239103	-11.22	+ .92	576.07
239104	-10.88	+6.78	583.93
240101	-3.44	- .35	574.77
240102	+1.08	+4.56	575.81
242101	+ .44	-1.83	643.75
245101	-1.39	-1.97	602.52
247101	+ .64	+1.47	584.09

<u>STRIP #4</u>			
251820	-1.72	+4.00	590.75
251821	+4.93	+ .75	598.96
247101	+2.17	+ .32	578.76
252802	-5.56	-5.58	572.65
253101	+ .18	+ .52	591.35

242101	+1.12	- .85	644.19
245101	-4.71	+1.05	597.33
247101	-3.62	-12.08	572.32
257100	- .78	+ .18	611.21
260820	+2.25	-1.99	627.37
261820	+2.11	+1.60	720.27
263820	+ .53	+ .84	629.27
263821	+ .89	+2.32	599.05
264820	-2.35	+4.90	590.81
264821	-1.27	+4.15	605.92

185101	+ .10	-1.58	609.50
188101	- .22	+2.99	626.15
191101	+1.98	+ .96	575.64
192100	+6.42	-5.99	716.08
193101	- .11	-5.64	578.76
194101	-1.78	+3.27	582.76

192100	+5.99	-4.26	712.75
193101	+2.28	+3.52	584.66
198801	-2.05	- .25	573.95
198802	+ .29	+1.36	576.87
199801	+2.09	-3.21	587.59
199802	+1.33	-2.19	585.83
200801	+2.54	-3.11	584.52
200802	+1.48	-6.49	578.41
201801	+ .95	+ .72	578.26
201802	- .38	+1.01	593.97
201803	- .69	-4.66	582.04
203101	- .78	+1.19	596.07
203801	+6.04	-7.82	582.73
203802	+4.55	-5.63	581.70

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.		JOB NO.		GEOIDETIC DATUM		ORIGINATING ACTIVITY		REMARKS	
STATION NAME		SOURCE OF INFORMATION (Index)		AEROTRIANGULATION POINT NUMBER		COORDINATES IN FEET STATE <u>Ohio</u> ZONE <u>North</u>		GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	
TP-00951		CM 7603							
Cedar Pt GA Boeckling Co, Silver Water Tank 1956	Quad 410823 Sta 1007	463140		ϕ 41 26	43.876				
Cedar Pt GA Boeckling Co, Black Water Tank 1928	Quad 410823 Sta 1008	460140		ϕ 41 28	58.026				
Sandusky County Courthouse Clock Tower 1928	Quad 410823 Sta 1011	303143		ϕ 41 27	13.803				
Sandusky, Apex Electrical MFG Co. Water Tank 1956	Quad 410823 Sta 1013	305143		ϕ 41 27	06.193				
Sandusky First Presbyterian Church SPIRE 1956	Quad 410823 Sta 1016			ϕ 41 27	15.933				
Sandusky ST Marys Catholic Church SPIRE 1928	Quad 410823 Sta 1011			ϕ 41 27	04.848				
				ϕ					
				λ					
				ϕ					
				λ					
				ϕ					
				λ					
				ϕ					
				λ					
				ϕ					
				λ					
COMPUTED BY R Kravitz	DATE Sept 13, 1979	COMPUTATION CHECKED BY F. M. G. / d. m.		DATE Sept 13, 1979					
LISTED BY J. Sched	DATE NOV 5, 1982	LISTING CHECKED BY		DATE					
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY		DATE					

COMPILATION REPORT

TP-00951

31. Delineation

The shoreline and interior planimetric on this map was compiled on the Wild B-8 stereoplotter instrument from 1:20,000 scale color photographs. The photographs were controlled by map point determined by aerotriangulation.

32. Control

Refer to the Aerotriangulation Plot Report for the adequacy of the horizontal control. The vertical control used in leveling the Wild B-8 stereoplotter instrument was obtained from USGS quadrangle maps.

33. Supplemental Data - None34. Contours and Drainage

Contours are not applicable. Drainage was compiled from office interpretation of the 1:20,000 scale color photographs.

35. Shoreline and Alongshore Details

The shoreline and alongshore detail was compiled by officer interpretation of the photographs. There was no photo coverage for the south end of Johnson Island, 41°29'49" - 82°44'06".

36. Offshore Details

The offshore detail consisted of rocks, trees, ruins and wrecks.

37. Landmarks and Aids

Twenty-four landmarks were identified. Fifteen field identified and verified by aerotriangulation and nine by compilation. Seventeen aid to navigation were field identified and verified by aerotriangulation.

38. Control for Future Surveys - None39. Junctions

There are no junctions.

40. Horizontal and Vertical Accuracy

Control for this map complies with the National Map Accuracy Standards.

46. Comparison with Existing Maps

Kelleys Island, Ohio, 1969, scale 1:24,000

Sandusky, Ohio, 1969, scale 1:24,000

47. Comparison with Nautical Charts

14845, 21st Edition, May 14, 1977, scale 1:10,000

14842, 7th Edition, March 29, 1980 (360), South Shore of Lake Erie

Items to be Applied to Nautical Charts Immediately: None

Items to be Carried Forward: None

Submitted by,

Robert R. Kravitz

Robert R. Kravitz

Approved and Forwarded:

Gregory L. Fennell
Chief, Coastal Mapping Section

Review Report
Shoreline Survey
TP-00951

61. General Statement

A final review was performed for this shoreline map and no major discrepancies were encountered. This map is registered as Class III since field edit was canceled March 5, 1980. For a complete analysis of TP-00951, refer to the Compilation Report bound with this Descriptive Report.

62. Comparison with Registered Topographic Survey - None

63. Comparison with Maps of Other Agencies

Refer to the Compilation Report, paragraph 46, bound with this Descriptive Report.

64. Comparison with Contemporary Hydrographic Surveys - None

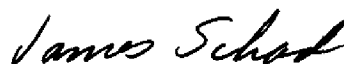
65. Comparison with Nautical Charts

Refer to the Compilation Report, paragraph 47, bound with this Descriptive Report.

66. Adequacy of Results and Future Surveys

This map complies with the project instruction and meets National Map Accuracy Standards.

Submitted by,



James Schad

Approved and Forwarded:


Chief, Photogrammetric Branch

Chief, Photogrammetry Division

March 31, 1978

GEOGRAPHIC NAMES

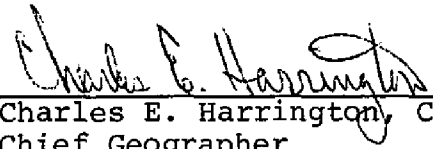
COMPILATION NAME SHEET

CM-7603 (Sandusky Harbor, Ohio)

CHART 14845 (LS-365)

Baltimore & Ohio (RR)	Mills Creek
Bay Point	Mineyahta-on-the-Bay
Bay Point Shoal	Moseley Channel
Cedar Point	Norfolk & Western (RY)
Cedar Point (locality)	Pipe Creek
Conrail (RR)	Sadler Sailing Basin
Dock Channel	Sandusky
Johnson Island	Sandusky Bay
Lake Erie	Upper Bay Channel
Lower Bay Channel	Upper Straight Channel
Lower Straight Channel	

Approved by:


Charles E. Harrington, C3x8
Chief Geographer

Information of Dissemination of Project Material

CM-7603

Lake Erie, West End, Ohio

NATIONAL ARCHIVE/FEDERAL RECORD CENTER

- . Aerotriangulation Bridging Photographs
- . Computer Readout
- . Control Station Identification Cards
- . NOAA Form 76-41 (Descriptive Report Control Record)
- . NOAA Form 76-40 (Field)
- . Project Diagram
- . Plot Report
- . Field Inspection Charts LS 37, 360, and 370

Bureau Archives

- . Descriptive Report
- . Registered Maps

Reproduction Division

- . 8X Reduction Negative of Each Map

Office of Staff Geographer

- . Geographer Name Standard

1073

NOAA FORM 76-40 (8-74) Replaces C&GS Form 367.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION														
LANDMARKS FOR CHARTS										ORIGINATING ACTIVITY														
REPORTING UNIT (Field Party, Survey Party, or Other Party)					STATE					LOCALITY					DATE									
TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED					A-11C Norfolk VA					OHIO					Sandusky Harbor					10-22-79				
The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.										(See reverse for responsible personnel)														
OPR PROJECT NO.										JOB NUMBER														
CMA 7603										TP-00951														
DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)										POSITION														
										LATITUDE					LONGITUDE									
										D.M. Meters					D.P. Meters									
										° ' "					° ' "									
* Tank											41 26	56 533	82 43	41 807	75 B(C) 6303	10-4-75		14842(360)						
* Silo											41 27	39 570	82 43	53 210	75 B(C) 6303	P-5 75 B(C) 6302 7-12-76		14845						
* Silo											41 27	39 929	82 43	53 560	75 B(C) 6303	P-5 75 B(C) 6302- 7-12-76		"						
* Silo											41 27	39 909	82 43	52 973	75 B(C) 6303	P-5 75 B(C) 6302 7-12-76		"						
* Spire (Sandusky St Marys Catholic Church Spire, 1928)											41 27	04 848	82 42	49 534	75 B(C) 6304	Triang Rec 7-28-76		"						
** Spire											41 27	08 095	82 42	35 302	75 B(C) 6304			"						
** Tower											41 27	08 482	82 42	33 523	75 B(C) 6304			"						
* Clock (Sandusky County Courthouse Clock Tower 1928)											41 27	13 803	82 42	41 222	75 B(C) 6304	Triang Rec 7-12-76		"						
* Spire (Sandusky First Presbyterian Church Spire 1956)											41 27	15 933	82 42	46 636	75 B(C) 6304	Triang Rec 7-12-76		"						
* Aerotriangulation Compilation											41 27	49 1	10 82					"						

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	<i>Robert R Kravitz</i>
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<i>Wm Schaefer</i>
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.	

Replaces C&GS Form 567.

LANDMARKS FOR CHARTS

U.S. DEPARTMENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

ORIGINATING ACTIVITY

- ☐ HYDROGRAPHIC PARTY
☐ GEODETIC PARTY
☐ PHOTO FIELD PARTY
☒ ~~COMPILATION ACTIVITY~~
☐ FINAL REVIEWER
☐ QUALITY CONTROL & REVIEW GRP.
☐ COAST PILOT BRANCH
- (See reverse for responsible personnel)

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.						
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION			LANDMARKS FOR CHARTS			
REPORTING UNIT (Field Party, Ship or Office)		STATE	LOCALITY	DATE		
☒ TO BE CHARTED ☐ TO BE REVISED ☐ TO BE DELETED	<i>Cedar Pt Mapping Div</i>		<i>Sandusky Harbor</i>	<i>10-22-79</i>		
The following objects HAVE ☐ BEEN INSPECTED from seaward to determine their value as landmarks. OPR PROJECT NO.		JOB NUMBER	DATUM			
HAVE ☐		<i>Cm 7603</i>	<i>TP-00951</i>			
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)	POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
		LATITUDE	LONGITUDE	OFFICE	FIELD	
* Tank		° /	' ° '		P-5 75 B(C) 6303 7-12-76	14242(300) 14845
** CNY		41 27	82 42	75 B(C) 6303 10-4-75		"
*		41 27	82 42	75 B(C) 6303 10-4-75		"
*		41 27	82 41	75 B(C) 6305 10-4-75		"
** Stack		41 27	82 41	75 B(C) 6305 10-4-75		"
*	(Sandusky, Apex Electric MFG Co Water Tank 1956)	41 27	82 40	75 B(C) 6305 10-4-75		"
*	(Cedar Pt GA Boeckling Co Silver Water Tank 1956)	41 26	82 38	75 B(C) 6305 9-14-75		"
** CUP		41 28	82 40	75 B(C) 6305 9-14-75		"
* OBS TR		41 28	82 40	75 B(C) 6305 9-14-75		"
* Aerotriangulation	Aerotriangulation					
* Compilation	Compilation					

TYPE OF ACTION		RESPONSIBLE PERSONNEL	
		NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD			☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED		Robert R Kravitz	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		James School	☐ OFFICE ACTIVITY REPRESENTATIVE ☐ REVIEWER ☒ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
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 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.			

NOAA FORM 76-40
(8-74)

RESPONSIBLE PERSONNEL		NAME		ORIGINATOR	
TYPE OF ACTION				☐ PHOTO FIELD PARTY	
OBJECTS INSPECTED FROM SEAWARD				☐ HYDROGRAPHIC PARTY	
				☐ GEODETIC PARTY	
				☐ OTHER (Specify)	
POSITIONS DETERMINED AND/OR VERIFIED				FIELD ACTIVITY REPRESENTATIVE	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES				OFFICE ACTIVITY REPRESENTATIVE	
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) 8. Photogrammetric field positions* require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. 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			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.					

NOAA FORM 76-40
(8-74)
Replaces C&GS Form 567.

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

REPORTING UNIT
(Field Party, Ship or Office)
C&GS Hydrographic Div
AMC Norfolk Va. OHIO

STATE
OHIO

LOCALITY
Sandusky Harbor

DATE
10-22-79

ORIGINATING ACTIVITY
☐ HYDROGRAPHIC PARTY
☐ GEODETIC PARTY
☐ PHOTO FIELD PARTY
☐ COMPILATION ACTIVITY
☐ FINAL REVIEWER
☐ QUALITY CONTROL & REVIEW GRP.
☐ COAST PILOT BRANCH
(See reverse for responsible personnel)

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

OPR PROJECT NO. ☐ JOB NUMBER ☐ SURVEY NUMBER ☐ DATUM

CM 7603 TP-00951

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)	LATITUDE		LONGITUDE		POSITION		METHOD AND DATE OF LOCATION (See Instructions on reverse side)		CHARTS AFFECTED
		°	'	°	'	D.M. Meters	D.P. Meters	OFFICE	FIELD	
* Light	- Pierhead Light	41	29	57	148	28	880	75 B(C) 5460 9-14-75	P-5 75 B(C) 5460 7-12-76	14842 (360) 14845
	Moseley Channel									
* Light	- Range Front Light	41	29	11	365	82	42	75 B(C) 5460 9-14-75	P-5 75 B(C) 5460 7-12-76	"
* Light	- Range Rear Light	41	28	57	298	40	600	75 B(C) 5460 9-14-75	P-5 75 B(C) 5460 7-12-76	"
	Sandusky Straight Channel									
* Light	- Inner Range Front Light	41	29	27	829	82	41	75 B(C) 5460 9-14-75	P-5 75 B(C) 5460 7-12-76	"
* Light	- Inner Range Rear Light	41	29	42	157	40	531	75 B(C) 5460 9-14-75	P-5 75 B(C) 5460 7-12-76	"
	Sandusky Dock Channel									
* Light	- Light	41	27	25	155	82	43	75 B(C) 5460 9-14-75	P-5 75 B(C) 5460 7-12-76	
* **	Aerotriangulation Compilation									

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	Robert R. Kravitz
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
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 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
**FIELD POSITIONS are determined by field observations based entirely upon ground survey methods. **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	Robert R Kravitz
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	Laurence Schick
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE	FIELD (Cont'd)
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	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
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods. **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	<i>Robert R Kravitz</i>
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<i>James Schack</i>
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.	

JES
 11/82

MAP FEATURES OF POSSIBLE LANDMARK VALUE

POSITIONS FURNISHED ARE PHOTOGRAMMETRIC POSITIONS - MAP FEATURES HAVE NOT BEEN INSPECTED

MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETTIC DATUM	ORIGINATING ACTIVITY	GEOGRAPHIC POSITION		CHARTS AFFECTED
					φ LATITUDE	λ LONGITUDE	
TP-00951	CM 2603	Sandusky Harbor	NA 1927	Rockville, Md			
MAP FEATURES		DESCRIPTION	PHOTO NUMBER				
Spire			75B(C) 6303 10-4-75		φ 41 26 58.135 λ 82 43 23.215		14842 (360) 14845
Stack			75B(C) 6303 10-4-75		φ 41 27 16.741 λ 82 43 12.519		"
Stack			75B(C) 6304 10-4-75		φ 41 27 11.864 λ 82 45 00.103		"
Stack			75B(C) 6304 10-4-75		φ 41 27 12.932 λ 82 42 59.012		"
Tank			75B(C) 6304 10-4-75		φ 41 27 28.601 λ 82 42 56.484		"
Tower			75B(C) 6304 10-4-75		φ 41 27 21.518 λ 82 42 46.731		"
Stack			75B(C) 6304 10-4-75		φ 41 27 35.411 λ 82 42 36.976		"
Tower			75B(C) 6304 10-4-75		φ 41 27 11.517 λ 82 42 30.604		"
Tower			75B(C) 6304 10-4-75		φ 41 27 06.790 λ 82 42 39.143		"
Spire			75B(C) 6304 10-4-75		φ 41 26 43.592 λ 82 42 39.622		"
Stack			75B(C) 6304 10-4-75		φ 41 26 43.308 λ 82 42 26.277		"
Stack			75B(C) 6304 10-4-75		φ 41 26 43.308 λ 82 42 26.277		"

LISTED BY
Vernon S. Schaal

DATE
 9 Nov 82

LISTING CHECKED BY

DATE

