

TP-01303

TP-01303

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h1>DESCRIPTIVE REPORT</h1>	
THIS MAP EDITION WILL NOT BE FIELD EDITED	
Map No. TP-01303	Edition No. 1
Job No. CM-8401	
Map Classification CLASS III (FINAL)	
Type of Survey SHORELINE	
<h2>LOCALITY</h2>	
State MAINE	
General Locality MACHIAS BAY & VICINITY	
Locality ROQUE ISLAND	
<div style="border: 1px solid black; padding: 5px; text-align: center;"> 19 85 TO 19 </div>	
<h2>REGISTERED IN ARCHIVES</h2>	
DATE	

NOAA FORM 76-36B (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY			
TP-01303 COMPILATION SOURCES					
1. COMPILATION PHOTOGRAPHY					
CAMERA(S) Wild RC-8(E) (E = 152.71 mm)		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE ZONE Eastern MERIDIAN 75th	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES * <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE COORDINATED PHOTOGRAPHY ** coordinated				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE		DATE	TIME	SCALE	STAGE OF TIDE
* 85 E(C) 3188-3190		10-8-85	10:06	1:50,000	5.0 feet above MLW
** 85 E(I) 2626-2627		9-22-85	11:00	1:50,000	1.3 feet above MLW
** 85 E(I) 2689		9-26-85	9:06	1:50,000	0.6 feet below MHW
					Mean tide range=18.4 feet
REMARKS *Compilation/bridging photographs based on predicted tide data. **Tide coordinated MHW and MLW photographs based on actual tide data. All photographs are referenced to the tide gage at Eastport, Maine.					
2. SOURCE OF MEAN HIGH-WATER LINE:					
The Mean High Water Line was compiled from office interpretation of the compilation/bridging color photographs using stereo instrument methods. The tide coordinated black-and-white infrared photographs were used to assist in the interpretation of the Mean High Water Line.					
3. SOURCE OF MEAN LOW-WATER LINE OR MEAN LOW-WATER LINE:					
The Mean Low Water Line was compiled graphically from the black-and-white tide coordinated MLW infrared ratio photographs.					
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		
None	TP-01304	TP-01307	None		
REMARKS					

TP-01303

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION
Premarking

☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Shea	Nov 1985
2. HORIZONTAL CONTROL	RECOVERED BY J. Dunford	Nov 1985
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY J. Dunford	Nov 1985
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 None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

Paneled

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
85E(C)3188	RYEFIELD, 1862 (paneled direct)		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ 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)

1 NOAA Form 76-53 (CSI Card)

PROJECT DATA

1 NOAA Form 77-53 (Tide Record Book)

2 NOAA Forms 76-77 (Level Book)

Hor. Control Data (Bound Folder), Field Report

NOAA FORM 76-36D
(3-72)

TP-01303

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

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete	Aug. 1986	Class III Manuscript		
Final Review	Sept. 1986	Final Class III Map	11-3-86	11-3-86

II. LANDMARKS AND AIDS TO NAVIGATION None

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

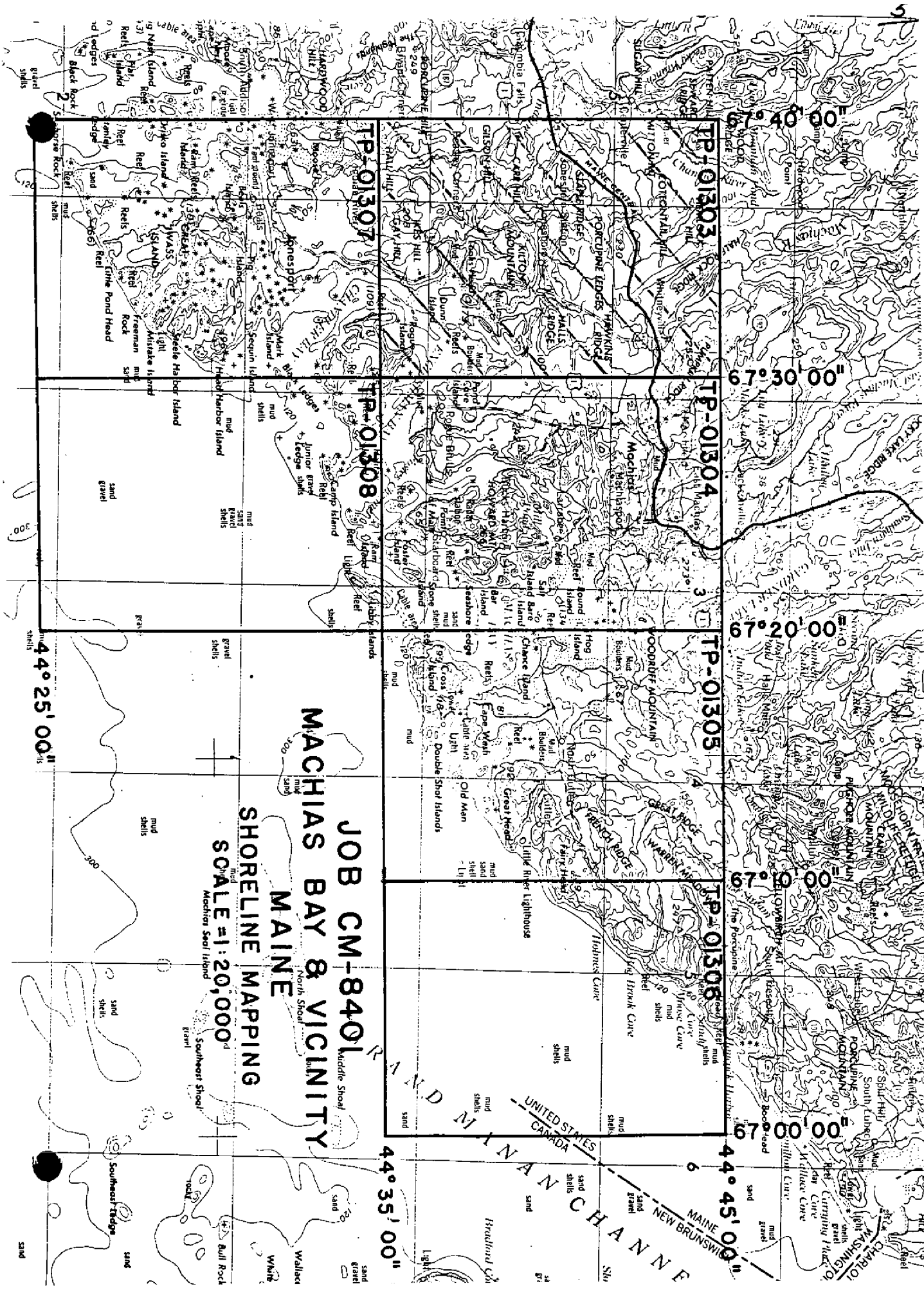
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS. 563 SUBMITTED BY FIELD PARTIES.
 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: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



JOB CM-8401
MACHIAS BAY & VICINITY
MAINE

SHORELINE MAPPING
SCALE=1:20,000

44° 35' 00"

44° 45' 00"

MAINE

NEW BRUNSWICK

UNITED STATES
CANADA

MANHATTAN CHANNEL

TP-01303

TP-01304

TP-01305

TP-01306

TP-01307

TP-01308

67° 40' 00"

67° 30' 00"

67° 20' 00"

67° 10' 00"

67° 00' 00"

44° 25' 00"

44° 25' 00"

44° 25' 00"

44° 25' 00"

44° 25' 00"

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-01303

This final Class III shoreline map is one of six 1:20,000 scale maps (TP-01303 thru TP-01308) that comprise project CM-8401, Machias Bay and Vicinity, Maine.

The purpose of this map is to provide current charting information for nautical chart maintenance and to furnish support data for proposed hydrographic activity.

This map portrays the shoreline along Chandler River and the bay areas north of Roque Island.

Field work prior to compilation consisted of the recovery, establishment and identification, by premarking methods, of horizontal control necessary for aerotriangulation. Also, field assistance was provided in obtaining the tide coordinated photographs and numerous (79) supplemental ground stations were premarked for control densification in support of hydrography. This activity was completed in November 1985. There was no field inspection performed.

Photo coverage for the project was adequately provided by 1:50,000 scale photographs taken with the Wild RC-8 (E) camera in September and October 1985. Color photographs were obtained for bridging and compilation. Tide coordinated black-and-white photographs, taken at mean high water and mean low water, were provided for graphic compilation and interpretation assistance. Supplemental 1:30,000 scale color photographs were obtained for identifying premarked control stations in support of hydrography.

Analytic aerotriangulation was adequately provided by the Washington Science Center in March 1986. Additional ground control was determined for the hydrographer by measuring 56 paneled photo stations. Bridging provided ratio values for enlarging the photographs to map scale and also photo located visible landmarks and navigational aids.

Compilation, based upon office interpretation of the 1:50,000 scale color photographs, was performed at the Coastal Mapping Unit, Atlantic Marine Center in August 1986. Compilation included the use of MHW and MLW tide coordinated infrared photographs. Refer to the Compilation Report for specific use of this photography.

Final review was performed at the Atlantic Marine Center in September 1986. A Chart Maintenance Print was prepared and forwarded to the Marine Chart Branch. A Notes to Hydrographer print and related support data were prepared to assist the hydrographer.

The Descriptive Report for this final Class III map contains all pertinent information used in map production. The original base manuscript and related data were forwarded to the Washington Science Center for registration.

FIELD INSPECTION

TP-01303

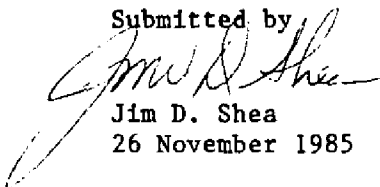
There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification (premarking) of the horizontal control necessary for aerotriangulation. Field activity also included the premarking of supplemental horizontal control in support of hydrography and the monitoring of the Eastport tide gage in obtaining tide coordinated infrared photography.

PROJECT REPORT CM-8401
MACHIAS BAY AND VICINITY, MAINE

SHORELINE MAPPING

This project was completed in compliance with Project Instructions dated 14 May 1985. Field work was accomplished during the period 9 September through 8 November 1985. Ten panels for 1:50,000 aerotriangulation photography were placed and located. Seventy-nine hydrographic control sites were paneled for 1:30,000 photography. Each site was permanently marked and described so that future recovery by the hydrographer will be possible. The tide gage at Eastport, ME was used for I.R. photography. Levels were run to the tape gage before and after photography to verify its elevation.

Submitted by



Jim D. Shea
26 November 1985

AEROTRIANGULATION REPORT
CM-8401
Machias Bay and Vicinity, Maine
March 1986

21. Area Covered

This report covers the Machias Bay, Maine area from Western Bay to Eastern Head. The project consists of six 1:20,000-scale sheets; TP-01303 through TP-01308.

22. Method

Three strips of 1:50,000-scale color photographs were bridged by analytic aerotriangulation methods and adjusted to ground as a block using the General Integrated Analytical Triangulation Program (GIANT). Pre-marked control stations were used as horizontal control.

The photographs were measured using the National Ocean Service Analytic Plotter (NOSAP) under control of the Integrated Digital Photogrammetric Facility Software (IDPF). Common points were transferred between strips to ensure adequate junctioning.

Ratio values were determined for the 1:50,000-scale color bridging photographs and the 1:50,000-scale MLW and MHW infrared photographs. A copy of these values and sketches of the photo coverage are attached to this report.

A magnetic tape containing positions to be plotted on a base manuscript has been prepared. These positions are in the Transverse Mercator State Plane Coordinate System, Maine, East Zone.

23. Adequacy of Control

The control was adequate and meets the National Ocean Service requirements. A listing of closures to control is attached.

24. Supplemental Data

USGS Topographic Quadrangles were used to obtain vertical control for bridging. NOS Nautical Charts were used to locate aids and Landmarks.

25. Photography

The coverage, overlap, and quality of the photographs were adequate for the job.

26. Additional Positions

Aerotriangulated positions were determined for 56 paneled hydrographic control sites. A majority of the panels were measured on two adjacent photographs only. Aerotriangulated positions were also determined for five landmarks requested by the U.S. Coast Guard.

Submitted by,



Vic McNeel

Approved and Forwarded:



Don O. Norman
Chief, Aerotriangulation Unit

3

FIT TO CONTROL

<u>STATION NAMES</u>	<u>POINT NO.</u>	<u>VALUES IN FEET</u>	
		<u>X</u>	<u>Y</u>
1. Tibb 1985	217100	-1.3	+3.4
2. Kel 1913, sub. station	214101	+0.6	-1.1
3. Merstin 1883	211100	-0.4	-1.6
4. Ackley RM2 1882, 1960	209101	-1.4	-1.5
5. Bog Creek RM1, 1863	205101	+0.2	+0.5
6. Godfrey 1883	204100	+0.4	+0.6
7. Curmple 1862, sub. station	238101	+0.4	-1.0
8. Foster Island 1882	243100	+1.5	-0.3
9. Ryefield 1862	187100	+0.6	0.0
10. Little 1985 (not held in adjustment)	193100	-1.8	-0.1

RATIO VALUECM-84011:50,000 Bridging Photographs

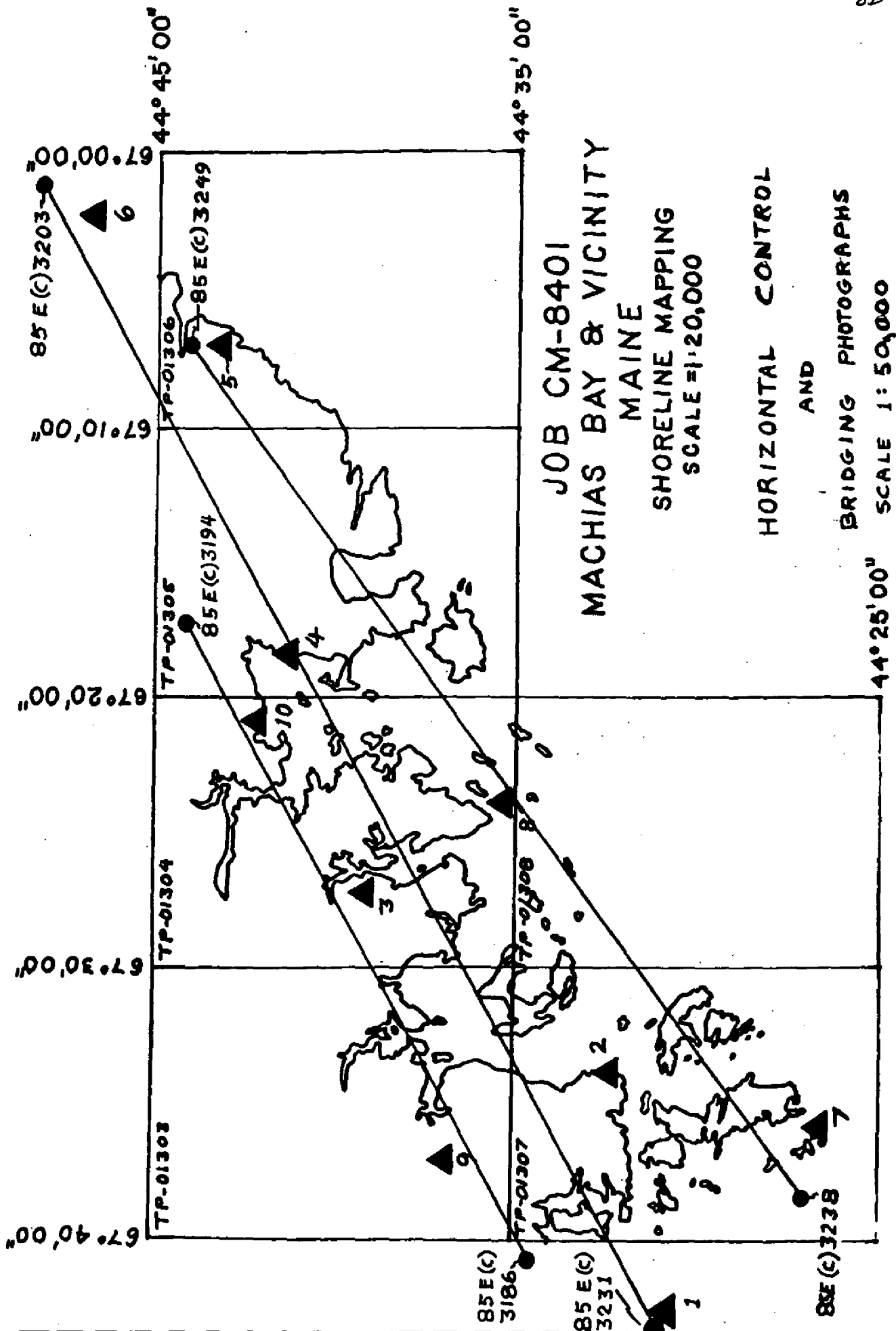
	<u>Ratio Value</u>
85 E(C) 3186-3194	2.50
85 E(C) 3202-3231 (odd only)	2.50
85 E(C) 3238-3249	2.50

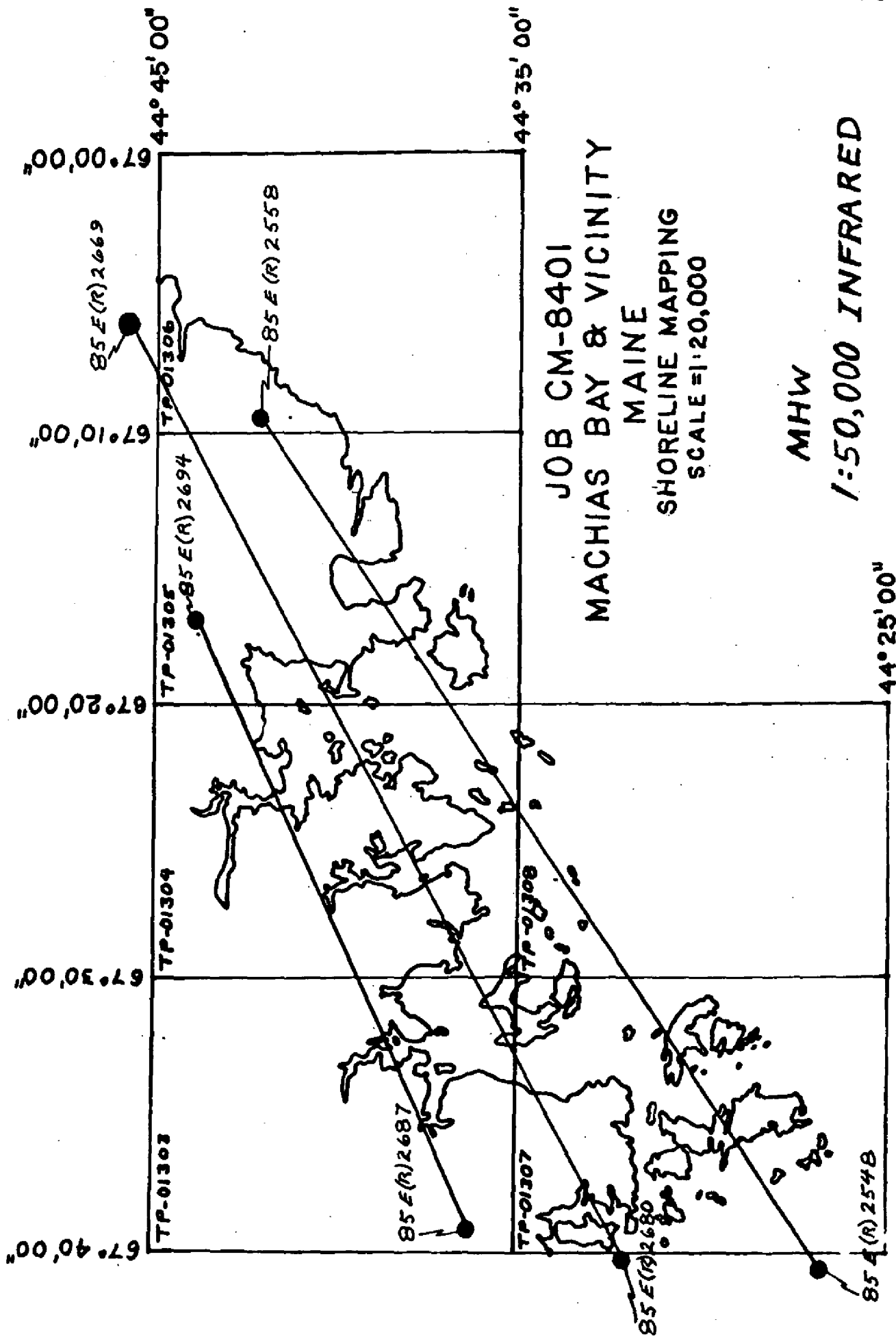
MLW 1:50,000 Black and White Infrared

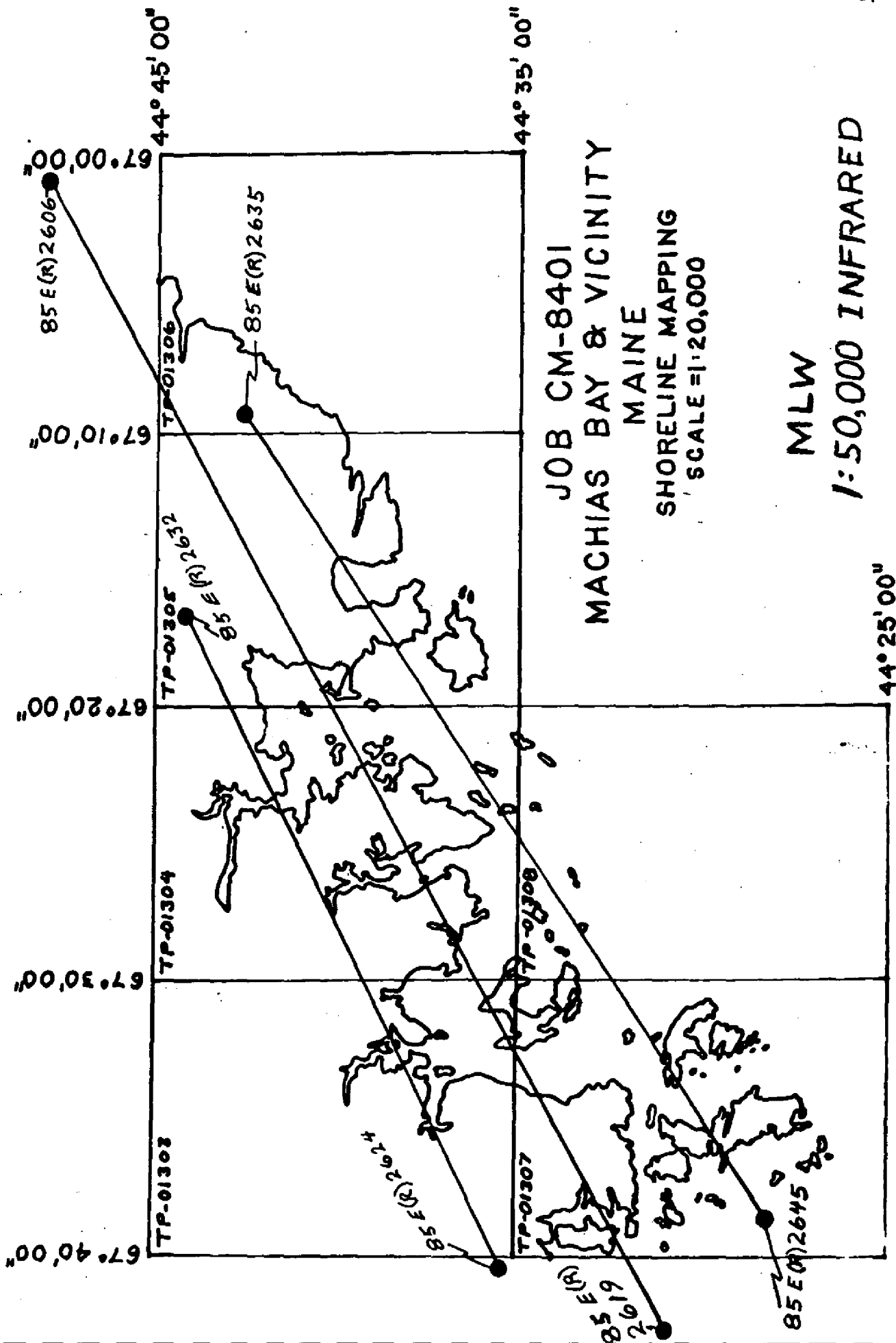
85 E(R) 2606-2619	2.51
85 E(R) 2624-2632	2.51
85 E(R) 2635-2645	2.51

MHW 1:50,000 Black and White Infrared

85 E(R) 2548-2558	2.53
85 E(R) 2669-2680	2.52
85 E(R) 2687-2694	2.51







COMPILATION REPORT

TP-01303

31 - DELINEATION

Delineation was accomplished using stereo instrument and graphic compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:50,000 scale bridging/compilation color photographs. Tide coordinated MHW infrared ratio photographs were used to assist in interpretation of the shoreline. Tide coordinated MLW infrared ratio photographs were used to graphically compile the approximate mean low water line. Control for graphic delineation was provided by the instrument compilation of coastal detail and common image points.

All photographs used to compile this map are listed on NOAA form 76-36B. The photography was adequate.

32 - CONTROL

The horizontal control was adequate. Refer to the Aerotriangulation Report, dated March 1986.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable to this project. Drainage was compiled from office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

The mean high water line was compiled from office interpretation of the compilation/bridging color photographs and was complemented by the tide coordinated MHW infrared ratio photographs.

36 - OFFSHORE DETAILS

Offshore detail was compiled by instrument methods using the 1:50,000 scale bridging/compilation color photographs as described in item #31.

The MLW infrared ratio photographs were used to graphically compile the approximate mean low water line as described in item #31.

37 - LANDMARKS AND AIDS

There are no charted landmarks and no charted aids within the mapping limits of this manuscript.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

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

40 - HORIZONTAL AND VERTICAL ACCURACY

See item #32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey Quadrangles:

Whitneyville, ME; dated 1948; photorevised 1977; scale 1:24,000

Jonesport, ME; dated 1948; photorevised 1977; scale 1:24,000.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts:

13326; 10th edition; scale 1:40,000; dated November 17, 1984

13325; 11th edition; scale 1:80,000; dated May 1, 1982.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by

FOR

David R. Miller

Cartographic Technician

22 July 1986

Approved

James L. Byrd, Jr.

James L. Byrd, Jr.

Chief, Coastal Mapping Unit

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8401 (Machias Bay, Maine)

TP-01303

Bobs Cove
Board Point
Boundary Ledges
Chandler Bay
Chandler River
Deep Hole Point
Dunn Island
Englishman Bay
Fellows Island
Flake Point Bar
Great Bar
Great Cove
Great Head
Jonesboro
Kilton Point
Lapstone Ledge
Little Mark Island
Little Ram Island
Look Head
Look Point

Mansfield Creek
Mason Bay
Mason Bay (locality)
Nepp Point
Pond Cove Island
Roque-----~~Rogue~~ Island *9/14*
Roque-----~~Rogue~~ Island Harbor *9/14*
delete ~~Rogue-Island-Ledge~~ *9/14*
Round Cove
Sanford Cove
Seal Rock
Shorey Cove
Smith Point
Southwest Creek
Spar Island
Squire Point
Squire Point Ledge
Tenney Cove
Tide Mill Creek
White Creek

Approved,

Charles E. Harrington

Charles E. Harrington
Chief Georgrapher
Nautical Charting Division
Charting and Geodetic Services

REVIEW REPORT
TP-01303

SHORELINE

61 - GENERAL STATEMENT

Final review for this final Class III map was accomplished at the Atlantic Marine Center in September 1986. For a schedule of the office and field operations, 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 USGS quadrangles: Whitneyville, ME; dated 1948; photorevised 1977; scale 1:24,000 Jonesport, ME; dated 1948; photorevised 1977; scale 1:24,000.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

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

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts: 13326, 10th edition, scale 1:40,000, dated November 17, 1984 13325, 11th edition, scale 1:80,000, dated May 1, 1982.

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 Section

Approved

John M. Mearns
Chief, Photogrammetric Production Sec.

Ronald K. Brewer
Chief, Photogrammetry Branch

