

TP-01120

TP-01120

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h2 style="text-align: center;">DESCRIPTIVE REPORT</h2>	
THIS MAP EDITION WILL NOT BE FIELD EDITED *	
<b>Map No.</b> TP-01120	<b>Edition No.</b> I
<b>Job No.</b> CM-8102	
<b>Map Classification</b> CLASS III (FINAL)	
<b>Type of Survey</b> SHORELINE	
<h3 style="text-align: center;">LOCALITY</h3>	
<b>State</b> MAINE	
<b>General Locality</b> BATH	
<b>Locality</b> BATH HARBOR, MAINE	
<div style="border: 1px solid black; padding: 5px; text-align: center;">           1981 TO 19         </div>	
<h3 style="text-align: center;">REGISTERED IN ARCHIVES</h3>	
<b>DATE</b>	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP. <u>01120</u>	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. <u>(1)</u>	
				<input type="checkbox"/> RESURVEY		MAP CLASS <u>III</u>	
				<input type="checkbox"/> REVISED		JOB <u>PH-CM-8102</u>	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit Atlantic Marine Center, Norfolk, VA				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE				TYPE OF SURVEY		JOB <u>PH-</u>	
A. Y. Bryson, CDR				<input type="checkbox"/> ORIGINAL		MAP CLASS <u>III</u>	
				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation July 19, 1982				Control March 24, 1982			
Compilation January 31, 1983							
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input checked="" type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION				4. GRID(S)			
Transverse Mercator Projection				STATE Maine		ZONE West	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				L. Harrod, Jr.		Oct. 1982	
METHOD: <u>Analytic</u> LANDMARKS AND AIDS BY				D. Norman		Oct. 1982	
2. CONTROL AND BRIDGE POINTS PLOTTED BY				L. Harrod, Jr.		Oct. 1982	
METHOD: <u>Coradomat</u> CHECKED BY				D. Norman		Oct. 1982	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				C. Klein		June 1983	
COMPILATION CHECKED BY				F. Mauldin		June 1983	
INSTRUMENT: <u>Wild B-8</u> CONTOURS BY				N.A.			
SCALE: <u>1:10,000</u> CHECKED BY				N.A.			
4. MANUSCRIPT DELINEATION PLANIMETRY BY				C. Klein		July 1983	
CHECKED BY				W. McLemore		Oct. 1983	
METHOD: <u>Smooth Drafted</u> CONTOURS BY				N.A.			
CHECKED BY				N.A.			
SCALE: <u>1:10,000</u> HYDRO SUPPORT DATA BY				C. Klein			
CHECKED BY				W. McLemore, Jr.		Oct. 1983	
5. OFFICE INSPECTION PRIOR TO <del>REVIEW</del> FINAL REVIEW BY				W. McLemore, Jr.		Oct. 1983	
6. APPLICATION OF FIELD EDIT DATA BY				N.A.			
CHECKED BY				N.A.			
7. COMPILATION SECTION REVIEW BY				W. McLemore, Jr.		Oct. 1983	
8. FINAL REVIEW <u>CLASS III</u> BY				J. Hancock		May 1984	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				J. Hancock		May 1984	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				P. Hawkins		June 1984	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				E. DAUGHERTY		NOV 1984	

NOAA FORM 76-36B  
(3-72)

CM-8102

TP-01120

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

## COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-10(Z) (Z=153.15mm)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES * <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY **		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Eastern MERIDIAN 75th <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
81 Z(C) 4804 - 4810*	May 8, 1981	10:10	1:20,000	1.19 below MLW	
81 Z(C) 4815 - 4821*	May 8, 1981	10:20	1:20,000	1.06 below MLW	
81 Z(I) 4902 - 4906**	May 8, 1981	14:19	1:20,000	0.52 below MHW	
81 Z(I) 4915 - 4920**	May 8, 1981	14:30	1:20,000	0.30 below MHW	
81 Z(I) 4855 - 4864**	May 8, 1981	11:02	1:20,000	0.24 below MLW	
81 Z(I) 4882 - 4890**	May 8, 1981	11:16	1:20,000	0.13 above MLS	
Mean Tide Range = 6.4 ft.					

REMARKS \*Compilation/bridging photographs based on predicted tide data. (These photographs stamped 5-7-81 in error). \*\*Tide coordinated MHW and MLW photographs based on predicted tide data. Predicted tide data based on reference station

## 2. SOURCE OF MEAN HIGH-WATER LINE: Portland with corrections to subordinate station Bath.

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 MHW line.

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

The Mean Low Water Line was compiled graphically from the tide coordinated black and white infrared ratioed 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	None	None	None
REMARKS This project consists of one sheet and does not junction with any known contemporary survey.			

TP-01120

## HISTORY OF FIELD OPERATIONS

- I. ☒ FIELD INSPECTION OPERATION (Photo-identification) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	C. S. Middleton, Jr.	May 1982
2. HORIZONTAL CONTROL	RECOVERED BY C. S. Middleton, Jr.	May 1982
	ESTABLISHED BY C. S. Middleton, Jr.	May 1982
	PRE-MARKED OR IDENTIFIED BY C. S. Middleton, Jr.	May 1982
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 C. S. Middleton, Jr.	May 1982
	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		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
81 E(C) 5266	HODGKINS 2, 1933 (Sub. Points)		
81 E(C) 5269	CHOW USE 1940 (Sub. Points)		
81 E(C) 5270	NARROWS USE 1940 (Sub. Points)		

## 3. PHOTO NUMBERS (Clarification of details)

None

## 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

## 7. SUPPLEMENTAL MAPS AND PLANS

None

## 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

Bound Field Report (includes 3 CSI Cards), 1 NOAA Form 76-52 (Hor. Obser. Bk.),  
1 C&GS Form 252 (Zenith Obser. Bk.)

NOAA FORM 76-36D  
(3-72)CM-8102  
TP-01120  
RECORD OF SURVEY USEU. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

## I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete	Oct. 1983	Class III Manuscript	None	None
Final Review, Class III	May 1984	Final Class III Map No field edit performed	July 1984	Aug 1984

## II. LANDMARKS AND AIDS TO NAVIGATION

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

PAGES COVER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
2		July 13, 1984	Landmarks and Aids for Charting

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. 1-57 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	



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

TP-01120

This 1:10,000 scale final Class III shoreline map comprises project CM-8102, Bath Harbor, Maine. This single map project covers the shoreline area of Bath Harbor and the adjacent waterways.

The purpose of this project is to provide current charting information for nautical chart maintenance and to furnish support data for future hydrographic operations.

Photo coverage was adequately provided by natural color and black-and-white infrared photographs. One flight strip of 1:40,000 scale color photographs, taken October 13, 1981 with the Wild RC-8(E) camera, was obtained for basic aerotriangulation. The 1:20,000 scale color and infrared photos, taken May 8, 1981 with the Wild RC-10(Z) camera, were obtained for compilation. The infrared photos taken at mean high water and mean low water were based on predicted tide data.

Field operations prior to compilation consisted of obtaining the aerial photography and the recovery, establishment, and photo identification of horizontal control necessary for aerotriangulation. This activity was completed in May 1982.

Analytic aerotriangulation was adequately provided by the Washington Science Center in October 1982. Aerotriangulation activity also included ruling the base manuscript, determining ratio values for the compilation photographs and locating visible landmarks and fixed navigational aids.

Compilation was accomplished by the Coastal Mapping Unit at the Atlantic Marine Center in October 1983. Delineation was based upon photo interpretation of the natural color and infrared photographs.

Field edit will not be performed for this map.

Final review was performed at the Atlantic Marine Center in May 1984. A Chart Maintenance Print was prepared and forwarded to the Marine Chart Branch. Also, a Notes to Hydrographer print was prepared for future hydrographic activity.

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

## FIELD INSPECTION

TP-01120

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.



## PROJECT REPORT

CM-8102

BATH  
MAINE  
PHOTOIDENTIFICATION

The Project was performed in accordance with Project Instructions from OA/C3 - Roger F. Lanier, dated March 24, 1982.

Two sub points were photoidentified for each of the three circled areas as specified in the job diagram. Recovery of Horizontal Control was limited to those needed to meet Aerotriangulation Requirements with the exception of circle no. 2 where recovery was extended as an aid to an upcoming small Hydrographic Project. Ground photographs of all of the sub points and the Horizontal Control points used to position the sub points have been included.

In circle no. 1 a four leg loop traverse was run coming off Station Hodgkins 2 1933 with a Reverse Solar from Hodgkins 2 TP-01 to Hodgkins 2 1933 serving as the Azimuth Control. The traverse coursed through Hodgkins 2 TP-02 (from which Hodgkins Sub Pt A and Hodgkins Sub Pt B were spurred in), Hodgkins 2 TP-03, then back to the Station Hodgkins 2 1933 where the angulation checked to 10 seconds and position closure met Third Order Class One Specifications.

In circle no. 2, Chow Sub Pt A and Chow Sub Pt B were spurred in from Station Chow USE using Stations Hospital USE and Doubling Point Light USE as Azimuth Control. In addition, a Solar Azimuth was taken from Chow USE to Doubling Point Light USE and the distance was measured between Chow USE and Hospital USE. The Solar Azimuth checked more closely to Doubling Point Light USE (9 seconds) than to Hospital USE (29 seconds) and a 20 second Azimuth discrepancy was encountered between Doubling Point Light USE and Hospital USE. The distance measured to Hospital USE missed by 0.43 Ft. The error is believed to be at Station Hospital USE however the error would have little effect on the positions of the sub points.

In circle no. 3 a closed traverse was started at station Narrows USE, coursing through Narrows Sub Pt A (from which Narrows Sub Pt B was spurred in), Narrows TP-01, closing on Station Road USE. A loop closure was also obtained back to station Narrows. Angulation of the traverse from Road to Narrows checked by 1 second. Solar Azimuths were taken at both Narrows and Road checking the inversed Azimuth by 33 seconds. The distance measured between Narrows and Road checked by 0.15 Ft. Closures were well within the parameters of Third Order Class One Specifications.

Field work on this Project was accomplished during the period of 4/28/82 thru 5/5/82 excluding travel time to and from the Project area.

All records and data forwarded to OA/C3415.

Submitted by:

Clifton S. Middleton Jr.  
Clifton S. Middleton Jr.

## Photogrammetric Plot Report

CM-8102

Bath Harbor, Maine

October 1982

21. Area Covered

The area covered by this report is shown on one 1:10,000 scale sheet, TP-01120 of Bath Harbor, Maine.

22. Method

One strip of 1:40,000 scale and two strips of 1:20,000 scale photographs were bridged by analytic aerotriangulation methods and adjusted to ground on the Maine State Plane Coordinate System, West Zone. Three control stations were photoidentified on the 1:40,000 scale photographs. The two strips of 1:20,000 scale photographs were controlled by tie points from the 1:40,000 scale strip. Fixed aids and landmarks were located on the bridging photographs. Ratio values were determined for the 1:20,000 scale MLW and MHW infrared photographs, also for the 1:20,000 scale bridging photographs. Office identified intersection stations were used to augment control. The sheet was plotted on the Coradimat.

23. Adequacy of Control

The horizontal control provided was sparse, but adequate, and will meet National Standards of Map Accuracy. Tie points were used to ensure a good tie between the strips. On station Hodgkins 2 1933, an attempt was made to measure sub point 1, but the correct point could not be seen.

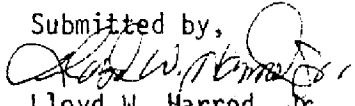
24. Supplemental Data

USGS quads were used to locate vertical points.

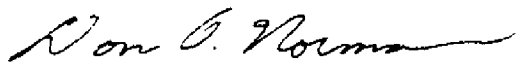
25. Photography

The coverage of the photography proved adequate for the project. Because of the difference in date, Strip 1, October 81 and Strips 2 and 3, May 1981, the color changes due to the change of seasons made it very difficult to transfer points using the point transfer device.

Submitted by,

  
Lloyd W. Harrod, Jr.

Approved and Forwarded:



Don O. Norman  
Chief, Aerotriangulation Section

CM-8102

Bath Harbor, Maine

Fit to Control  
X and Y in FeetSTRIP #1

			<u>X</u>	<u>Y</u>
7 Hodgkins 2 1933	Sub pt. 1	(266101)	1.757	-37.042
▲	Sub pt. 2	(266102)	-.007	.004
4 Ledge		(268100)	5.292	-16.025
2 Bath Central Church Spire 1855		(268105)	11.658	6.328
1 Bath Baptist Church Spire 1855		(268106)	-.123	-3.005
5 ▲ Chow Use 1940	Sub pt. A	(268101)	1.111	.344
▲	Sub pt. B	(268102)	-1.146	-.389
3 Bath Bridge, Center of Top of W. Tower		(268103)	-.204	4.461
3 Bath Bridge, Center of Top of E. Tower		(268104)	5.782	4.147
8 ▲ Narrows Use 1940	Sub pt. A	(270101)	1.246	.630
▲	Sub pt. B	(270102)	-1.202	-.597
6 Doubling Point Light Use		(269501)	1.129	.048

STRIP #2

▲ 804801 - Tie from Strip 1			1.476	-.768
▲ 804803 " " " "			-2.031	-.050
804804 " " " "			-.265	2.730
804805 " " " "			6.142	11.880
▲ 807801 " " " "			.558	.500
807802 " " " "			1.226	1.271
807803 " " " "			2.386	-.352
807805 " " " "			-1.777	.509
▲ 807806 " " " "			.253	.185
810801 " " " "			2.558	.446
▲ 810802 " " " "			1.206	1.096
▲ 810803 " " " "			-1.462	-.963
810804 " " " "			-.526	-1.019

STRIP #3

		<u>X</u>	<u>Y</u>
▲ 814801	Tie from Strip 1	-2.332	-1.325
▲ 814802	" " " "	1.726	1.760
814803	" " " "	1.127	1.334
▲ 817801	" " " "	-.594	-2.737
817802	" " " "	-.325	1.214
▲ 817803	" " " "	1.296	1.542
819801	" " " "	-1.366	-1.109
▲ 819802	" " " "	-.087	1.051
819803	" " " "	.959	1.943
▲ 821802	" " " "	.265	-.793
▲ 821803	" " " "	-.274	.502

▲ STATIONS HELD IN STRIP ADJUSTMENTS

CM-8102

Bath Harbor, Maine

October 1982

Ratio values for 1:20,000 scale B&amp;W infrared photography

MLLW

81Z(R) 4882-4890	X2.023
4855-4864	X2.024

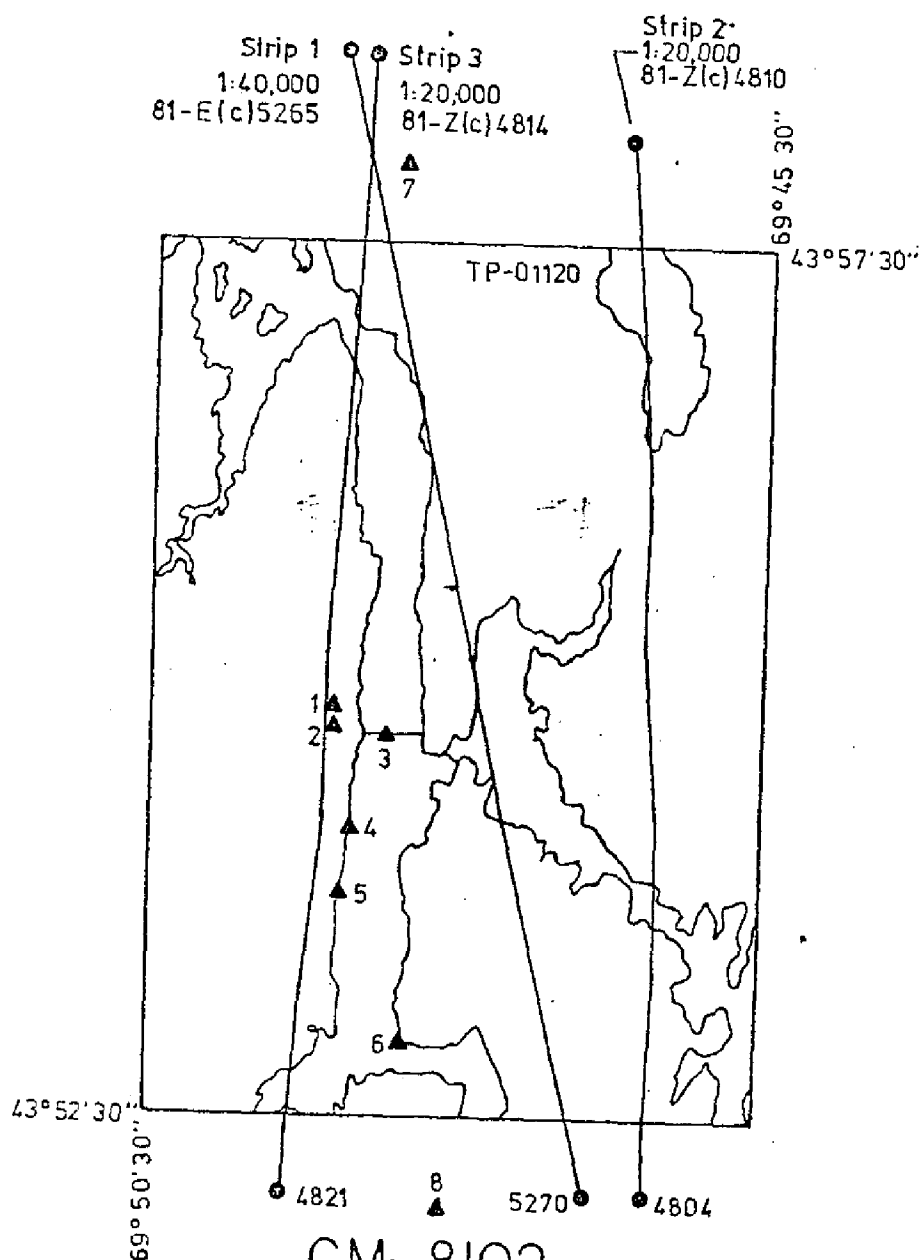
MHW

81Z(R) 4915-4920	X2.033
4902-4906	X2.026

Ratio values for color Bridging Photography

1:20,000 scale

81Z(C) 4814-4821	X2.033
4804-4810	X2.034



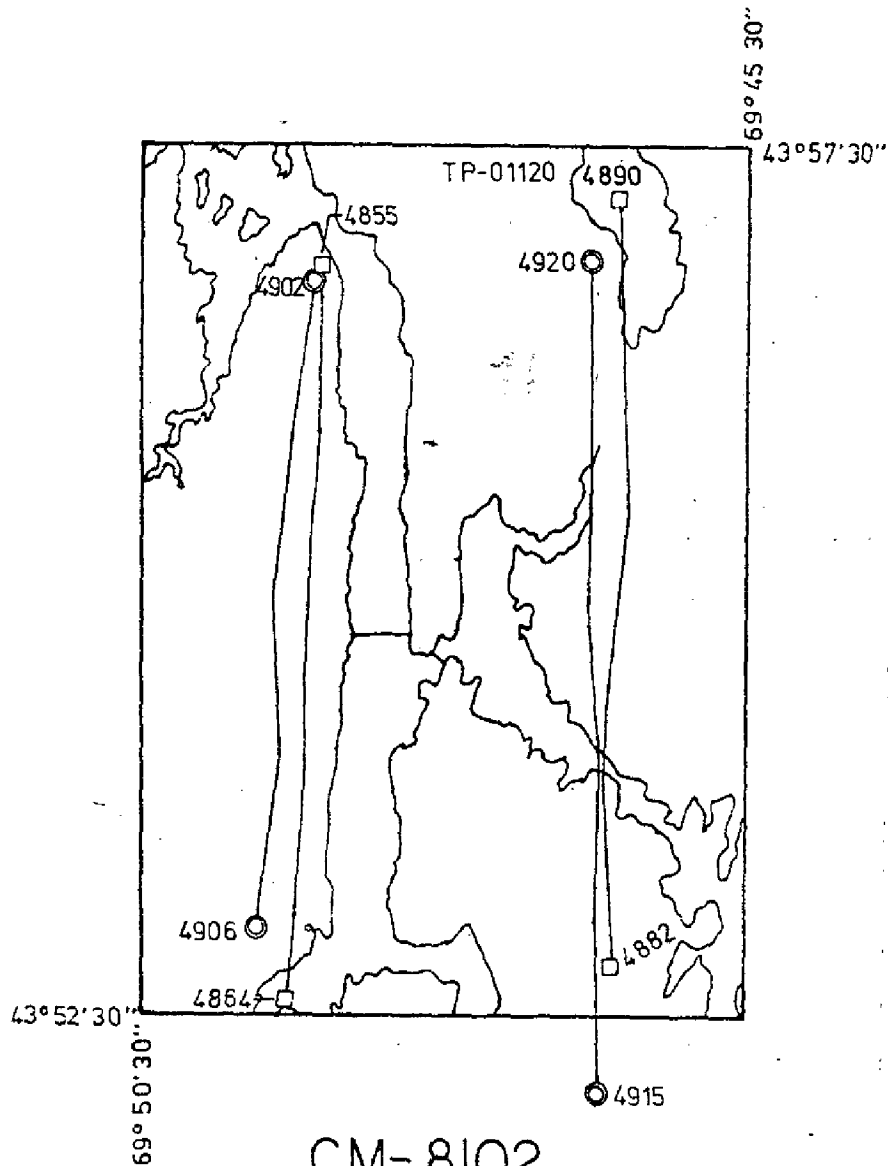
CM-8102  
BATH HARBOR, MAINE  
SHORELINE MAPPING

SCALE 1:10,000

BRIDGING PHOTOGRAPHY

LEGEND

▲ TRIANGULATION



CM-8102  
BATH HARBOR, MAINE  
SHORELINE MAPPING

SCALE 1:10,000  
RATIO PHOTOGRAPHY 81 ZR  
1:20,000  
LEGEND



## DESCRIPTIVE REPORT CONTROL RECORD

Pg. 1 of 2

**MAP NO.**

AP NO.  
TP-01120

**JOB NO.**

CM-8102

STATION NAME

BATH RED CHURCH SPIRE, 1933

1855  
BATH BAPTIST CHURCH SPIRE,

BATH CENTRAL CHURCH SPIRE,

BATH BRIDGE, C OF TOP OF W  
TOWER, 1933

BATH BRIDGE, C OF TOP OF E-  
TOWER, 1933

BOX (USE), 1940

LEDGE, 1903

CEDAR (USE), 1940

CHOW (USE), 1940

HOSPITAL (USE), 1939

COMPUTED BY

LISTED BY  
C. J. Klein

U.S.  
**HAND PLOTTING BY**

COMPUTATION CHECKED BY

DATE 7/12/83	LISTING CHECKED BY F. Mauldin
-----------------	----------------------------------

DATE	12/03	T. MOUNTAIN
HAND PLOTTING CHECKED BY		

LISTING CHECKED BY  
F. Mauldin

HAND PLOTTING CHECKED BY

DATE \_\_\_\_\_

DATE 7/13/83

DATE \_\_\_\_\_

SUPERSEDES NOAA FORM 78-41. 2-71 EDITION WHICH IS OBSOLETE.



## COMPILATION REPORT

TP-01120

31 - DELINEATION

Delineation was accomplished using stereo instrument and graphic compilation methods. Instrument compilation was used to delineate shoreline, alongshore and interior detail based on office interpretation of the 1:20,000 scale bridging/compilation color photographs. Tide coordinated MHW infrared photographs (based on predicted tides) were used to assist in the shoreline delineation. Tide coordinated MLW infrared ratio photographs (based on predicted tides) 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. Both the color compilation photographs and the infrared photographs were adequate. The date of the color photos was incorrectly stamped May 7 instead of the actual day, May 8.

32 - CONTROL

Refer to the Photogrammetric Plot Report dated October 1982. Horizontal control was adequate.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

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

35 - SHORELINE AND ALONGSHORE DETAILS

The mean high water line was compiled from office interpretation of the compilation photographs and was complimented by the MHW infrared photographs which were coordinated to predicted tides. To make an accurate check with the 1:10,000 scale manuscript, the MHW infrared photographs were ratioed:

81 Z(I) 4902 - 4906 2.026 times  
81 Z(I) 4915 - 4920 2.033 times

and the color compilation photographs were ratioed:

81 Z(C) 4804 - 4810 2.034 times  
81 Z(C) 4815 - 4821 2.033 times

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36 - OFFSHORE DETAILS

Offshore detail was compiled by instrument methods as described in item #31. Both the 1:20,000 scale MHW and MLW infrared photographs were used to assist in interpretation.

To graphically compile the approximate mean low water line as described in item #31, the MLW infrared photographs were ratioed:

81 Z(I) 4855 - 4864 2.024 times  
81 Z(I) 4882 - 4890 2.023 times

37 - LANDMARKS AND AIDS

There are 10 charted landmarks and 8 charted navigational aids within the mapping limits of this manuscript. Among these, 9 landmarks and 4 aids were either located or verified photogrammetrically.

Appropriate information was prepared on the 76-40 forms and submitted with this map.

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

Refer to Item #32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey Quadrangles: Bath, Maine, dated 1980, scale 1:24,000; and Bath, Maine, dated 1957, scale 1:62,500.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts: 13296, 19th edition, dated July 4, 1981, scale 1:15,000; 13298, 6th edition, dated September 11, 1982, scale 1:15,000; 13293, 27th edition, dated April 3, 1982, scale 1:40,000; and 13294, 16th edition, dated April 3, 1982, 1:40,000 scale.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

*Carl J. Klein*

Carl J. Klein  
Cartographic Technician  
July 19, 1983

Approved,

*James L. Byrd, Jr.*

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

## REVIEW REPORT TP-01120

## SHORELINE

61. GENERAL STATEMENT

Refer to the Summary included in this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with U.S.G.S. Quadrangle Bath, Maine, dated 1980, 1:24,000 scale.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Prior to final review, no contemporary hydrographic survey was accomplished in the area common to this map.

Hydrographic support data was prepared and submitted for future hydrographic activity.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS Charts: 13296, 19th edition, 1:15,000 scale, dated July 4, 1981; 13298, 6th edition, 15,000 scale, dated September 11, 1982; and 13293, 27th edition, 1:40,000 scale, dated April 3, 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, AMC

Approved,

*Charles F. Lutz*  
for Chief, Photogrammetric Section, Rockville

*Gregory T. Ferguson*  
for Chief, Photogrammetry Branch  
Rockville

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8102 (Bath Harbor, Maine)

TP-01120

Alum Rock  
Arrowsic Island  
Back River  
Back River Creek  
Barley Neck  
Bath  
Burnt Jacket Channel  
Carleton Ledges  
Carleton Point  
Castle Island  
Clapp Point  
Crawford Island  
Crow Point  
Days Ferry (locality)  
Doubling Point  
Ferry Point  
Fiddler Reach  
Hanson Bay  
Hockomock Bay  
Hockomock Point  
Hospital Point  
Kennebec River  
Lime Rock  
Lines Island  
Long Reach  
Maine Central (RR)  
Mill Island  
Mill Point  
Money Point  
Neguasset (Corrected to Nequasset) *qth*

Neguasset Brook (Corrected to Nequasset Brook) *qth*  
Neguasset Lake (Corrected to Nequasset Lake) *qth*  
North Bath  
Palace Cove  
Pleasant Cove  
Preble Point  
Ram Island  
Read Island  
Sasanoa Point  
Sasanoa River  
Snipe Cove  
Stetson Rocks  
Swett Point  
Thorne Head  
Thorne Island  
Tibbett Point  
Towesic Neck  
Trufant Ledge  
Upper Hell Gate  
West Branch  
Whiskeag Creek  
Winnegance Creek  
Winslow Rocks  
Woolwich  
Woods Island

Approved by:

*Charles E. Harrington*

Charles E. Harrington  
Chief Geographer, N/CG2x5

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION <b>NAVIGATIONAL AIDS OR LANDMARKS FOR CHARTS</b>										ORIGINATING ACTIVITY	
REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA		STATE Maine		LOCALITY Bath Harbor		DATE July 1983															
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.		JOB NUMBER CM-8102		SURVEY NUMBER TP-01120		DATUM N.A. 1927															
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												
TOWER	(Bath Bridge, Center of Top of W Tower 1933)	43 54	40.550	69 48	36.968			81 Z(C) 4819 5-8-81		13296 13298											
TOWER	(Bath Bridge, Center of Top of E Tower, 1933)	43 54	40.688	69 48	33.569			81 Z(C) 4819 5-8-81		13296 13298											
SPIRE		43 54	31.5 972	69 49	00.6 13			81 Z(C) 4819 5-8-81		13296 13298											
SPIRE		43 53	56.6 1746	69 49	07.2 160			81 Z(C) 4819 5-8-81		13296 13293 13294											
STACK		43 55	32.2 994	69 48	42.3 944			81 Z(C) 4818 5-8-81		13296 13298 13293, 13294											
SPIRE	(Bath Red Church Spire, 1933)	43 55	32.226	69 48	51.555			81 Z(C) 4818 5-8-81		"											
CLOCK TOWER	(Bath Baptist Church Spire, 1855)	43 54	51.433	69 49	00.405			81 Z(C) 4819 5-8-81		"											
SPIRE	(Bath Central Church Spire, 1855)	43 54	46.388	69 49	02.254			81 Z(C) 4819 5-8-81		"											
BELL TOWER		43 54	45.8 1414	69 48	52.1 1163			81 Z(C) 4819 5-8-81		"											



RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	C. J. Klein
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW	
ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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>FIELD (Cont'd)</b> <b>B. Photogrammetric field positions** require</b> 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
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: L - 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	<b>III. TRIANGULATION STATION RECOVERED</b> 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 <b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent</b> entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

<b>NOAA FORM 76-40</b> (8-74) Replaces C&GS Form 567.										<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b>										<b>NONFLOATING AIDS OR LANDMARKS FOR CHARTS</b>										<b>ORIGINATING ACTIVITY</b> <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)																																																																															
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED										REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit AMC, Norfolk, VA										STATE Maine										LOCALITY Bath Harbor										DATE July 1981																																																																					
OPR PROJECT NO.										JOB NUMBER CM-8102										SURVEY NUMBER TP-01120										DATUM N.A. 1927										METHOD AND DATE OF LOCATION (See instructions on reverse side)										CHARTS AFFECTED																																																											
CHARTING NAME										DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)										LATITUDE ° / ' " D.M. Meters										LONGITUDE ° / ' " D.P. Meters										OFFICE										FIELD																																																											
LIGHT										(Doubling Point Light (USE), 1939)										43 52										56.730										69 48										26.224										81 Z(C) 4820										5-8-81										13296 13293 13294																													
LIGHT										Doubling Point Range Front Light										43 52										58.0										69 47										46.3										81 Z(C) 4804										5-8-81										"																													
LIGHT										Doubling Point Range Rear Light										43 53										05.0										69 47										46.4										81 Z(C) 4804										5-8-81										"																													
DAYBEACON										Carleton Ledges Jetty Daybeacon 33										43 54										06.9										69 47										16.1										81 Z(C) 4806										5-8-81										"																													

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	C. J. Klein
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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>FIELD (Cont'd)</b> <b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> 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-2-6-1 8-12-75	<b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

## RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

## INSTRUCTIONS

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

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

[illegible]