

NOAA FORM 76-35
(6-80)

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

DESCRIPTIVE REPORT

Map No.

TP-00762

Edition No.

1

Job No.

CM-7407

Map Classification

FINAL, FIELD EDITED MAP

Type of Survey

SHORELINE

LOCALITY

State

MASSACHUSETTS

General Locality

BUZZARDS BAY

Locality

BUTTERMILK BAY

1974 TO 1977

REGISTERED IN ARCHIVES

DATE

TP-00762

HISTORY OF FIELD OPERATIONS

1. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY (Premarking)	R. Tibbetts	April 1974
2. HORIZONTAL CONTROL	RECOVERED BY: None	
	ESTABLISHED BY: L. Davis	April 1974
3. VERTICAL CONTROL	RECOVERED BY: NA	
	ESTABLISHED BY: NA	
	PRE-MARKED OR IDENTIFIED BY: NA	
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 BY	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY: None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY: NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
Paneled		NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
740(C)9475	Center, 1940 (Sub. Pt. paneled) (station is northeast of this manuscripts)		

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-form 152, 1-form 266, 1-form 269C

TP-00762

HISTORY OF FIELD OPERATIONS

I. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Tibbetts	July 1977
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	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (<i>Triangulation Stations</i>) BY LOCATED (<i>Field Methods</i>) BY IDENTIFIED BY	None None 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	H. Hart
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None		NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (*Clarification of details*)

74(C)4813 (Black/White Ratio)

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 Field edit report, 1 Field edit paper print, 1 form 76-40

I. MANUSCRIPT COPIES				
COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit	February 1976	Class III manuscript SUPERSEDED	July 1976	April 1976
Field edit applied, Compilation complete	February 1978	Class I manuscript SUPERSEDED	February 1978	March 1978
Final Review	November 1984	Final Map	March 1985	March 1985

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH			
PAGES RECORDED	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		May 22, 1980	Landmarks to be charted.

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

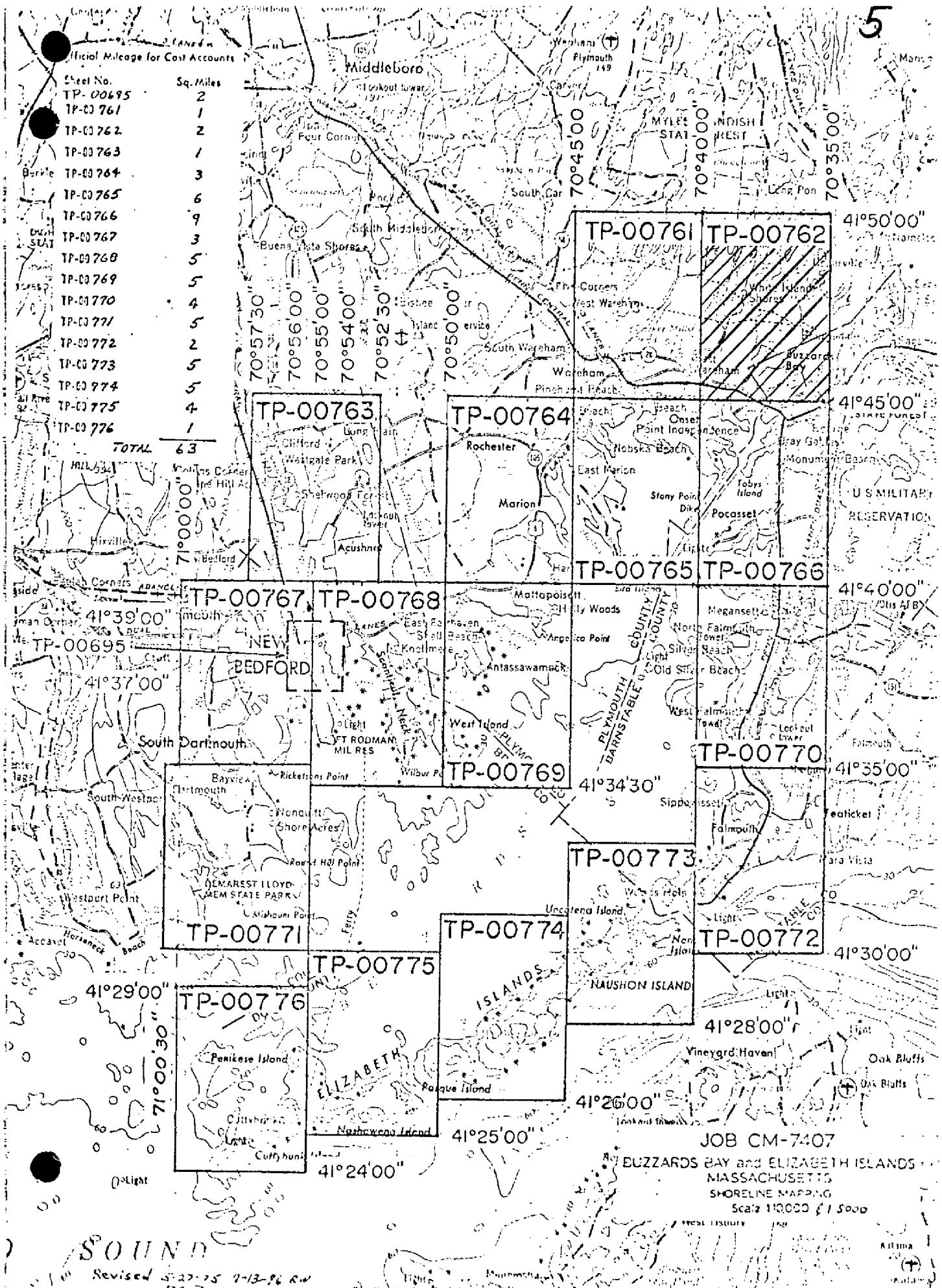
1. BRIDGING PHOTOGRAPHS; DUPLICATE BRIDGING REPORT; COMPUTER READOUTS.
 2. CONTROL STATION IDENTIFICATION CARDS; FORM NOS 76-40 SUBMITTED BY FIELD PARTIES.
 3. SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:
 4. DATA TO FEDERAL RECORDS 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
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL

Official Mileage for Cost Accounts

Sheet No.	Sq. Miles
TP-00695	2
TP-00761	2
TP-00762	2
TP-00763	1
TP-00764	3
TP-00765	6
TP-00766	9
TP-00767	3
TP-00768	5
TP-00769	5
TP-00770	4
TP-00771	5
TP-00772	2
TP-00773	5
TP-00774	5
TP-00775	4
TP-00776	1
TOTAL	63



SOUND

Revised 5-27-75 7-13-76 R.W.

JOB CM-7407
 BUZZARDS BAY and ELIZABETH ISLANDS
 MASSACHUSETTS
 SHORELINE MAPPING
 Scale 1:10000 @ 1:5000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00762

This 1:10,000 scale final shoreline map is one of seventeen maps that comprise project CM-7407, Buzzards Bay, Massachusetts. The project consists of sixteen 1:10,000 scale maps (TP-00761 thru TP-00776) and one 1:5,000 scale inset map (TP-00695).

The purpose of this map was to furnish support for hydrographic activity scheduled in the spring of 1976 and to provide current shoreline data for nautical charts.

This map portrays the northeast shoreline of Buzzards Bay, featuring Cohasset Narrows and Buttermilk Bay. This map defines the northeast limit of the project.

Photo coverage for the project was adequately provided in 1974 with 1:60,000 scale, 1:30,000 scale and 1:15,000 scale color photographs. The 1:60,000 scale photographs were taken with the RC-10 "C" camera for aerotriangulation. The 1:30,000 scale photographs were taken with the RC-8 "E" camera for aerotriangulation and compilation. The 1:15,000 scale photographs were taken with the RC-10 "Z" camera and were used to bridge and compile inset map TP-00695. Supplemental tide coordinated infrared photographs at 1:30,000 scale were taken on black-and-white film at mean low water with the RC-10 "Z" camera. Photo coverage used to produce this map included the 1:30,000 scale compilation photos and the 1:30,000 MLW infrared photos, both taken April 1974.

Field work prior to compilation consisted of the recovery, establishment and identification, by premarking methods, of horizontal control necessary for aerotriangulation. Also, the field party was responsible for assisting in obtaining the tide coordinated aerial photography. This activity was performed April 1974.

Analytic aerotriangulation was adequately provided by the Washington Science Center April 1975. This activity also included ruling the base manuscripts and providing ratio photographs for compilation.

Compilation by office interpretation of the 1:30,000 scale color photographs was performed at the Coastal Mapping Section, Atlantic Marine Center in February 1976. The MLW tide coordinated infrared photographs were ratioed to map scale and were used to graphically delineate the MLW line. Copies of the Class III manuscript and applicable source data were forwarded to the field for edit.

A Class III map print was forwarded to the hydrographer in support of contemporary hydrographic operations. The hydro survey common to this map, H-9712, was field accomplished but is unprocessed and currently in an active status.

TP-00762

Field edit was conducted July 1977 by a photogrammetric field party. Application of this data was accomplished at the original compilation office February 1978 and the manuscript was advanced to Class I. Copies of the Class I manuscripts were forwarded to the Hydrographic Surveys Branch and the Marine Charts Branch.

Final review was performed at the Atlantic Marine Center in November 1984. A final Chart Maintenance Print and a Hydrographic Print were prepared and forwarded to the Marine Charts Branch and the Hydrographic Surveys Branch.

The Descriptive Report for this final field edited map contains all pertinent information used to produce this map. The original base manuscript and related data were forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00762

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification by premarking methods of the horizontal control necessary for the aerotriangulation of the project.

8

PHOTOGRAMMETRIC PLOT REPORT
JOB CM-7407
Buzzards Bay, Massachusetts
April 1975

21. Area Covered

This project covers the shoreline of Buzzards Bay and the Elizabeth Islands. Included are seventeen T-sheets. Sheets TP-00761 thru TP-00776 are 1:10,000 scale and TP-00695 is 1:5,000 scale.

All sheets have the Massachusetts State Grid (Mainland Zone) intersections plotted.

22. Method

Four strips of color photography were bridged on the Wild STK-1 in order to obtain compilation and pass-point positions and exact scale ratios to be used during compilation.

Strip 1 (1:60,000-scale) was adjusted on five field-identified triangulation stations with twenty-two additional triangulation stations and tie points as checks. Strip 2 (1:60,000-scale) was adjusted on three field-identified triangulation stations and one tie point with fourteen additional triangulation stations and tie points as checks. Strip 3 (1:30,000-scale) was adjusted on five field identified triangulation stations with sixteen additional triangulation stations and tie points as checks. Strip 4 (1:15,000-scale) was adjusted on four office identified triangulation stations with six additional triangulation stations and tie points as checks. All adjustments were performed on the IBM 6600. All sheets were ruled and plotted on the Calcomp.

1:10,000-scale ratios were ordered for the entire project. 1:5,000-scale ratios were also ordered for the area covered by T-sheet TP-00695.

The panel for Nobska Point Lighthouse 1904 could not be held in the adjustments. A distance was not recorded on the Control Station Identification form at the time of the field work, but was furnished by the Norfolk Office at a later date. It is believed an error in this distance is the cause for the point not holding in the strip adjustments.

The center panel of the target for Goosberry Neck 2 (USE) 1934 was not in place at the time of photography. Only the three legs were visible.

Neither one of the two field-identified substitute points for USE 6 1934 could be found on the 1:15,000-scale bridging photography (Strip 4).

All other horizontal control utilized in the adjustments held within National Map Accuracy.

24. Supplemental Data

Vertical control for bridging only was obtained from local USGS quadrangles.

25. Photography

Photography was adequate as to overlap and coverage.

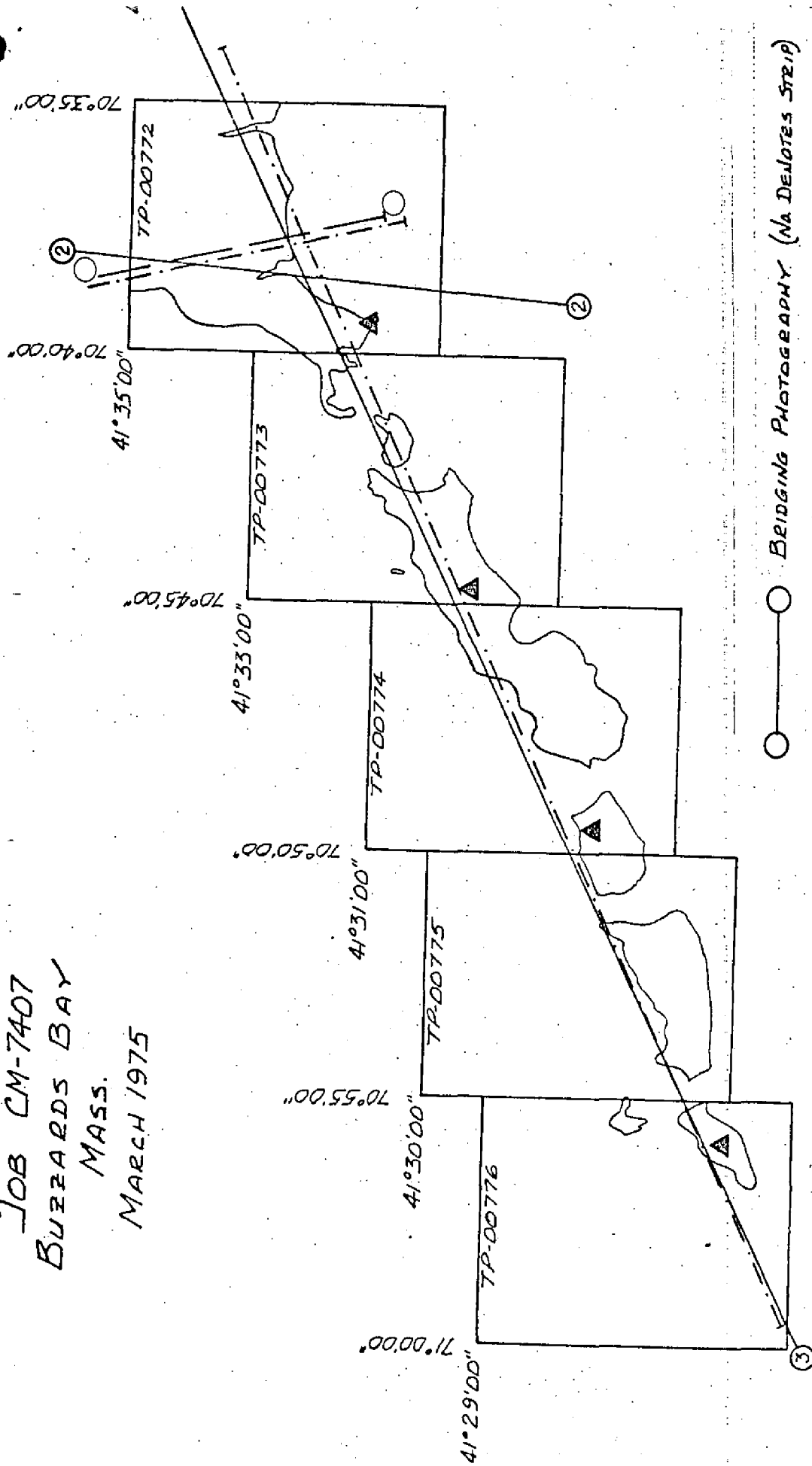
Submitted by:

Michael L. McGinley
Michael L. McGinley

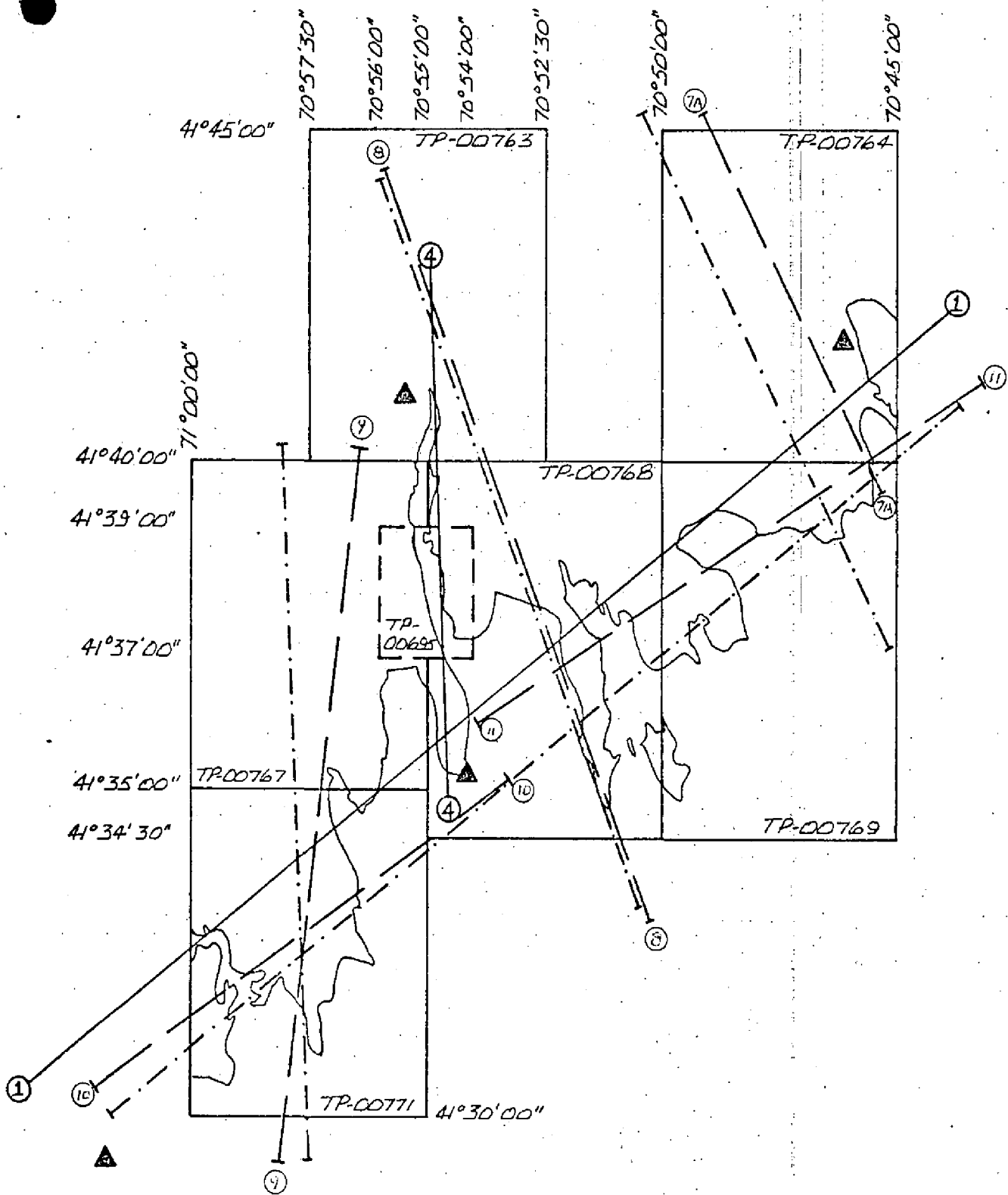
Approved by:

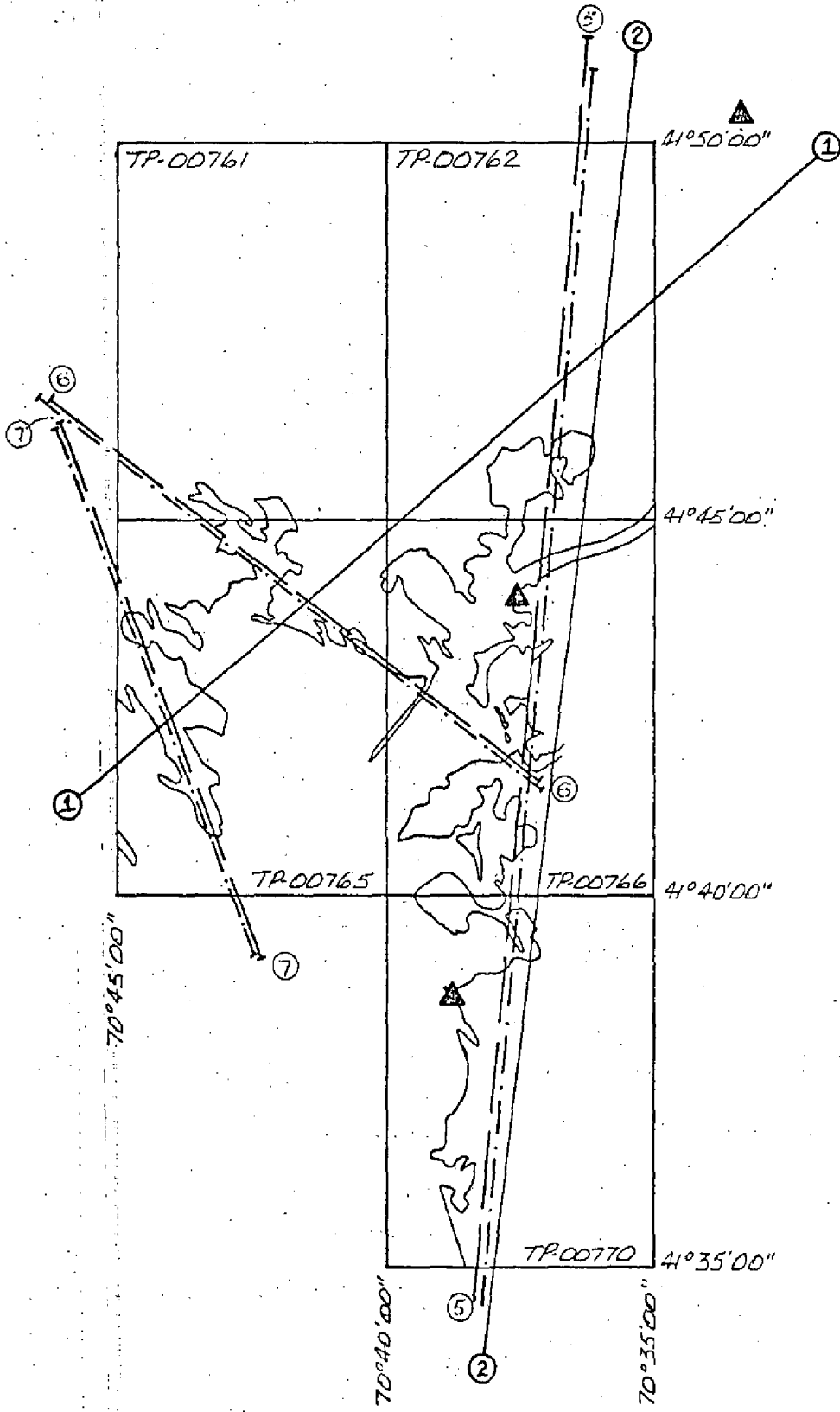
John D. Perrow, Jr.
John D. Perrow, Jr.
Chief, Aerotriangulation Section

JOB CM-7407
 BUZZARDS BAY
 MASS.
 MARCH 1975



- BRIDGE PHOTOGRAPHY (NA DELOTES STRIP)
- 1:30,000 COMPILATION PHOTOGRAPHY
- · - · - 1:30,000 B/W SUPPORT PHOTOGRAPHY





DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. TP-00762	JOB NO. CM-7407	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODEIC DATUM N.A. 1927		GEOGRAPHIC POSITION		REMARKS
				COORDINATES IN FEET STATE Massachusetts ZONE Buttermilk Bay		ϕ LATITUDE	λ LONGITUDE	
NONE				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
				X=	ϕ			
				Y=	λ			
COMPUTED BY			DATE	COMPUTATION CHECKED BY			DATE	
LISTED BY			DATE	LISTING CHECKED BY			DATE	
HAND PLOTTING BY			DATE	HAND PLOTTING CHECKED BY			DATE	

COMPILATION REPORT

TP-00762

31 - DELINEATION

Delineation was accomplished using stereo instrument and graphic compilation methods. The Wild B-8 plotter was used to delineate shoreline, alongshore and interior detail based upon office interpretation of the 1:30,000 scale bridging/compilation color photographs.

Mean low water tide coordinated infrared photographs at 1:30,000 scale were ratioed to map scale in order to graphically compile the low water features.

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

32 - CONTROL

Refer to the Photogrammetric Plot Report dated April 1975.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

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

35 - SHORELINE AND ALONGSHORE DETAILS

The MHW line and alongshore detail were compiled from office interpretation of the 1:30,000 scale compilation photographs as described in item #31.

36 - OFFSHORE DETAILS

Offshore detail was compiled by instrument and graphic methods as described in item #31.

37 - LANDMARKS AND AIDS

Work copies of forms 76-40 were prepared and forwarded to the field editor for verification, location and/or deletion.

38 - CONTROL FOR FUTURE SURVEYS

None.

TP-00762

39 - JUNCTIONS

Refer to the Data Record Form 76-36B, Item 5.

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report dated April 1975.

46 - COMPARISON WITH EXISTING MAPS

A comparison has been made with the following U.S. Geological Survey
Quadrangles: Sagamore, MA, scale 1:24,000, dated 1967; and Wareham, MA,
scale 1:24,000, dated 1972.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the following National Ocean Survey
Chart: 13236, 1:20,000 scale, 18th edition, dated October 12, 1974.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

Jerry L. Hamrick
for Charles Parker
Cartographic Technician
February 6, 1976

Approved,

Jerry L. Hamrick
for Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

ADDENDUM TO THE COMPILATION REPORT

TP-00762

FIELD EDIT

Field edit was accomplished July 1977 by coastal mapping field personnel. Shoreline and marsh limits delineated on the field ratio print were the only significant revisions.

GEOGRAPHIC NAMES

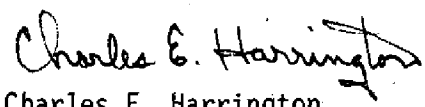
FINAL NAME SHEET

CM-7407. (Buzzards Bay and Elizabeth Islands, Massachusetts)

TP-00762

- Bay Colony (RR)
- Broad Cove
- Buttermilk Bay
- Buzzards Bay
- Cohasset Narrows
- Gibbs Narrows
- Gibbs Neck
- Lewis Point
- Little Buttermilk Bay
- Long Neck
- Miller Cove
- Muddy Cove
- Queen Sewell Cove
- Red Brook
- Riverside

Approved by:

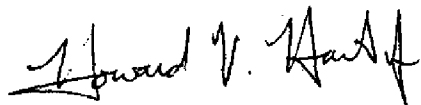


Charles E. Harrington
Chief Geographer
Nautical Charting Division

Field Edit Report
Job CM - 7407
Buzzard's Bay, Massachusetts
TP-00762 Buttermilk Bay

This sheet was field edited during the 1977 summer season.

51. ADEQUACY OF COMPILATION - The compilation on this sheet was found to be correct with very minor changes necessary.
52. ALONGSHORE FEATURES - All shoreline was inspected from seaward and all questions were answered and noted on the Field Edit Ozalid. Rock data was recorded on photograph 74E 4813. The shoreline, MHWL, MLWL are correct.
57. OFFSHORE FEATURES - The shallow limits are correctly delineated. The entire bay bottom is covered in grass with the exception of the channel which appears to skirt the south shore eastward and north around the bay.
58. LANDMARKS AND AIDS - There were no permanent aids found. The landmarks were recovered in the field and are submitted on form 76-40.
59. GENERAL STATEMENT - All field edit notes have been made in violet ink on both the Field Edit Ozalid and the photograph used.



Howard V. Hart Jr.
Surveying Technician

REVIEW REPORT TP-00762
SHORELINE

61. GENERAL STATEMENT

Final review for this final field edited map was accomplished at the Atlantic Marine Center in November 1984. For a schedule of the office and field operations, refer to the Summary included in this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

None.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with the following 1:24,000 scale U.S. Geological Survey quadrangles: Wareham, MA, dated 1972; and Sagamore, MA, dated 1967.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Contemporary hydrographic activity common to this map was assigned as hydro survey H-9712. This survey was physically accomplished; however, the field data is currently unprocessed and a completion date is unscheduled.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS Charts: 13236, 22nd edition, scale 1:20,000, dated March 10, 1984; 13229, 20th edition, scale 1:40,000, dated March 24, 1984; and 13230, 34th edition, dated March 10, 1984, scale 1:40,000.

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,

Gregory T. ...
Chief, Photogrammetric Section, Rockville

Ronald K. Brewer
Chief, Photogrammetry Branch,
Rockville

TYPE OF ACTION		RESPONSIBLE PERSONNEL		ORIGINATOR	
OBJECTS INSPECTED FROM SEAWARD		R. Tibbets		<input checked="" type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)	
POSITIONS DETERMINED AND/OR VERIFIED		H. Hart J. Roderick		FIELD ACTIVITY REPRESENTATIVE	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'		<input type="checkbox"/> OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	
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		III. 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		II. 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.			

