## TP-00520

#### NOAA FORM 76-35

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

### **DESCRIPTIVE REPORT**

Type of Survey Special Surveys
Job No CM-7402 Мар No. ТР-00520
Classification No. Final Edition No
Field Edited Map
LOCALITY
State North Carolina
General Locality Beaufort Inlet
LocalityShackleford Point
19 73 TO 1974
REGISTRY IN ARCHIVES

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901



NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE	TYPE OF SURVEY SURVEY	тр. 00520
13-72) Page 10 (2 NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1	TION NO. (1)
		ss I Final
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY MAP CLA	r'Mf
	REVISED JOB	7402
PHOTOGRAMMETRIC OFFICE	LAST PRECEEDING MAP ED	ITION
Coastal Mapping Division (Norfolk)	TYPE OF SURVEY JOB	PH
OFFICER-IN-CHARGE	ORIGINAL MAP CLA	DATES:
Jeffrey G. Carlen, CDR-NOAA	G REVISED 19 TO	
I. OFFICE	2. FIELD	
General Instructions 5/10/74	Photography (Special	Bathymetry
Amendment No.   8/10/74	and Topo.)	0/23/73
,, , , ,	Field (Special Survey	s) ,
·		0/30/73
	Field Edit	8/21/74
N. P. P. P. L. C.		
II. DATUMS	OTHER (Specify)	<del></del>
I. HORIZONTAL: X 1927 NORTH AMERICAN		
MEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL:	Nat'l Geodetic Vertic	al Datum
MEAN LOWER LOW-WATER  MEAN SEA LEVEL	of 1929.	
3. MAP PROJECTION	4. GRID(S)	
Lambert Conformal	N. C. ZONE NA	
5. SCALE	SYATE ZONE	· · · · · · · · · · · · · · · · · · ·
1:5,000		
OPERATIONS	NAME	DATE
1. AEROTRIANGULATION Analytic, Block By	D.O. Norman	5/74
METHOD: Adj. LANDMARKS AND AIDS BY	NA	
2. CONTROL AND BRIDGE POINTS PLOTTED BY	R. Robertson	5/74
METHOD: Calcomp CHECKED BY	NA A.L. Shands	7/74
3. STEREOSCOPIC INSTRUMENT Contouts & PLANIMETRY BY COMPILATION - CHECKED BY	Vanhaven, Byrd, Hanco	<del></del>
	A.L. Shands	<u> </u>
scale:1:3000 Pantographed to checked by	Vanderhaven, Byrd, Hand	o¢k 7/74
Contours/	Hancock	7/74
	B. Kurs	2/74-
METHOD: Smooth Compilation CHECKED BY  Drafting CHECKED BY	J. Hancock B. Kurs	8/71
DI WI OTHE	NA	<del></del>
SCALE: 1:5,000 CHECKED BY	NA	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	B. Kurs	8/74
6. APPLICATION OF FIELD EDIT DATA	J.L.Hancock B. Kurs	10/74
7. COMPILATION SECTION REVIEW BY	B. Kurs	10/71
8. FINAL REVIEW BY	E.L. Rolle	5/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	E.L. Rolle	5/76
11, MAP REGISTERED - COASTAL SURVEY SECTION BY  NOAA FORM 76-36 A SUPERSEDES FORM C& G5 181 SERIES	R. CATOR	5/76



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NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) Page 2-62 NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	TYPE OF SURVEY	SURVEY TP. 00520
rage x of L	ORIGINAL	MAP EDITION NO. ( )
	l	, ,
DESCRIPTIVE REPORT - DATA RECORD	☐ RESURVEY	MAP CLASS Final
	REVISED	лов Рн. <u>СМ-7402</u>
PHOTOGRAMMETRIC OFFICE	LAST PRECEED	ING MAP EDITION
Coastal Mapping Division, Rockville	TYPE OF SURVEY	JOB PH
OFFICER-IN-CHARGE	ORIGINAL ORIGINAL	MAP CLASS
}	RESURVEY .	SURVEY DATES:
Cdr. James Collins	☐ REVISED	19TO 19
I. INSTRUCTIONS DATED		
1. OFFICE	<del> </del>	FIELD
General Instructions-OFFICE 5/10/74	Instructions-Photo	
General Instructions-OFFICE- Amendment I 8/10/74	Instructions-Field Instructions-Field	
	Instructions fren	3 Edit 0/21//4
•	,	
II. DATUMS	<del></del>	
	OTHER (Specify)	
1. HORIZONTAL: XX 1927 NORTH-AMERICAN		
MEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL: MEAN LOW-WATER	l	
MEAN SEA LEVEL	National Geodetic	Vertical Datum of
3. MAP PROJECTION	<del>                                     </del>	GRID(\$)
   Lambert Conformal	STATE	ZONE
5. SCALE	North Carolina	N.A.
1:5,000	(	
III. HISTORY OF OFFICE OPERATIONS	<del></del>	- <del></del>
OPERATIONS	NAME	DATE
T. AEROTRIANGULATION Analytic, Block By	D.O. Norman	5/74
METHOD: Adjustment LANDMARKS AND AIDS BY	N.A.	5/74
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Calcomp CHECKED BY	R. Robertson	
3. STEREOSCOPIC INSTRUMENT CONTOURS & PLANIMETRY BY	G. Fromm	6/18/74
COMPILATION CHECKED BY	P. Dempsey	6/18/74
ınstrument: B-8 Photobathymetry क्लानकवसङ्क вү	G. Fromm	6/18/74
SCALE: 1:3,000 CHECKED BY	P. Dempsey	6/19/74
4. MANUSCRIPT DELINEATION CONTOURS & PLANIMETRY BY CHECKED BY	G. Fromm E.L. Rolle	6/26/74
Photobathymetry contours by	G. Fromm	6/20/74
METHOD:	E.L. Rolle	6/20/74
Smooth compilation drafting CHECKED BY	N.A.	
1:5,000 CHECKED BY	N.A.	0/51
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	B. Kurs J.L. Hancock	8/74 10/74
6. APPLICATION OF FIELD EDIT DATA  CHECKED BY	B. Kurs	10/74
7. COMPILATION SECTION REVIEW BY	B. Kurs	10/74
8. FINAL REVIEW BY		
	E.L. Rolle	5/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY 11. MAP REGISTERED - COASTAL SURVEY SECTION BY	E.L. Rolle E.L. Rolle	5/76

NOAA FORM 76-36B

TP-00520

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

#### COMPILATION SOURCES

The state of the s					
1. COMPILATION PHOTOGRAPHY					
Wild "RC-8" and "RC-	10"	TYPES OF PI	HOTOGRAPHY END	TIME REFER	ENCE
TIDE STAGE REFERENCE  PREDICTED TIDES		(C) COLOR	MATIC	Eastern	(X)STANDARD
REFERENCE STATION RECORDS  TIDE CONTROLLED PHOTOGRAP	нү	(I) INFRARED COLOT		MERIDIAN 75th	DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF T	IDE
73C(C)5505 - 5509 73C(C)5647 - 5652 73C(C)6377 - 6381 73E(I)2201R - 2203R 73E(I)1283R - 1288R	11/7/ <b>7</b> 4 <b>73</b> 11/7/ <b>7473</b> 11/12/73 11/12/73 11/12/73	10:34-10:34 11:21-11:21 13:36-13:36 13:04-13:10 10:34-10:34	1:7,500 1:7,500 1:4,300	+0.50*ft. abov 0.91*ft. abov +0.65*above MI -0.10* (c +0.10*MIW(ocea +0.50*MIW(ocea * Refer to the for page for additional inform	we MIW W(inlet) ocean) in) ilouwy timal
REMARKS					

#### 2. SOURCE OF MEAN HIGH-WATER LINE:

The elevation of the MHW line above NGVD in each tide zone was usedin the B-8 to delineate it using the color photography listed above. The source of the MHW line is the tide coordinated color photography listed above under item 1.

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

DATE(S)

The elevation of the MLW line below NGVD in each tide zone was used to to delineate it from the color photography listed above, supplemented where needed by black and white ratios of the infrared photography.

The source of the MLW line is the tide coordinated color photography and black and white ratios of the color infrared photography listed above under item 1.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY COPY USED

5. FINAL JUNCTIONS				
NORTH	EAST	SOUTH	WEST	
TP-00519	TP-00522	No survey	TP-00518	
REMARKS & 11'	Control of the second			

SURVEY NUMBER

NOS jobs in the area.

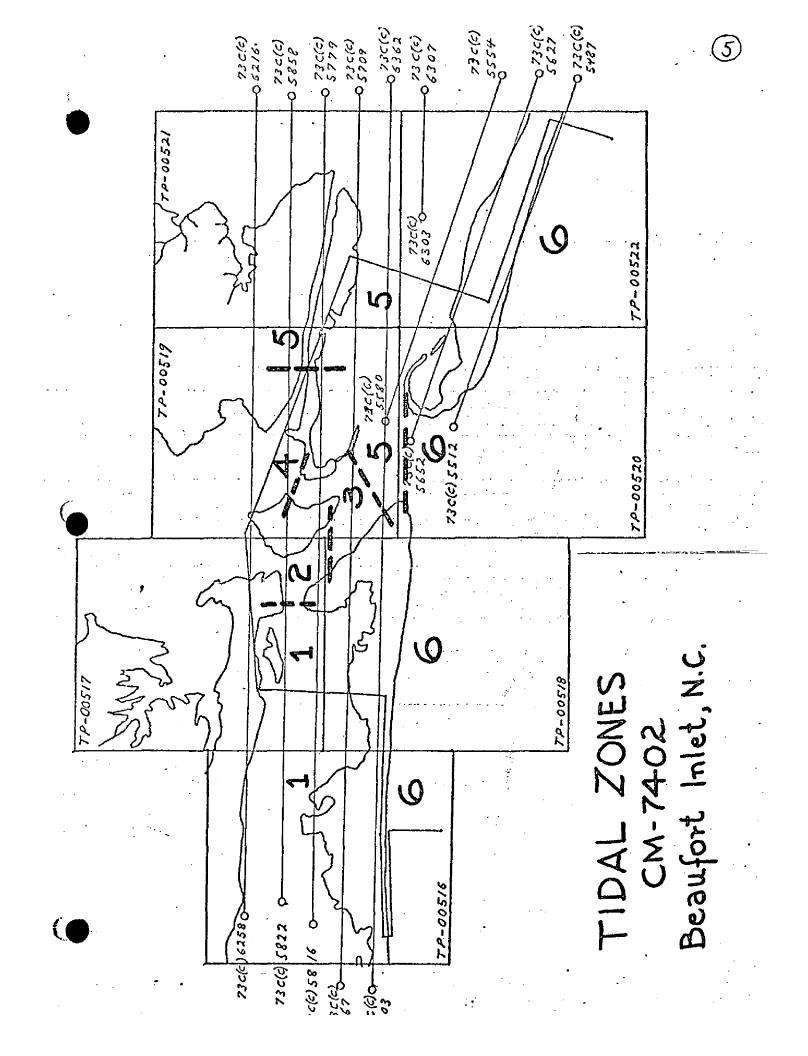
SURVEY NUMBER

SURVEY COPY USED

DATE(S)

#### TP-00520 TIDE INFORMATION

· .	• •		•	
PHOTOGRAPHY	TIDE STATIONS (In operation at tinhotography)	me of	CTAGE OF TIDE Feet	THAN RANGE Feet
	TIDE STATION TIDA	L ZONE*	; • -	, .
73C(C)5505-5509	Atlantic Beach	6	+0.50MLW	3.76
73C(C)5647-5652	Beaufort Inlet Channel Range	5	+0.91MLW	3.26
73C(C)6377-6381	Fort Macon Coast Guard Bock	3	+0.65MLW	3.18
73C(C)6377	Beaufort Inlet Channel Range	5	+0.65MLW	3.26
73C(C)6377-6381	Atlantic Beach	6	-0.10MLW	3.76
73E(I)1283R-1288R	Atlantic Beach	6	+0.50MLW	3.76
73E(1)2201R-2203R	Atlantic Beach	6	+0.10MLW	3.76
	Diagram.	·		
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NOAA FORM 76-36C (3-72)

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

#### HISTORY OF FIELD OPERATIONS

	RATION X FIELD			D.7-
OF	PERATION	NAME		Sept. 74
. CHIEF OF FIELD PARTY		R.S. Tibbetts		Oct. 73
	RECOVERED BY	R.D. Black		Oct. 1973
. HORIZONTAL CONTROL	ESTABLISHED BY	11 11 11		11 11
	PRE-MARKED OR IDENTIFIED BY	H= H H		11 11
	RECOVERED BY	L. H. Davis		Sept. 1974
3. VERTICAL CONTROL	ESTABLISHED BY	R. D. Black		Oct. 1973
	PRE-MARKED OR IDENTIFIED BY	11 11 11		11 11
	RECOVERED (Triangulation Stations) BY	N.A.		
4. LANDMARKS AND AIDS TO NAVIGATION	LOCATED (Field Methods) BY	N.A.		
AIDS TO NAVIGATION	IDENTIFIED BY	N.A.		
	TYPE OF INVESTIGATION			a conti
5. GEOGRAPHIC NAMES INVESTIGATION	COMPLETE	R.E. Kesselrin	ng	Oct. 1974
	A SPECIFIC NAMES ONLY			
4 4	NO INVESTIGATION			
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	N.A.		
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.		
II. SOURCE DATA  1. HORIZONTAL CONTROL ID	ENTIFIED Day	2. VERTICAL CONTRO	L IDENTIFIED T	2
	rre-mark	D7: A 10		Pre-mark
Jetty 1973	STATION NAME	Panel A-10	STATION DE	CICHA TION
73C(C)5651; 73C(C)  4. LANDMARKS AND AIDS TO  N.A.				
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT	NAME
5. GEOGRAPHIC NAMES:	REPORT X NONE	6. BOUNDARY AND LI	MITS: REPO	RT WONE
7. SUPPLEMENTAL MAPS AND Sketch "A"; Film	ozalid with elevations pl	ottod Fort Maco	n CG Base Res	
7. SUPPLEMENTAL MAPS AND Sketch "A"; Film	D PLANS	ottod Fort Maco	n CG Base Res	



NOAA FORM 76-36D

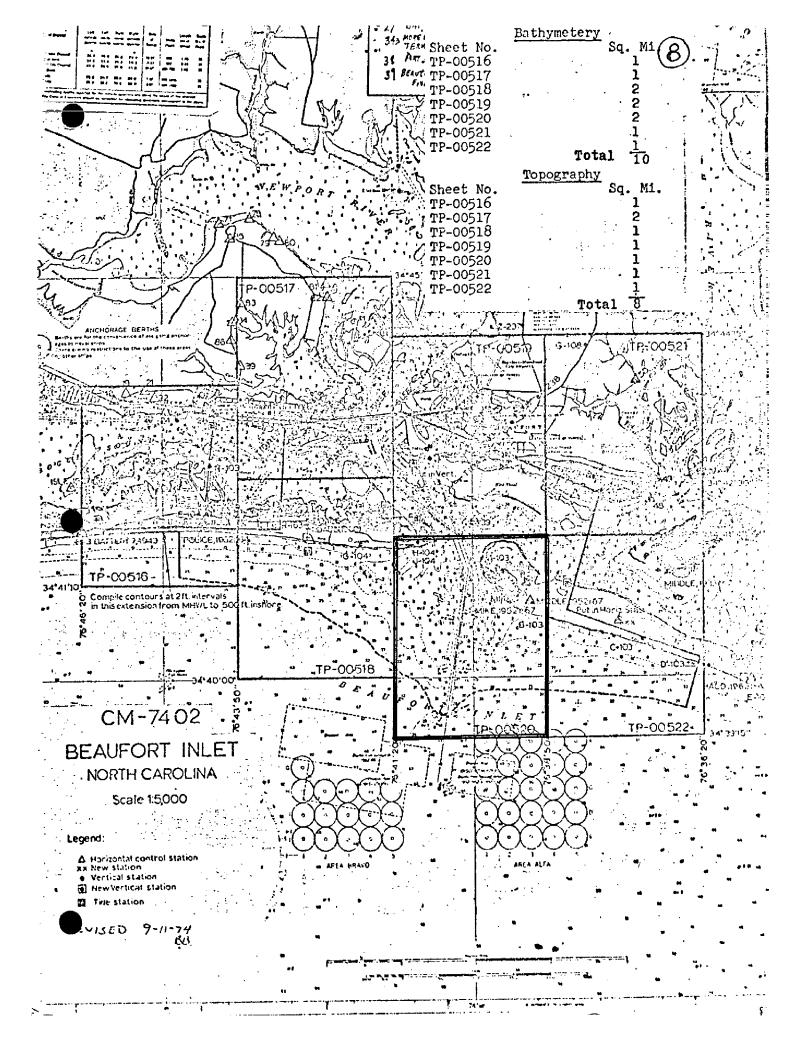
(3-72)

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

#### TP-00520

#### RECORD OF SURVEY USE

\	P-00220	1/2-4:	AP 01 44K - L				
I. MANUSC	CRIPT COPIES						
	CO.	MPILATION STAGE	/S			DATE MANUSCRI	PT FORWARDED
	DATA COMPILED	DATE	RE	MARKS		MARINE CHARTS	HYDRO SUPPORT
	lation Complete ng field edit	Aug. 1974	Class III Manuscrip				Aug. 1974
Field	Edit Applied	Oct. 1974	Class I	,			Nov. 1974
				,			
	MARKS AND AIDS TO NAVIGA						
1. REP	PORTS TO MARINE CHART DI	VISION, NAUTICAL	DATA BRANCH				
NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED			REMA	\RKS	
	!						ı
						ı	
					••••	,	
					<del></del>	•	
_	REPORT TO MARINE CHART REPORT TO AERONAUTICAL						
	RAL RECORDS CENTER DAT		AERONAUTIONE	_ DATA SEC.	IIQN. U.	HE FURWARDED.	<del> </del>
1. 🔀 2. 🔀	BRIDGING PHOTOGRAPHS; CONTROL STATION IDENTIFY SOURCE DATA (except for GA ACCOUNT FOR EXCEPTION	DUPLICATE IFICATION CARDS;	FORM NOS	S 567 SUBMI	TTED BY	FIELD PARTIES.	
4.	DATA TO FEDERAL RECOR	POSICENTER, DAT	F FORWARDED:				•
	<u> </u>						<u>.</u>
IV. SURVE	EY EDITIONS (This section st	JOB NUMBER		p eartion is re		TYPE OF SURVEY	<del></del>
SECOND	TP -	_ (2) PH			REV		URVEY
EDITION	DATE OF PHOTOGRAPH	HY DATE OF FI	ELD EDIT	□	□	MAP CLASS	FINAL
	SURVEY NUMBER	JOB NUMBER	R	ţ	7	YPE OF SURVEY	
THIRD	TP	_ (3) PH	}	Ì	REV	ISED RES	URVEY
EDITION	DATE OF PHOTOGRAPH	HY DATE OF FI	ELD EDIT	] □	□m.	MAP CLASS □IV. □V.	FINAL
<del></del>	SURVEY NUMBER	JOB NUMBER	Ŕ			YPE OF SURVEY	
FOURTH	TP	_ (4) PH			REV	ISED RESU	ĴRVĖY
EDITION	DATE OF PHOTOGRAPH	TY DATE OF FI	ELD EDIT	n.	□ m.	MAP CLASS □₹V. □V.	OFINAL .



## (9)

#### SUMMARY TP-00516 thru TP-00522

Under a cooperative agreement with the Corps of Engineers, Wilmington District, which became effective August 1973, these seven maps (TP-00516 thru 522) were compiled at 1:5,000 scale in the area of Beaufort Inlet, North Carolina.

The purpose of this special survey is to provide data for the Corps of Engineers on siltration rates in the entrance channel and harbor complex, possible impacts of entrance channel deepening on adjacent beaches, possible changes effected by dredging on the tidal prism and the circulation pattern, to update and establish tidal datums, and to update nautical charts in the area.

Field operations, which began in October 1973, generally consisted of aerial photography, establishment of tidal datums, pre-marking of horizontal and vertical control, and field edit.

Aerotriangulation and compilation tide-coordinated photography was furnished at 1:7,500 scale from natural color film taken with the Wild RC-10 super-wide-angle camera. Supplemental black-and-white infrared tide-coordinated photography at 1:4,300 scale, taken concurrently in an independent mode using color infrared film in the RC-8 camera, was also furnished.

Nine strips of the 1:7,500 scale photography were bridged by analytic aerotriangulation methods and adjusted to ground with the block adjustment program. Fourteen horizontal control stations, fifteen vertical control stations, and fifteen vertical points from the tide-coordinated infrared photography were weighted in the block adjustment. This provided horizontal and vertical control for compilation.

Compilation photography was the 1:7,500 scale photography and the supplemental infrared photography. The Wild B-8, using the 1:7,500 scale photography was used to compile planimetry, topography, and photobathymetry. The topography consists of 2-foot interval contours and spot elevations referred to the National Geodetic Vertical Datum of 1929. The photobathymetry consists of discrete soundings and 2-foot interval depth curves referred to the Mean Low Water Datum established by NOS.

All line work is smooth compilation drafting.

One plastic copy and ten ozalid copies of each map was furnished to:

Department of the Army
Wilmington District, Corps of Engineers
P.O. Box 1890
Wilmington, North Carolina 28401
ATTN: Mr. R.P. Masterson, Jr.

A Chart Maintenance Print for each map was submitted to the Marine Chart Division.

The following items are registered in the Bureau Archives:

- 1. A plastic copy of each map (1:5,000 scale).
- 2. A Descriptive Report for each map.

Negatives for each map are filed in the Reproduction Division.

All field data are filed in the National Archives.

#### FIELD INSPECTION

**TP-**00520

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

# Photogrammetric Plot Report Beaufort Inlet, North Carolina CM-7402 May 1974

#### 21. Area Covered.

This report pertains to seven sheets in the vicinity of Beaufort Inlet, North Carolina. The sheets are TP-00516 thru TP-00522.

#### 22. Method.

Nine strips (see sketch) of 1:7,500 scale color photography were bridged by analytic aerotriangulation methods and adjusted to ground with the block adjustment program. Points were established for determining ratios of 1:4,300 scale infrared support photography. Sufficient points were plotted by the Coradomat for setting models for compilation. These points were plotted in the North Carolina State Plane Coordinate System.

#### 23. Adequacy of Control.

The control was adequate. Fourteen horizontal control stations were weighted in the block adjustment. The largest residual in the fit to horizontal control was .4 foot.

Fifteen vertical control targets were weighted. The largest residual in the fit to these targets was one-half foot. In addition to these targeted points, thirty-nine vertical control points were established from the tide-related infrared photography. Fifteen of these points were weighted in the block adjustment. The largest residual in the fit to control of all thirty-nine points was 1.28 feet. This point was in the critical area as were three other points with residuals greater than 1 foot. The average residual of non-weighted vertical points in the critical area was .54 foot.

24. Supplemental Data. - None was used.

#### 25. Photography.

There was a noticeable scale difference on the edge of adjacent photographs. This produced some error in measurement that could not be compensated for.

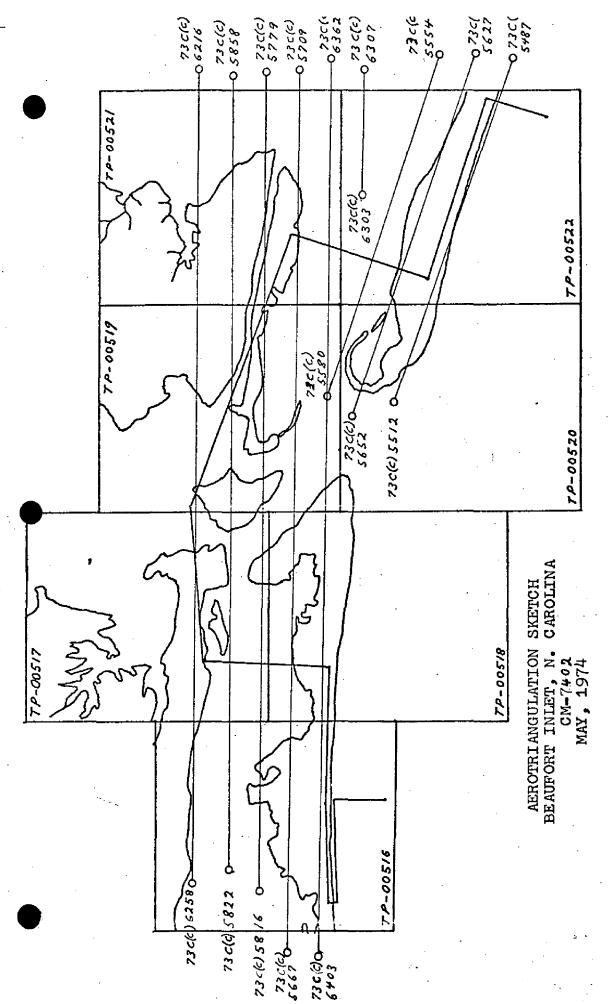
Submitted by,

Non O. Norman

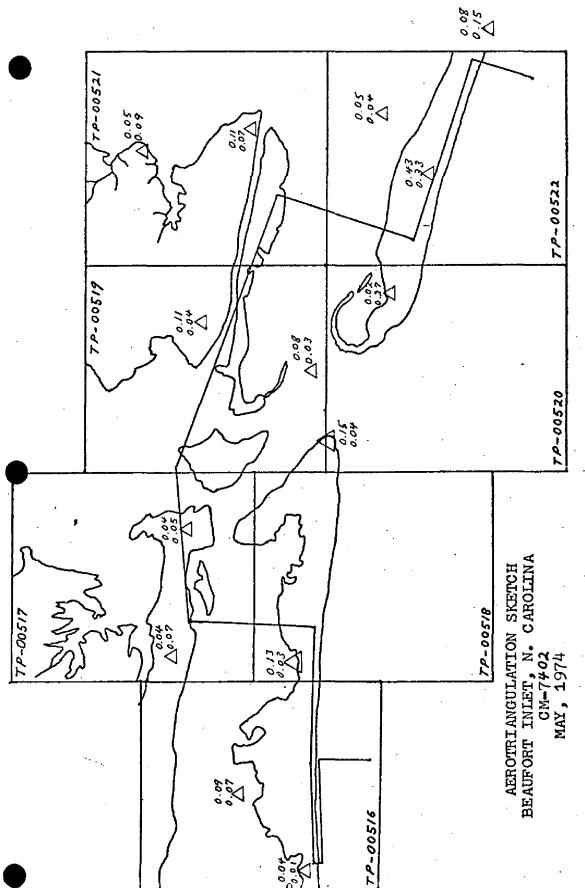
Don O. Norman

Approved by .

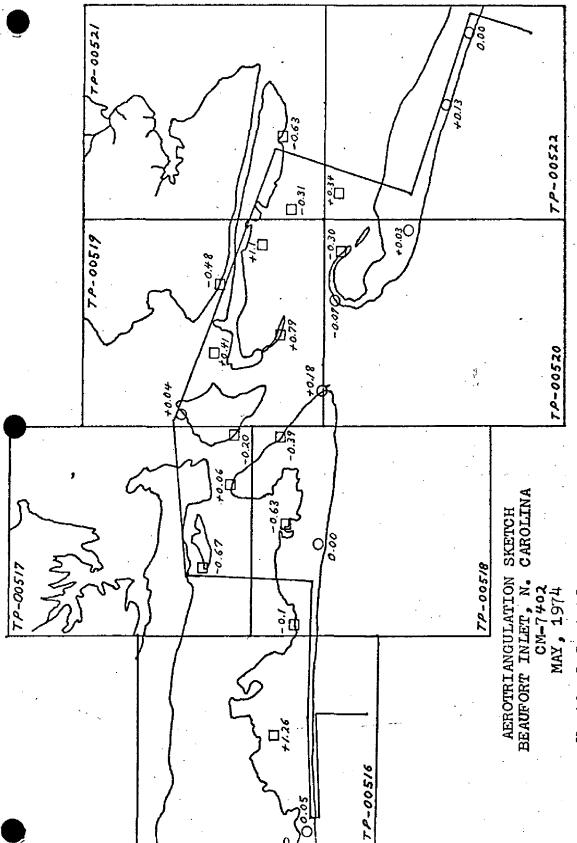
John D. Perrow, Jr.



Bridging Photography



 $\Delta$  Horizontal Control



Vertical Control
O targets, weighted in block
D points from infrared photography

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

C&GS-164) NOAA FORM 76-41 (\$-71) USCOMM-DC 34168-271 (FORMERLY F

DESCRIPTIVE REPORT CONTROL RECORD

SCALE FACTOR SCALE OF MAP 1:5, 000

(16) DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Pt. = 3048006 meter) February 2, 1974 N.A. 1927 - DATUM FORWARD DATE 7 X -LATHTUDE-OR Y COORDINATE 2,705,816.16 348,845 M. Mc Gimley CHECKED BY NA 1917 DATUM PROJECT NO. CM-7402 SOURCE OF INFORMATION (INDEX) 日 707 .5.2 JETTY (SHACKLEFORD USE) 1933 Page 2974 DATE MAP T. TP- 00520 STATION COMPUTED BY

#### Compilation Report TP-00520

#### 31. Delineation

The map was compiled on the Wild 8-8 stereoplotter using the 1:7,500 scale color photography. Black-and-white ratio photos, taken concurrently on color infrared film, were used to supplement compilation of the mean low water line.

#### 32. Control

Refer to the Photogrammetric Plot Report bound with this Descriptive Report.

The identification, density, and placement of horizontal and vertical control was adequate.

#### 33. Supplemental Data - None

#### 34. Contours and Drainage

Inconsistent color tone qualities of the photography impeded compilation of the contours. Areas of questionable contour accuracy were referred to the field editor for verification.

In areas where the mean range of tide is greater than the contour interval, the 2-foot contour is delineated below the mean high water line. In areas where the 2-foot contour line and the mean high water line are nearly coincident, both lines are combined and delineated with the mean high water line symbol.

There was no significant drainage to be compiled on this map.

#### 35. Shoreline and Alongshore Detail

There was no preliminary field inspection of the shoreline.

The mean high water line and the mean low water line were compiled on the B-8 stereoplotter using contour compilation methods. Control data for this compilation was furnished by field methods and the photogrammetric plot.

Shoal areas were delineated from office interpretation of the photography and referred to the field editor.

#### 36. Offshore Details and Photobathymetry

All discrete underwater depths (soundings), 2 foot interval underwater contours (depth curves), and all other pertinent offshore details were compiled on the B-8 stereoplotter. Areas of questionable compilation accuracy were referred to the field editor and/or the hydrographic party for verification.

Suspended silt and surf limited photobathymetry along the ocean side of Bogue Banks, Shackleford Banks, and Beaufort Inlet.

#### 37. Landmarks and Aids

All landmarks and nonfloating aids, identifiable on the photography, were delineated and labeled with descriptive names only, i.e., light, beacon, marker, etc.

Forms 76-40 were not prepared. All positions of landmarks and nonfloating aids will be forwarded to the Marine Chart Division with Job 7219, which is a part of project SCOPE.

- 38. Control for Future Surveys None
- 39. Junctions

Refer to Form 76-36B, item #5, submitted with this Descriptive Report.

40. Horizontal and Vertical Accuracy

This map complies with National Map Accuracy Standards.

- 41. thru 45. Inapplicable
- 46. Comparison with Existing Maps

A comparison has been made with USGS quadrangle of Beaufort, NC, scale 1:24,000, edition of 1949, photorevised in 1971.

47. Comparison with Nautical Charts

A comparison has been made with the following nautical charts:

Chart 420, scale 1:40,000, 42nd edition, Feb. 16, 1974 Chart 423, scale 1:12,500, 14th edition, Dec. 8, 1973

Items to Be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by,

G. L. Fromm

Approved and forwarded:

E.L. Rolle

Quality Control Group

#### 49. NOTES FOR THE HYDROGRAPHER

An ozalid copy of this map was furnished to the hydrographic party and labeled "Discrepancy Print for the Hydrographer". All notes for the Hydrographer were applied to this print.



### JOB CM 7402 BEAUFORT INLET, N.C. MAP TP-00520

#### 52. Adequacy of Compilation

Compilation was adequate. The MHWL was accepted as compiled according to instructions received from the Chief, Coastal Mapping Division dated May 28, 1974. The map was well compiled and no significant shoreline changes were noted during field edit.

A large marsh area in the northwest corner of the map was not compiled. This marsh area is composed of very dense saw grass and is taller and lighter in color than the shorter marsh which it surrounds. The marsh limits were inked on photo 730(0)6379 and attention drawn to them on the field edit ozalid.

The front range markers for the Morehead City Channel Dredging Ranges were overlooked by the compiler. They were circled on the proper photograph and indicated, with cross-reference, on the field edit exalid.

No evidence of any submerged cables, as questioned, was discovered on the map. It does not appear likely that submerged cables would be placed across a dredged channel, but if any are extant they are not indicated by signs or other above water indications.

Bench mark A-103 is not in the area indicated by the question on the field edit ozalid. This area contains the vertical pre-mark titled "panel A-103". The actual bench mark is near the Morehead City Channel Range Rear Light. The bench mark's position was pricked on photo 73C(C)5651 and entered on form 76-53 which is included with this report.

The "rectangular feature", at latitude 340 41.2', longitude 760 39.1', is a four foot high, four inch mesh fence, well constructed, and enclosing a six foot growth of very dense saw grass. It is suspected that this feature is an experiment by the marine research section of a university, possibly Duke which has a marine lab in Beaufort. There doesn't appear to be any other likely explanation as it is not sutible for a duck blind and has no openings in it for use as a "catch pen" for wild hogs and/or other animals.

The limits of the Fort Macon Coast Guard Reservation were obtained from the engineering officer at Fort Macon Coast Guard. The boundary is two feet outside of a chair link fence which surrounds the reservation, except for the northwesterly line which is a prolongation of the tangent of the existing fence. The fence is plainly visible on photo 73C(C)6379: A sketch was made of the boundary and distances and bearings were indicated on it. The sketch is included with this report. Approximate limits were inked on photo 73C(C)6379 and on the field edit ozalid.

The field editor was requested to check the two and four foot contours near the northwesterly corner of the map. This area is covered by very dense almost inpenetrable brush. As the area in question is in a state park, clearing lines through the brush was clearly not an acceptable method of obtaining the required information. An attempt was made with the plane table to gather the required data. Two rodmen, armed with light aluminum ladders, stadia boards and machetes were sent into the brush, using the ladders to crawl over the dense parts and worming and crawling their way through the rest. After eight and a half hours of this exasperation, a total of 13 rod shots were obtained. Due



to high trees and other interference the elevations could not be spaced properly to allow contouring the area. Mr. Review of the Rockville office was contacted and the problem explained. Mr. Review gave verbal instructions that this question be overlooked. These instructions were followed. The data already obtained was indexed on the film ozalid and is included with this report.

#### 54. Recommendations

There are no recommendations.

#### 56. Landmarks and Non-Floating Aids for Navigation

There was no requirement for landmarks and aids for this project. The Morehead City Channel Dredging Range markers were discussed under side heading 52 above.

#### 57. Rocks, Reefs, and Shoals

There are no rocks or reefs or shoals as defined, within the compiled limits of this map.

#### 58. Photography

Photography consisted of 1:5000 color ratio prints and was very good. The photography was not prepared for office use.

#### 59. Disposition of Data

The field edit ozalid, the color ratio photography, and all field edit data were forwarded to the Director, Atlantic Marine Center.

Richard E. Kesselring Surveying Technician Photo Party 62

(22)

			P-00520	
1. PROJECTION AND GRIDS	2. TITLE		3. MANUSCRIPT NUMBER	4. MANUSCRIPT SIZE
BK	BK		BK	BK
CONTROL STATIONS				
5. HORIZONTAL CONTROL ST THIRD-ORDER OR HIGHER	ATIONS OF ACCURACY	6. RECOVER	ABLE HORIZONTAL STATIO HAN THIRD-ORDER ACCUR ic stations)	NS 7. PHOTO HYDRO STATIONS
RY		(	NA	NA
8. BENCH MARKS	9. PLOTTING OF	SEXTANT	10. PHOTOGRAMMETRIC	
BK	NA		MA BK	NA
ALONGSHORE AREAS (Nautica	1 Chart Data)			
12. SHORELINE	13. LOW-WATER	LINE	14. ROCKS, SHOALS, ET	C. 15. BRIDGES
DV	DIZ		BK	NA
16. AIDS TO NAVIGATION	17. LANDMARKS		18. OTHER ALONGSHOR PHYSICAL FEATURE	E 19. OTHER ALONGSHORE
NA	NA NA		BK	BK
PHYSICAL FEATURES		21	GROUND COVER	122 DI AMETARI E CONTOUR
20. WATER FEATURES		ZI. NATURAL	. GROUND COVER	22. PLANETABLE CONTOUR
			BK	37.4
23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS	IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
BK	BK		BK	BK
CULTURAL FEATURES			4.5	
27. RO ADS	28. BUILDINGS		29. RAILROADS	-30. OTHER CULTURAL FEATURES
BK	BK		NA	NA
BOUNDARIES			100	
31. BOUNDARY LINES NA	1		32. PUBLIC LAND LINE	NA NA
MISCELLANEOUS 33. GEOGRAPHIC NAMES		34. JUNCTIO	NS	35. LEGIBILITY OF THE
				MANUSCRIPT
RK			BK	BK
36. DISCREPANCY OVERLAY	37. DESCRIPTIV	E REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
BK	BK		NA	BK
40. REVIEWER	/		SUPERVISOR, REVIEWS	ECTION OR UNIT
Dernard Su	is			onasek
Bernard Kurs			1 //J. W. V	Dhasek
41. REMARKS (See attached she FIELD COMPLETION ADDITION		IONS TO THE	MANUSCRIPT	
	s furnished by the	field comple		lied to the manuscript. The manu-
Jerry L. Hanc	ock		Supervisor   Supliw   Voseph W. V	Vouasek
43. REMARKS			1	

## Review Report Photogrammetric Bathymetry and Topographic Map TP-00520 May 1976

#### 61. General Statement

The map was reviewed in its Class I (field edit applied) stage by the Quality Control Group. The Descriptive Report contains all of the pertinent information which may be required by users of this map.

- 62. Comparison with Registered Topographic Surveys None
- 63. Comparison with Maps of Other Agencies

Refer to Compilation Report, Item #46.

#### 64. Comparison with Contemporary Hydrographic Surveys

Photobathymetry is a component part of the map. A copy of the map was furnished the hydrographic party to provide support for a standard hydrographic survey. The hydrographic survey was accomplished in all areas not covered by photobathymetry. Sounding lines were run to evaluate the photobathymetry and to resolve questions noted by the compilation office.

The Officer-in-Charge, Atlantic Hydrographic Party, had the final authority and responsibility for resolving discrepancies, if any, between hydrographic and photogrammetric data. All accepted photobathymetry was transferred to the smooth sheets and identified as such by the hydrographer.

A comment is carried on the map as follows: Depths on this map may not be final. Refer to contemporary hydrographic surveys of the area for combined photobathymetry and hydrography.

#### 65. Comparison with Nautical Charts

Refer to Compilation Report, Item #47.

#### 66. Adequacy of Results and Future Surveys

This map meets the National Standards of Map Accuracy and complies with Compilation Instructions and Bureau requirements.

6.21

Submitted by

E. L. Rolle

Approved and forwarded:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7402 (Beaufort Inlet, N. C.)

TP-00520

Beaufort Inlet

Bogue Banks

Fort Macon

Onslow Bay

Shackleford Banks

Shackleford Point

Approved

C. E. Harrington Staff Geographer-C51x2

#### TP-00520 National Archives Data

- 1 Discrepancy Print for the Field Editor
- 2 Form C&GS-152
- 1 [Sketch (Coast Guard reservation limits)

#### Photography:

73C(C)5651 73C(C)6379