TP-00888

TP-00888

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-7501..... *Map No.* TP-00888.....

Classification No. Final *Edition No.* ..1.....

Field Edited Map

LOCALITY

State ...North Carolina.....

General Locality ..Oregon Inlet.....

Locality .Old House Channel.....

.....

1974 TO 1975

REGISTRY IN ARCHIVES

DATE .....

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-775

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TP. 00888

MAP EDITION NO. (1)

MAP CLASS Final

JOB CM- 7501

PHOTOGRAMMETRIC OFFICE: Coastal Mapping Division, Rockville

OFFICER-IN-CHARGE: Cdr. James Collins

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-

MAP CLASS

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
General Instructions-OFFICE-1/23/75	Instructions-FIELD- 10/22/74 Instructions-Photography-10/31/74 Instructions-FIELD EDIT-6/30/75

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [X] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify): National Geodetic Vertical Datum of 1929

3. MAP PROJECTION: Lambert Conformal

4. GRID(S): STATE: North Carolina; ZONE: N.A.

5. SCALE: 1:5,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS	NAME	DATE
1. AEROTRIANGULATION Analytic Block — BY	I. Raborn	3/75
METHOD: Adjustment — LANDMARKS AND AIDS BY	N.A.	
2. CONTROL AND BRIDGE POINTS — PLOTTED BY	D. Phillips	3/75
METHOD: Coradomat — CHECKED BY	N.A.	
3. STEREOSCOPIC INSTRUMENT COMPILATION — Contours & PLANIMETRY BY	G. Vanderhaven	6/75
CHECKED BY	G. Fromm	6/75
INSTRUMENT: B-8 — Photobathymetry [redacted] BY	G. Vanderhaven	6/75
SCALE: 1:4000 pantographed to 1:5,000 — CHECKED BY	G. Fromm	6/75
4. MANUSCRIPT DELINEATION — Contours & PLANIMETRY BY	G. Fromm	6/75
CHECKED BY	E.L. Rolle	6/75
METHOD: — Photobathymetry [redacted] BY	G. Fromm	6/75
smooth compilation drafting — CHECKED BY	E.L. Rolle	6/75
HYDRO SUPPORT DATA BY	N.A.	
SCALE: 1:5,000 — CHECKED BY	N.A.	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT — BY	G. Fromm	6/19/75
6. APPLICATION OF FIELD EDIT DATA — BY	R.R. White (AMC)	7/75
CHECKED BY	J.W. Vonasek (AMC)	7/75
7. COMPILATION SECTION REVIEW — BY	E.L. Rolle	6/22/75
8. FINAL REVIEW — BY	E.L. Rolle	6/28/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH — BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH — BY	E.L. Rolle	6/28/76
11. MAP REGISTERED - COASTAL SURVEY SECTION — BY	R.T. Cator	11/76

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

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NOAA FORM 76-36B
(3-72)

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

TP-00888

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-10 3.5"f.l.
Wild RC-8 6" focal length

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

TYPES OF PHOTOGRAPHY LEGEND
- (C) COLOR
- (P) PANCHROMATIC
- (I) INFRARED B&W

TIME REFERENCE
ZONE: Eastern — ☒ STANDARD ☐ DAYLIGHT
MERIDIAN: 75th

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
74C(C)1724,2628,31,34,36	11/1/74	1500-1503	1:10,000	Refer to the following page for tide information.
74C(C)1695,97,99	11/1/74	1443-1446	1:10,000	
74C(C)1701,03,04,05	11/1/74	1443-1446	1:10,000	
74C(C)1464,66,68,70,71,72 74,75	10/31/74	1502-1505	1:10,000	
74C(C)1426,28,30,32	10/31/74	1445-1446	1:10,000	
74E(I)7855R-7864R	11/1/74	1500-1503	1:5,800	
74E(I)7828R-7837R	11/1/74	1443-1446	1:5,800	
74E(I)7692R-7701R	10/31/74	1502-1505	1:5,800	
74E(I)7657R-7662R	10/31/74	1445-1446	1:5,800	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

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:

The source of the MLW line is the tide-coordinated color photography and ratioed prints of the B&W infrared photography listed above under item 1.

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
TP-00886 & TP-00887	TP-00889	TP-00890	No contemporary Survey

REMARKS

As this is a special job, no attempt was made to junction with other NOS jobs in this area.

NOAA FORM 76-36B(1)
(7-75)

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

TIDE - COORDINATED PHOTOGRAPHY

TP - 00888

~~LOCATION AND~~ PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)		STAGE OF TIDE	MEAN RANGE
COLOR	TIDE STATION	TIDAL ZONE*	FEET	FEET
74C(C)1724-36	Old House Slough	4	0.36 MLW	0.7
1695-1701	" " "	4	+0.37 MLW	0.7
1697-99	" " "	11	+0.39 MLW	0.7
1464-1468	" " "	11	+0.22 MLW	0.7
1464-1466	" " "	4	+0.21 MLW	0.7
1426-1430	" " "	11	+0.22 MLW	0.7
74C(C)1734-1736	Oregon Inlet Channel	10	+0.08 MLW	1.0
1699-1701	" " "	10	+0.07 MLW	1.0
1699-1703	" " "	9	+0.09 MLW	1.2
1468-1470	" " "	9	+0.02 MLW	1.2
1468-1470	" " "	10	+0.07 MLW	1.0
1430-1432	" " "	9	-0.01 MLW	1.2
74C(C)1724-1726	Roanoke Sound Channel	3	+0.35MLW	0.4
74C(C)1734-1738	Davis Slough	2	+0.07 MLW	0.9
1701-1705	" "	2	+0.08 MLW	0.9
1470-1475	" "	2	+0.09 MLW	0.9
74C(C)1701-1703	Oregon Inlet Bridge	6	+0.08 MLW	1.4
1432	" " "	6	+0.07 MLW	1.4
1470-1471	" " "	6	+0.15 MLW	1.4
1426-1428	" " "	13	+0.10 MLW	1.0
1428=1432	" " "	12	+0.10 MLW	1.4

REMARKS:

* Refer to page 3 of 3 for a Tidal Zone Diagram

NOAA FORM 76-36B(1)
(7-75)

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

TIDE - COORDINATED PHOTOGRAPHY

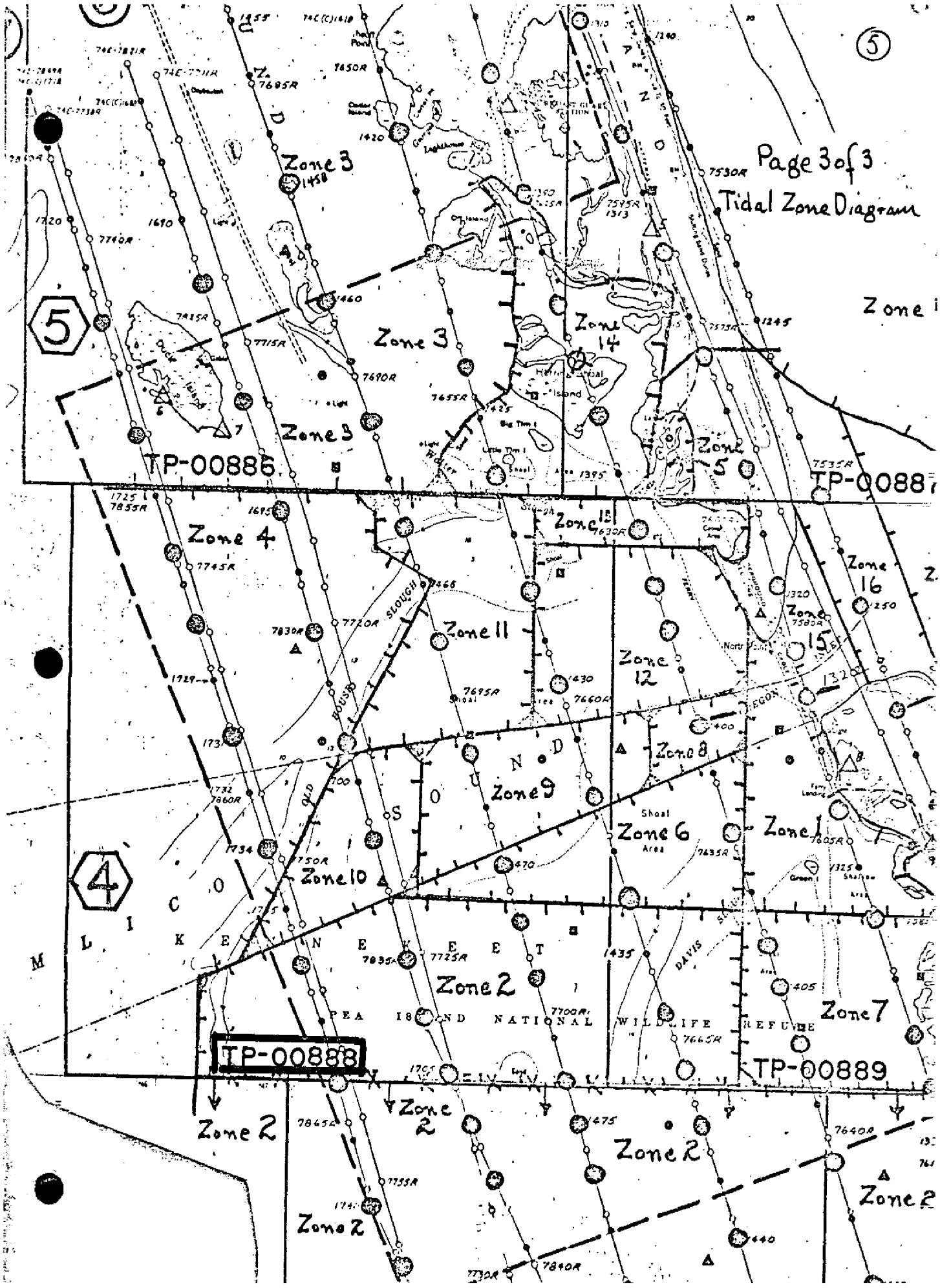
TP - 00888

~~LOCATION AND~~ PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)		STAGE OF TIDE	MEAN RANGE
IR	TIDE STATION	TIDAL ZONE*	FEET	FEET
74E7855R-7862R	Old House Slough	4	+0.36 MLW	0.7
7828R-7833R	" " "	4	+0.37 MLW	0.7
7831R-7833R	" " "	11	+0.39 MLW	0.7
7692R-7696R	" " "	11	+0.22 MLW	0.7
7692R-7695R	" " "	4	+0.21 MLW	0.7
7657R-7660R	" " "	11	+0.22 MLW	0.7
74E7860R-7863R	Oregon Inlet Channel	10	+0.08 MLW	1.0
7831R-7835R	" " "	10	+0.07 MLW	1.0
7833R-7834R	" " "	9	+0.09 MLW	1.2
7695R-7698R	" " "	9	+0.02 MLW	1.2
7695R-7697R	" " "	10	+0.07 MLW	1.0
74E7854R-7856R	Roanoke Sound Channel	3	+0.35 MLW	0.4
74E7861R-7864R	Davis Slough	2	+0.07 MLW	0.9
7833R-7837R	" "	2	+0.08 MLW	0.9
7697R-7701R	" "	2	+0.17 MLW	0.9
74E7834R-7835R	Oregon Inlet Bridge	6	+0.08 MLW	1.4
7657R-7658R	" " "	13	+0.01 MLW	1.0
7657R-7661R	" " "	12	+0.01 MLW	1.4
7659R-7662R	" " "	9	-0.01 MLW	1.2
7661R-7662R	" " "	6	+0.07 MLW	1.4
7697R-7699R	" " "	6	+0.15 MLW	1.4

REMARKS:

*Refer to page 3 of 3 for a Tidal Zone Diagram.

Tidal Zone Diagram



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NOAA FORM 76-36C
(3-72)

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

TP-00888

HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION [X] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R.S. Tibbetts L.F. Beugnet	10/74 7/75
2. HORIZONTAL CONTROL	RECOVERED BY	R.S. Tibbetts	10/74
	ESTABLISHED BY	R.S. Tibbetts	10/74
	PRE-MARKED OR IDENTIFIED BY	R.S. Tibbetts	10/74
3. VERTICAL CONTROL	RECOVERED BY	NA	
	ESTABLISHED BY	R.S. Tibbetts	10/74
	PRE-MARKED OR IDENTIFIED BY	R.S. Tibbetts	10/74
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	R.S. Tibbetts	10/74
	LOCATED *(Field Methods)* BY	L.F. Beugnet	7/75
	IDENTIFIED BY	NA	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION [X] COMPLETE [ ] SPECIFIC NAMES ONLY [ ] NO INVESTIGATION	BY L.F. Beugnet	7/75
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY		
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED: All stations pre-marked

2. VERTICAL CONTROL IDENTIFIED: All stations pre-marked

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

74-C(c)-1430, 1728

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Located or verified at the time of field edit.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [X] REPORT [ ] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

4 CSI cards NOAA FORM 76-53
4 CSI cards FORM C&GS-152

NOAA FORM 76-36C
(3-72)

* U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36D
(3-72)

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

TP-00888

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending Field Edit	7/3/75	Class III Manuscript		7/3/75
Field Edit applied	7/22/75	Class I Manuscript		

II. LANDMARKS AND AIDS TO NAVIGATION

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. [X] BRIDGING PHOTOGRAPHS; [X] DUPLICATE BRIDGING REPORT; [X] COMPUTER READOUTS.
2. [X] CONTROL STATION IDENTIFICATION CARDS; [X] 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:

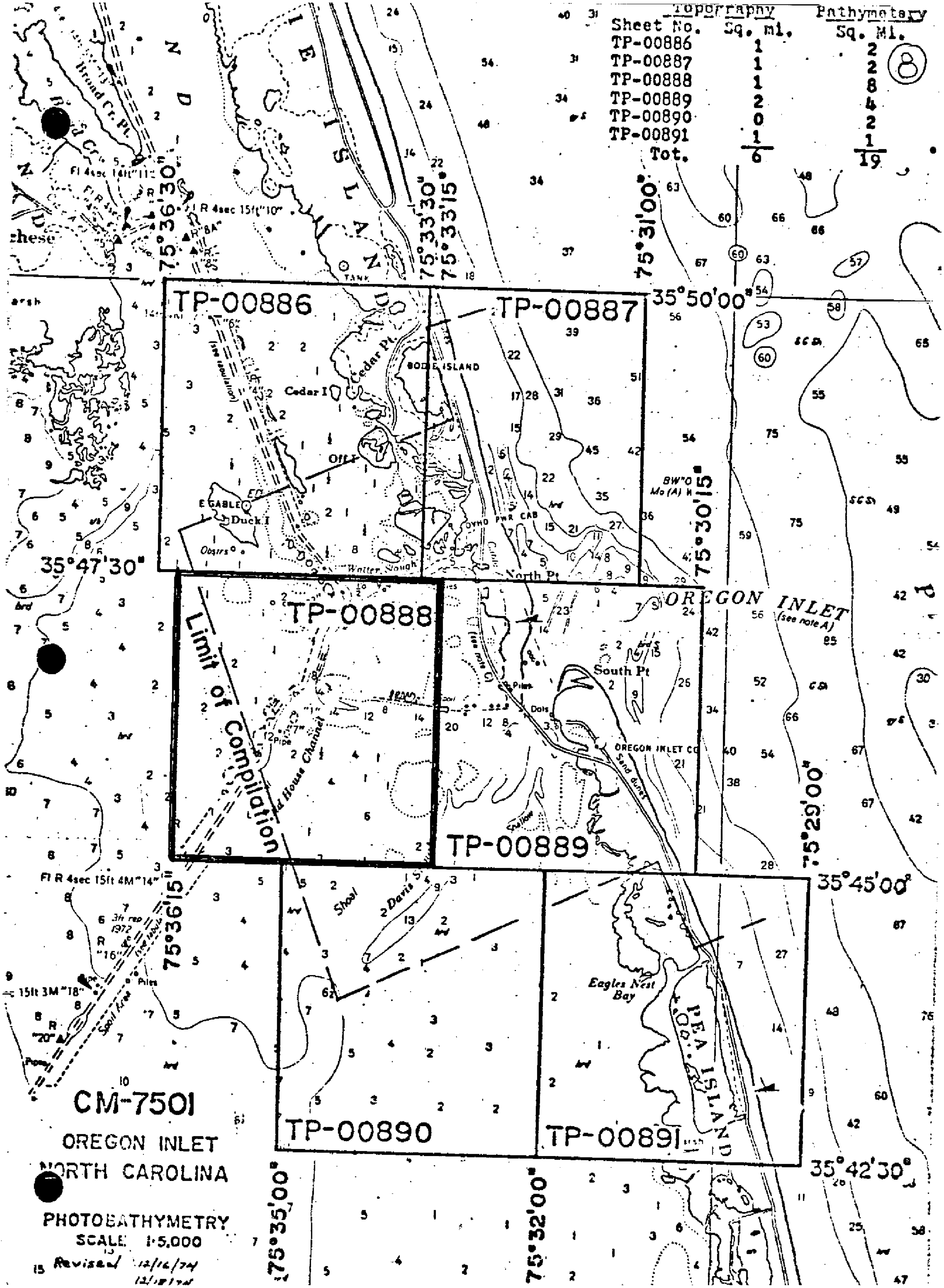
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

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

NOAA FORM 76-36D

☆U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6



	Topography	Bathymetry
Sheet No.	Sq. mi.	Sq. Mi.
TP-00886	1	2
TP-00887	1	2
TP-00888	1	8
TP-00889	2	4
TP-00890	0	2
TP-00891	1	1
Tot.	6	19

8

CM-7501
OREGON INLET
NORTH CAROLINA
PHOTOBATHYMETRY
SCALE 1:5,000
Revised 12/16/74

SUMMARY
TP-00886 thru TP-00891

Under a cooperative agreement with the Corps of Engineers, Wilmington District, which became effective in October 1974, these six maps (TP-00886 thru TP-00891) were compiled at 1:5,000 scale in the area of Oregon 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, 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 covering the area.

Field operations, which began in October 1974, 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 1:10,000 scale from natural color film taken with the Wild RC-10 super-wide-angle camera. Supplemental black-and-white infrared tide-coordinated photography at 1:5,800 scale, taken concurrently in an independent mode using infrared film in the RC-8 camera, was also furnished.

Six strips of the 1:10,000 scale color photography were bridged by analytic aerotriangulation methods and adjusted to ground with the block adjustment. Thirteen horizontal control stations and twenty-four vertical control stations were weighted in the block adjustment. This provided horizontal and vertical control for compilation.

Compilation photography was the 1:10,000 scale color photography and the supplemental infrared photography. The Wild B-8, using the 1:10,000 scale photography, was used to compile planimetry, topography, and photobathymetry. The topography consists of 2-foot interval contours and spot elevations referred to the Mean Low Water Datum established by NOS. 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 of each map, ten ozalid copies of each map, and one set of color printons covering the project were forwarded to:

Department of the Army
Wilmington District, Corps of Engineers
P.O. Box 1890
Wilmington, NC 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 OPERATIONS REPORT
SPECIAL SURVEYS
OREGON INLET, N. C.
JOB CM-7501

Operations commenced on October 16, 1974. A total of 25 pre-marks, 15 horizontal and 10 vertical, were placed in position by October 26, 1974. Horizontal panel no. 3 and vertical panel no. 16 were combined into one station due to their proximity. One extra horizontal control panel, included in the above total, was placed near Hill, 1974 which is an auxillary station used in locating some of the other control stations. Photography commenced on October 31, 1974 and was completed November 1, 1974. A total of eight lines were flown with two of them being reflown on the 1st. No high water photography was taken.

Ten of the paneled control stations were in water. These panels were placed in position by jetting down, with a small gasoline powered pump, four two by fours 12 feet in length to a depth of stability. The two by fours were then braced diagonally from the center with one by fours and laterally with fourteen gauge galvanized wire. The panels were then fastened to the top of the resulting structure. All control was paneled with the same configuration of panels. No distinctions were made between vertical control panels and horizontal control panels, i.e., both have 1.6 foot equilateral triangles for center panels and rectangular wing panels.

Nine of the horizontal control stations were located by three point theodolite fixes with check angles. Three were located by traverse, four by angle and distance, one by solar azimuth and distance, and one station was marked direct. The vertical control stations in the water were located with sextant fixes which are included on the back of their respective Control Station Identification Cards. Traverses and three point fixes were entered in Form 76-52 Observation of Horizontal Directions which is enclosed with this report.

Information regarding angles and distances, solars and stations marked direct are included on the respective Control Station Identification card of the station involved.

A total of fifteen miles of levels was run to establish elevations on the National Geodetic Vertical Datum of 1929 on seven horizontal control panels and one vertical control panel. These are panel nos. 1, 2, 3 and 16 combined, 9, 10, 11, 12 and 21. Elevations of panel nos. 13, 14 and 15 were effected by transferring the water level from the Davis Slough Tide Staff. Elevations are given in feet above staff zero as no NGVD elevation was available for the staff. Water level transfers were made to panel nos. 7, 22 and 23 from Davis Slough Tide Staff and Old House Slough Tide Staff. Once again elevations were given in feet above staff zero as no NGVD elevations were available for the staffs. Panel nos. 17 and 19 had elevations transferred from the Oregon Inlet Marina Tide Staff and the Duck Island Tide Staff. The statement regarding elevations of previous panels also applies to these panels. The elevations for panel nos. 24 and 25 was transferred by water level from No Name Tide Staff. Panel no. 18 was transferred from the Duck Island Tide Staff as were the water level stakes for panel nos.4

(12)

and 5. Two water level stakes were used for panel no. 5 as an island was directly between the panel and the tide staff involved. The water level between the two stakes checked almost flat.

Panel nos. 8 and 20 were leveled directly from the Main Channel Tide Staff by differential levels. Elevations were given in feet above staff zero as no NGVD elevation for the staff was available.

The extra panel near Hill 1974 and panel no. 6 were leveled directly from Old House Slough Tide Staff by differential levels. Once again elevations were given above staff zero as no NGVD elevation for the staff was available.

Water tranfers of elevations to panel nos. 7, 13, 14, 15, 18, 19, 22, 23 and 24 were made by using a level rod as a portable tide staff. The rod was held in the water against the center panel and wiggled around until settlement in the sandy bottom ceased. The top of the panel on the rod was then read and observations commenced on the water level on the rod. Simultaneous observations were made on the respective tide staffs and transmitted by radio to the party at the panel, by subtracting the mean water level reading on the rod from the reading at the top of the panel and adding the result to the mean tide staff reading, the elevations of the panels above zero of the tide staffs involved was obtained.

Elevations were transferred to panel nos. 4, 5, 17 and 25 by using a combination of water level and differential leveling. A stake was driven to water level near the stations while tide staff observations were transmitted via radio to the level party. Differential levels were then run from the water level stakes to the panels. By adding the height of the panel above the stake to the mean staff reading, the elevations of the panels above zero of the respective staffs were obtained.

Names used for the tide staffs involved in the above operations were indicated on the job diagram which is included with this report. Information obtained was entered in several Forms 76-77. Levels run to the land stations were entered in Form 638 Wye Leveling. Both are included with this report.

Tide observations during photography and leveling to the Jennette's Pier Tide Staff and the Oregon Inlet Bridge Tide Staff were entered in Form 76-77 Leveling Record - Tide Station. Prior levels had been run to the Jennette's Pier Tide Staff by a tide party from Rockville office. No such levels were run to the Oregon Inlet Bridge Tide Staff. A new tidal bench mark (No. 5, 1974) was established near Oregon Inlet Bridge Tide Staff and this mark was then tied to the existing marks at the Oregon Inlet Marina. The elevations obtained were referred to the zero of the Oregon Inlet Bridge Tide Staff.

Field work was completed on November 19, 1974 and all control panels were removed by November 21st. All pertinent data was completed and sent to Rockville on November 25, 1974.

Richard E. Kesselring
Surveying Technician
Photo Party 62

NOTE: There was no field inspection prior to compilation

Photogrammetric Plot Report
Oregon Inlet, North Carolina
CM-7501
March 1975

21. Area Covered

This report pertains to six sheets in the vicinity of Oregon Inlet, North Carolina. The Sheets (1:5,000) are TP-00886 thru TP-00891.

22. Method

Six strips (see sketch) of 1:10,000-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 1:5,800-scale infrared support photography and also the bridging photography. Common points were located between strips 6 and 7 in order to set models in strip 7 if needed. Data for ruling projections were furnished to the Calcomp to be plotted in the North Carolina State plane coordinate system.

23. Adequacy of Control

The control was adequate, but horizontal panel number 2 (Bodie Island L.H. 1875, SS"A") did not meet the National Map Accuracy Standards in either of the strips or the block. Since the home station was "floated" and fit the adjustment, the substation was eliminated from the adjustment.
Thirteen horizontal control stations were weighted in the adjustment. The largest residual in the fit to horizontal control was 1.7 feet.

Twenty-four vertical cotnrol stations were weighted. The largest residual in the fit to these stations was 0.72 foot.

24. Supplemental Data

USGS quadrangles were used to provide vertical control for some of the strips adjustment.

25. Photography

The photography was adequate as to coverage, overlap, and definition.

Respectfully submitted,

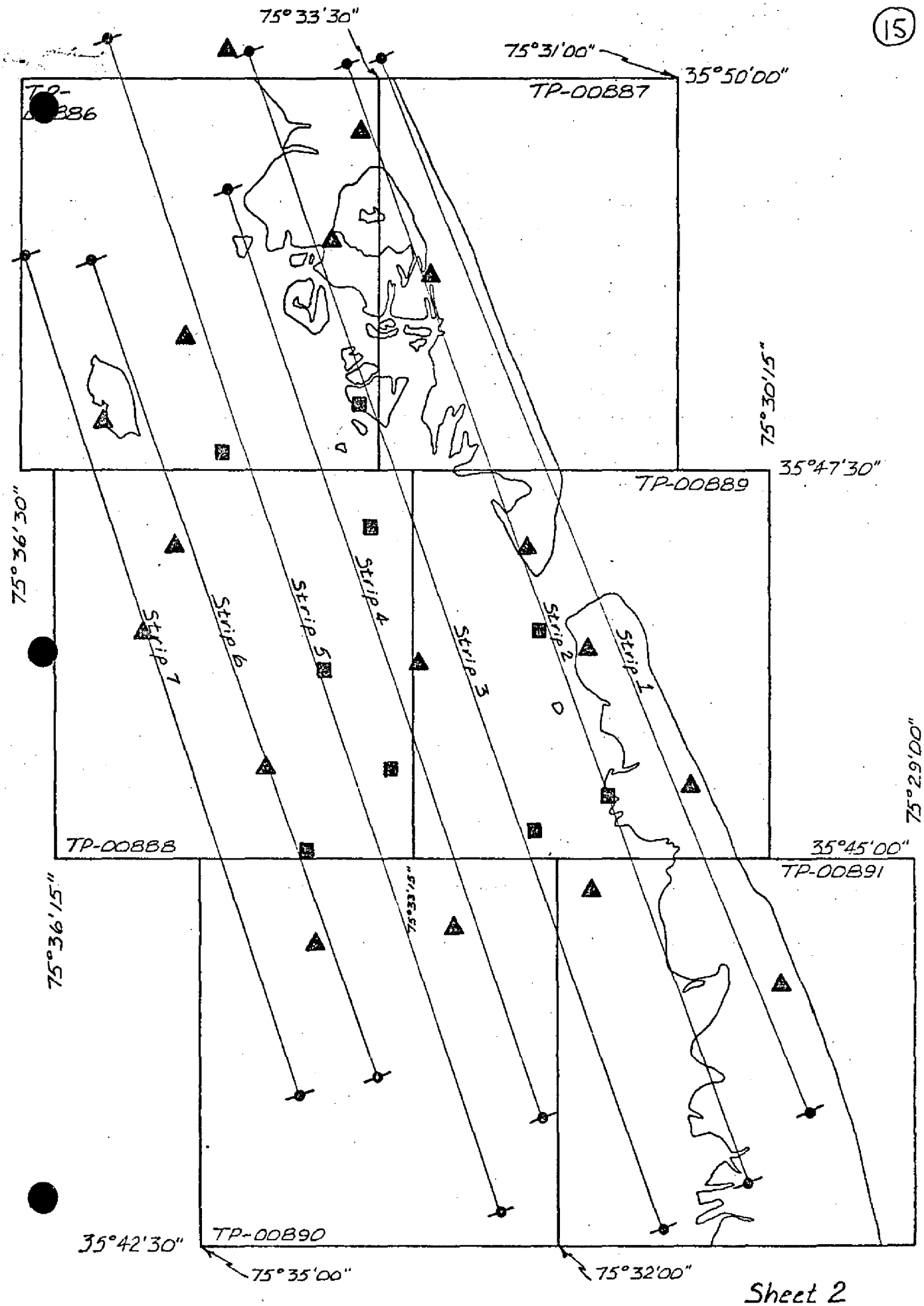
Ivey O. Raborn
Ivey O. Raborn

Approved and forwarded:

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

JOB CM-7501
OREGON INLET
NORTH CAROLINA
1:5000 SCALE
JAN. '75

STRIP 1	1:10000 COLOR	74C(C)1236-1267
	1:5800 B/W IR	74E 7524R-7553R
STRIP 2	1:10000 COLOR	74C(C)1307-1339
	1:5800 B/W IR	74E 7567R-7587R
	1:5800 " " "	7590R-7617R
STRIP 3	1:10000 COLOR	74C(C)1384-1417
	1:5800 B/W IR	74E 7619R-7647R
STRIP 4	1:10000 COLOR	74C(C)1418-1444
	1:5800 B/W IR	74E 7649R-7675R
STRIP 5	1:10000 COLOR	74C(C)1448-1484
	1:5800 B/W IR	74E 7678R-7709R
STRIP 6	1:10000 COLOR	74C(C)1688-1711
	1:5800 B/W IR	74E 7721R-7748R
	1:5800 B/W IR	74E 7711R-7736R
STRIP 7	1:10000 COLOR	74C(C)1718-1744
	1:5800 B/W IR	74E 7849R-7878R
	1:5800 " " "	7738R-7763R


75°33'30"
75°31'00"
35°50'00"
TP-00887
TP-00886
75°30'15"
35°47'30"
TP-00889
75°36'30"
Strip 7
Strip 6
Strip 5
Strip 4
Strip 3
Strip 2
Strip 1
75°29'00"
TP-00888
35°45'00"
TP-00891
75°36'15"
35°42'30"
TP-00890
75°35'00"
75°32'00"

Sheet 2

NOAA FORM 76-41
(6-75)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00888	CM-7501	N.A. 1927	

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	COORDINATES IN FEET STATE North Carolina ZONE N.A.	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS
HILL, 1974 *	Computed by Norfolk	705100	x= 3,012,453.15 y= 753,102.34	φ λ	
S.S. (Extra panel) *		705101	x= 3,012,640.60 y= 752,960.21	φ λ	
HORIZONTAL PANEL #6 *	Computed	704100	x= 3,013,233.93 y= 755,425.59	φ λ	
HORIZONTAL PANEL #7 *	Computed by Norfolk Theodolite fix	707100	x= 3,016,651.33 y= 750,003.28	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	
* Not shown on map.			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	

COMPUTED BY	J. D. Perrow	DATE	12/6/74	COMPUTATION CHECKED BY B.P.T.	DATE 12/9/74
LISTED BY	J. D. Perrow	DATE	12/6/74	LISTING CHECKED BY B.P.T.	DATE 12/9/74
HAND PLOTTING BY		DATE		HAND PLOTTING CHECKED BY	DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

(16)

31. Delineation

The map was compiled on the Wild B-8 stereoplotter using the 1:10,000 scale color photography. Black-and-white infrared photography, taken concurrently, was ratioed and used graphically to supplement compilation of the mean low water line and areas of shallow depths.

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

A diagram, outlining 18 tidal zones within the project area, was furnished. The diagram provided the mean range of tide and the vertical differences between MLW datum and the NGVD of 1929 for each zone.

34. Contours and Drainage

The quality of the photography was adequate for contour compilation. All contours and terrain elevations were referenced to MLW datum.

All significant drainage was compiled.

35. Shoreline and Alongshore Details

There was no preliminary field inspection of the shoreline.

The mean high water line and the mean low water lines were compiled on the B-8 stereoplotter using contour compilation methods. The black-and-white infrared photography was used graphically to supplement compilation of the mean low water line. 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. The photobathymetry is referenced to the mean low water datum established by NOS. Areas of questionable compilation accuracy were referred to the field editor and/or the hydrographic party for verification.

Suspended silt restricted the placement and density of discrete soundings in some areas.

37. Landmarks and Aids

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

Forms 76-40 were not prepared. All positions of landmarks and nonfloating aids will be forwarded to the Marine Chart Division under 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 Oregon Inlet, N.C., scale 1:24,000, edition of 1953, photorevised 1970.

47. Comparison with Nautical Charts

A comparison has been made with the following nautical charts:

NOS No. 12204 (1229), scale 1:80,000, 20th edition, March 8, 1975
NOS No.12205 (129-SC), scale 1:40,000, 0th edition, Feb. 22, 1975

Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by,

G. Fromm

G. Fromm

Approved and forwarded:

E. L. Rolle

E. L. Rolle
Quality Control Section

49. NOTES FOR THE HYDROGRAPHER

The Atlantic Hydrographic Party was furnished with preliminary reconnaissance maps of the project area showing approximate shorelines, channels, shallow and shoal areas compiled graphically from the ratio photos.

As the model w ork progressed, copies of the worksheets were furnished to indicate areas where photobathymetry was being accomplished.

Ozalid copies of the inked manuscripts in an advanced stage of completion were furnished as a final designation of areas lacking photobathymetry.

FIELD EDIT REPORT

JOB CM-7501

OREGON INLET, NC

MAP TP-00888

51. METHODS

Field edit of this manuscript was accomplished by skiff and by observations from vantage points on the spoil areas. All corrections, additions or deletions have been noted on the field edit ozalid. Tidal bench marks have been identified on photographs 74C(c)1430 and 1728 for location by the compilation office.

52. ADEQUACY OF COMPILATION

There was no field inspection prior to compilation. Compilation was adequate and will be complete upon application of the field edit data.

A newly established fixed aid to navigation and several that were moved subsequent to photography were located by the field edit party.

54. RECOMMENDATIONS

There are no recommendations.

Leo F. Beugnet

Leo F. Beugnet
Supervisory Cartographer

10 July 1975

NOAA FORM 75-74
(7-75)

U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

TP - 00888

(21)

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
E.R.	E.R.	E.R.	E.R.

CONTROL STATIONS

5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY *(Topographic stations)*	7. PHOTO HYDRO STATIONS
E.R.	N.A.	N.A.

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
E.R.	N.A.	E.R.	N.A.

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
E.R.	E.R.	E.R.	N.A.

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
E.R.	E.R.	E.R.	E.R.

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
E.R.	E.R.	N.A.

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
E.R.	E.R.	E.R.	E.R.

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
E.R.	E.R.	N.A.	E.R.

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
N.A.	N.A.

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
E.R.	E.R.	E.R.

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
E.R.	E.R.	N.A.	E.R.

40. REVIEWER	SUPERVISOR, REVIEW SECTION OR UNIT
Edward L. Roller *Edward L. Roller*	S.G. Blankenbaker *S.G. Blankenbaker*

41. REMARKS (See attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

COMPILER	SUPERVISOR
Richard R. White *Richard R. White*	Joseph W. Vonasek *Joseph W. Vonasek*

43. REMARKS

Review Report
Photogrammetric Bathymetry
and Topographic Map TP-00888
June 1976

61. General Statement

The map was reviewed in its Class I (field edit applied) stage by the Quality Control Section. 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 the 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.

Submitted by,

E. L. Rolle

E.L. Rolle

Approved and forwarded:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

(23)

20 August 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7501 (Oregon Inlet, North Carolina)

TP-00888

Old House Channel

Oregon Inlet Channel

Pamlico Sound

Pea Island National Wildlife Refuge

Roanoke Sound Channel

Walter Slough

Approved by

Chas. E. Harrington

Chas. E. Harrington
Staff Geographer-C51x2

NOAA FORM 76-40 (8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS [redacted] FOR CHARTS

ORIGINATING ACTIVITY
- ☐ HYDROGRAPHIC PARTY
- ☐ GEODETIC PARTY
- ☐ PHOTO FIELD PARTY
- ☒ COMPILATION ACTIVITY
- ☐ FINAL REVIEWER
- ☐ QUALITY CONTROL & REVIEW GRP.
- ☐ COAST PILOT BRANCH

(See reverse for responsible personnel)

☒ TO BE CHARTED ☐ TO BE REVISED ☐ TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office): Special Projects Sec. Norfolk, VA

STATE: North Carolina

LOCALITY: Oregon Inlet

DATE: 7/24/75

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

OPR PROJECT NO.:

JOB NUMBER: CM-7501

SURVEY NUMBER: TP-00888

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)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
LIGHT	Oregon Inlet Channel Light 13 * Revised LNM 12/77	35 46	18.56 572	75 33	48.57 1220	74C(c) 1468 10-31-74	V-Vis. 7-10-75	12204 12205
DAYBEACON	Oregon Inlet Channel Daybeacon 14 Not charted * *	35 46	24.66 760	75 34	17.96 451	74C(c) 1699 11-1-74	V-Vis. 7-10-75	12204 12205
DAYBEACON	Revised LNM 12/77 * * Oregon Inlet Channel Daybeacon 15	35 46	22.58 696	75 34	33.08 831		F-6-L 7-10-75	12204 12205
LIGHT	Revised LNM 12/77 Oregon Inlet Channel Light 16 *	35 46	27.42 845	75 34	42.40 1065		F-6-L 7-10-75	12204 12205
DAYBEACON	[redacted] Not charted * * Oregon Inlet Channel Daybeacon 16A	35 46	31.21 962	75 34	41.84 1051	74C(c) 1699 11-1-74	V-Vis. 7-10-75	12204 12205
LIGHT	Revised LNM 50/76 Oregon Inlet Channel Light 18 *	35 46	53.21 1640	75 34	32.25 810	74C(c) 1466 10-31-74	V-Vis. 7-10-75	12204 12205
DAYBEACON	Not charted * * Oregon Inlet Channel Daybeacon 19	35 47	12.39 382	75 34	25.13 631	74C(c) 1464 10-31-74	V-Vis. 7-10-75	12204 12205
LIGHT	Keypunched Oregon Inlet Channel Light 23 * *	35 47	21.45 661	75 34	23.61 593	74C(c) 1464 10-31-74	V-Vis. 7-10-75	12204 12205
	* Labeled "Light" on map. ** Labeled "Daybeacon" on map.							
	*Daybeacon 15 located by Field Party Not in light list, not charted							24

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS [redacted] FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [x] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [x] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
Special Projects Sec. Norfolk, VA	North Carolina	Oregon Inlet	7/24/75

The following objects HAVE [x] HAVE NOT [ ] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	CM-7501	TP-00888	N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
DAYBEACON	Revised LNM 22/78 (5th CGD) Old House Channel Daybeacon 1 *	35 46	25.44 784	75 34	48.37 1215	74C(c) 1699 11/1/74	V-Vis. 7/10/75	12204 12205
DAYBEACON	(Not charted) Old House Channel Daybeacon 2 *	35 46	27.97 862	75 34	47.54 1194		F-6-L 7/10/75	12204 12205
DAYBEACON	Keypunched Old House Channel Daybeacon 3 X *	35 46	25.24 778	75 34	52.00 1306	74C(c) 1699 11/1/74	V-Vis. 7/10/75	12204 12205
DAYBEACON	Keypunched Old House Channel Daybeacon 5 X *	35 46	23.56 726	75 34	55.25 1388		F-6-L 7/10/75	12204 12205
LIGHT	Keypunched Old House Channel Light 6 X * *	35 46	21.09 650	75 35	00.52 13	74C(c) 1731 11/1/74	V-Vis. 7/10/75	12204 12205
DAYBEACON	Keypunched Old House Channel Daybeacon 7 X *	35 46	11.58 357	75 35	04.42 111		F-6-L 7/10/75	12204 12205
LIGHT	Keypunched Old House Channel Light 8 X * *	35 45	51.72 1594	75 35	17.67 444	74C(c) 1734 11/1/74	V-Vis. 7/10/75	12204 12205
	* Labeled "Daybeacon" on map.							
	** Labeled "Light" on map.							(25)

TP-00888
National Archives Data

1 Discrepancy Print for the Field Editor

4 NOAA Form 76-53 Control Station Identification

4 Form C&GS-152 Control Station Identification

Photography: 74C(C)1430 & 1728 (color ratios)

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

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 Review.

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
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