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-00890  
**Classification No.:** Final  
**Edition No.:** Field Edited Map

**LOCALITY**

**State:** North Carolina

**General Locality:** Oregon Inlet

**Locality:** Davis Channel

**DATE:** 1974 TO 1975

REGISTRY IN ARCHIVES

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*U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901*
**DESCRIPTIVE REPORT - DATA RECORD**

**PHOTOMGRAMMETRIC OFFICE**
Coastal Mapping Division, Norfolk

**OFFICER-IN-CHARGE**
Cdr. Jeffrey G. Carlen

### I. INSTRUCTIONS DATED

#### 1. OFFICE
General Instructions-OFFICE-1/23/75

#### 2. FIELD
Instructions-FIELD-10/22/74
Instructions-PHOTOGRAPHY-10/31/74
Instructions-FIELD EDIT-6/30/75

### II. DATUMS

#### 1. HORIZONTAL:
- 1927 NORTH AMERICAN

#### 2. VERTICAL:
- MEAN HIGH-WATER
- NATIONAL GEODETIC VERTICAL DATUM OF 1929

#### 3. MAP PROJECTION
Lambert Conformal

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

### III. HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION Analytic Block</td>
<td>I. Raborn</td>
<td>3/75</td>
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<tr>
<td>METHOD: Adjustment</td>
<td></td>
<td></td>
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<tr>
<td>LANDMARKS AND AIDS BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>D. Phillips</td>
<td>3/75</td>
</tr>
<tr>
<td>METHOD: Coromat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLOTTED BY</td>
<td></td>
<td></td>
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<tr>
<td>CHECKED BY</td>
<td></td>
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<tr>
<td>3. STEREOSCOPIC INSTRUMENT</td>
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<td>COMPILATION</td>
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<tr>
<td>PLANIMETRY BY</td>
<td>J. Byrd &amp; J. Hancock</td>
<td>6/75</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>R. R. White</td>
<td>6/75</td>
</tr>
<tr>
<td>SCALE: 1:4,000 pan. to 1:5,000</td>
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<td>4. MANUSCRIPT DELINEATION</td>
<td>N.A.</td>
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<tr>
<td>PHOTOBATHYMETRY</td>
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<tr>
<td>METHOD:</td>
<td></td>
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<tr>
<td>PLANIMETRY BY</td>
<td>R. R. White</td>
<td>6/75</td>
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<tr>
<td>CHECKED BY</td>
<td>J. L. Hancock</td>
<td>6/75</td>
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<tr>
<td>SCALE: 1:5,000</td>
<td>HYDRO SUPPORT DATA</td>
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<tr>
<td>SPHERICAL CIRCULAR ERROR BY</td>
<td>N.A.</td>
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</tr>
<tr>
<td>CHECKED BY</td>
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<td></td>
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<tr>
<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
<td>J. W. Vonasek</td>
<td>6/75</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td>R. R. White</td>
<td>7/75</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>J. W. Vonasek</td>
<td>7/75</td>
</tr>
<tr>
<td>7. COMPIILATION SECTION REVIEW</td>
<td>J. W. Vonasek</td>
<td>7/75</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. FINAL REVIEW</td>
<td>E. L. Rolle</td>
<td>6/29/76</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</td>
<td>E. L. Rolle</td>
<td>6/29/76</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</td>
<td>R. T. Gator</td>
<td>11/76</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. **Compilation Photography**

- **Camera(s):**
  - Wild RC-10 3.5" F.1.
  - Wild RC-8 6" focal length

- **Tide Stage Reference:**
  - Check the box for "Predicted Tides"
  - Check the box for "Reference Station Records"
  - Check the box for "Tide Controlled Photography"

- **Types of Photography Legend:***
  - (C) Color
  - (P) Panchromatic
  - (I) Infrared B&W

- **Time Reference:***
  - Eastern: Standard Time
  - Meridian: 75th

<table>
<thead>
<tr>
<th>Number and Type</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>74C(C)1406-1408</td>
<td>10/31/74</td>
<td>1425-1426</td>
<td>1:10,000</td>
<td>Refer to the following page for tidal information.</td>
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<tr>
<td>1437, 38, 40</td>
<td>10/31/74</td>
<td>1446</td>
<td>1:10,000</td>
<td></td>
</tr>
<tr>
<td>1474, 75, 76, 78</td>
<td>10/31/74</td>
<td>1503-1506</td>
<td>1:10,000</td>
<td></td>
</tr>
<tr>
<td>1705, 06, 07 11/4/74</td>
<td>10/31/74</td>
<td>1444-1446</td>
<td>1:10,000</td>
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</tr>
<tr>
<td>74E(I)7639R-7641R</td>
<td>10/31/74</td>
<td>1425-1426</td>
<td>1:5,800</td>
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<td>7665R-7668R</td>
<td>10/31/74</td>
<td>1446</td>
<td>1:5,800</td>
<td></td>
</tr>
<tr>
<td>7701R-7704R</td>
<td>10/31/74</td>
<td>1503-1506</td>
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<td>7727R-7730R</td>
<td>10/31/74</td>
<td>1523-1525</td>
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<td>7753R-7757R</td>
<td>10/31/74</td>
<td>1542-1544</td>
<td>1:5,800</td>
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<td>10/31/74</td>
<td>1444-1446</td>
<td>1:5,800</td>
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<tr>
<td>7864R-7868R 11/1/74</td>
<td>10/31/74</td>
<td>1501-1503</td>
<td>1:5,800</td>
<td></td>
</tr>
</tbody>
</table>

2. **Source of Mean High-Water Line:**

There is no MHW line on this map.

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.)*

<table>
<thead>
<tr>
<th>Survey Number</th>
<th>Date(s)</th>
<th>Survey Copy Used</th>
<th>Survey Number</th>
<th>Date(s)</th>
<th>Survey Copy Used</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

5. **Final Junctions**

- **North:**
  - TP-00888
  - TP-00891

- **East:**
  - TP-00889

- **South:**
  - No contemporary survey

- **West:**
  - TP-00891

**Remarks:**

As this is a special job, no attempt was made to junction with other NOS jobs in this area.
<table>
<thead>
<tr>
<th>LOCATION AND PHOTOGRAPHY</th>
<th>TIDE STATION</th>
<th>TIDAL ZONE</th>
<th>STAGE OF TIDE</th>
<th>MEAN RANGE</th>
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</thead>
<tbody>
<tr>
<td>74C(C)1406-1408</td>
<td>Davis Slough</td>
<td>2</td>
<td>+0.02 MLW</td>
<td>0.9</td>
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<tr>
<td>1406-1408</td>
<td></td>
<td>7</td>
<td>0.00 MLW</td>
<td>1.2</td>
</tr>
<tr>
<td>1437-1440</td>
<td></td>
<td>2</td>
<td>+0.07 MLW</td>
<td>0.9</td>
</tr>
<tr>
<td>1437-1440</td>
<td></td>
<td>7</td>
<td>0.00 MLW</td>
<td>1.2</td>
</tr>
<tr>
<td>1474-1478</td>
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<td>2</td>
<td>+0.09 MLW</td>
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<tr>
<td>1705-1707</td>
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<td>2</td>
<td>+0.08 MLW</td>
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<tr>
<td>74E7639R-7641R</td>
<td>Davis Slough</td>
<td>2</td>
<td>+0.02 MLW</td>
<td>0.9</td>
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<tr>
<td>7639R-7641R</td>
<td></td>
<td>7</td>
<td>0.00 MLW</td>
<td>1.2</td>
</tr>
<tr>
<td>7665R-7668R</td>
<td></td>
<td>2</td>
<td>+0.07 MLW</td>
<td>0.9</td>
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<tr>
<td>7665R-7668R</td>
<td></td>
<td>7</td>
<td>0.00 MLW</td>
<td>1.2</td>
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<tr>
<td>7701R-7704R</td>
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<td>2</td>
<td>+0.09 MLW</td>
<td>0.9</td>
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<td>2</td>
<td>+0.17 MLW</td>
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<tr>
<td>7753R-7757R</td>
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<td>+0.29 MLW</td>
<td>0.9</td>
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<tr>
<td>7837R-7840R</td>
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<td>2</td>
<td>+0.08 MLW</td>
<td>0.9</td>
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<tr>
<td>7864R-7868R</td>
<td></td>
<td>2</td>
<td>+0.07 MLW</td>
<td>0.9</td>
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</tbody>
</table>

**REMARKS:**

* Refer to the following page for a Tidal Zone Diagram.
## History of Field Operations

### I. Field Inspection Operation

<table>
<thead>
<tr>
<th>Operation</th>
<th>Name</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Chief of Field Party</td>
<td>R.S. Tibbetts</td>
<td>10/74</td>
</tr>
<tr>
<td></td>
<td>L.F. Beugnet</td>
<td>7/75</td>
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### II. Field Edit Operation

<table>
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<th>Recovery</th>
<th>Name</th>
<th>Date</th>
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<tbody>
<tr>
<td>R.S. Tibbetts</td>
<td></td>
<td>10/74</td>
</tr>
<tr>
<td>R.S. Tibbetts</td>
<td></td>
<td>10/74</td>
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<td>R.S. Tibbetts</td>
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<td>10/74</td>
</tr>
<tr>
<td>R.S. Tibbetts</td>
<td></td>
<td>10/74</td>
</tr>
</tbody>
</table>

### Source Data

#### 1. Horizontal Control Identified
All stations pre-marked

#### 2. Vertical Control Identified
All stations pre-marked

#### 5. Geographic Names
- Complete: L.F. Beugnet 7/75
- Specific Names Only
- No Investigation

### Other Field Records

1. CSI Card NOAA FORM 76-53
2. CSI Card Form C/S/GS-152

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**NOAA FORM 76-36C**

**U.S. Department of Commerce**

**National Oceanic and Atmospheric Administration**

**National Ocean Survey**

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### Record of Survey Use

#### I. Manuscript Copies

<table>
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<th>Date</th>
<th>Remarks</th>
<th>Date Manuscript Forwarded</th>
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<tr>
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<td>7/22/75</td>
<td>Class I Manuscript</td>
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#### II. Landmarks and Aids to Navigation

1. **Reports to Marine Chart Division, Nautical Data Branch**

<table>
<thead>
<tr>
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<th>Chart Letter</th>
<th>Number Assigned</th>
<th>Date Forwarded</th>
<th>Remarks</th>
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</table>

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 567 Submitted by Field Parties.
3. Source Data (except for Geographic Names Report) as Listed in Section II, NOAA Form 76-36C.

#### IV. Survey Editions

<table>
<thead>
<tr>
<th>Survey Edition</th>
<th>Survey Number</th>
<th>Job Number</th>
<th>Type of Survey</th>
<th>Map Class</th>
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<td>TP - (2)</td>
<td>PH -</td>
<td>Revised</td>
<td>III, IV, V, Final</td>
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<td>Date of Field Edit</td>
<td>Resurvey</td>
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<tr>
<td>Third Edition</td>
<td>TP - (3)</td>
<td>PH -</td>
<td>Revised</td>
<td>III, IV, V, Final</td>
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<td>Date of Field Edit</td>
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<td>Fourth Edition</td>
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<td>Date of Field Edit</td>
<td>Map Class</td>
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NOAA Form 76-36D
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 1:5,000 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 auxiliary 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 refloated 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 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, 7, 10, 11, 12 and 21. Elevations of panel nos. 17, 18 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. 16 was transferred from the Duck Island Tide Staff as were the water level stakes for panel nos. 4
and 5. Two water level stakes were used for panel no. 5 at 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 transfers 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
Fier 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 Fier 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. Keserling
Surveying Technician
Photo Party 62

NOTE: This was no field leveling on 11-26-74.
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. 1675, 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 control 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

Approved and forwarded:

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(6)1236-1267
         1:5800 Blw IR 74E 7524E-7553R
Strip 2 1:10000 Color 74C(6)1307-1339
         1:5800 Blw IR 74E 7587E-7587R
         1:5800 " " 7590R-7617R
Strip 3 1:10000 Color 74C(6)1384-1417
         1:5800 Blw IR 74E 7619R-7647R
Strip 4 1:10000 Color 74C(6)1418-1444
         1:5800 Blw IR 74E 7649R-7675R
Strip 5 1:10000 Color 74C(6)1448-1484
         1:5800 Blw IR 74E 76782-7709R
Strip 6 1:10000 Color 74C(6)1688-1711
         1:5800 Blw IR 74E 7821E-7749R
         1:5800 Blw IR 74E 7711R-7736R
Strip 7 1:10000 Color 74C(6)1718-1744
         1:5800 Blw IR 74E 7849R-7878R
         1:5800 " " 7738R-7763R

Sheet 1
**DEScriptive Report Control Record**

<table>
<thead>
<tr>
<th>Station</th>
<th>Source of Information (Index)</th>
<th>Datum</th>
<th>Latitude or Y Coordinate</th>
<th>Longitude or X Coordinate</th>
<th>Distance from Grid or Projection Line in Meters (1 ft. = 304.8006 meter)</th>
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<tbody>
<tr>
<td>HORZ. PANEL #14</td>
<td>Computed by Norfolk</td>
<td>513100</td>
<td>741,433.77</td>
<td>3,025,592.83</td>
<td>DAVIS SLOUGH STAFF 4.60¹</td>
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<td>Computed by Norfolk</td>
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<td>3,019,235.08</td>
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</table>

*Not shown on map.*

---

**Computed by:** J.D. Perrow  
**Date:** 12/6/74  
**Checked by:** B.P.T.  
**Date:** 12/9/74
Compilation Report
TP-00890

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 depth.

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. Contour and Drainage - None

35. Shoreline and Alongshore Details - None
The mean low water line was 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.
Silt, sun glare, and soft texture of the bottom of Pamlico Sound, in an area north of latitude 35°44'30" and west of longitude 75°33'45"", impeded compilation of photobathymetry.

37. Landmarks and Aids - None

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 Pea Island, NC, scale 1:24,000, edition of 1950, photorevised 1970.

47. Comparison with Nautical Charts

A comparison has been made with the following Nautical Charts:

Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by,

James L. Byrd

Approved and forwarded:

Joseph W. Vonasek
Chief, Special Projects Section, AMC

Approved:

Victor E. Serena
Chief, Photogrammetric Branch, AMC
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 work 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-00890

51. METHODS

The area compiled in this manuscript is comprised entirely of water area, and the field edit was accomplished by skiff. All corrections, additions or deletions have been noted on the field edit ozalid.

52. ADEQUACY OF COMPILATION

With the exception of one tide gage which falls within the compilation limits, all compilation consisted of photogrammetric bathymetry.

54. RECOMMENDATIONS

None

Leo F. Beugnet
Leo F. Beugnet
Supervisory Cartographer

10 July 1975
### PHOTOGRAMMETRIC OFFICE REVIEW

**TP-00890**

<table>
<thead>
<tr>
<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
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**CONTROL STATIONS**

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<tr>
<th>5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY</th>
<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)</th>
<th>7. PHOTO HYDRO STATIONS</th>
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<tr>
<th>8. BENCH MARKS</th>
<th>9. PLOTTING OF SEXTANT FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
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**ALONGSHORE AREAS (Nautical Chart Data)**

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<tr>
<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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<th>16. AIDS TO NAVIGATION</th>
<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
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**PHYSICAL FEATURES**

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<th>20. WATER FEATURES</th>
<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
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<th>23. STEREOSCOPIC INSTRUMENT CONTOURS</th>
<th>24. CONTOURS IN GENERAL</th>
<th>25. SPOT ELEVATIONS</th>
<th>26. OTHER PHYSICAL FEATURES</th>
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**CULTURAL FEATURES**

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<tr>
<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
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**BOUNDARIES**

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<th>31. BOUNDARY LINES</th>
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**MISCELLANEOUS**

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<tr>
<th>33. GEOGRAPHIC NAMES</th>
<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
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<tr>
<th>36. DISCREPANCY OVERLAY</th>
<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
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**REVIEWER**

Joseph W. Vonasek

**SUPERVISOR, REVIEW SECTION OR UNIT**

Special Projects Section

**FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT**

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.

**COMPLETER**

Richard R. White

**SUPERVISOR**

Joseph W. Vonasek

**REMARKS**

43. REMARKS
Review Report
Photogrammetric Bathymetry
and Topographic Map TP-00890
June 1976

61. General Statement
The map was reviewed in its Class 1 (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 hydro-
graphic 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,

[Signature]
E.L. Rolle

Approved and forwarded:

[Signature]
Chief, Photogrammetric Branch

[Signature]
Chief, Coastal Mapping Division
20 August 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7501 (Oregon Inlet, North Carolina)

TP-00890

Davis Channel

Pamlico Sound

Pea Island National Wildlife Refuge

Approved by

Chas. E. Harrington
Staff Geographer-C51x2
Discrepancy Print for the Field Editor

1 NOAA Form 76-53 Control Station Identification

1 Form C&GS-152 Control Station Identification

Photography: None
**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.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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**FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-970.**