Form 504
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>SHORELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Office No. T-11704</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOCALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
</tr>
<tr>
<td>General locality</td>
</tr>
<tr>
<td>Locality</td>
</tr>
</tbody>
</table>

1962 - 1963

CHIEF OF PARTY
Ray M. Sundeen, Chief of Field Party
V. Ralph Sobieralski, Tampa District Officer

LIBRARY & ARCHIVES

DATE

ORIGINAL
**DESCRIPTIVE REPORT - DATA RECORD**

**T - 11704**

**PROJECT NO. (III):**  
PH-6209

**FIELD OFFICE (III):**  
Bayside, Virginia

**PHOTOGRAMMETRIC OFFICE (III):**  
Tampa, Florida

**CHIEF OF PARTY:**  
R. M. Sundean

**OFFICER-IN-CHARGE:**  
V. Ralph Sobierski

**INSTRUCTIONS DATED (III) (III):**  
Field - September 12, 1962  
Supplement 1, Field - October 16, 1962  
Office - October 30, 1962

**METHOD OF COMPILATION (III):**  
Kelsh plotter

**MANUSCRIPT SCALE (III):**  
1:10,000

**STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):**  
1:6,000

**DATE RECEIVED IN WASHINGTON OFFICE (IV):**

**DATE REPORTED TO NAUTICAL CHART BRANCH (IV):**

**APPLIED TO CHART NO.:**

**DATE:**

**DATE REGISTERED (IV):**

**GEOGRAPHIC DATUM (III):**  
N. A. 1927

**REFERENCE STATION (III):**  
CENTER, 1960

**LAT.:**  
36° 5' 15.5" (1703.2 m.)

**LONG.:**  
76° 07' 52.30" (1294.7 m.)

**PLANE COORDINATES (IV):**

**STATE:**  
Virginia

**ZONE:**  
South

**VERTICAL DATUM (III):**  

**ELEVATIONS SHOWN AS (2) REFER TO MEAN HIGH WATER**  
**ELEVATIONS SHOWN AS (5) REFER TO SOUNDING DATUM**  
**I.E., MEAN LOW WATER OR MEAN LOWER LOW WATER**

**ADJUSTED**  
**UNADJUSTED**

**SOUNDING COORDINATES (IV):**

x = 2,692,161.66 Ft.

**ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (III) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.**

**WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.**
# DESCRIPTIVE REPORT - DATA RECORD

<table>
<thead>
<tr>
<th>Field Inspection by (III):</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. S. Tibbetts</td>
<td>November 1962</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean High Water Location (III) (State Date and Method of Location):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air photo compilation</td>
</tr>
<tr>
<td>Date of photographs: May 3, 1962</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Edit Cichy 1963</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Projection and Grids Ruled by (IV):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. R. (W.O.)</td>
<td>September 1962</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projection and Grids Checked by (IV):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>L. F. B. (W.O.)</td>
<td>September 1962</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Plotted by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. P. Cakowski</td>
<td>January 1963</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Checked by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. D. Purvis</td>
<td>January 1963</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stereoscopic Control Extension by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Heinbaugh (W.O.)</td>
<td>January 1963</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stereoscopic Instrument Compilation (III):</th>
<th>Planimetry Reviewed by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. I. Saperstein</td>
<td>R. E. Smith</td>
<td>January 1963</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contours</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inapplicable</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manuscript Delineated by (III):</th>
<th>Reviewed by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Honick</td>
<td>W. H. Shearouse</td>
<td>January 1963</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scribing by (III):</th>
<th>Reviewed by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul W. Leikhim</td>
<td>W. H. Shearouse</td>
<td>June 1963</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Photogrammetric Office Review by (III):</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. H. Shearouse</td>
<td>July 1963</td>
</tr>
</tbody>
</table>

**Remarks:**
**DESCRIPTION REPORT - DATA RECORD**

**CAMERA (KIND OR SOURCE) (III):**

Wild single lens "W"

**PHOTOGRAPHS (III):**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>62-W-4038</td>
<td>May 3, 1962</td>
<td>1230</td>
<td>1:30,000 Diapositives</td>
<td>-0.2</td>
</tr>
<tr>
<td>62-W-4039</td>
<td>May 3, 1962</td>
<td>1230</td>
<td>&quot; &quot;</td>
<td>-0.2</td>
</tr>
<tr>
<td>62-W-4040</td>
<td>May 3, 1962</td>
<td>1230</td>
<td>&quot; &quot;</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

**PREDICTED TIDE (III):**

<table>
<thead>
<tr>
<th>REFERENCE STATION:</th>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hampton Roads</td>
<td>-</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>SUBORDINATE STATION:</td>
<td>Lynnhaven Inlet (R.R.Bridge)</td>
<td>HW -0.5</td>
<td>LW 0.6</td>
</tr>
</tbody>
</table>

**WASHINGTON OFFICE REVIEW BY (IV):**

W.H. Shearouse (Tampa District Office)

**DATE:** December 1963

**PROOF EDIT BY (IV):**

**DATE:**

**NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III):** 5

<table>
<thead>
<tr>
<th>Recovered</th>
<th>Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4**</td>
</tr>
</tbody>
</table>

**NUMBER OF HYDRO STATION IDENTIFIED (III):**

<table>
<thead>
<tr>
<th>Recovered</th>
<th>Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**REMARKS:**

* Including 3 stations west of project (No Form 526 was submitted for station CENTER 1960)

** Including 2 stations west of project
<table>
<thead>
<tr>
<th>Compiled</th>
<th>Completion Date</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alongshore area revised</td>
<td>January 1963</td>
<td>superseded</td>
</tr>
<tr>
<td>from field edit,</td>
<td>May 1963</td>
<td></td>
</tr>
<tr>
<td>Manuscript complete</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROJECT PH-6209
LYNNHAVEN BAY VA.
SHORELINE MAPPING
SCALE 1:10,000

<table>
<thead>
<tr>
<th>SHEET NO.</th>
<th>LINEAR MILES SHORELINE</th>
<th>AREA SQ. MILES</th>
</tr>
</thead>
<tbody>
<tr>
<td>11704</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>11705</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>11706</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>11707</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>11708</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>11709</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-11704

Shoreline map T-11704 is one of six similar maps in project 21051 (PH-6209) and is the northwesterly map in the project. It covers a portion of the shoreline of Lynnhaven Roads (Chesapeake Bay) at Lynnhaven Inlet, and Lynnhaven Bay. This is a Kelsh project in advance of hydrographic surveys which are being made in the same area. The field operations preceding compilation included field inspection, recovery and identification of horizontal control and pre-hydrographic identification of 21 temporary hydrographic stations. The Kelsh compilation was at a scale of 1:10,000, from which a film negative showing shoreline, alongshore features and photo-hydro stations was furnished for preparation of the hydrographer's boat sheet. 1:30,000 scale single-lens contact photographs, taken May 3, 1962, were used for compilation. Ratio (1:10,000 scale) photographs were subsequently provided for field edit and hydro support purposes. The manuscript is a vinylite sheet 3 3/4' in latitude by 4 1/4' in longitude which was scribed and reproduced on cronaflex following photogrammetric office review. One cronar positive and one cronar film negative of the reviewed manuscript are provided for record and registry.
3. **Horizontal Control**

   Only the stations required for horizontal control identification were searched for.
   Requirements for horizontal control identification as indicated on a special copy of the project diagram were met.
   The following stations are lost or destroyed and reported on Form 526:

<table>
<thead>
<tr>
<th>Station</th>
<th>Date</th>
<th>Station</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-11704</td>
<td>Van, 1941</td>
<td>T-11707</td>
<td>None</td>
</tr>
<tr>
<td>T-11705</td>
<td>None</td>
<td>T-11708</td>
<td>None</td>
</tr>
<tr>
<td>T-11706</td>
<td>East End Tower (U.S.E.), 1925</td>
<td>T-11709</td>
<td>Hollies, 1922</td>
</tr>
<tr>
<td></td>
<td>Parcel C Tower B (U.S.E.), 1939</td>
<td></td>
<td>Virginia Beach, Water Tank, 1909</td>
</tr>
</tbody>
</table>

9. **Landmarks and Aids**

   All landmarks and aids for nautical charts are reported on Form 567.
   All aids and landmarks which are not triangulation have been identified or photo located on the horizontal control identification contact prints. All visible aids and landmarks which are triangulation are also identified on the same contact prints.

14. **Special Reports and Supplemental Data**

   Photo Party 723 as per instructions only completed the horizontal control and landmark identification. No shoreline inspection or recovery of vertical control was attempted.

Respectfully submitted,
28 September 1962

Lt. Ray M. Sundeen
Chief of Party
FIELD INSPECTION REPORT
PROJECT PH-6209

2. AREAL FIELD INSPECTION

This report is submitted for the entire project. The areas covered by the survey are: Lynnhaven Bay and its tributaries, Lynnhaven Roads and the outer coast from Cape Henry to Rudee Inlet.

The field work was accomplished by personnel from Photo Party 720 during the period 17 October to 16 November 1962.

Field work by Photo Party 720 was restricted to work as per Instructions - FIELD - Project PH-6209 - Lynnhaven Bay, Virginia - Shoreline Mapping - Supplement 1 dated 16 October 1962, except section 4.01 which was completed only in the Western Branch of Lynnhaven Bay.

The area is thickly settled and is changing daily as a result of new construction by real estate developers.

The photographs for the project consisted of 1962 single lens ratio prints of 1:15,000 scale. The photographs were not quite as crisp and sharp as have been used on some other projects.

Two golf courses fall within the project; namely Princess Anne Golf Course and Cavalier Yacht and Golf Club. No limit lines have been delineated on the field photographs because only the fairways belong to the golf courses; all other property around the cleared fairways are private property.

4. VERTICAL CONTROL

There are six Tidal Bench Marks within the area. Bench Marks No's 1, 3, 4, and 5 were recovered in good condition as described. Bench Mark C 289, 1942 has been destroyed; the old Norfolk and Southern Bus Station has been torn down and a new Pure Oil service Station stands in its place. Bench Mark T 288, 1942 was not searched for due to the inadequacy of the furnished description.

The four TBM's recovered have been pricked on contact photograph 62-5-3260.

5. DRAINAGE:

No drainage delineation was made. This phase was omitted due to verbal instructions from Washington Office. In most cases the drainage is obscured by a dense growth of trees after it leaves the marsh, making it most difficult to be delineated.
6. WOODLAND COVER

Woodland cover has been classified in accordance with Topographic Manual, Part II (reference 5433).

7. SHORE LINE AND ALONGSHORE FEATURES

The outer shoreline from Lynnhaven Roads to Rudee Inlet is a wide white sand beach bounded by a dense growth of low scrub pine. According to local information, the width of this beach is very unstable and changes with the tides and storms. The degree of change often depends on the severity and duration of the tides and storms.

The mouth of Lynnhaven Bay for the most part is foul with sand and oyster bars with a fairly deep water channel that will accommodate boats with a draft of up to 4 feet. This channel splits about 1500 feet above the bridge and goes to the Eastern and Western branches of the bay. The upper reach of the bay is very shoal (often less than 1 foot of water) and is foul with stakes.

Broad Bay, Linkhorn Bay, and Crystal Lake have deep water (5 to 10 feet) with a reported 4 to 7 feet in the narrows and Rainey Gut, as both have been dredged in the last 6 months.

The outer shore line was not inspected from Seaward. The MHW Line was delineated by reference measurements from identifiable objects along the shore. Lynnhaven Inlet, Bay, and its tributaries were inspected by running an outboard skiff as close inshore as possible without running aground, and comparing the shoreline with the photographs.

8. OFFSHORE FEATURES

The only offshore feature noted was the New Chesapeake Bay Bridge on Sheet T-11704.

9. LANDMARKS AND AIDS

Twelve aids to navigation have been recommended for charting on Form 567. Ten of the aids were located by theodolite cuts from photo points; Day Beacon No. 2 was pricked direct, and Cape Henry Light had been located previously by triangulation.

Seven Aids to Navigation have been recommended to be deleted from the Charts. All have been reported on Form 567.

All nautical and aeronautical landmarks were identified and reported by Photo Party 723. See report submitted by Lt. Ray M. Sundeen, Chief of Photo Party 723, dated 28 September 1962.
10. **BOUNDARIES, MONUMENTS, AND LINES**

   Not applicable.

11. **OTHER CONTROL**

   Photo hydro stations were selected and identified in the Western Branch of Lynnhaven Bay.

12. **OTHER INTERIOR FEATURES**

   All roads to be mapped have been classified in accordance with Photogrammetric Instructions No. 56 dated 2 January 1962.

   All buildings which are of landmark value have been circled on the field photographs.

13. **GEOGRAPHIC NAMES**

   A systematic geographic names investigation was not required. No discrepancies in charted names or new names were noted during field inspection.

14. **SPECIAL REPORT AND SUPPLEMENTAL DATA**


Submitted:
12-26-62

Robert S. Tibbetts
Surveying Technician
ADDENDUM TO FIELD INSPECTION REPORT
PROJECT PH-6209
LYNNHAVEN BAY, VIRGINIA

GENERAL STATEMENT

In general all phases of field inspection has been completed for the project. Lt. Sundeen completed the identification of control and identification of Nautical Landmarks. The writer completed the remainder.

TIDAL BENCH MARKS

Only one set of tidal bench marks was recovered in the area. The field inspector does not know if any other tidal marks exist as this one set was all that was furnished.

ROADS

All roads have been classified throughout the project.

SHORELINE INSPECTION

This phase has been completed throughout the project except for the outside shoreline within Fort Story. This portion was not done due to construction by bulldozers pushing up sand dune lines.

BUILDINGS

This has been completed for the project.

PHOTO-HYDRO

The preselection of photo-hydro stations was completed only in the Western branch of Lynnhaven Bay.

REFERENCE INSTRUCTIONS

The original instructions for the project were not furnished the writer.

Submitted:
11 January 1963

Robert S. Tibbetts
Surveying Technician
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CENTER 1960</td>
<td>Vol II p. 678</td>
<td>NA 1927</td>
<td>36° 54' 55.251</td>
<td>76.07 52.304</td>
<td></td>
<td>1703.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>220.587.55 FT.</td>
<td></td>
<td>1294.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,692.461.66 FT.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYGEIA INN 1929</td>
<td>G.P.S. page 241</td>
<td></td>
<td>36° 54' 45.746</td>
<td>76.07 14.373</td>
<td></td>
<td>1410.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P.C.'s p. 101</td>
<td></td>
<td></td>
<td>220.076.82 FT.</td>
<td></td>
<td>355.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,710, 178.41 FT.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AEROTRIANGULATION REPORT
LYNnhaven Bay, VA.
PH-6209

January 4, 1963

This project covers an area comprised of six T-sheets (T-11704 thru T-11709). Photographic coverage used in this bridging operation consisted of three East-West flight lines at a scale of 1:30,000 and a North-South flight line at a scale of 1:20,000. Inasmuch as the side lap of the northernmost flight line and the side lap of the southernmost flight line were such that wing control points from these two flight lines were adequate to control the central flight line, only the outer flight lines were bridged. The smaller scaled flight line was tied to common triangulation points and bridge points used in the East-West flight lines.

Adequate ties between Strips I, II, and III were made at their junctions through common triangulation and bridge pass points. Closures on these common points indicate accuracy requirements are met for 1:10,000 scale mapping standards.

As a further check on the accuracy of the bridging operation a two-model bridge, using the central East-West flight line, was set on the C-8 Stereoplanigraph with adequate checks resulting between Strips I and III in the area (see Aerotriangulation sketch for location of this check bridge).

Control stations used for making adjustments:

Strip I
(1) Little Creek Coast Guard Cupola
(2) Center
(3) Hygela Inn
(4) Cape Henry Lighthouse (1869)
(6) Parcel C, Tower A, (USE)

Strip II
(10) Decca
(6) Parcel C, Tower A, (USE)
(4) Cape Henry Lighthouse (1869)

Strip III
(12) Norfolk W. Base
(11) Norfolk E. Base
(14) WTRAR Radio Tower No. 1
(9) Virginia Beach Municipal Water Tank
The bridging was completed on the Wild A-5 Stereoplotter with all horizontal control points being held satisfactorily with the following exceptions:

01. Strip I
   
   Center (1960) The image of this station was extremely poor and could not be positively identified on the diapositives. Its substitute station held within accuracy requirements.

   Little Creek Amphibious Base Tank (1952) Substation. It was impossible to discern the low hedge used as the substitute station.

   Hyrcla Inn (1929) The image of the substitute station was fair and it is assumed that the error in position is attributable to a faulty field measurement of azimuth with a portion of the error due to distance measurement (line of traverse was impaired by a portion of a building).

02. Strip I and II

   Cape Henry Lighthouse (NEW) Substitute station. Image point of substitute station (bush) was very poor.

03. Strip III

   None.

The following stations were office-identified in addition to the triangulation stations identified by the field.

   Camp Pendleton, South Rifle Range Tower (1955)
   Camp Pendleton, North Rifle Range Tower (1955)

Both stations held in the bridging operation.

Landmarks

Supplementing Cape Henry Lighthouse (old & new) these landmarks were incorporated in the bridging procedure:

   Virginia Beach Coast Guard Radio Tower
   Virginia Beach Municipal water tank (1953)
   WBGF Radio Tower
   Virginia Beach Mayflower Apartment Bldg. W. Light (1953)
   Cavalier Hotel Cupola (1929)
   Virginia Beach Mayflower Apartment Bldg. E. Light (1953)
Submitted by:

Wallace Heinbauch

Approved by:

Everett H. Ramey, Chief
Aerotriangulation Section
LYNNHaven Bay, VA.
PH-6207

Legend

1:20,000 Scale Single-Lens Photographs
1:30,000 Scale Single-Lens Photographs
Photography Used in Bridging
Control Triangulation
Check Triangulation

Little Creek Naval Amphib Base, Tank 1952
Center
Hygeia Inn, 1929
Cape Henry L.H. (1849)
Cape Henry L.H. (New)
Parcel C Tower A (USE)
Cavalier Hotel Cupola, 1929

Virginia Beach Mun W.T., 1953
Decca
Norfolk E. Base, 1931
Norfolk W. Base, 1931
Little Creek C.G. Base Cupola
WTAR Radio Tower, No. 1, 1937
Hollis Tower "A"

Note: Divergence from Previously Determined Coordinates (x, y) Shown in Parentheses in That Order.
31. **DELINEATION**

The Kelsh plotter was used.

The field inspection was generally adequate. The diapositives, 62-W-4038 thru 4041, were not of usual standard. These photographs had sun spots, poor contrast, were generally flat, and of poorer quality than usually furnished.

No roads were shown, except bridges, in accordance with the layout submitted by the Washington Office showing limits of delineation. Notation on layout states "This area has been revised by the Chart Division for a new chart by updating quadrangles (1952-1954) with 1960-1962 photos. Compile back to red line (i.e. 1/2" or so) only, for tie purposes".

32. **CONTROL**

See bridge report.

33. **SUPPLEMENTAL DATA**

None.

34. **CONTOURS AND DRAINAGE**

Inapplicable.

35. **SHORELINE AND ALONGSHORE DETAILS**

The shoreline inspection was generally adequate and delineation was done accordingly. The mean high water line at Cape Henry was not inspected due to construction (see addendum to Field Inspection Report), but was delineated nevertheless. The photographs show this stretch of shoreline to be very indefinite and it should be located by the field editor.

The low water, shallow and shoal lines were delineated by office interpretation of the photographs. All alongshore details, such as piers indicated by the field inspection have been shown.
36. **OFFSHORE DETAILS**

A building has been located offshore as photo-hydro station 26.

37. **LANDMARKS AND AIDS**

Five aids to navigation have been located and are reported on form 567. Numerous aids to be deleted have been reported by the field inspector and are submitted on form 567.

There are no landmarks.

38. **CONTROL FOR FUTURE SURVEYS**

Twenty-one photo-hydro stations have been located and are listed under item 49 with descriptions for each.

39. **JUNCTIONS**

Junction has been made with T-11705 to the east and T-11707 to the south. Project limits to the north and west.

40. **HORIZONTAL AND VERTICAL ACCURACY**

No statement.

46. **COMPARISON WITH EXISTING MAPS**

Comparison has been made with U.S.G.S. CAPE HENRY quadrangle, 1:24,000 edition of 1955. The comparison is generally favorable except for the addition of part of the new Chesapeake Bay bridge near the western limits of the manuscript.

47. **COMPARISON WITH NAUTICAL CHARTS**

Comparison has been made with chart 481, scale 1:20,000, 11th edition, Dec. 3, 1962. The chart appears to be in good agreement with the manuscript.
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Irving I. Saperstein
Cartographer (Photo)

APPROVED AND FORWARDED 29 JUL 1963

V. Ralph Sobiersalski
Tampa District Office
48. **Geographic Names List**

Avery Island
Bayville Creek
Broad Bay
Brock Cove
Chesapeake Beach
Dix Inlet
Eagles Nest Point
Eastern Branch Lynnhaven River
Fish House Island
Garaway Point
Inlet
Keeling Drain
Lynnhaven Bay
Lynnhaven Colony
Lynnhaven Inlet
Lynnhaven Roads
Lynnhaven Shores
Long Creek
Mapps Point
Ocean Park
Parker Cove
Pleasure House Creek
Pleasure House Point
Poorhouse Cove
Thoroughgood Cove
Western Branch Lynnhaven River
Witch Duck Bay
Witch Duck Point

Geographic Names Section 6 February 1964
49. NOTES FOR THE HYDROGRAPHER

The following is a list of photo-hydro stations with a description of each:

01 - End of pier
02 - End of pier
03 - End of pier
04 - Number not used
05 - End of pier
06 - End of pier
07 - End of pier
08 - End of pier
09 - End of pier
10 - End of pier
11 - End of pier
12 - End of pier
13 - End of pier
14 - End of pier
15 - End of pier
16 - End of pier
17 - End of pier
18 - End of pier
19 - End of pier
20 - End of pier
21 - End of pier
22 - End of pier

fall on T-11707
49. NOTES FOR THE HYDROGRAPHER (continued)

23 - End of pier
24 - Northwesterly corner
25 - Center of end of pier
26 - Center of building
27 - Center of pier
28 - End of pier
29 - End of pier
30 - End of pier
<table>
<thead>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>WHS</td>
<td>XX</td>
</tr>
<tr>
<td>7. Photo Hydro Stations</td>
<td>8. Bench Marks</td>
</tr>
<tr>
<td>WHS</td>
<td>XX</td>
</tr>
<tr>
<td>9. Plotting of Sextant Fixes</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td>XX</td>
</tr>
<tr>
<td>10. Photogrammetric Plot Report</td>
<td></td>
</tr>
<tr>
<td>XX</td>
<td>W.O.</td>
</tr>
<tr>
<td>11. Detail Points</td>
<td></td>
</tr>
<tr>
<td>Kelsh (I.I.S.)</td>
<td></td>
</tr>
<tr>
<td>12. Shoreline</td>
<td>13. Low-Water Line</td>
</tr>
<tr>
<td>WHS</td>
<td>XX</td>
</tr>
<tr>
<td>14. Rocks, Shoals, Etc.</td>
<td>15. Bridges</td>
</tr>
<tr>
<td>WHS</td>
<td>WHS</td>
</tr>
<tr>
<td>16. Aids to Navigation</td>
<td>17. Landmarks</td>
</tr>
<tr>
<td>WHS</td>
<td>XX</td>
</tr>
<tr>
<td>18. Other Alongshore Physical Features</td>
<td>WHS</td>
</tr>
<tr>
<td>19. Other Alongshore Cultural Features</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td></td>
</tr>
<tr>
<td>20. Water Features</td>
<td>21. Natural Ground Cover</td>
</tr>
<tr>
<td>WHS</td>
<td>WHS</td>
</tr>
<tr>
<td>22. Planetable Contours</td>
<td>23. Stereoscopic Instrument Contours</td>
</tr>
<tr>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>24. Contours in General</td>
<td>25. Spot Elevations</td>
</tr>
<tr>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>26. Other Physical Features</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td></td>
</tr>
<tr>
<td>XX</td>
<td>WHS</td>
</tr>
<tr>
<td>29. Railroads</td>
<td>XX</td>
</tr>
<tr>
<td>30. Other Cultural Features</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td></td>
</tr>
<tr>
<td>31. Boundary Lines</td>
<td>32. Public Land Lines</td>
</tr>
<tr>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>33. Geographic Names</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td></td>
</tr>
<tr>
<td>34. Juncions</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td></td>
</tr>
<tr>
<td>35. Legibility of the Manuscript</td>
<td>36. Discrepancy Overlay</td>
</tr>
<tr>
<td>WHS</td>
<td>XX</td>
</tr>
<tr>
<td>37. Descriptive Report</td>
<td></td>
</tr>
<tr>
<td>WHS</td>
<td></td>
</tr>
<tr>
<td>38. Field Inspection Photographs</td>
<td>39. Forms</td>
</tr>
<tr>
<td>WHS</td>
<td>WHS</td>
</tr>
<tr>
<td>40. Field Completion Additions and Corrections to the Manuscript</td>
<td>Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.</td>
</tr>
</tbody>
</table>
Field Edit Report, T-11704

No Field Edit Report has been received.

Questions referred to the field editor were satisfactorily answered. That portion of the mean high-water line referred to in item 35 as being "under construction" was delineated from measurements furnished by the field editor.

Tampa
61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

<table>
<thead>
<tr>
<th>Map</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-8301</td>
<td>1:20,000</td>
<td>1944</td>
</tr>
<tr>
<td>T-8302</td>
<td>1:20,000</td>
<td>1944</td>
</tr>
</tbody>
</table>

This map supersedes the listed prior surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

U.S.G.S. - CAPE HENRY, VIRGINIA 1:24,000 1955

Marsh island in mouth of Western Branch Lynnhaven River (approximate latitude 36°53.5', longitude 76°06.2') no longer exists; now uncovers at low-water only.

Marsh island at approximate latitude 36°53.7', longitude 76°05.5' no longer exists.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8724, 1:10,000 scale, dated October 1, 1962. This boat sheet does not show soundings for approximately one mile along the Lynnhaven Roads (Cape Henry) shoreline at eastern limits.

Due to field edit corrections slight changes were made in delineation of shoreline of map manuscript in the vicinity of latitude 36°51.6', longitude 76°05' (Inlet and Lynnhaven Shores). These corrections should be made on the hydrographer's smooth sheet.

Boat sheet does not show marsh islet in Witch Duck Bay at latitude 36°53', longitude 76°07.3'.

No piers are shown on boat sheet.
65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 481, 11th edition, revised July 22, 1963. The following differences were noted:

Several piers shown on the manuscript do not appear on the chart.

Pier on chart at approximate latitude 36°52.9', longitude 76°07.05', is not visible on photographs 62-W-4039 or 4040.

Pier on chart, north side of channel near Daybeacon 10, at approximate latitude 36°51.26', longitude 76°07.95', does not appear on photographs 62-W-4038 or 4039.

Pier on chart on west side of cove at approximate latitude 36°53.2', longitude 76°06', is not visible on photographs 62-W-4038, 4039, 4031 or 4052.

Lynnhaven Inlet, East and West Obstruction Lights and Lynnhaven Roads Fishing Pier Light, as well as Long Creek Daybeacons 6 and 9, appear on the chart but not on the manuscript. Form 567 for deletions was submitted by J. K. Wilson under date of November 13, 1962.

Overhead cable shown on chart at highway bridges near west entrance to Long Creek are not on the manuscript. No field inspection was furnished for the feature nor can supporting poles be seen on photographs 62-W-4038 or 4039.

Chart 481 lacks approximately .3 mile covering area of manuscript along south limits. This part was compared with 1:80,000 scale chart 1227, 6th edition, revised August 6, 1962.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standard of Map Accuracy.

Future surveys should check for new man-made canals in connection with suburban development and dredged and deepened areas that are presently marsh and lying at the inshore ends of creeks and coves.
Also, existence of the overhead cable discussed under item 65 should be verified.

Reviewed by:
William H. Shearouse
William H. Shearouse

22 APR 1964
Approved by:
V. Vaijo Sobieralski
Tampa District Officer

Approved by:
Charles L. Benn Chief, Cartographic Branch
C. E. Woodcock Chief, Photogrammetry Division

Chief, Chart Division
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

I. I. Saberstein

<table>
<thead>
<tr>
<th>STATE</th>
<th>VIRGINIA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynnhaven Inlet</td>
<td>Long Creek</td>
<td>36 54</td>
<td>11.50 607</td>
<td>76 05</td>
<td>02.06 D.A.</td>
<td>Photo</td>
</tr>
<tr>
<td>Dayton 7</td>
<td></td>
<td>36 54</td>
<td>11.76 655</td>
<td>76 05</td>
<td>54.05 1330</td>
<td>Plot</td>
</tr>
<tr>
<td>Dayton 10</td>
<td></td>
<td>36 54</td>
<td>11.21 667</td>
<td>76 06</td>
<td>22.47 1101</td>
<td></td>
</tr>
<tr>
<td>Dayton 12</td>
<td></td>
<td>36 54</td>
<td>11.53 680</td>
<td>76 05</td>
<td>37.52 739</td>
<td></td>
</tr>
<tr>
<td>Dayton 16</td>
<td></td>
<td>36 54</td>
<td>12.72 392</td>
<td>76 04</td>
<td>31.75 795</td>
<td></td>
</tr>
<tr>
<td>Dayton 17</td>
<td></td>
<td>36 54</td>
<td>12.72 392</td>
<td>76 04</td>
<td>31.75 795</td>
<td></td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* Tabulate seconds and meters
NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Norfolk

November 13, 1962

I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be

Robert S. Tibbetts

Joseph K. Wilson

Chief of Party.

<table>
<thead>
<tr>
<th>STATE</th>
<th>Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>✔</td>
<td>LYNNAHAVEN INLET EAST OBSTRUCTION LIGHT</td>
</tr>
<tr>
<td>✔</td>
<td>LYNNAHAVEN INLET WEST OBSTRUCTION LIGHT</td>
</tr>
<tr>
<td>✔</td>
<td>LYNNAHAVEN INLET LONG CREEK</td>
</tr>
<tr>
<td>✔</td>
<td>DAYBEACON NO. 6</td>
</tr>
<tr>
<td>✔</td>
<td>DAYBEACON NO. 9</td>
</tr>
<tr>
<td>✔</td>
<td>DAYBEACON NO. 6</td>
</tr>
<tr>
<td>✔</td>
<td>LYNNAHAVEN INLET, LYNNAHAVEN ROADS FISHING FIER LIGHT</td>
</tr>
</tbody>
</table>

NOTE: all names are preceded by CHESAPEAKE BAY, LYNNAHAVEN ROADS

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-35, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS