

DATE: February 16, 1982

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 863-9428 Sandbridge, Virginia

Period: June 13-November 9, 1981

HYDROGRAPHIC SHEET: H-9972

OPR: D103

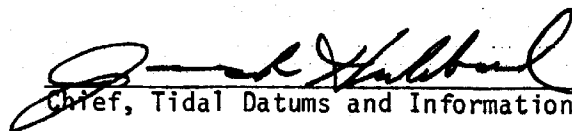
Locality: Delmarvance

Plane of reference (mean lower low water): 2.59 ft.

Height of Mean High Water above Plane of Reference is 3.60 ft.

REMARKS: Recommended zoning:

- (1) West of $75^{\circ}40'$ apply x 1.06 range ratio.
- (2) East of $75^{\circ}40'$ apply - 10 minute time correction and x 1.06 range ratio.


Chief, Tidal Datums and Information Branch

FIELD TIDE NOTE

The field tide reduction of soundings was based on predicted tides from Hampton Roads, Virginia which were corrected in accordance with the pre-zoning scheme provide with 1980 project instructions and was interpolated by the PDP 8/E computer utilizing program AM 500. All times of both predicted and recorded tides are Greenwich Mean Time.

To maintain continuous tidal records the ADR gage installed at Sandbridge, Station # 863-9428 was supplemented by a gas-purged pressure gage at the same site. The location and period of operation are as follows:

<u>Site</u>	<u>Location</u>	<u>Period</u>
Sandbridge Pumping Pier	36-41-30N 075-55-12W	11 June 1981 - 10 November 1981

Sandbridge Pumping Pier - Metercraft Model 7602, S/N 705-108 gage was installed on 11 June 1981 and began operation on 12 June 1981. The staff was installed during the 1980 field season and was leveled on 12 June 1981. Fisher-Porter, ADR, Model 1551, S/N R6511A4632M2, gage was installed on 11 June 1981 and began operations on 12 June 1981. The same staff, leveled 12 June 1981, was used for both gages.

On 7 August 1981, the punch block jammed on the ADR gage. The gage was removed and returned to Atlantic Marine Center for inspection; it was replaced by Fisher-Porter, ADR, Model 1550, S/N 7601A1469M23. Operations of the new gage commenced on 10 August 1981.

On 7 September 1981, the bubbler gage failed during hydrographic operations. During the down time of the bubbler gage, the ADR gage was operational. Upon inspection of the gage on 12 September 1981, it was discovered that the orifice was buried below 6" of sand. The problem was rectified by remounting the orifice 2.5 feet above the ocean bottom. Gage restored to operations on 12 September 1981.

On 16 September 1981 during inspection of the ADR gage, it was found that the gage was punching 12 minutes fast. The conclusion was that the problem resulted from excessive vibration of the pier and by the take-up spring on the gage. The spring was readjusted and the gage commenced operating on 17 September 1981.

On 30 October 1981, the punch block jammed on the ADR gage. The gage was removed and returned to A.M.C. for repair. The punch block assembly was replaced and the gage was reinstalled at Sandbridge that same day.

All tidal records were removed from the tide station at Sandbridge, VA on 11 November 1981. The tide station operation was discontinued due to completion of the hydrographic field season by PEIRCE.

Levels: Four spirit level runs were made at the Sandbridge Station: (1) On 12 June 1981, to establish tide station prior to hydrographic operations; (2) on 19 August 1981, station releveled by personnel from Tides and Water Levels Branch at A.M.C.;

(3) on 1 October 1981, to check the elevation of the tide staff after the passage of Hurricane Dennis; (4) on 16 November 1981, to level at the removal of the tide station. All information and data was forwarded to Tide and Water Levels Branch, Rockville, MD.

Zoning: Zoning is based on the prezoning scheme noted in the project instructions with correctors of - 2 hours 30 minutes and tide value multiplier of 1.30.

Duck, North Carolina - Station Number 865-1370 was operational and under the jurisdiction of A.M.C., Tides and Water Levels Branch, throughout the survey. A check level was performed 5 June 1981. The gage was again leveled on 19 November 1981 at the end of the field season. All data was forwarded to Tide and Water Levels Branch, Rockville, MD.

Hampton Roads, Virginia - Reference station number 863-8610.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
NOAA Ship PEIRCE S-328
439 W. York Street
Norfolk, Virginia 23510

December 9, 1981

TO: Chief, Water Levels Branch (C234)
FROM: *M. D. [Signature]*
Commanding Officer
NOAA Ship PEIRCE S-328
SUBJECT: Request for Verified Hourly Heights of Tides

Please provide hourly heights of tide and the value of MLIW on the tide staff for the period of hydrography on H-9919, H-9948, H-9959, H-9972, H-9978 OPR-D103. The actual times of hydrography for all surveys were submitted each month with the tide package.

Period of Hydrography: 13 June 1981 (JD 164) thru 6 November 1981 (JD 310)

Control Station: Hampton Roads, Virginia (# 863-8610)

Please forward the requested information directly to the Atlantic Marine Center, Attention: CAM 33.

Attachment: Progress Sketch

cc: CAM 1
CAM 3



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tradition of service to the Nation