

## UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL OCEAN SERVICE Silver Spring, Maryland 20910

## TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: January 20, 1999

HYDROGRAPHIC BRANCH: Atlantic

HYDROGRAPHIC PROJECT: OPR-F344-WH

HYDROGRAPHIC SHEET: H-10824

LOCALITY: North Carolina, Atlantic Ocean Approaches

To Morehead City

TIME PERIOD: July 9, 1998 - November 14, 1998

TIDE STATION USED: 865-6590 Atlantic Beach, Triple "S" Pier, NC

Lat. 34° 41.9′N Lon. 76° 42.7′W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.207 meters

TIDE STATION USED: 865-6483 Duke Marine Lab, Beaufort Inlet, NC Lat. 34° 43.2'N Lon. 76° 40.2'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.966 meters

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: SEC85 & SEC89.

Refer to attachments for zoning information.

- Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time.
- Note 2: Use tide data from the appropriate station with applicable zoning correctors for each zone according to the order in which they are listed in the Tidezone corrector files. For example, tide station one (TS1) would be the first choice for an applicable zone followed by TS2, etc. when data are not available.
- Note 3: Atlantic Beach, Triple "S" Pier (865-6590) is the preferred tide data set for hydrography offshore, Atlantic Ocean Approaches to Morehead City. Unfortunately, a significant portion of the collected data was declared invalid do to unresolved gauge problems. Data collected at this station starting October 28, 1998 are valid based on data analyses. However, due

to pier construction, vertical stability verification through SOP differential leveling could not be conducted either at the maintenance activity or at the end of data collection for this project. As a result, uncertainty still exists, however, the accuracy is within the requirement for NOS hydrographic surveying operations. Therefore data from the Atlantic Beach station (TS1) should be used when available. The second choice station for this project is Duke Marine Lab 865-6483 (TS2).

> Romas N. Mero 1/21/99 CHIEF, REQUIREMENTS AND ENGINEERING BRANCH

Final tide zone node point locations for OPR-F344-WH-98, Sheet H-10824.

Format:

Longitude in decimal degrees (negative value denotes Longitude West),

Latitude in decimal degrees
Tide Station (in recommended order of use)
Average Time Correction (in minutes)

Range Correction

	Tide Station Order	AVG Time Correction	Range Correction
Zone SEC85			
-76.553316 34.614162	865-6590	0	0.94
-76.730339 34.560916	865-6483	-54	1.15
-76.89935 34.493201			
-76.957503 34.446746			
-76.787701 34.404771 -76.661971 34.488685			
-76.51971 34.466665 -76.519049 34.565107			
-76.53576 34.589439			
-76.553316 34.614162			
Zone SEC89			
-76.904675 34.214612		- <b>6</b>	0.89
-76.787701 34.404771	865-6483	<del>-</del> 54	1.09
-76.661971 34.488685			
-76.519049 34.565107 -76.462032 34.463201			
-76.577014 34.004327			
-76.679059 33.522125			
-77.080586 33.551796			
-76.982673 33.959035			
-76.904675 34.214612			