



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Silver Spring, Maryland 20910

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE:** January 21, 1999

**HYDROGRAPHIC BRANCH:** Atlantic

**HYDROGRAPHIC PROJECT:** OPR-F344-WH  
**HYDROGRAPHIC SHEET:** H-10825

**LOCALITY:** North Carolina, Atlantic Ocean Approaches  
To Morehead City

**TIME PERIOD:** July 12, 1998 - September 16, 1998

**TIDE STATION USED:** 865-6590 Atlantic Beach, Triple "S" Pier, NC  
Lat.  $34^{\circ} 41.9'N$  Lon.  $76^{\circ} 42.7'W$   
**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.  $34^{\circ} 43.2'N$  Lon.  $76^{\circ} 40.2'W$   
**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 & SEC86.

Refer to attachments for zoning information.

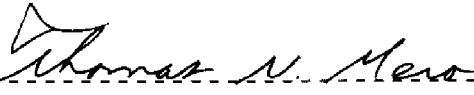
**Note 1:** Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time.

**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).

 1/21/99  
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CHIEF, REQUIREMENTS AND ENGINEERING BRANCH

Final tide zone node point locations for OPR-F344-WH-98,  
Sheet H-10825.

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			
-76.519049	34.565107			
-76.53576	34.589439			
-76.553316	34.614162			
Zone SEC86				
-76.553316	34.614162	865-6590	0	1.00
-76.54751	34.649844	865-6483	-54	1.22
-76.657373	34.688497			
-76.695358	34.696226			
-76.790541	34.698624			
-76.900257	34.685349			
-77.16484	34.496165			
-76.957503	34.446746			
-76.89935	34.493201			
-76.730339	34.560916			
-76.553316	34.614162			