

## C. HORIZONTAL AND VERTICAL CONTROL

NOAA tide station 8557380 Lewes, DE was the source of verified water level heights for determining correctors to soundings. The primary means for analyzing the adequacy of zoning was observing zone boundary crossings in the navigated swath editor, SAIC's **Multi View Editor (MVE)**. In addition, the sun illuminated coverage plots were examined on screen for adequacy of zoning. Crossline comparisons were used to analyze zoning for the influence of wind and weather. The water level zoning parameters provided by NOS, Table C-1, were adequate for application of the observed verified water levels.

Table C-1. Water Level Zoning Parameters Applied on Sheet H11554

Zone	Time Corrector (minutes)	Range Ratio	Reference Station
SA24	-78	0.86	8557380
SA26	-72	0.91	8557380
SA26a	-72	0.86	8557380

The survey data for sheet H11554 were collected in horizontal datum NAD-83, using the UTM Zone 18 projection. The following equipment was used for positioning on the *M/V Atlantic Surveyor*:

- TSS POS/MV, Serial Number 314
- Trimble 7400 DSi GPS Receiver, Serial Number 3815A22469

Differential correctors used for H11554 online data were from the U.S. Coast Guard Stations at Moriches, NY, Reedy Point, DE, Annapolis, MD and Sandy Hook, NJ. The differential receiver was set to only receive data from these four corrector stations; however the POS/MV reported that it used additional stations during online data collection. Station 256 (Chico, CA), or erroneous station identification codes were reportedly used by the POS/MV for a total of 8 seconds of online data collection. SAIC believes that the POS/MV incorrectly reported the station identification it was using for correctors and was indeed using one of the four assigned stations. This behavior has been previously observed in the POS/MV system.

Please refer to the Horizontal and Vertical Control Report SAIC Doc 06-TR-018 for detailed descriptions of the procedures and systems used to attain hydrographic positioning which will be delivered with the H11555 (Sheet B) Descriptive Report.