

### **C. HORIZONTAL AND VERTICAL CONTROL**

A subordinate tide station (8761529 Martello Castle, LA) was installed by John Oswald and Associates and Lowe Engineers, under sub-contract to SAIC. Analysis of water levels obtained from tide station 8761529 and NOAA tide station 8747437 Bay

Waveland Yacht Club, MS were performed to determine final water level zoning parameters. Zone boundaries were provided by NOAA. Tide station 8761529 was the source of verified water level heights for corrections to soundings.

The primary means for analyzing the adequacy of zoning was to conduct a zone to zone analysis. In addition, adequacy of zoning was verified by observing zone boundary crossings in the navigated swath editor, SAIC's **MultiView Editor (MVE)**, and examination of the sun illuminated coverage plots at zone boundaries. Crossline comparisons were used to analyze zoning for the influence of wind and weather. Table C-1 presents the water level zoning parameters for H11612 that were developed based on comparisons to NOAA tide station 8747437 and a zone to zone analysis.

**Table C-1. Water Level Zoning Parameters Applied on Sheet H11612**

<b>Zone</b>	<b>Time Corrector (hours:minutes)</b>	<b>Range Ratio</b>	<b>Reference Station</b>
CGM81	-2:36	1.131	8761529
CGM82	-2:18	1.118	8761529
CGM83	-2:06	1.105	8761529
CGM84	-1:54	1.092	8761529
CGM85	-1:35	1.079	8761529
CGM86	-1:18	1.065	8761529
CGM87	-1:06	1.052	8761529
CGM88	-0:48	1.039	8761529
CGM89	-0:30	1.026	8761529
CGM90	-0:12	1.013	8761529

The survey data for sheet H11612 were collected in horizontal datum NAD-83, using geodetic coordinates, while data display and products used the UTM Zone 16 projection. The equipment used for positioning on the *F/V Lacey Marie* and the *M/V Thomas R. Dowell* are listed in Table C-2.