C. VERTICAL AND HORIZONTAL CONTROL

The Instruments used for determining corrections for the speed of sound through the water column were an ODOM Digibar and a Seabird-Seacat Velocity Profiler. SVP casts are downloaded and processed in the Velociwin program supplied by the Hydrographic Systems and Technology Program (HSTP). Corrections were applied to the sounding plot using the Caris HIPS.

Field soundings are corrected by verified tides data from NOAA/CO-OPS, as per
WATER LEVEL INSTRUCTIONS
OPR-G347-NRT2-2008 Charleston, SC
(2/04/2008 MC)

This is a TCARI controlled project.

Pertinent water level data were provided via email data transmissions through TIDEBOT, to the Field unit. Water level data requested and used were both 6 min Preliminary; and Verified for final data submission. Observed tides were used until Verified tide were received, then all data had "Verified" tides applied prior to submission.

The operating water level station at Charleston, SC (8665530) provided water level reducers for this project, during all periods of hydrography.

Tidal Constituent and Residual Interpolation (TCARI) method uses harmonic constituents and residuals from historical and operating water level stations to provide precise water level correction for bathymetric surveys.

For hydrography in the area of Charleston, SC the TCARI grid "G347NRT22008-TCARI.tc" supplied in conjunction with the water level data from Section 1.3.4 to produce a seamless tide correction, was used as the source file. Refer to the TCARI Field SOP for detailed TCARI instructions. A copy of the *.tc file and all *.dat water level files is included with each survey, and can be found in the appropriate survey folder (O:\H11861_Support_Data\OPR-G347-NRT2-08\H11861\Descriptive Report\Appendices\IV. Tide_&_Water_Levels\Request_For_Tides\H11861_Verified.tc). *Concur*