G2. Tide Corrections

The operating station at Pensacola, FL. was the reference station used when determining predicted tides for various sites within the project area. In HDAPS software, predicted tidal correctors were able to be applied to the on-line sounding data compiled throughout the project. Tidal zone correctors were applied to the predicted tides at Pensacola, FL, to compute the least depths over obstructions. The HDAPS software version used on this project does not apply tide correctors properly durring leap years. Due to a fault in the TIDES portion of the software the program applies tide correctors from the previous day in on-line and post processing plotting. The Mississippi Coast has a small tidal range on the order of 2 feet. High tide occurs approximately one hour later each day. By plotting soundings with the previous days tide data the depths will be in error on the order of .5 feet. This problem with the HDAPS software was discovered upon the RUDEs return to AMC after all depth plot data had been processed. For the purposes of this survey the sounding plots are adequate for comparison to prior surveys. Smooth tides data should be applied to all least depths taken on wrecks and obstructions durXing the course of this survey.

The Tidal Zone Correctors as specified in the Project Instructions are as follows:

Hydrographic Area	Time Corr <u>High Water</u>	-ection Low Water	<u>Height Ratio</u>
ZONE A East of Longitude 88° 28.0' —	-1 hr 15 min		
ZONE B West of longitude / 88 28.0'to 88 45.0'	-1 hr 00 min	-0 hr 45 min	× 1.22

ZONE C / West of Longitude / $-\emptyset$ hr 45 min $-\emptyset$ hr 30 min \times 1.30 \times 1.30 \times 45.0 \times 45

The following list shows which tide table was used to plot data of each individual AWOIS item. In several cases the search area would over lap two tide zones. In these cases the zone containing the greatest amount of the search area was used for data acquisition and plotting. Note; some AWOIS items will use more than one tide table as the current HDAPS software allows only 71 lines of data entry per table.

HDAPS TIDE TABLE NUMBER / Zone	DOY FROM-TO	APPLICATION AWOIS ITEM / DOY
1 / B	99-125	4756 / 104, 105, 106 4752 / 118, 119, 120, 123
2 / C	115-141	5853 / 124 5852 / 125 2808 / 125, 127, 131, 132, 133, 134, 138, 139, 140, 141
5 / C	144-171	2808 / 146