

## 8. TIDE CORRECTORS

Predicted tide correctors were applied off-line by HDAPS to all soundings that were acquired with the DE-719 echo sounder. All echo sounding data plotted on the final field sheets were plotted with predicted tide correctors.

During the course of the survey, prevailing northerly winds resulted in much lower water levels than normal. The low water effects were most noticeable at the northern ends of Boggy and Rocky Bayou where mud flats became extremely visible. Sand bars and mud flats on the eastern and western edges of the survey area along the shoreline were also prominent with northerly winds. To delineate the shoal depths, the sounding vessels ran 50-meter splits (buffer lines) on the inshore areas with prevailing southerly winds. Consequently, with predicted tides applied to the sounding data, the contour lines drawn on the sounding and smooth plots near the shoreline areas resembled a sawtooth configuration. It is suspected that smooth tides applied to the sounding data will result in smooth contours near the shoreline. The tidal datum for this project was mean lower low water.\* The operating tide station at Pensacola, Florida (872-9840), served

\*Application of smooth tides rectified irregular curve situation.

as the control for datum determination for all subordinate stations. Additional control for datum determination was provided by the operating tide station at Destin, East Pass. Two additional tide stations, Big Hammock Point and Valparaiso, Boggy Bayou, were installed and monitored from 4 hours before to 4 hours after completion of the survey. The datum determination for predicted tides in the 1989 Tide Table is mean low water instead of mean lower low water.

On day 097, the Destin, East Pass tide gage was knocked off the tide well onto the dock by a pleasure craft. The tide staff was also slightly disturbed. The gage was repositioned on the tide well and appeared to be operating properly. Closing levels may show a difference in elevation from opening levels as a result of the tide staff being displaced. Smooth tides were requested from Chief, Sea and Lake Levels Branch, N/OMA12, in a letter dated April 12, 1989.