

## 62. Tide Corrections

The tidal datum for this project is mean lower low water. The operating tide station at Bridgeport, Connecticut (846-7150) will serve as control for datum determination. This station was also used for predicted tides. No tide stations were established by the HECK in support of this survey.

All hydrographic and diver determined depths have been corrected for predicted tides. The tidal values were taken from Tide Tables 1989 High and Low Water Predictions, East Coast of North and South America. Correctors for time and height were taken from the nearest tabulated geographic position on Long Island Sound.

Tidal correctors were applied online by entering the appropriate values into the HDAPS predicted tide tables. Nine predicted tide tables were used. These tables are included in APPENDIX I.F, HDAPS PREDICTED TIDES TABLES.\*

Contours plotted on the final depth plots for HE-10-2-89 (AWOIS item 6931) indicate inaccuracy of predicted tides of approximately two feet. Clearly defined shifts in the contours correspond directly with changes in dates of hydrography. Another problem exists on sheet HE-10-4-89 (AWOIS item 6932); disagreement between mainscheme and crossline soundings of up to four feet was not resolved. A careful analysis of all HDAPS tables and procedures was made and no errors were found. HECK believes that this problem was caused by strong along-sound winds which served to either augment or diminish the tide and that the application of approved tides will resolve the problem.\*\*

\*DATA REMOVED FROM DESCRIPTIVE REPORT AND FILED WITH FIELD DATA.  
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\*\*SEE ALSO SECTION 3.D. OF THE EVALUATION REPORT.

A Request for Approved Tides was mailed to Chief, Sea and Water Levels Branch, on June 23, 1989. A copy of this letter is enclosed in Appendix I.G.\*