

## 62. Tide Corrections

The tidal datum for this project is mean lower low water. The operating tide station at Sandy Hook, NJ 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. Verification Third-order levels were conducted at the tide station on June 28, 1989 (DOY 179) and at the end of the project on August 31, 1989 (DOY 243).

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 project instructions.

Tidal correctors were applied online by entering the appropriate values into the HDAPS predicted tide tables. Three predicted tide tables were used. These tables are included in APPENDIX I.D., HDAPS PREDICTED TIDES TABLES.\* APPROVED TIDES WERE APPLIED DURING OFFICE PROCESSING.

Hydrography collected during area surveys for contacts 13 and 21 on DOYs 226, 227 and 229 exhibited depth discrepancies of as much as 6 feet when smooth plotted. HECK believed that variation from normal predicted tides caused the discrepancies. Conversation with personnel at Coast Guard Station / Shark River, Belmar, New Jersey, revealed that greater than average tidal ranges were experienced during this period. The HECK believes that application of approved tides will resolve the discrepancies.

A Request for Approved Tides was mailed to Chief, Sea and Water Levels Branch, on September 30, 1989. A copy of this letter is enclosed in Appendix I.E.\*