C. HORIZONTAL AND VERTICAL CONTROL

A complete description of horizontal and vertical control for survey H11496 can be found in the *OPR-P158-FA-05 Horizontal and Vertical Control Report*,[9] submitted under separate cover. A summary of horizontal and vertical control for this survey follows.

Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning, with differential corrections received from the U.S. Coast Guard beacons at Potato Point (298 kHz) and Hinchinbrook (292 kHz).

Vertical Control

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) primary tide station at Cordova, AK (945-4050) served as control for datum determination and as the primary source for water level reducers for survey H11496.

A request for delivery of approved water level data (smooth tides) for survey H11496 was forwarded to N/OPS1 on September 30, 2005 in accordance with the *Preliminary Field Procedures Manual v1.1*, dated March 2005 (FPM). A copy of the request is included in Appendix III.

Verified water level data (smooth tides) were received by the FAIRWEATHER on November 10, 2005 for NWLON primary tide station at Cordova, AK (945-4050). As per the letter instructions, all data were reduced to MLLW using the smooth tides, by applying tide file 9454050.tid and time and height correctors through the zone corrector file P158FA2005CORP.zdf. FAIRWEATHER received the Tide Note for Hydrographic Survey H11496 on November 3, 2005, which states that preliminary zoning is accepted as the final zoning for the project. A copy of the Tide Note is included in Appendix IV. It will not be necessary for the Pacific Hydrographic Branch to reapply the verified water level data (smooth tides) to the survey data during final processing.