H13403 NOAA Ship Rainier

C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

ERS Datum Transformation

The following ellipsoid-to-chart vertical datum transformation was used:

Method	Ellipsoid to Chart Datum Separation File
ERS via VDATUM	OPR-O351-FA-20_VDatum_100m_NAD83(2011)- MLLW_XGEOID16B.csar OPR-O351-FA-20_VDatum_100m_NAD83(2011)- MHW_XGEOID16B.csar

Table 12: ERS method and SEP file

All submitted H13403 MBES data were reduced to chart datum (MLLW) using ERS via VDATUM processing methods.

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD 83).

The projection used for this project is Universal Transverse Mercator (UTM) Zone 8.

The following PPK methods were used for horizontal control:

• RTX

WAAS

The Wide Area Augmentation System (WAAS) was used for real-time horizontal control during data acquisition.