

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	EC_Apalachicola_xyNAD83-MLLW_geoid12b.csar

Table 11: ERS method and SEP file

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 16.

PPP

All positioning and attitude data associated with OPR-J359-KR-19 was post-processed in POSpac MMS using PP-RTX methods. For further discussion, reference the HVCR and or DAPR submitted with this report.

D. Results and Recommendations

D.1 Chart Comparison

A chart comparison was conducted using the Triangle Rule script within the Chart Review Tool of Pydro QC Tools. A combined s57 file of charted soundings extracted from ENC's listed in the project instructions and an s57 file of surveyed soundings were compared with the following results (Figure 16):

Survey H13282 surveyed soundings show significant variance to charted soundings due to shifting sandwave crests (Figure 17). The most significant shoaling occurs within a one-half linear nautical mile radius of 29-20-13N 085-02-53W, with some surveyed depths shoal to charted depths by up to 15ft (Figure 18).