UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Marine and Aviation Operations
NOAA Ship FAIRWEATHER S-220
1010 Stedman Street
Ketchikan, AK 99901

August 29, 2011

MEMORANDUM FOR: Jeffrey Ferguson
Chief, Hydrographic Survey Branch

FROM: CAPT David O. Neander, NOAA
Commanding Officer
2011.08.30 09:20:08 -08'00'

TITLE: OPR-N395-FA-11 VDatum Evaluation and Deliverable Recommendation

Fairweather personnel conducted a comparison of VDatum ERS versus discrete tidal zoning vertical transformation techniques using crossline data per the Hydrographic Survey Project Instructions (PI). Results and analysis of the comparison are in the attached report.

Based on the comparison results, *Fairweather* personnel recommend proceeding with data reduction utilizing the VDatum ERS vertical transformation technique as per Appendix 1.2 Final Deliverables of the PI.

While VDatum reduction is a novel technique and the *Fairweather* has modified naming conventions for surfaces referenced to the NAD83 ellipsoid with this technique in the past, *Fairweather* personnel do not believe it to be necessary in this case. Since all deliverable products will be referenced to MLLW as per standard convention, the *Fairweather* will not include any indication of the alternate technique in the naming of surfaces.

Attachment