




UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Coast Survey
Silver Spring, Maryland 20910-3282

February 25, 2013

MEMORANDUM FOR: CDR Larry Krepp, NOAA
Commanding Officer. NOAA Shin *Thomas Jefferson*

FROM: Jeffrey Ferguson 
Chief, Hydrographic Surveys Division

SUBJECT: Vertical Datum Transformation Technique,
OPR-B370-TJ-12, Long Island Sound, NY

Hydrographic surveys H12479 & H12481 are approved for vertical reduction to chart datum, Mean Lower Low Water (MLLW), using the NOAA Vertical Datum Transformation (VDatum) (<http://vdatum.noaa.gov>) derived separation (SEP) model provided on the project CD/DVD.

Approval of VDatum, in lieu of the NOAA Center for Operational Oceanographic Products and Services (CO-OPS) TCARI package as per the Project Instructions, is based on your recommendation and the review of comparison results you included in your memos from December 3, 2012, Subject "H12479 Interim Deliverables" & "H12481 Interim Deliverables".

The results of the data analysis show that ellipsoidally referenced survey (ERS) techniques with VDatum used as the vertical datum reducer to MLLW in this area indicate a better internal consistency of the survey data and produces final sounding values that meet or exceed horizontal and vertical specifications for hydrographic surveys.

The comparison techniques are in line with the procedures that were developed and approved as part of the CSDL Ellipsoidally Referenced Survey (ERS) project. These procedures and deliverables were added to the April 2012 edition of the NOS Hydrographic Surveys Specifications and Deliverables Manual and Field Procedures Manual documents.

You shall include a description of your ERS processing procedures and the comparisons you conducted between ERS and traditional tides in the appropriate Descriptive Report (DR), Horizontal and Vertical Control Report and/or Data Acquisition and Processing Report.

This memo and your memo, shall be included in the supplemental correspondence Appendix of the DR.

