

Title: Transitioning from Paper to Digital Survey Products

Author(s): James Guilford, Hydrographer, Tenix LADS, Inc.; Castle E. Parker, Hydrographer, NOAA

Address: Tenix LADS, Inc.  
925 Tommy Monroe Drive  
Suite J  
Biloxi, MS, 39532

Earlier this year Tenix LADS, Inc. was selected to supply lidar hydrographic surveying services for NOAA for the 2007 to 2009 survey seasons. Under the current "Lidar Anywhere" contract for the 2006 survey season, final products delivered to NOAA are completely digital using a combination of the BAG format and the S-57 exchange standard for encapsulating survey data. This is a marked departure from previous surveys where the official, legal record was a smooth sheet typically portraying lidar derived coastline, soundings and depth curves plotted on mylar.

The S-57 deliverable is an advanced product compared to the traditional mylar plot. Significantly more information can be stored beyond the traditional x, y, z data and made available to the end user. Less cartographic intervention will be necessary than with the traditional smooth sheets. Incorporating an S-57 file from a survey into an existing ENC will be more efficient than working with the previously delivered mylar sheets as the data delivered from the survey will already be in S-57 format.

By having the ability to store additional information about the survey in the digital S-57 file product itself, less information will need to be documented in reports. Boat crews will have all the information necessary to carry out more productive shoreline verification and junctioning in the digital S-57 format, rather than individual paper plots or partial digital data sets for each investigation.

The implementation of the new NOAA specifications and deliverables has created new challenges in production and integration for both the contractor and client respectively. However, even with an adjustment to new software and workflow procedures, gains in production efficiency have been made. The final product delivered to NOAA will be more user friendly for the boat crews that typically junction to the lidar survey.