## Maximizing NOAA's Ship Productivity Through the Use of Airborne Laser Hydrography

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Key words: Airborne, Hydrography, LIDAR, Laser, NOAA.

## ABSTRACT

The National Oceanic Atmospheric Administration (NOAA) is responsible for surveying over 3.4 million miles of the United States Exclusive Economic Zone. With only three in house hydrographic survey vessels, NOAA has had to incorporate the use of Airborne Laser Hydrography (ALH) to maximize annual survey production. ALH has developed over the past twenty-five years into a reliable, cost effective method for augmenting ship hydrography. With an understanding of the limitations of an ALH system, the hydrographer can utilize an ALH survey to determine the need, line spacing, and with what frequency the ship hydrographic surveys will be conducted.

NOAA has utilized an ALH system to conduct a variety of hydrographic surveys including post storm assessment in Florida, remote area assessment at Midway Island, and near-shore hydrography and reconnaissance in Alaska. The results from these surveys have reduced the need for the time consuming launch based survey and even prevented the need to deploy a vessel at all.

Ship hydrography will not be replaced by present technology ALH systems, the two methods of conducting hydrographic surveys will be an integral part of future NOAA surveys.

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