

Rapid Fielding of Capability to the Fleet: Guest Editor's Introduction

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ABSTRACT

With a focus on critical contributions to critical challenges and striving to create defining innovations, staff members at the Johns Hopkins University Applied Physics Laboratory (APL) often harken back to the Laboratory's legacy in developing and fielding the prototype and global navigation satellites (TRANSIT), as well as its role in developing and fielding the nation's first sea-based strategic deterrent (Polaris). These efforts required the staff to seek out and understand the needs of the warfighter, often as active participants in platform-based installations, field tests, and training exercises. These exciting projects resulted in delivery of unprecedented capabilities to U.S. forces while also attracting the best and the brightest to APL. In the spirit of this legacy, APL's Force Projection Sector has focused this issue of the Johns Hopkins APL Technical Digest on rapid fielding of capability to the Fleet. The articles in this issue represent all three of the sector's mission areas—Strategic Deterrence, Sea Control, and Precision Strike—and give some insight into the breadth and depth of the work we do to put capabilities in the hands of the warfighter, ranging from developing analysis and training tools to deploying prototype systems on Navy platforms.

tational increases associated with Moore's law with real SSBN-based subscale testing to move away from empirically based computational fluid dynamics codes to physics-based models that will replace large-scale underwater launch tests with predictive underwater launch

