



NATIONAL SECURITY SPACE

The APL Space Department was formed to implement Frank T. McClure's vision for a Doppler-based satellite navigation system that would enable the United States' fleet of ballistic missile submarines to know exactly where they were at any given time. APL's much-publicized role in NASA-sponsored space exploration grew out of a very practical need to better understand the space environment in implementing national security-oriented space missions.

APL has continued to support national security via space-based development throughout the 50 years that the Space Department has existed. APL conducted many national security-motivated space missions, such as GEOSAT and Polar BEAR; in fact, APL's largest spacecraft to date was the Midcourse Space Experiment (MSX). Through the Delta-180 series of missions, APL conducted proofs of concept that ballistic missile defense systems were technologically feasible.

APL also developed technology critical to enabling national security space missions conducted directly by the government, such as the ultrastable oscillators that provide time and frequency references for many government satellites. More recently, APL has employed remote sensing and analysis capabilities to provide operational products to the Department of Defense. Current emphasis is on supporting the government through space-based enhancement of terrestrial operations, building space situational awareness, and enhancing the security of national space assets.