The Unmanned Combat Aerial Vehicle - Navy (UCAV-N) is an aircraft carrier-based, signature-controlled aircraft with an airborne endurance goal of 12 hours. It is intended to perform three missions: penetrating surveillance/reconnaissance, strike, and suppression of enemy air defense.

The Defense Advanced Research Projects Agency (DARPA) and the Office of Naval Research (ONR) lead the UCAV-N Advanced Technology Program that has been active since February 2000. The goal of the program is to demonstrate that a carrier-based, survivable, multi-mission platform is technically feasible and to develop technology capable of transitioning to the Navy’s UCAV-N acquisition program.

Two contractor teams have been funded to participate in the program: Boeing and Northrop Grumman Corporation (NGC). The science and technology (S&T) program has two phases. Phase I ended in March 2002. Both contractors developed an Operational System Concept (OSC) and entered Phase IIA to further refine their OSCs. Presently, there is sufficient funding for only one contractor to enter Phase IIB where a system will demonstrate carrier landings/takeoffs from a shore based test facility. The Phase IIB system is intended to be a technology demonstrator, not an operational prototype suitable for direct entry into system development and demonstration.

Currently, the Navy intends to stand up an acquisition program and obtain a Milestone A decision in FY04, leading to an initial operational capability in 2015. Full and open competition is anticipated for the System Design Study (Concept Exploration) phase with sufficient funding requested for participation of three contractor teams. No additional funding has been requested to “catch-up” competitors other than Boeing and NGC in the existing DARPA/ONR Advanced Technology Program.

TEST & EVALUATION ACTIVITY
Presently no UCAV-N vehicle exists. NGC produced a UCAV-N related “flying demonstrator” – Pegasus X-47A – that conducted taxi tests in September 2002 with plans for a high speed taxi tests in December 2002 and a possible flight in 2003. NGC provided 90 percent of the funding necessary to produce the Pegasus X-47A with the Navy or DARPA providing the remaining 10 percent.

TEST & EVALUATION ASSESSMENT
Funding and joint coordination were the primary constraints to UCAV-N development during CY02. The Navy has taken steps to significantly increase funds in FY06 in order to meet requirements for Milestone B in FY07. DOT&E concurs with the assessment by Navy acquisition authorities that additional S&T funding is required to ensure that UCAV-N has a robust demonstration program that sustains competition in preparation for the acquisition program.

Funding and joint coordination were the primary constraints to Unmanned Combat Aerial Vehicle-Navy development during CY02.