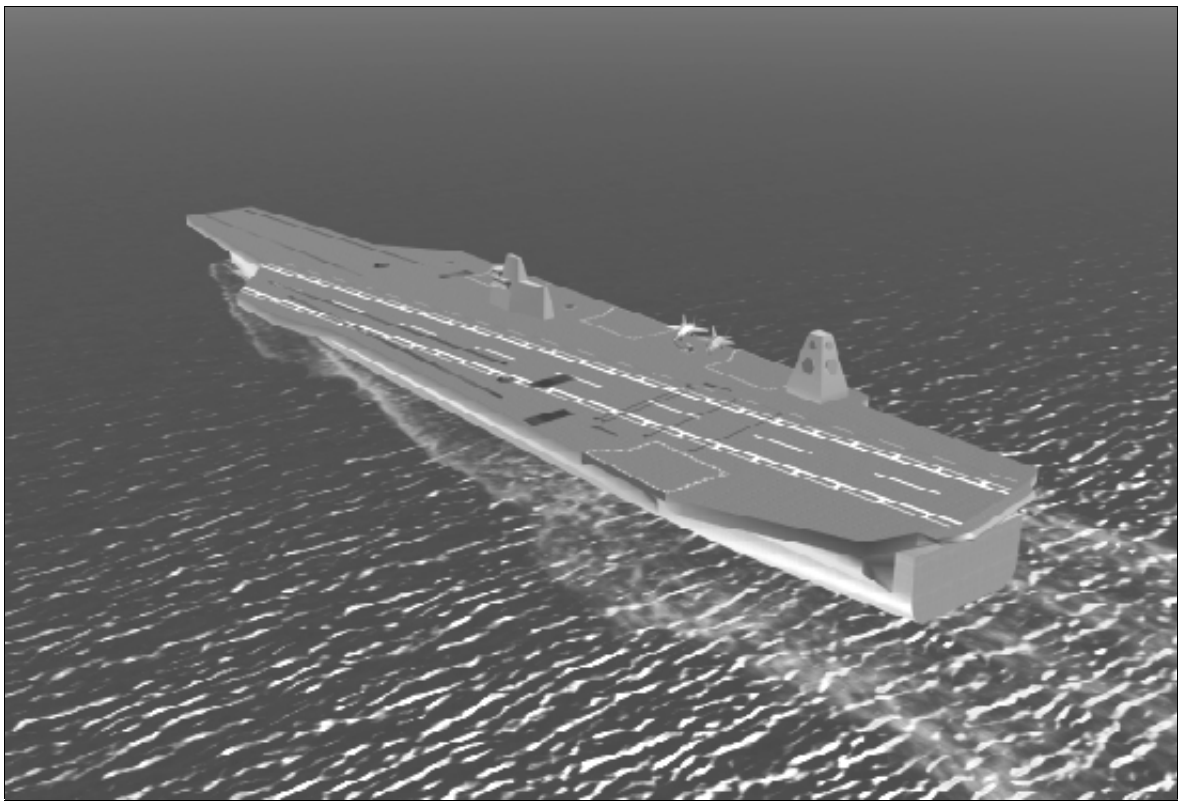
CVNX



Navy ACAT ID Program		**Prime Contractor**
Total Number of Systems:	N/A	TBD
Total Program Cost (TY$):	N/A	
Average Unit Cost (TY$):	N/A	
Full-rate production:	N/A	

SYSTEM DESCRIPTION & CONTRIBUTION TO JOINT VISION 2010

CVNX will be the new design for the aircraft carrier replacing the existing Nimitz class (CVN 68) in 2013. With an expected 50-year life cycle, the first ship in this new aircraft carrier class will be a part of the fleet until 2063. As a new generation aircraft carrier, CVNX will play a pivotal role in achieving the ***Joint Vision 2010*** concept of ***dominant maneuver.*** The embarked air wing of the next century will be a key system of ***precision engagement*** in the strategies of the future.

BACKGROUND INFORMATION

Many possible designs of CVNX, formerly CV(X), are included in an ongoing Analysis of Alternatives (AOA) with trade studies including factors such as ship size, speed, sustainability, and survivability. The design effort for CVNX started with a "clean sheet". Reduced life cycle cost of CVNX, compared to the Nimitz class carrier, has been from the outset and remains a primary CVNX

program goal. Part 1 of the AOA, concluded in 1997, focused on the size of the air wing intended for the ship with the nominal size options being 40, 60, or 80 plane air wings. Part 2 of the AOA concluded in October 1998; Part 3 in January 2000; and the Milestone I decision is scheduled for April 2000.

TEST & EVALUATION ACTIVITY

The AOA continued this year, albeit with a change in strategy, as a result of the Navy decision to pursue an evolutionary design strategy rather than a "clean sheet-of-paper" approach. There was no dedicated test and evaluation activity, although there were vulnerability assessments of design alternatives. DOT&E continued its involvement as a member of the AOA Oversight Group and anticipates that the AOA-related vulnerability assessments will provide useful information to formulate the scope of surrogate testing for CVNX LFT&E. In May 1999, the LFT&E activity began to intensify when the Test and Evaluation Working Integrated Process Team began meeting. DOT&E and the Navy began discussing the LFT&E strategy in July 1999. As part of the process, the Navy briefed DOT&E on various aspects of their proposed LFT&E program, including expected threat information.

TEST & EVALUATION ASSESSMENT

Early OT&E and LFT&E involvement in this long-range program will prove vital in establishing credible Measures of Effectiveness and Measures of Performance in facilitating realistic and meaningful OT&E and LFT&E. Early test planning efforts should also lead to investment in adequate modeling and simulation to support future OT&E and LFT&E.

The DAB recommended an evolutionary nuclear propulsion design based on a Nimitz Class hull form and a 75 aircraft air wing. An Acquisition Decision Memorandum signed in October 1998, confirmed an evolutionary acquisition strategy in which the first ship of the class will have a new propulsion plant and electrical generation and distribution system in a NIMITZ Class hull. This hull affords little opportunity to make substantial survivability improvements, which must wait until the second ship of the class. DOT&E is pursuing a LFT&E strategy that would assure early involvement by live fire test, including vulnerability testing of decommissioned ships and land-based surrogates. Since the first ship of the class will use a NIMITZ hull, DOT&E believes that it is critical to conduct an assessment of the NIMITZ Class known vulnerabilities prior to Milestone I to minimize the vulnerabilities of CVNX.

DOT&E continues its proactive approach to understanding performance drivers for mission effectiveness, survivability, and support of the operational test structure.