

DoD Adapts Off-the-Shelf Technology

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WASHINGTON — Mix a little new commercial technology into an existing weapon system and the result could be military equipment that's more efficient and less costly to operate.

DoD and corporate America are adapting off-the-shelf technology to improve military planes, helicopters, and other weapon systems. DoD's Commercial Operations and Support Savings Initiative, or COSSI, provides seed money so civilian industry can insert technology into what are known as "legacy" systems.

The DoD initiative leverages private-sector research and development to reduce operations and support costs, according to Rich Mirsky, who heads COSSI at DoD's defense research and engineering office here. The program also promotes civil and military integration and supports acquisition reform, he said.

COSSI is a two-stage process. First, DoD funds the nonrecurring engineering, testing, and qualification needed to adapt a commercial item for military use. Then, selected contractors develop, manufacture, and deliver prototypes to military customers for installation into fielded DoD systems.

Since 1997, DoD has invested about \$160 million on nearly 60 projects while more than 100 private industry contractors invested \$117 million. Defense officials estimate the projects will result in \$4 billion in operation and support cost savings over a 12-year period.

One project, for example, involves adapting a commercial health and usage monitoring system for use in military helicopters. Mirsky said the adapted system would help identify problems quicker and reduce flight tests. The system will create a database by collecting information automatically. It will also

allow maintenance personnel to replace parts based on condition rather than time in service, he noted.

Another project involves adapting propellers on Navy P-3 aircraft to switch to an electronic system from an electromechanical one. Propeller maintenance costs are expected to drop from over \$20 per flight to less than \$4 per flight.

Defense officials also are working on adapting the flight computer used on the Sikorsky S-92 commuter helicopter for use in the military's UH-60. "Your maintenance costs go way down," Mirsky said. "Your reliability goes way up. It weighs less and uses less power."

New communications systems components for C-17 transports, processors, and software for F/A-18C/D fighters, electronic display units for F-16 fighters, and other projects will reduce parts obsolescence as well as spare parts and software maintenance costs. They will also reduce unnecessary replacements, testing time, and effort, Mirsky said.

He said DoD solicits proposals from contractors, and the Services, then evaluates and ranks the proposals. The fiscal 2001 budget request includes \$51.9 million for the initiative — \$9.9 million for the Army, \$12.5 million for the Navy, \$19.9 million for the Air Force, and \$9.6 million for the Office of the Secretary of Defense.

For more information about COSSI, visit www.acq.osd.mil/es/dut on the Web.

Editor's Note: Kozaryn works for the American Forces Press Service. This information is in the public domain at www.defenselink.mil/news on the World Wide Web.