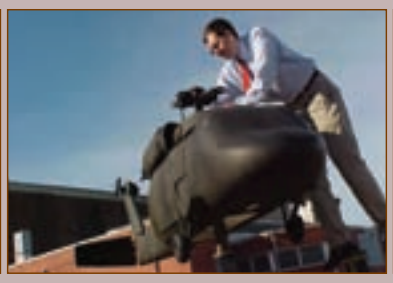
"By being a little bit creative, you can serve the public and save the government money, too."


product and "will give the public something to look at," Mr. Ilse said. "Plus, [it] was expensive, and it would be a shame just to scrap it," he added. Mr. Medeiros agrees and believes that reusing an item for an appreciative audience can have a value that transcends simple economics. He analogized donating the model to donating old computers to a school — students' use of those computers exceeds their value as scrap.

The proposed museum is not yet open to the public and is the subject of ongoing negotiations between the Army, Department of Defense, state of Connecticut and town of Stratford. Current plans are for the proposed museum to undergo renovations, with opening scheduled for Memorial Day 2006.

Navy Capt. Dorothy J. Freer, DCMA Sikorsky commander, praised Mr. Ilse for saving a piece of aviation history. "Sikorsky has built more than 2,500 BLACK HAWKS, and this model laid the groundwork for those aircraft," Capt. Freer said. Mr. Ilse challenges other DCMA employees who see items like this to try to save them: "By being a little bit creative, you can serve the public and save the government money, too."

NESP: A Real Success Story

by Mr. Richard Casey, NESP Support Program Integrator, DCMA St. Petersburg

Who would believe that a major Navy program of such significant importance to the fleet would somehow bypass the engineering development and low-rate initial production phases, then be pushed into production in parallel with developmental testing and still end 13 months ahead of schedule? This is a success story for the Naval Extremely High Frequency Satellite Communication Program known as the NESP.

The NESP communication terminal connects ship, shore and submarine platforms to the MILSTAR (Military Strategic, Tactical & Relay) satellite constellation. For each of these three platforms, there are three different configurations of the NESP terminal with the same basic capabilities but varying peripheral equipment. The environments in which these NESP terminals are used are stressed and require anti-jam and low-probability-of-intercept communication capabilities. By

The NESP communication terminal connects ship, shore and submarine platforms to the MILSTAR satellite constellation.

providing minimum, essential and secure communications, the NESP terminal supports worldwide command and control communications to strategic and tactical Naval forces through all levels of conflict.[1]

Members of the Defense Contract Management Agency (DCMA) and the Space and Naval Warfare Systems Command (SPAWAR) support teams assisted with the program and contributed to the NESP's ultimate success.

The NESP began with a mission to have a "Communication Group Console" (CG) that integrates narrowband[2], wideband[3] and protected[4] communication capabilities in a single console for the U.S. Navy — and after much work, this objective was achieved. The new system is replacing a 1987 system that offers no space for upgrades to meet the present-day communication needs of the Navy. The CG is designed to operate with shipboard and land-based antennas of varying size and is built with commercial off-the-shelf components. The system is functional for surface, ship, submarine and land-based facilities and meets all Navy ship environmental and reliability requirements.

Team members included: Mr. Tom Moschetto, administrative contracting officer, and Mr. Chuck Faass, program integrator, of DCMA Raytheon in Marlboro, Mass.; DCMA St. Petersburg employees on-site at Raytheon in Largo, Fla.: Ms. Michelle Myhree, Joint Communications Systems team leader, Mr. Richard Casey, support program integrator and engineer, Mr. Warren Slack, quality assurance specialist, Mr. John Wicker, industrial specialist, and Ms. Brenda Greene, senior industrial specialist; Mr. John Coucher, customer on-site representative

The new system is replacing a 1987 system that offers no space for upgrades to meet the present-day communication needs of the Navy.

(Above) The *USS Ronald Reagan* (CVN 76) departs her homeport at Naval Air Station North Island in Coronado, Calif., and heads out to open sea on Jan. 4, 2006. The NESP terminal connects communication platforms, such as the one on this Nimitz-class nuclear powered aircraft carrier, to the MILSTAR satellite constellation. (U.S. Navy photo by Photographer's Mate 2nd Class Christopher Brown)

[1] Source: GlobalSecurity.org, "Navy Extremely High Frequency Satellite Communications Program (NESP)" *FYO1 Annual Report,* 17 Jan. 2006, <http://www.globalsecurity.org/military/library/budget/fy2001/dot-e/navy/01nesp.html>.

[2] Narrowband systems provide support to users who need voice or low-data-rate communications and who also may be mobile or otherwise disadvantaged by limited terminal capability, antenna size, environment, etc.

Source: Glen Elfers and Stephen B. Miller, "Future U.S. Military Satellite Communication Systems," *Crosslink,* 3 (2001/2002), 20 Dec. 2005, <http://www.aero.org/publications/crosslink/winter2002/08.html>.

[3] Wideband systems provide high capacity for communications devices.

Source: *ibid.*

[4] Protected systems support anti-jam features, covertness and nuclear survivability.

Source: *ibid.*

For the duration of the March 1998 – September 2005 contract, DCMA team members provided daily reports to the highest levels of program management and made significant efficiency improvements in the test program.

responsible for overall system performance and testing; Mr. Mel Landis, SPAWAR program manager; and Mr. Joe Vital, Naval Undersea Warfare Center program manager. Together, the DCMA St. Petersburg and SPAWAR personnel met daily with the Raytheon production team to review transactions, schedules and problem areas. For the duration of the March 1998 – September 2005 contract, DCMA team members provided daily reports to the highest levels of program management and made significant efficiency improvements in the test program.

Many shortcomings were felt in the beginning months of the program due to formidable production schedule requirements. Test equipment hardware and software had to be developed and put online, test and operational procedures needed to be developed, approved and implemented, and spare parts were not available. Additionally, suppliers were unable to test assemblies and major components dynamically due to the unavailability of environmental test equipment. Thus, the majority of the circuit card assemblies were initially statically tested, which was extremely time and labor-intensive. Compounding the complexity of the testing process was the fact that the prime contractor for the CG follow-on terminal was Raytheon in Marlboro, Mass., but the CG was to be built in Largo, Fla., at a new facility, unfamiliar to engineering management and the NESP production community. The testing process continually improved and became more efficient as the program matured, but not without significant production impacts and design changes along the way.

Other "growing pains" included test failures, redesigns and problems with installation and general operation. Many of the smaller subcontractors, previously acceptable with component and subsystem procurement, fell short of acceptance with the newer technological developments and requirements and had to be replaced.

Despite the numerous challenges, the DCMA and SPAWAR support teams were able to get 228 completed CGs and 269 upgrade units to the Navy ahead of schedule, providing U.S. military personnel with the most up-to-date and reliable communication tools. The Navy is extremely pleased with the CG and has praised the increase in capability the system provides. The NESP could have been a disaster in the making, but it ended triumphantly as a major success story.

(Top) Mr. Richard Casey (left), NESP support program integrator, DCMA St. Petersburg, and customer representative, Navy Capt. John Pope (DCMA staff photo)
(Left) Customer representative, Navy Capt. John Pope, signs the DD250 Material Inspection and Receiving Report. (DCMA staff photo)