

FY 2006: Comparative Testing Office New Projects *
Foreign Comparative Testing (FCT) & Defense Acquisition Challenge (DAC) Programs

Army

<p><u>FCT:</u></p> <ul style="list-style-type: none"> ▪ Aluminum Alloy 5059 for Armor Applications ▪ Area Mine Clearing System ▪ AT-4CS (Confined Space) Enhanced Blast Tandem Warhead ▪ High Frequency Combat Net Radio ▪ Noise Robust Voice Recognition System ▪ Unit of Employment Battle Command 	<p><u>DAC:</u></p> <ul style="list-style-type: none"> ▪ External Aircraft Rescue Hoist for Black Hawk Helicopter ▪ Modular Land Warrior Fuel Cell Power System ▪ Ruggedized Radio Frequency Identification (RFID) Tags with Highly Flexible Antenna ▪ Super-Capacitor Power Source for Gun-Launched Munitions ▪ Topical Paromomycin for the Treatment of Cutaneous Leishmaniasis
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Navy / Marine Corps

<p><u>FCT:</u></p> <ul style="list-style-type: none"> ▪ 30mm Programmable Airburst Munition ▪ Emergency Battery System ▪ Expeditionary Assault Bridge Launcher ▪ Multipurpose Tank Blade System for M1A1 Main Battle Tank ▪ Portable Undersea Training Range 	<p><u>DAC:</u></p> <ul style="list-style-type: none"> ▪ 7.62mm and 9mm Reduced Environmental Hazard Ammunition (REHA) ▪ High Performance Standard Advanced Dewar Assembly (SADA) -Type II ▪ Mine Neutralization by Explosive Ordnance Disposal (EOD) Teams in Very Shallow Water ▪ Titanium Encapsulated Silicon Carbide Skirt Armor ▪ Tactical Remote Sensor Systems Monitoring Station Modernization ▪ Trailer-Mounted Power Generator and Environmental Control Unit
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Air Force

<p><u>FCT:</u></p> <ul style="list-style-type: none"> ▪ Air Flotation Platform ▪ Extended 1553 Databus ▪ MIL-STD-1760 Umbilical and Connector ▪ Void-Sensing Fuze ▪ Weather Analysis and Forecasting System 	<p><u>DAC:</u></p> <ul style="list-style-type: none"> ▪ Improved Infrared Missile Self-Protection F-15 Aircraft ▪ Communications and Networking for a Deployable Internet ▪ Nickel Nanostrand Coating for Improved Lightning Strike Protection ▪ Extended 1553 Databus-Graceful Degradation ▪ Angel Fire
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US Special Operations Command (SOCOM)

<p><u>FCT :</u></p> <ul style="list-style-type: none"> ▪ Amphibious Reconnaissance Insertion Vehicle ▪ Improved Crew-Served Weapons Mount ▪ Improved Limpet Mine ▪ Muzzle Break Sound Suppressor for MK13 Rifle 	<p><u>DAC:</u></p> <ul style="list-style-type: none"> ▪ Specific Emitter Identification Insertion ▪ Green Light Aiming Laser for Special Operations Forces (SOF) Small Arms ▪ Electronic Intelligence (ELINT) Receiver ▪ Covert Eyes 3-Dimensional (3-D) Video Camera ▪ Compact Broadband Remote Antenna (CoBRA) Intelligence & Information Systems Enhancements ▪ Portable Tactical Wireless Broadband Network
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* A brief description of each project is available from the Public Affairs Office (media only), (703) 695-0192; Public Communications (non-media only), (703) 607-5737.

FY 2006: Comparative Testing Office New Projects

ARMY

Foreign Comparative Testing (FCT) Program

Aluminum Alloy 5059 for Armor Applications. The Weapons and Materials Research Directorate at the Army Research Laboratory, Aberdeen, Maryland, is evaluating an improved aluminum alloy, designated AA5059, with enhanced ballistics, weldability, and corrosion resistance. Developed by Corus of Germany, AA5059 is of interest to the Army for armor and structural applications to existing combat systems such as improvements to the current M2 Bradley Infantry Fighting Vehicle and for future combat system designs.

Area Mine Clearing System. The Army's Project Manager for Close Combat Systems, Countermine Division at Fort Belvoir, Virginia, is evaluating vehicle-mounted mechanical systems (flails) that are designed to clear large areas of anti-tank and anti-personnel landmines with a high degree of confidence. Potential candidates are produced by DOK-ING of Croatia, A/S Hydrema of Denmark, Kvaerner Eureka of Norway, the Scandinavian Demining Group AB of Sweden, and Aardvark Mine Clearance, Ltd. of the United Kingdom.

AT-4CS (Confined Space) Enhanced Blast Tandem Warhead. The Project Manager for Close Combat Systems, Picatinny Arsenal, New Jersey, is evaluating an enhanced blast tandem warhead for the AT-4 CS (Confined Space) weapon produced by Saab Bofors Dynamics of Sweden. The AT-4 CS, in the DoD inventory as a result of a previously successful FCT project, is currently the only fielded shoulder-launched munition able to be fired from enclosures. The Tandem Warhead round under evaluation is designed to blast through walls with the first warhead and neutralize targets behind the wall/in the bunker with the second warhead.

High Frequency Combat Net Radio. The Space and Terrestrial Communications Directorate of the Army's Communications Electronics Command at Fort Monmouth, New Jersey, is evaluating the Selex Communications (formerly Marconi Selenia) CNR2000 combat net radio with both High Frequency (HF) and Very High Frequency (VHF) band capabilities. The results of this evaluation will provide valuable information concerning communications interoperability between European Union-NATO coalition forces and U.S. military units.

Noise Robust Voice Recognition System. The Interactive Speech Technology Program Office at the Army's Communication-Electronics Command, Fort Monmouth, New Jersey, is evaluating the "Aurix" advanced speech recognition system. Developed by 20/20 Speech Ltd. of the United Kingdom, this system can "recognize" speech at a high level of accuracy in various noise environments, such as in the high intensity noise of a battlefield produced by gunfire and/or explosions. Pending successful testing, the product will be transitioned to provide speech recognition interfaces for the individual soldier within the Army's Land Warrior/Soldier and Force XXI Battle Command Brigade and Below Programs.

Unit of Employment Battle Command. The Program Integration Office for Battle Command at Fort Leavenworth, Kansas, is evaluating mature battle command system software developed by Systematic, Denmark and Capgemini, Netherlands for applicability as a real-time battlespace command and control tools for training combat commanders. The objective will be to use the candidates at the Army's Training and Doctrine Command Battle Command Battle Laboratory as surrogate Army Battle Command Systems for Unit of Employment and exercises. The candidate systems are currently used in their respective countries to plan and provide current situation of military operations.

Defense Acquisition (DAC) Program

External Aircraft Rescue Hoist for Black Hawk Helicopter. The Army's UH-60 Blackhawk Project Office, Redstone Arsenal, Alabama, is evaluating two External Aircraft Rescue Hoists developed by Goodrich Corporation, Diamond Bar, California, and Breeze Eastern of Union, New Jersey, which utilize state-of-the-art motors with improved braking capabilities. Upon successful testing, an Airworthiness Release will be issued to allow installation of the qualifying hoist on the HH-60M Medical Evacuation Helicopter.

Modular Land Warrior Fuel Cell Power System. The Army's Program Manager-Soldier Warrior, Fort Belvoir, Virginia, is evaluating an advanced, high-power, light-weight, soldier-wearable power source under development by DuPont of Wilmington, Delaware. Embedded in the device is circuitry to smartly charge military rechargeable batteries while on soldiers and to directly source power soldier-carried radios, navigation systems, hand-held battlefield command and control systems and weapon sensors. This device offers a revolutionary new power source for individual soldier use during military operations, greatly reducing weight load burden and enhancing mission duration and soldier lethality.

Ruggedized Radio Frequency Identification (RFID) Tags with Highly Flexible Antenna. The Army's Program Manager-Soldier Warrior, Fort Belvoir, Virginia, is evaluating Read-only Type S-Label and Read-write capable Air-Tune Type Radio Frequency Identification (RFID) tags developed by Vivid Systems of Canton, Mississippi - rugged data carriers that can be read swiftly from comparatively long distances. The tags and their associated reader/writer are of interest for use on the Army's M4 modular weapon, AN/PRC-148 Radio, and other selected individual soldier equipment items.

Super-Capacitor Power Source for Gun-Launched Munitions. The Army's Product Manager for Excalibur, Picatinny Arsenal, New Jersey, is evaluating a super-capacitor power source developed by Raytheon of Tucson, Arizona, and Maxwell Technologies, San Diego, California, to replace the current mission-life limited and expensive lithium reserve cell battery of the Excalibur artillery projectile. Successful completion of this project will provide the warfighter with a more versatile projectile at significant cost savings.

Topical Paromomycin for the Treatment of Cutaneous Leishmaniasis. The Army Medical Material Development Activity, Ft. Detrick, Maryland, is evaluating Topical Paromomycin, a new drug being developed by TEVA Pharmaceuticals North America of North Wales, Pennsylvania, to treat Cutaneous Leishmaniasis (CL). CL is a serious medical threat to U.S. deployed forces, typically presented as ulcerous skin lesions that develop over weeks to months after a person is bitten by an infected sand fly. The average cost per patient for the current Pentostam treatment is \$17,000 for hospitalization and treatment with approximately 60 lost duty days. This new chemotherapeutic agent treatment will allow infected soldiers to heal while they remain on station.

NAVY & MARINE CORPS

Foreign Comparative Testing (FCT) Program

30mm Programmable Airburst Munition. Program management offices for the Marine Corps' Expeditionary Fighting Vehicle (EFV) in Woodbridge, Virginia, and the Navy's LPD-17 Amphibious Assault Ship, Washington, DC, are evaluating airburst ammunition developed by NAMMO of Norway, and Oerlikon Contraves of Switzerland. Ammo will be employed with the MK46 gun system onboard LPD-17 class amphibious assault ships to counter swarming enemy small craft, and with the EFV gun system to effectively engage and defeat materiel and personnel targets behind cover.

Emergency Battery System. The Marine Corps Systems Command (Expeditionary Power), Quantico, Virginia, is evaluating lightweight, non-rechargeable, environmentally friendly batteries developed by MagPower Systems, Inc. of Canada and MEET of the Republic of Korea. The system addresses Marine Corps' requirement for a supplementary battery source to power small items of equipment such as radios, computers, and sensors and to minimize their battery load while assuring they can still power their electronics throughout a long mission.

Expeditionary Assault Bridge Launcher. The Project Manager for Engineer Systems, Marine Corps Systems Command at Quantico, Virginia, is evaluating the BR-90 assault bridge launcher system. Developed by Alvis-Vickers, Ltd. (BAE Systems), the system will be integrated with the current Assault Vehicle-Launched Bridge (AVLB) and Marine Corps M1A1 Abrams Tank chassis to meet gap-crossing requirements for Military Load Class-70 tracked vehicles. The Marine Corps is currently using the M60 Sherman Tank chassis with the AVLB, an aging platform not designed to maneuver at current Marine Expeditionary Forces speeds on the battlefield.

Multipurpose Tank Blade System for M1A1 Main Battle Tank. The Program Manager for Tanks, Marine Corps Systems Command, Quantico, Virginia, is evaluating a crew-controlled blade system that mounts on the front of a tank. Testing will determine suitability for use on Marine Corps M1A1 to breach buildings and walled compounds, remove roadblocks, quickly create fighting positions for infantry and mechanized forces, and impose non-explosive destruction of enemy obstacles without the use of the tank's main gun ammunition. This Pearson Engineering blade system is in service with British Forces and promises to meet an urgent requirement identified during current Marine Expeditionary Force operations in Iraq.

Portable Undersea Training Range. The Aviation Training Systems Office, Naval Air Systems Command, Patuxent River, Maryland, with test support from the Naval Undersea Warfare Center, Newport, Rhode Island, is evaluating two technologies which, when integrated, will provide the core of an advanced deployable undersea range for Navy Antisubmarine Warfare (ASW) training in shallow littoral waters. The "Basil II" Station-Keeping Buoy produced by ACSA of France is used in command and control and for positioning instrumentation on similar sea ranges; the "NASPAR" transponder developed by Nautronix of Australia provides proven in-water protocols for ASW training.

Defense Acquisition (DAC) Program

7.62mm and 9mm Reduced Environmental Hazard Ammunition (REHA). The Marine Corps' Program Manager for Ammunition, Quantico, Virginia, is evaluating 7.62mm and 9mm REHA ammunition that is being developed with environmentally safe components by Alliant Tech of Toone, Tennessee; Kilgore of Marion, Illinois; Winchester in Independence, Missouri; Remington of Lonoke, Arkansas; Elk River Corporation, Knoxville, Tennessee; and Precision Ammunition of Tampa, Florida. If successful, the project will provide the warfighter with lead-free training and combat cartridges meeting

or exceeding the performance of current ammunition that will alleviate the high costs of range clean-up, as well as demonstrate Marine Corps stewardship of the environment.

High Performance Standard Advanced Dewar Assembly (SADA)-Type II. The Marine Corps Program Manager for Tanks is evaluating an advanced SADA-Type II developed by Raytheon Corporation of McKinney, Texas to provide improvements in long range threat detection and engagement capabilities over the current Fire Enhancement Program requirements for the M1A1 Main Battle Tank. SADA is a main component in the thermal sighting systems used for night vision, infrared search and track, combat-ID, and thermal targeting. These improvements directly translate into greater situational awareness for tank crews, improved lethality, and a reduction in fratricide and collateral damage.

Mine Neutralization by Explosive Ordnance Disposal (EOD) Teams in Very Shallow Water. The Naval EOD Program Office, Indian Head, Maryland, is evaluating an evolutionary approach to low risk methods for conducting naval mine neutralization operations by Explosive Ordnance Disposal (EOD) Teams. Initially, an in-service Mine Neutralization System developed by EDO Corporation of North Amityville, New York (SEA FOX), will be integrated with the Rigid Hull Inflatable Boats [RHIBs] currently in use by Naval Special Clearance Team ONE to provide a manned surface vehicle neutralization capability. The project will transition to an unmanned, remote-controlled RHIB neutralization system, thereby taking the diver out of the water for identification and disposal of sea mines and other dangerous ordnance.

Titanium Encapsulated Silicon Carbide Skirt Armor. The Direct Reporting Program Manager for the Marine Corps' Expeditionary Fighting Vehicle (EFV) in Woodbridge, Virginia, is evaluating advanced armor developed by General Dynamics, Woodbridge, Virginia, which is composed of silicon carbide modules linked together and encapsulated with several layers of titanium. The introduction of this new design will allow the skirt armor to sustain multiple hits in the same area while maintaining protection level, is predicted to extend the useful life of the armor 6-fold over the current armor, and will reduce the weight of the EFV by 5 percent.

Tactical Remote Sensor Systems Monitoring Station Modernization. The Marine Corps Systems Command, Quantico, Virginia, is evaluating a new configuration for mobile sensor monitoring developed by Nova Engineering of Cincinnati, Ohio. The system significantly downsizes hardware that will enable the Marine Corps to adapt its sensor monitoring systems to lighter, more mobile platforms that can be deployed and operated "on the move".

Trailer-Mounted Power Generator and Environmental Control Unit. The Marine Corps Systems Command Ground Transportation and Engineering Systems Program Office is evaluating off-road, towable, trailer systems capable of generating 20-40 kW of electric power and 100,000 BTU of cooling or heating for the Marine Expeditionary Force. The candidate systems to meet the Marine Corps requirement are in production from Applied Companies of Valencia, California, Bea Maurer of Fairfield, Virginia, and DHS Systems of Orangeburg, New York.

AIR FORCE

Foreign Comparative Testing (FCT) Program

Air Flotation Platform. The 309th Air Maintenance Group at Hill AFB, Utah, is evaluating air flotation platforms developed by Solving of Finland that are used to reposition aircraft and airframe structures as integral units, maintaining structural alignment during depot level maintenance operations. Currently, Air Force maintenance operations aircraft airframes are disassembled for repair and/or replacement of major structural components with no ability to move the aircraft. This requires all tooling and labor to be transported to the airframe, resulting in added wait-time, inefficient overhaul, and added in-process inventory.

Extended 1553 Databus. The B-2 EHF Satellite Communications (SATCOM) Integration Program Office at Wright-Patterson AFB, Ohio, is evaluating extended 1553 databus performance developed by Edgewater Computer Systems, Inc. of Canada. The objective is to increase the throughput capability of the existing 1553 databus to perform in accordance with real-time operating principles. The goal is to cost-effectively upgrade legacy Air Force and Department of Defense mobile warfighting support platforms using extended 1553 databus, increasing throughput required in a network-centric environment.

MIL-STD-1760 Umbilical and Connector. The 508th Fighter Support Group, Hill AFB, Utah, is evaluating an advanced umbilical connector developed by EDO MBM Technology, Ltd. of the United Kingdom. The current Air Force 1760 connector, which transfers guidance information to weapons, is a “screw on/pop off” design which is experiencing damage upon weapon release. The British “smart bomb” umbilical uses a collar that screws onto the weapon’s 1760 connector and an umbilical cable that snaps onto the collar. The umbilical snaps off of the collar when the weapon is released, preventing damage to the umbilical connector.

Void-Sensing Fuze. The Program Director, Cruise Missile Product Group at Tinker AFB, Oklahoma, is evaluating a programmable void-sensing and layer-counting fuze currently in production by TDW of Germany. The fuze is for potential employment in the penetrating warhead of the Air Force’s Conventional Air-launched Cruise Missile (CALCM) and/or the Navy’s Tomahawk Cruise Missile in order to defeat hard and deeply-buried targets.

Weather Analysis and Forecasting System. The Weather, Plans and Programs Office, U.S. Air Force, Europe, Ramstein AFB, Germany, is evaluating “NinJo” weather analysis and forecasting software. The software was developed by the consortium of Ernst Basler and Partners GmbH, Germany, for potential replacement of the U.S. Air Force-Europe Operational Weather Squadron’s Horace software. NinJo allows display and handling of all types of weather data, enabling forecasters to generate significantly improved pin-point military forecasts and provide timely weather watches and warnings for U.S. European Command operations.

Defense Acquisition (DAC) Program

Improved Infrared (IR) Missile Self-Protection for F-15 Aircraft. The Air Force’s F-15 Systems Group at Wright-Patterson AFB, Ohio, is evaluating improvements to the F-15’s AN/ALE-58 self protection countermeasure dispenser (CMD) system developed by BAE North America, Austin, Texas, and the Boeing Company, St. Louis, Missouri. This project provides the F-15 pilot the hardware interfaces necessary to enhance the Pilot Vehicle Interface (PVI) to achieve increased situational awareness, enhanced self protection, and reduced pilot workload.

Communications and Networking for a Deployable Internet. The Air Force Research Laboratory, Rome, New York, is evaluating a technology that will allow legacy voice communication networks already installed on operational aircraft to be used to send and receive Internet Protocol message traffic, such as text messages and imagery. Known as Interim Capability for Airborne Networking (ICAN), the capability was developed by Northrop-Grumman, Melbourne, Florida.

Nickel Nanostrand Coating for Improved Lightning Strike Protection. The Air Force Research Laboratory, Wright-Patterson AFB, Ohio is evaluating a new class of highly conductive paints and lightning strike protection systems based on nickel nanostrands, being developed by Metal Matrix Composites, Midway, Utah. These new nanostrand materials create greater conductivity in paints, coatings, and composites. When a surface is treated, lightning strikes and resulting damage are kept at or near the surface of the aircraft, damaging the paint but not the composite structure.

Extended 1553 Databus-Graceful Degradation. The Agile Combat Systems Support Wing, Wright-Patterson AFB, Ohio, is evaluating an innovative and proven Scheduling and Control System developed by Dayton Aerospace, Inc., Dayton, Ohio. The system is targeted for use in Extended 1553-based weapons platforms to assure that they operate efficiently and reliably under degraded conditions. This effort is an integral part of the Air Force's program to upgrade the Mil-Std-1553B local area network using 21st century technology to provide significantly greater performance, affordability, and capability to support future upgrades, while avoiding massive aircraft re-design and retrofit costs.

Angel Fire. The Air Force Research Laboratory and Air Force Institute of Technology are teaming with the US Strategic Command, Los Alamos National Labs, the Defense Threat Reduction Agency, the National Geospatial Agency, and Dayton Aerospace, Dayton, Ohio, to test a spiral upgrade for wide-area persistent surveillance. A rapid development and demonstration is planned to deploy a camera system that provides continuous coverage of Ramadi or Fallujah-sized towns at resolutions and frame rates that allow for tracking of vehicles and people in support of ground troops in an urban environment. This provides situational awareness to tactical decision makers and facilitates forensic and predictive analysis, further supporting urban combat, base defense, border security, and other counter terrorism efforts.

U.S. SPECIAL OPERATIONS COMMAND (SOCOM)

Foreign Comparative Testing (FCT) Program

Amphibious Reconnaissance Insertion Vehicle. The Naval Special Warfare Development Group (NSWDG) is conducting technical and operational testing at the Army's Aberdeen Test Center, Maryland, and at NSWDG sea test sites in Norfolk, Virginia, to evaluate a high-speed amphibious vehicle manufactured by Gibbs Technology, United Kingdom. This vehicle inserts SEAL teams through the water from offshore, continues on land to conduct a reconnaissance or direct action mission, and then returns through the water to return to parent ship using a single vehicle.

Improved Crew-Served Weapons Mount. The Program Manager for Advanced Lightweight Grenade Launcher at the Naval Surface Warfare Center, Crane, Indiana, is evaluating a "soft" gun mount for Special Operations Forces (SOF) crew-served weapons, such as automatic grenade launcher and machine guns. This gun mount, developed by Vinghøg AS of Norway teamed with Roulunds Tech AS of Denmark, will improve accuracy when firing on the move, resulting in less dispersion and reducing the amount of ammunition required to defeat targets.

Improved Limpet Mine. The Naval Air Warfare Center, Indian Head, Maryland; Naval Surface Warfare Center, Carderock Division, West Bethesda, Maryland; and the Army's Aberdeen Test Center, Maryland are jointly evaluating an improved limpet mine. The mine was developed by Royal Ordnance in combined USSOCOM / United Kingdom Ministry of Defense testing to meet the Special Operation Forces requirements for underwater demolition. This evaluation will determine if the British candidate can destroy or incapacitate enemy vessels and maritime structures with a device that is smaller, lighter, and more capable than the current legacy Limpet Assembly Module.

Muzzle Break Sound Suppressor for MK13 Rifle. The Program Office for Special Operations Force Weapons, Naval Surface Warfare Center, Crane, Indiana, is evaluating suppressors made of advanced materials to suppress audio and visual signatures for the MK13 sniper rifle, enhancing shooter survivability. Testing will be conducted with MLEE Pty Ltd. of Austria, Brugger & Thomet of Switzerland, and PGW Defense and Canadian Tactical, Ltd. of Canada.

Defense Acquisition (DAC) Program

Specific Emitter Identification Insertion. The Technology Applications Program Office, Fort Eustis, Virginia, is evaluating a digital Specific Emitter Identification (SEI) system. Developed by ITT Industries of Clifton, New Jersey, the system is targeted for integration into the ALQ-211 Suite of Integrated Radio Countermeasures (SIRFC) program as part of its development of an analog receiver for upgrade to digital. By developing a SEI capability to improve threat identification performance, concurrently with the development of the digital receiver line replaceable units, production cost savings will be realized.

Green Light Aiming Laser for Special Operations Forces (SOF) Small Arms. The Program Manager for Special Operations- Peculiar Modification to the M4 Carbine (SPMOD), Fort Bragg, North Carolina, is evaluating green light laser aiming devices. Testing will be conducted with Insight Technology, Londonderry, New Hampshire; Aimpoint of Alpharetta, Georgia; and B.E. Meyers and Company of Redmond, Washington, to replace the existing red light laser aiming device for small arms/weapons for Special Operations Forces. Green light lasers are closer to the center of the spectrum of human vision and provide much better contrast than red lasers when used against green and black objects, also providing superior visibility in bright sunlight on green and black targets.

Electronic Intelligence (ELINT) Receiver. The Program Manager for Intelligence, U.S. Special Operations Command, is evaluating a threat warning receiver developed by Mid-Atlantic RF Systems of Forest Hill, Maryland. The system is worn by the individual and detects signals emitted from enemy missiles, maritime craft, helicopters and surveillance aircraft which represent a potential threat to Special Forces personnel and maritime craft.

Covert Eyes 3-Dimensional (3-D) Video Camera. The Program Manager, Reconnaissance and Surveillance, U.S. Special Operations Command, is evaluating a multi-purpose, high-resolution, 3-D Flash Laser System developed by Geo-Spatial Technologies of Lorton, Virginia and Advanced Scientific Concepts of Santa Barbara, California. The camera enables Special Forces to acquire and view targets through vegetation, window blinds, smoke, and tinted windows during daylight or total darkness. The system serves as both a camera and camcorder, and will support standoff ranges of up to 250 meters.

Compact Broadband Remote Antenna (CoBRA) Intelligence and Information Systems Enhancements. The Program Manager, Intelligence Systems, U.S. Special Operations Command, is evaluating portable satellite communications enhancements developed by Swe-Dish Satellite Systems, Inc., Reston, Virginia. These improvements lower the operational costs of the CoBRA and reduce Special Forces dependence on commercial satellites for secure communications, as well as providing military users with increased flexibility and greater efficiency in completing their missions.

Portable Tactical Wireless Broadband Network. The Program Manager, U.S. Special Operations Command Intelligence and Information Systems, the Navy's Space and Warfare Systems Command, Charleston, SC, and Rajant Corporation, Wayne, Pennsylvania, are evaluating a secure tactical wireless broadband network. Using BreadCrumb® technology, the need is to test a system that offers an individual wireless radio that provides a self-forming, self-healing, meshed, secure wireless broadband network for improved SOF communication on the battlefield. This project will evaluate and extend the capabilities for SOF use in areas involving missions underground, in tunnels, in mountainous areas and within buildings.