

APPENDIX B

SOF PROGRAMS & SYSTEMS

USSOCOM's unique responsibilities include providing SOF with specialized equipment to perform their worldwide missions. As a result, the USSOCOM commander in chief is the only unified commander charged by law with acquisition responsibilities similar to those of the services to develop, acquire, and field equipment. To accomplish this, USSOCOM has its

own special operations acquisition executive, with responsibilities and authorities equal to service acquisition executives, and a Special Operations Acquisition Center which supports USSOCOM program management and oversight of Major Force Program-11 acquisition funding. The following pages highlight some of the current SOF programs and systems.

AIR SYSTEMS

CV-22 Osprey

Mission

Perform long-range, night and all-weather infiltration, exfiltration, and resupply missions; medical evacuation, and selected rescue and recovery missions.

Description

- Variant of USMC MV-22 tiltrotor aircraft.
- Capabilities include:
 - Aerial refueling
 - Terrain following/terrain avoidance radar
 - Precision navigation
 - Defensive suite upgrades
 - Vertical/short takeoff or landing (V/STOL)

Status

- 50 aircraft planned for procurement.
- Now in engineering and manufacturing phase of development.



- Production decision in FY 2001.
- Required assets available in FY 2003.
- Initial operational capability (IOC): FY 2004.
- Last delivery in FY 2009.

Contractors

- Bell Helicopter Textron; Fort Worth, Texas
- Boeing Helicopter; Philadelphia, Pennsylvania

AC-130H/U Spectre Gunship

Mission

Provide precision fire and other support for special operations and general purpose forces, including close air support, armed reconnaissance, interdiction, escort convoy/helicopter, surveillance, and search and rescue.

Description

- AC-130Us modified to include:
 - Side-firing 105mm howitzer, 40mm cannon, and 25mm gatling gun
 - Fire control computers
 - Dual fire control: simultaneous fire on two targets with two sensors
 - Electronic countermeasures
 - All weather targeting
 - Extensive navigation and sensor suites
- Ten older AC-130As were deactivated upon delivery of AC-130Us.
- Eight Vietnam era AC-130Hs upgraded with improved sensors, fire control, and navigation suite.

MC-130E/H Combat Talon

Mission

Accomplish low-level, long-range, night, all-weather infiltration and extraction of SOF personnel and equipment; resupply military operations in hostile areas; and refuel SOF rotary-wing aircraft.

Description

- Extensively modified C-130s.
- MC-130H carries 52 SOF personnel.
- 2800 NM range.
- Airdrops up to 26 troops.
- Terrain following/terrain avoidance radar.
- Aerial refueling system.
- Precision navigation equipment.
- Defensive avionics systems.
- MC-130Es developed during Vietnam War.

Status

- 24 MC-130Hs delivered.



- Modification program calls for AC-130H center-wing boxes to be replaced to extend aircraft service life.
- Upgraded defensive avionics systems on AC-130Hs.
- Continue to develop more effective weapons ammunition to enable AC-130 to fire from beyond range of antiaircraft weapons.

Status

- Thirteen AC-130Us delivered.
- IOC: April 1996; full operational capability (FOC): FY 2001.

Contractors

- AC-130H — Lockheed Martin; Ontario, California
- AC-130U — Boeing Corporation; Palmdale, California



- IOC: June 1993; FOC: FY 2000.
- MC-130H communications/navigation upgrades funded through FY 1999; scheduled completion FY 2001.
- 14 MC-130Es operational.
- Center-wing box currently being replaced on MC-130E aircraft to extend service life.

Contractors

- MC-130E — Lockheed Martin; Ontario, California
- MC-130H — Lockheed Martin Federal Systems; Owego, New York

MC-130P Combat Shadow

Mission

Provide low-level, long-range, night, single ship/formation refueling of SOF rotary-wing aircraft and limited infiltration/exfiltration/resupply of SOF forces via airland/airdrop.

Description

- 28 aircraft have been modified to be air-refuelable.
- SOF-I modifications include:
 - Enhanced navigation
 - Forward-looking infrared equipment
 - Night vision goggle compatible head-up display
 - Defensive avionics and threat warning systems
 - Improved communications systems
 - Improved night operations capability



- Center-wing box currently being replaced to extend aircraft service life.

Status

SOF-I modifications and center-wing replacements complete in FY 2000.

Contractor

- Lockheed Martin; Ontario, California

EC-130E Commando Solo

Mission

Provide broadcasting capabilities primarily for psychological operations missions; support disaster relief operations; and perform communications jamming in military spectrum and intelligence gathering.

Description

- Modified C-130Es.
- Capabilities include:
 - Reception, analysis, and transmission of various electronic signals to exploit electromagnetic spectrum for maximum battlefield advantage
 - Secondary capabilities include jamming, deception, and manipulation techniques
 - Unrefueled range 2800 NM
 - Broadcasts in frequency spectrums including AM/FM radio, short-wave, television, and military command, control and communications channels



- Rivet Rider modification includes:
 - Worldwide color TV
 - Infrared countermeasures
 - Vertical trailing wire antenna
 - Fire suppressant foam in fuel tank
 - Radar warning receiver
 - Self-contained navigation system

Status

- Six aircraft modified.

Contractor

- Lockheed Martin; Ontario, California

MH-60K Blackhawk

Mission

Conduct medium-range, night, and all-weather infiltration/exfiltration; resupply operations in hostile areas; selected rescue and recovery missions; and medical evacuation.

Description

- Aerial refueling and extended range fuel tanks.
- Precision navigation equipment and TF/TA radar.
- Integrated cockpit and mission management system.
- Enhanced weapons and defensive countermeasures systems.
- Forward-looking infrared equipment.
- Upgraded communications.



Status

- 23 MH-60K fielded; incorporation of U.S. Army basic airframe/aircraft modifications to allow use of common repair parts.
- Aircraft survivability equipment modifications and avionics upgrades planned for FY 1998 and beyond.

Contractor

- Sikorsky Aircraft; Stratford, Connecticut
- Lockheed Martin Federal Systems; Owego, New York

MH-47E Chinook

Mission

Conduct medium-range, night, and all-weather infiltration/exfiltration; resupply operations in hostile areas; selected rescue and recovery missions; and refuel aircraft.

Description

- Modified CH-47D Chinook helicopter.
- Precision navigation equipment.
- Integrated cockpit and mission management system with multimode radar.
- Forward-looking infrared equipment.
- Defensive countermeasures systems.
- Upgraded communications.
- Enhanced weapons.
- Aerial refueling and extended-range fuel tanks.
- Moving map display.
- Alternate command and control platform.



- Small arms protection systems for aircraft components, crew, and passengers.

Status

- 25 MH-47E fielded.
- Aircraft systems modifications, avionics system upgrades and aircraft survivability equipment modifications planned for FY 1998 and beyond.

Contractor

- Boeing Helicopter; Philadelphia, Pennsylvania

MH-53J Pave Low III

Mission

Perform medium-range, low-level, night, and all-weather infiltration/extraction; resupply SOF in the field; and pathfinder operations. Unique capabilities permit selected rescue and recovery missions.

Description

- Terrain following/terrain avoidance radar; forward-looking infrared equipment.
- Precision navigation instruments; improved mission computers.
- Armor protective systems for aircraft components, crew, and passengers.
- Fuel range extension systems; aerial refueling capability.
- Alternate command and control platform.
- Moving map displays.
- Improved weapons and defensive avionics systems.
- Completed shipboard compatibility, enhanced gross weight upgrades and service life extension program (SLEP) (complete renovation of the structural, electrical, and hydraulic systems).



- Upgraded engines; automatic blade and tail folding for shipboard operations.
- Significantly improved aircraft safety, reliability, and maintainability.
- Six older TH-53A helicopters used exclusively for training, resulting in lower training costs and extended aircraft service life.

Status

Fourteen aircraft to be upgraded with Interactive Defensive Avionics System/Multi-Mission Advanced Tactical Terminal — (IDAS/MATT).

Contractor

- IDAS/MATT: Lockheed/Martin Federal Systems; Owego, New York

MARITIME MOBILITY

Cyclone Class Patrol Coastal (PC)

Mission

Provide a long-range, high-speed craft capability for coastal patrol/interdiction and to support SEAL teams and other SOF.

Description

- 170-foot long, 8-foot draft, 25-foot beam.
- Range 2860 nautical miles, maximum speed 35 knots.
- Crew of four officers and 24 enlisted.
- Support for 25 man embarked SEAL detachment.
- Two 25mm chain guns, two .50 caliber mounts, and two Stinger stations.



Status

Thirteen ordered, built, and commissioned. One vessel currently under construction. Ship self-defense upgrades planned.

Contractor

- Bollinger Shipyard; New Orleans, Louisiana

Mark V Special Operations Craft (SOC)

Mission

Perform medium-range, all weather insertion and extraction of SOF and limited coastal patrol and interdiction.

Description

- High performance combatant craft sized to permit air deployment aboard C-5 aircraft when mated to organic transporter and in company with other support equipment.
- Range in excess of 600 nautical miles.
- Sustained top speed in excess of 40 knots.
- Each craft manned by a crew of five and can carry 16 SOF personnel.
- Each detachment consists of two craft, two transporters, two prime movers, two 5 ton trucks, and four 5/4 ton trucks, plus the containerized deployment package (main-maintenance/repair parts, weapons, etc.).
- Armed with multiple, rapid fire, minor caliber weapons (40mm, .50 cal., 25mm, 7.62mm).



- Space, weight, and power reservations for future capabilities improvements.

Status

- Ten Mark V SOC detachments (20 craft) funded.
- Fourteen of 20 craft (five detachments) built and delivered as of November 1997.
- Final six craft under construction in FY 1998.

Contractors

- Craft — Halter Marine; New Orleans, Louisiana
- Transporter subcontractor — Martinez & Turek; Riverside, California
- Engines and waterjets subcontractor — Detroit Diesel/MTU; Detroit, Michigan
- Prime movers — Freight Liner; Portland, Oregon

Advanced Seal Delivery System (ASDS)

Mission

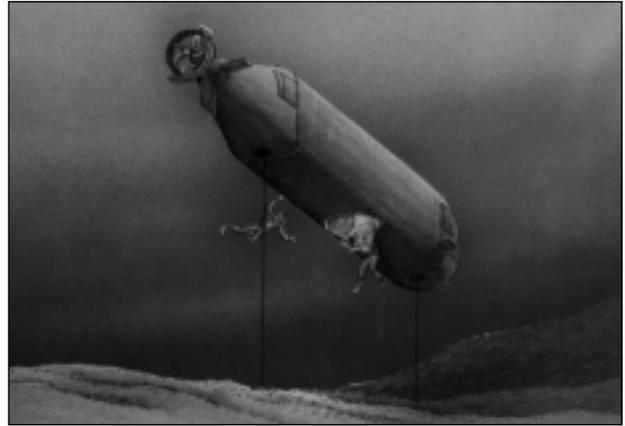
Conduct clandestine insertion and extraction of a SEAL squad into hostile locations.

Description

- Manned, dry interior, battery-powered submersible craft.
- Host platform fast attack submarine or LSD.
- Air transportable by C-5 or C-17.
- Improved range, speed, payload, and habitability for crew and SEAL squad.
- Submerged swimmer lock-in and lock-out.

Status

- Detailed design and manufacturing development contract awarded in FY 1994.



- First 688 class fast attack submarine, as ASDS host, identified.
- First ASDS vessel to be delivered mid FY 1999.

Contractor

- Northrup Grumman Corporation; Annapolis, Maryland

Submarine Conversion

Mission

Provide a host SEAL delivery vehicle/ dry-deck shelter (SDV/DDS) for long-range maritime clandestine insertion and extraction of SOF.

Description

- Modifies Five SSN 688 Class submarines to host the DDS, which supports one SDV.
- Modifications include troop transport, equipment, and munitions storage improvements.
- Converted submarines under Atlantic and Pacific Fleet commands.

Status

Six existing single DDS-capable and two dual DDS-capable submarines to be decommissioned



by 2001; conversions of five 688-class fast attack submarines into single DDS-capable ships funded for FY 1996-2000. SSN 23 planned as the sixth DDS capable host. IOC for first conversion in FY 1998.

Contractor

- Newport News Shipbuilding and Drydock Company; Newport News, Virginia

Naval Special Warfare Rigid Inflatable Boat (NSW RIB)

Mission

Perform short-range insertion and extraction of SOF; SOF coastal resupply; and coastal surveillance missions.

Description

- Rugged, seaworthy, versatile 36-foot RIB.
- 200 nautical miles range at 32 knots.
- 45 knots top speed.
- Eight passengers or 3,200 lbs payload.
- C-130 transportable.

Status

- Production commenced June 1997.
- 70 NSW RIBs funded. First delivery November 1997; IOC: January 1998.



- Production scheduled for FY 1998-2003.

Contractor

- U.S. Marine, Inc.; New Orleans, Louisiana

COMBAT EQUIPMENT, MUNITIONS AND ARMAMENT

SOF Laser Marker (SOFLAM)

Mission

Provide capability to locate and designate critical enemy targets for destruction using laser guided ordnance.

Description

Lighter and smaller than current laser markers; better reliability and availability than current systems.

Status

- Successfully completed operational evaluation October 1995.
- Began delivery of 296 units in May 1996. FOC scheduled for April 1998.



- Will field systems with Army Special Forces and Rangers; Navy SEALs; and Air Force special tactics squadrons.

Contractor

- Litton Laser Systems; Apopka, Florida

SOF Personal Equipment Advanced Requirements (SPEAR)

Mission

Provide SOF operators with state of the art equipment that improves operator survivability, mobility, lethality, and endurance.

Description

SPEAR acquires individual operator equipment in 9 functional areas including:

- Lightweight environmental protective clothing (LEP).
- Body armor/load carriage systems (BALCS).
- Modular integrated communications helmet (MICH).
- Modular target identification and acquisition (MTIA).

- Team/platoon command, control, communication, computer and intelligence (C4I).
- Laser/ballistic eye protection.
- Lightweight NBC protection equipment.
- Signature reduction.
- Physiological management.

Status

LEP is currently in production and fielding. SOCOM initiated BALCS development in FY 1997 and will continue in FY 1998 with production and fielding scheduled for FY 1999. SOCOM will initiate development of MICH, MTIA, and Team/Platoon C4I in FY 1998.

MK23 MOD 0 USSOCOM Caliber .45 Pistol

Mission

Equip SOF operators with capability for close quarters combat and sentry neutralization.

Description

Modular system consists of:

- .45 caliber pistol.
- Laser aiming module for both visible and infrared illumination and fire control.
- Signature suppresser (to minimize sound and flash).

- System provides increased reliability, durability, accuracy, and lethality over current handguns in the USSOCOM and DoD inventory.

Status

1,950 handguns delivered in the third quarter of FY 1996.

Contractor

- Heckler and Koch, Incorporated;
Sterling, Virginia



M4A1 Carbine w/Accessory Kit

Mission

Allow SOF operators to configure the M4A1 carbine based on mission-specific requirements. Kit items increase weapons effectiveness through improved target acquisition and fire control in close quarters battle and out to ranges of 500 meters both day and night.

Description

Kit items include:

- Rail interface system.
- Four power telescopic day scope.
- Close quarters battle/reflex sight.
- Infrared and visible laser aiming device.
- Signature suppresser.
- Modified M203 grenade launcher.
- Improved night scope.
- Visible light illuminator.
- Back-up iron sight.
- Forward hand grip.
- Storage case.



Status

All kit items currently in production with exception of visible illuminator, visible laser, back-up iron sight, and improved night scope. Market evaluations are ongoing for these items with production decisions expected in first quarter FY 1998.

Contractors

- Colt Manufacturing, Incorporated; Hartford, Connecticut
- Trigicon Incorporated; Wixom, Michigan
- Knight's Armament Co.; Vero Beach, Florida

Time Delay Firing Device (TDFD)

Mission

Provide SOF operators the capability to place and initiate demolition charges behind enemy lines on high value targets such as bridges, tunnels, and ammunition storage sites. Allows operators time to return to safe area before detonation.

Description

- Expendable demolition initiation device.
- Small, extremely accurate, lightweight, long delay timer.
- Replaces current M1 family of chemical delay pencils.
- Self contained battery — no maintenance.
- Less than 6 cubic inches and weighs 7 ounces.



- Field reprogrammable from five minutes to 30 days.

Status

In production.

Contractor

- AAI Corporation; Hunt Valley, Maryland

Selectable Lightweight Attack Munition (SLAM)

Mission

Provide the capability to destroy light armored vehicles, parked aircraft, ammunition and petroleum, oil, and lubricants (POL) sites, and storage facilities with a lightweight munition while avoiding enemy forces.

Description

- Small (fits in battle dress uniform pocket) and lightweight (2.2 pounds).
- Defeats variety of targets:
 - Tracked and wheeled vehicles
 - Parked aircraft
 - POL/ammunition storage sites
- Explosively formed penetrator effective against 40mm rolled homogeneous armor out to 25 feet.
- Four modes of attack:
 - Bottom attack on target magnetic signature
 - Time demolition with standard Army blasting caps or time delay firing device



- Side attack on target infrared signature
- Command detonation

Status

In production; IOC: first quarter FY 1998.

Contractor

- Alliant Techsystems; Hopkins, Minnesota

Remote Activation Munition System (RAMS)

Mission

Provide the capability to remotely control detonation of demolition charges or the remote operation of other items.

Description

- Lightweight transmitter (less than two pounds) with nominal range of two km.
- Compatible with SOF demolition munitions.
- Type A receiver can initiate up to four M-6 blasting caps.
- Type B receiver can initiate an M-7 blasting cap.
- Type C receiver can mechanically operate SOF equipment.



Status

- In production.
- IOC planned for FY 1999.

Development Agency

- Army Research Lab; Adelphi, Maryland

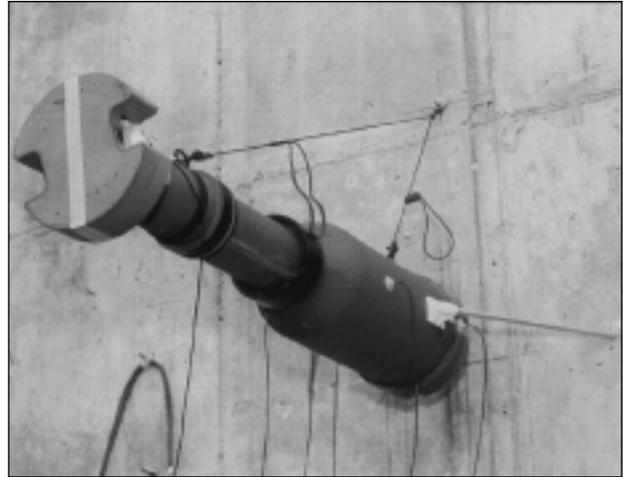
Penetration Augmented Munition (PAM)

Mission

Provide a capability to defeat large, heavily reinforced concrete structures (such as bridge supports).

Description

- 35 pounds, 33 inches long (extends to 41 inches for operation).
- One-man portable and operable.
- Replaces up to 200 pounds of C4 explosives.
- Multi-staged operation:
 - Stage 1 — First explosively formed penetrator cuts rebar.
 - Stage 2 — Second explosively formed penetrator creates pilot hole.
 - Stage 3 — Follow-through charge embeds and detonates.



Status

In development.

Contractor

- Alliant Techsystems; Hopkins, Minnesota

Miniature Underwater Global Positioning System Receiver (MUGR)

Mission

Provide position and navigation information for infiltration/exfiltration, reconnaissance, rendezvous, fire support, target location, and threat area location/avoidance for surface and subsurface combat operations.

Description

- Miniaturized (1.2 pounds, 24 cubic inches), one-hand operation.
- Ruggedized, waterproof operation to 33 foot depth (after receiving global positioning system signal at surface or by using an optional floating antenna).
- Point-to-point navigation.
- Two-hour continuous battery life at 25 degrees centigrade.
- Service life 3-5 years.



Status

192 systems fielded in January 1996 to all components; follow-on option available for an additional 373 systems.

Contractor

- Trimble Military Products; Sunnyvale, California

Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS)

Mission

Provide the capability to defeat light armored targets, urban and field fortifications, personnel in the open and in defilade, and soft skinned vehicles. Also provides target marking, obscuration, and illumination capability.

Description

A shoulder-fired, air jumpable, and swimmable system. An 84mm non-developmental item (NDI) recoilless rifle system consisting of:

- M3 Carl Gustav reusable launcher compatible with current standard optical devices.
- High explosive anti-tank (HEAT) round.

- High explosive dual purpose (HEDP) round.
- High explosive (HE) round for anti-personnel use.
- Smoke round.
- Illumination round.
- Full and subcaliber training systems.

Status

- System fielded with U.S. Army Special Operations Command since 1990.
- Test and evaluation ongoing to support Naval Special Warfare Command's fielding.
- Ammunition production contract in-place through FY 1999.
- Joint integrated product team managing all efforts.

Contractor

- Bofors Weapons Systems; Sweden



Improved Night/Day Observation/ Fire Control Device (INOD)

Mission

Give the SOF sniper a device that provides target acquisition and fire control, both day and night, out to the maximum effective range of his assigned weapons.

Description

INOD incorporates a day scope and image intensified night scope into a single device weighing less than 4 lbs and precludes carrying two items of equipment to perform sniper missions. This lightens the sniper's load, and precludes the need to mount and zero separate scopes when going

from day to night operations. INOD can range man-sized targets out to 1 km.

Status

- Development initiated in third quarter FY 1997.
- Testing and evaluation of prototype systems will continue through FY 1998 and early FY 1999 with production scheduled to begin in third quarter FY 1999.
- First unit equipped: second quarter FY 2000.

Contractor

ITT Electro-Optics Inc.; Roanoke, Virginia

SOF Demolition Kit

Mission

Provide the capability to custom build, attach and waterproof, as required, demolition charges based on specific targets and operational scenarios.

Description

- Utilizes various state-of-the-art inert war heads, fixtures, attaching materials and equipment, and waterproofing items and compounds.

- Replaces unreliable field improvised items and methods.

Status

- First unit equipped: second quarter FY 1998.

Development Agency

Armament Research, Development and Engineering Center; Picatinny Arsenal, New Jersey

Heavy Sniper Rifle (HSR)

Mission

Provide the SOF sniper with a capability to engage materiel targets such as wheeled vehicles, light armored vehicles, parked aircraft, ammo and fuel storage facilities, radar, and C4I equipment.

Description

HSR is a .50 caliber anti-materiel weapon that weighs less than 27.5 lbs, is effective out to 1500 meters, fires a variety of specialized ammunition (including explosive incendiary rounds), and can cycle a minimum of six rounds in one minute.

Status

- This is a joint USSOCOM-U.S. Army acquisition effort following a COTS/NDI acquisition strategy.
- Solicitation released in first quarter FY 1998 with evaluation and selection in third quarter FY 1998.
- First unit equipped: fourth quarter FY 1999.

Contractor

To be determined

COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS & INTELLIGENCE (C⁴I)

Special Operations Media System (SOMS) B

Mission

Provide enhanced tactical television and radio capabilities to produce, broadcast, record, and retransmit programming material in support of psychological operations/civil affairs missions.

Description

- Tactical, mobile, deployable radio and television broadcast system for production and dissemination of PSYOP products to audiences worldwide.
- Rack-mounted broadcast and editing equipment configured in independent subsystems such as Mobile Radio Broadcast System (MRBS) and Mobile Television Broadcast System (MTBS) installed on high mobility, multipurpose, wheeled vehicles.
- MRBS able to produce, broadcast, record, and monitor PSYOP products over commercial bands from fixed locations using broadband, directional, and omni-directional, antenna systems.
- MTBS with electronic news gathering (ENG) capability able to produce, broadcast, record, and monitor commercial-quality programming material to future deployable Psychological Operations Broadcast System and fixed-site Fort Bragg Media Production Center using satellite uplink/downlink.

- Each MRBS/MTBS is C-130 deployable with drive-on/drive-off capability.
- SOMS B replaces the transportable amplitude modulated transmitter 10 KWatt (TAMT-10), PSYOP air mobile dissemination system (PAMDIS), and AN/TSG-171 (ENG portion only).

Status

- Operational testing conducted at Joint Interoperability Test Center, Ft Huachuca, Arizona, March-April 1997.
- Net Equipment Training (NET) for SOMS B LRIP conducted August 1997 at 17th Bn 7th PSYOP Group, Joliet, Illinois.
- Full Rate Production Decision for MTBS approved September 1997. Full Rate Production Decision for MRBS October 1997.
- Evolutionary acquisition program with planned technology insertions FY 1999-2003.
- First unit equipped: August 1997.
- Completed fielding: January 1999.

Contractor

- Naval Air Warfare Center, Aircraft Division; St. Inigoes, Maryland

Family of Loudspeakers

Mission

Provide a high quality loudspeaker broadcast to target areas in support of SOF and conventional forces when deployed by mobile PSYOP forces.

Description

- System of loudspeakers mounted on track/wheeled vehicles, watercraft, and rotary-wing aircraft and dismounted for ground operations (tripod/stand, manpacked).
- Provides enhanced high quality recorded live audio, dissemination, and acoustic deception capabilities.
- Replaces obsolete loudspeaker systems.

Status

- Basic contract for delivery of Production Qualification Test (PQT) articles with negotiated production options was awarded by US Army Communication & Electronics Command (CECOM) in March 1996.
- DT/OT to be performed at Aberdeen Test Center and National Institute of Standards & Technology starting March 1998.
- Program currently funded to procure ORD requirement of 340 manpack, 407 vehicle/watercraft, and 21 aircraft loudspeakers.
- First unit equipped: July 1999.
- Completed fielding: May 2000.

Contractor

- Raytheon E-Systems; Richardson, Texas

Deployable Print Production Center (DPPC)

Mission

Provide a rapidly deployable, self-contained shelter mounted system for creating, editing and producing PSYOP print products in forward deployed locations.

Description

DPPC is a rapidly deployable, 1497B-Shelterized system mounted on a heavy HMMWV with a C-130 roll-on/roll-off capability. DPPC will provide PSYOP forces the capability to create, edit and print PSYOP products at forward locations. DPPC consists of a computerized development workstation with multiple input sources (graphics, motion, and still video, color scanner, etc.), desktop publishing, high-speed digital color duplicator, and paper cutter.

Status

- DPPC #1 currently in integration and fabrication phase.
- Development testing (transportability, environmental and safety) to be conducted at Aberdeen Test Center.
- Operational testing to be conducted at Ft Bragg, North Carolina.
- First unit equipped: June 1998.
- Completed fielding: June 1999.

Contractor

Naval Air Warfare Center, Aircraft Division; St. Inigoes, Maryland

Psychological Operations Broadcast System (POBS)

Mission

Provide strategic, wide-area multi-media radio and television production, distribution and dissemination capability in support of theater CINCs.

Description

POBS consists of wide-area, multi-media systems providing radio and television programming production, distribution and dissemination support to the theater commander. POBS is comprised of several interfacing systems that can stand alone or interoperate with other PSYOP systems as determined by mission requirements. POBS will include: a PSYOP Distribution System (PDS) that will provide a program link to worldwide; long-range broadcast capabilities such as, but not limited to, direct broadcast satellites (DBS); repeaters, ground and sea-based transmitters, interoperability with Commando Solo; an upgraded fixed-site medial production center

(MPC); lightweight, fly-away packages consisting of any combination of theater media production center (TMPC), deployable AM transmitters, deployable FM transmitters, and deployable television transmitters; and unmanned aerial vehicle (UAV) payloads.

Status

- POBS Architecture Study Group is currently defining the POBS architecture based on user requirements defined in the POBS Capstone Requirements Document.
- Fielding of initial PSYOP distribution system (PDS) planned for FY 1998, followed by FY 1999 fielding of additional PDSs and one theater medial production center (TMPC).
- Operational requirements documents are being updated.
- Evolutionary acquisition program with planned technology insertions.

SCAMPI Telecommunications Systems

Mission

Serve as the principal command, control, communications, computers, and intelligence medium for USSOCOM.

Description

- Carries both collateral (red) and sensitive compartmented (grey) information voice and data.
- All information fully secured using one or two levels of encryption.

Status

- SCAMPI System currently connects 35+ sites.
- Tactical gateways installed at Special Operations Command, Europe in FY 1996 (fully operational in FY 1998).
- Conversion to Integrated Digital Network Exchange (IDNX) equipment FY 1994-1997.
- Deployable SCAMPI capability accomplished in FY 1997.

Multi-Mission Advanced Tactical Terminal (MATT)

Mission

Provide near real-time operational intelligence information from national and tactical sources, enabling SOF to effectively avoid, defeat, or destroy enemy threat systems, and to support routine and crisis mission planning.

Description

A four channel UHF receiver capable of simultaneous reception and processing of up to four intelligence broadcasts. It provides near real-time intelligence, threat avoidance, and target acquisition data directly to combat forces. The MATT is an interim migration system for the joint tactical terminal (JTT). A man-portable, briefcase variant of this system is also available.

Status

- First deliveries and fielding occurred in FY 1995.
- Initial, fully-integrated MH-53J flight test conducted FY 1996.

- Units operationally deployed with Joint Special Operations Task Force in stand alone configuration.
- Successfully integrated/flown by the Services onboard F-15, EA-6B, and B1-B, and as a component of the Air Force CONSTANT SOURCE system.
- MATT is currently being integrated on the MH-53J (IOC: first quarter FY 1997; FOC: fourth quarter FY 1998) and SOFIV (IOC: fourth quarter FY 1998); requirements for other platforms are being determined.
- Recent significant events: Production Readiness Review for backplane enhancement — September 1997; JTT IPT — November 1997; BMATT Production Readiness Review — December 1997.

Contractor

- Allied Signal, Inc., Government Electronic Systems; Baltimore, Maryland

SOF Intelligence Vehicle (SOF IV)

Mission

Support deployed SOF headquarters elements allowing them to receive, send, process, and analyze near-real-time intelligence information.

Description

- Joint Deployable Intelligence Support System (JDISS)/Special Operations Command Research, Analysis and Threat Evaluation System (SOCRATES)-based intelligence system configured in a high-mobility, multi-purpose, wheeled vehicle (HMMWV).
- Rigid shelter and trailer to transport support equipment.
- JDISS-compliant software applications and architecture. Deployed intelligence analysts will be able to interface with national and theater intelligence data handling systems.
- Able to send and receive data, voice,

facsimile, high-resolution digital imagery, and map products.

- Provides word processing, electronic mail, message text generation, and local network services.

Status

- Production contract awarded in January 1995.
 - First article was delivered in February 1996.
 - Operational test conducted in March 1996.
- Twelve systems (10 HMMWV variants, two transit case variants) have been delivered.
- Introduction of evolutionary insertions underway.
- IOC: first quarter FY 1997.

Contractor

- Raytheon E-Systems, Richardson Operations; Richardson, Texas



Special Operations Command, Research, Analysis and Threat Evaluation System (SOCRATES)

Mission

Provide a wide range of mission-required, automated intelligence and imagery support to USSOCOM, its component commands, and operating forces, as well as USCENTCOM and its components in-garrison. Implements Joint Deployable Intelligence Support System (JDISS) for USSOCOM.

Description

- An ongoing, evolutionary program.
- Wide area, network-based, multifunctional intelligence system incorporating a variety of computers, databases, intelligence communications systems, secure phones, facsimile equipment, imagery processing, secondary imagery dissemination, and map handling equipment.
- Unprecedented access to national and regional intelligence products, satisfying long-standing intelligence deficiencies identified in all five geographic CINC theater intelligence architectures.
- Extremely capable, rugged, and deployable link to national and regional intelligence.
- Near real-time intelligence and imagery products.
- Funding includes development and acquisition of deployable SOCRATES workstations to provide a capable, rugged,

and deployable capability that will enable SOF to interface with national, theater, and service intelligence data handling systems.

- Product improvements focused on integration of emerging intelligence community systems, technology, and standards into the SOCRATES architecture.

Status

- SOCRATES IOC occurred in first quarter FY 1990.
- Operational/intelligence interface installed first quarter FY 1994 to support connection to USSOCOM secret command local area network (LAN).
- Fiber optic backbone upgrade to SOCRATES LAN backbone occurred in second quarter FY 1995.
- Major JDISS-SOCRATES software upgrade IOC occurred in first quarter FY 1998. Fielding to components completed in second quarter FY 1998.
- Psychological Operations Automation System (POAS) Phase 1 IOC in first quarter FY 1996.
- Operational at 43 sites with over 2,000 users.

Contractor

- Principal Support: Technautics; Sverdrup

SOF Signal Intelligence Manpack System (SSMS)

Mission

Provide near-real-time force protection and target identification and location.

Description

- Lightweight, man-portable communications intercept and direction finding (DF) system.
- Two DF antennas provide simultaneous coverage. Improved version merges these into one full spectrum antenna.
- Permits intercept and DF operations from fixed positions or when carried by operator.

Status

- IOC: third quarter FY 1994.
- FOC: third quarter FY 1995.
- Improved SSMS successfully completed FOT&E in November 1997.
- ETI insertion of 156 systems begins FY 1998.
- Part of SOF-wide system migration strategy under joint threat warning system (JTWS).



Contractor

- Delfin Systems; Santa Clara, California

Special Mission Radio System (SMRS)

Mission

Pass reliable, secure command and control via voice and data over long or varying distances; serves as the HF-Manpack System for those missions requiring a low probability of intercept/detection capability.

Description

- A low-power, high-frequency radio set.
- Features automatic link establishment, embedded COMSEC, and internal modem.
- Frequency range of 1.6-60.000MHz.
- Transmitter power selectable up to 10 watts.

- Improved weight/size and power consumption over AN/PRC-70, AN/PRC-74, and AN/PRC-104 systems (rucksack load reduction over PRC-70 from 46.8 lbs to 10 lbs), which it replaces.
- Provides reliable communications for C2, thereby reducing dependency on availability of limited UHF satellite channels.

Status

- Initial contract awarded 1995; production planned for 1337 systems.
- Evolutionary program; IOC: September 1999.

Tactical Radio System (TRS)

Mission

Provide naval special warfare (NSW) combatant craft with critical intra-craft communications and an exterior command and control link to SOF base station, tactical aircraft, SOF and conventional U.S. and allied maritime platforms, and other SOF and conventional forces.

Description

- Consists of four subsystems — radio control/interior (RC/I), drop-in communications package (DICP), communications helmet, and a single multi-band antenna.
- Will enable crew members to communicate internally, boat-to-boat, or via tactical radios co-located in the DICP.

- The multi-band antenna will consolidate existing HF, VHF, UHF, LOS, and UHF SATCOM antennas into a single antenna.

Status

- Developmental and operational testing completed.
- Multi-band antenna technology to meet the operational requirements document does not exist.
- Fourteen low-rate initial production units installed on 30-foot rigid inflatable boats (RIB).
- Successfully installed and tested on NSW RIB.
- In production.

Contractor

- Naval Air Warfare Center, Aircraft Division; St. Inigoes, Maryland

Joint Base Station (JBS)

Mission

Provide a deployed SOF commander the ability to establish and maintain mobile and fixed combat, contingency, training, and administrative communications from any level within a theater of operations.

Description

- Family of deployable base stations. Encompasses three component commands' requirements: core capability (NSW task unit van), Variant 1 (USASOC Special Forces base station), Variant 2 (AFSOC special operations communications package), Variant 3 (NSW fixed base station), and Variant 4 (NSW modular communications).
- Small transportable, roll on/off, self-contained communications system that will provide high data rate, continuous, reliable long and short range, and secure communications.

- Provides the ability to rapidly transmit data between infiltrated elements and higher headquarters.

Status

- Seven core production units completed and delivered to Naval Special Warfare Command in January 1997.
- Variant 1 undergoing DT/OA with a production decision planned for June 1998.
- Two Variant 2, low rate initial production units released to AFSOC and more units in production.
- Variant 3 and 4 critical design reviews scheduled for FY 1999.

Contractor

- Naval Air Warfare Center, Aircraft Division; St. Inigoes, Maryland

Integrated Survey Program (ISP)

Mission

Support Joint Chiefs of Staff contingency planning in conducting surveys on facilities where U.S. interests may be at risk.

Description

- Merge several existing survey programs into a single program, standardizing procedures and equipment.
- Field eleven Data Collection Systems to theater CINCs regional survey teams and component's specialized survey teams.
- Establish the ISP central production branch within the USSOCOM Joint Intelligence Center.
- Increase dissemination of survey products through use of digital media.

Status

- ISP has been designated as a migration system by the assistant secretary of defense (command, control, communications and intelligence).
- Prototype/integration contract awarded in August 1995.
- Operational test and evaluation conducted June 1996-September 1997.
- Fielding of all data collection system during FY 1998.

Contractor

- Integraph Corp;
Huntsville, Alabama

Special Operations Forces Tactical Assured Connectivity System (SOFTACS)

Mission

Provide assured connectivity between the joint special operations task force's major subordinate units and other commands in support of SOF missions.

Description

- A state-of-the-art tactical automation system and digital telecommunications network with increased throughput capacity to support the flow of information throughout the deployed SOF community.
- Consists of multi-band, multi-channel super high frequency (SHF) satellite communications (SATCOM) terminals, troop-satellite support radio (TSSR) systems, digital circuit switches, remote trunking systems (RTS), tactical local area network (LAN) equipment, and message gateway servers.
- Operates over military and commercial satellite space segments and provides

high capacity communications links to support voice, data, imagery, and video teleconferencing.

- System will be fielded in two configurations: a vehicle mounted system and a transit case configuration. The transit case system will be fielded initially as a SHF terminal only. Both configurations will evolve to meet objective requirements.

Status

- Four each specification compliant vehicle-mounted SOFTACS will be acquired and tested as low-rate initial production units.
- Production decision for follow-on SOFTACS procurement is expected in third quarter FY 1998.

Contractor

Raytheon Electronics System;
Marlborough, Massachusetts

Aircraft Wireless Intercom System (AWIS)

Mission

Provide SOF fixed- and rotary-wing aircrew members, a supervisor, and up to a five-person support team with wireless, hands-free communications for hot refueling operations inside and around the aircraft or with crew members performing inflight duties.

Description

- An AWIS consists of up to six wireless, hands-free operated radio sets; an aircraft interface unit; and a clip antenna.
- Supports at least six separate independent aircraft nets with up to six crew members in each network.
- Allows simultaneous, omni-directional communications in the commercial UHF band among all users.

- Safe to operate in a hazardous environment.
- Interfaces with hard-wired aircraft inter-communications systems.

Status

- Market survey has been completed.
- Commercial-off-the-shelf equipment is available.
- Eight first article test units to be acquired and tested.
- Production decision for follow-on AWIS procurement is expected second quarter FY 1998.

Contractor

Communications-Applied Technology;
Reston, Virginia

C⁴I Automation System (C⁴IAS)

Mission

Provide a command-wide interoperable automation network supporting garrison and deployed requirements.

Description

- An ongoing, evolutionary program.
- Consolidates component LANs and WANs (unclassified and collateral).
- Provides an interoperable, reliable, and sustainable automation environment.

- Fulfills a wide range of requirements — command and control, office automation, decision-making assistance, mission analysis, as well as planning and execution.
- Complies with the defense information infrastructure (DII) common operating environment (COE).

Status

Program initiated on October 1, 1997.

Joint Threat Warning System (JTWS)

Mission

Primary source of threat warning and situational awareness supporting ground, maritime, aircraft and unattended SOF mission requirements.

Description

- Configured for use in man-pack, unattended and platform configurations to include: SOF aircraft (TALONI/II, Gunships, CV-22 and selected helicopters). Maritime craft (patrol coastal/MK-V SOC).
- Hosts common software taken from PRIVATEER controlling integrated common modules (ICM) of hardware from existing SOF SIGINT-related programs to include: PRIVATEER, SILENT SHIELD, SSMS AND MATT/BMATT.
- Provides communications and radar intercept and direction finding capability with access to national intelligence resources via Integrated Broadcast System (IBS).
- Operated by Naval Security Group (NSG), Air Intelligence Agency (AIA) and USASOC personnel.
- Long term capability replaces existing hardware with three main ICMs (platform, ground & unattended)

tailored to requirements of individual weapons platforms.

- Commercial products ensuring commonality and interoperability within the SOF and national community.
- Adheres to JMCIS/JDISS and DII COE standards.

Status

- Evolutionary acquisition program
- JORD approved by November 1997 RRB.
- Initiated by Congress in FY 1997 to provide training supporting the PRIVATEER program.

Contractor

- Technical developer — SPAWAR Systems Center; Charleston, South Carolina
Supported by: NRL, Washington, D.C.
NRaD, DET 2/645 MATS, Autometric, Inc., SRC and EWA
- Vendors: SWRI, Hewlett-Packard, Watkins-Johnson, Cubic, Delfin Systems, Allied Signal, Raytheon E-Systems

PRIVATEER

Early Warning System

Mission

Provide threat warning and situational awareness aboard SOF maritime craft to include the Cyclone-class patrol coastal (PC) and MK-V special operations craft (SOC).

Description

- Permanently installed communications and radar intercept and direction finding.
- Access to national intelligence resources for IBS component broadcasts.
- Operated by Naval Security Group personnel.
- System components make use of existing government and commercial products while ensuring commonality and interoperability within the SOF and national community.
- Adheres to JMCIS/JDISS and DII COE standards.

Status

- Evolutionary acquisition program

- Production initiated FY 1996 for patrol coastal (13 systems).
- Scaled down version in FY 1998 for MK-V (20 systems).
- OT&E completed in FY 1995 for PC configuration. IOT&E for MK-V during FY 1997. FOT&E for Technology Insertions starting in FY 1999.
- Part of SOF-wide system migration strategy under the joint threat warning system (JTWS).
- Designated by the Office of Assistant Secretary of the Navy (RD&A) for migration into the mainstream Navy system architectures.

Contractor

- Technical developer — SPAWAR Systems Center; Charleston, South Carolina
Supported by: NRL, Washington, D.C., Autometric Inc., SRC and EWA
- Vendors: SWRI, Hewlett-Packard, Watkins-Johnson, Cubic, and Allied Signal.

SILENT SHIELD

Early Warning System

Mission

Provide threat warning and situational awareness aboard fixed- and rotary-wing SOF aircraft.

Description

- Carry-on /carry-off communications intercept and direction finding system.
- Access to national intelligence resources via BMATT for IBS component broadcasts (TIBS, TDDS & TADIX-B).
- Operated by Air Intelligence Agency (AIA) personnel.
- System components make use of existing government and commercial products.

Status

- Evolutionary acquisition program
- LRIP production initiated FY 1997 (5 Systems) for OT&E.
- Full production planned for FY 2001.
- Part of SOF-wide system migration strategy under the joint threat warning system (JTWS).

Contractor

- Technical developer — DET2/645 MATS; Greenville, Texas. Supported by: Raytheon E-Systems; Greenville, North Carolina
- Vendors: E-Systems, Watkins-Johnson, COBRA and Allied Signal

Active Noise Reduction (ANR)

Mission

ANR is built into the headsets and helmets used by aircraft crew members and use electronic noise canceling to reduce the noise level. The system detects the ambient noise signal, reverses the phase and amplitude, and reinserts the signal into the earcup to cancel high amplitude noise levels in aircraft cockpits and cargo bays. ANR reduces temporary and permanent hearing loss.

Description

A "variable family" nomenclature for the ANR system has been established and designated as "headset electrical," active noise reduction, PRU-57(V)/P. The four versions currently on contract are the:

(1) HGU-55/P helmet version preliminarily designated as PRU-57(V)1/P, (2) the headset version preliminarily designated as PRU-57(V)2/P, (3) the F-22 aircraft version preliminarily designated PRU-57(V)3/P and (4) the helicopter helmet version. The helicopter version has yet to be assigned an official nomenclature.

Status

Contract awarded to produce 1563 ANR headsets of which 193 have been delivered to AFSOC. There is currently an additional requirement for 1563 fixed wing helmets and 370 helo helmets (SPH-4AF).

Contractor

Bose Corporation; Framingham, Massachusetts

Multi-Band Multi-Mission Radio (MBMMR)

Mission

Provide reliable, secure voice and data communications across the VHF and UHF bands with a single manpack radio.

Description

- Frequency range of 30-512 MHz.
- Features demand access multiple assignment (DAMA), embedded Type 1 COMSEC, SINCGARS, and HAVEQUICK II.
- Transmitter power selectable up to 20 watts.
- Reduces combat load by replacing numerous

single banded manpack radios currently used, such as the AN/PRC-85, AN/PRC-113, AN/PRC-117, AN/PRC-119, AN/PSC-3, AN/PSC-5, LST-5B/C and HST-4A with one full range/band radio system.

Status

- Market survey has been completed.
- Competitive acquisition.
- Test articles to be acquired and available for testing in early FY 1999.

Multi-Band Inter/Intra Team Radio (MBITR)

Mission

Provide reliable, secure communications (voice and data) on a user-selected frequency from 30 to 512 MHz utilizing a single hand held radio.

Description

- VHF & UHF/LOS hand held radio.
- Frequency range of 30-512 MHz.
- Features embedded Type 1 COMSEC.
- Transmitter power selectable up to 5 watts.
- Improved weight/size and power consumption by replacing numerous multi-frequency/banded hand held radios currently used, such as the AN/PRC-68, AN/PRC-126, MX-300,

MX-300S and MX-300R with one full range/band radio system.

Status

- Contract awarded in March 1997 for test articles.
- Test articles available for testing in fourth quarter FY 1998
- Production decision is expected in first quarter FY 1999.
- Production planned for about 4,050 systems.

Contractor

Racal Communication, Inc.;
Rockville, Maryland

SURVIVAL & MISSION SUPPORT

Directional Infrared Countermeasures (DIRCM)

Mission

Protect SOF C-130 aircraft from advanced infrared missiles.

Description

- Cooperative acquisition program with the United Kingdom.
- System integrates existing technology with growth provisions included for laser upgrade.
- Missile warning sensors (MWS) detect threat missile; after handoff from MWS, fine track sensor acquires and tracks missile; modulated lamp-based countermeasure defeats missile.
- Capable of defeating multiple threats.
- Installations planned for 59 SOF AC-130H/U and MC-130E/H aircraft.

Status

- Memorandum of understanding with the United Kingdom Ministry of Defense signed in June 1994.
- Development/production contract competitively awarded in March 1995.

- 36-month development phase followed by four years of production options starting in early FY 1999.
- Initial DIRCM installations on operational aircraft scheduled for FY 1999.

Contractors

- Prime contractor:
Northrop Electronics Systems International;
Rolling Meadows, Illinois
- Key subcontractors:
 - GEC-Marconi Defense Systems;
Edinburgh, Scotland
 - Northrop Grumman, formerly (Westinghouse Electric Company); Baltimore, Maryland
 - Boeing, formerly (Rockwell Tactical Systems Division); Duluth, Georgia
 - British Aerospace (Systems and Equipment); Plymouth, United Kingdom
 - Raytheon, formerly (Chrysler Technologies Airborne Systems); Waco, Texas

Special Operations Forces Planning and Rehearsal Systems (SOFPARS)

Mission

Provide semi-automated and automated flight planning, mission planning, preview, and mental rehearsal capability for SOF Air Force and Army air operations. As part of mission planning, provide access to national/tactical/strategic level data bases and threat analysis.

Description

- SOFPARS is an integrated family of SOF Air Force and Army air mission planning systems, supported by intelligence databases and imagery that will be used by planners within the SOF command structure worldwide to plan and preview SOF missions.
- Components include:
 - Base station systems — for use at major SOF/theater level headquarters
 - Desktop systems — can be deployed to secured forward areas
 - Portable systems — used for mission planning.
 - PCs used for flight planning at the individual aircraft/crew level.

- These systems, with enhanced, state-of-the-art processing speed, flexibility, storage capacity, and growth potential, significantly improve threat analysis, image processing, and mission/flight planning as well as processing of the combat planning folder data.
- SOFPARS will support all types of SOF aircraft — both fixed- and rotary-wing.

Status

- Systems on hand or presently being fielded include:
 - 80 flight planning systems (PCs)
 - 132 portable mission planning systems
 - 75 desktop systems
 - 18 base station systems
- Initial fielding complete. Procurement of replacement systems for flight/mission planning is projected for FY 1999.

Contractor

- Sanders (a Lockheed Martin Company); Nashua, New Hampshire

Aircrew Training System (ATS) and Special Operations Forces Training System (STS)

Mission

Support initial aircraft and mission qualifications, as well as continuation and upgrade training; to perform rapid and secure rehearsal of national, high-priority, sensitive missions within 48 hours of taskings; and to provide support for the Air Force's MC-130E/H and AC-130U and the Army's MH60/47E.

Description

- Integrated, ground-based system.
- Improves aircrew proficiency.
- Reduces operating costs.
- Lowers risk of training accidents.
- Includes weapons system trainers specific to each aircraft, mission rehearsal devices, part-task trainers, computer-based instruction, and associated computer and logistical support equipment for crew.

- Mix of academics, simulator training, and aircraft flight training to produce combat qualified crew.

Status

- Design, integration, and software development to continue through FY 2000.
- Initial systems for MC-130E/H scheduled for operation FY 1996-1998.
- Initial system for AC-130U scheduled in FY 1998.

Contractors

- Loral Defense Systems; Akron, Ohio
- Lockheed Martin Information Systems; Orlando, Florida
- Rockwell International; Ft. Walton Beach, Florida
- Evans & Sutherland; Salt Lake City, Utah

SOF Technology Development

Mission

Provide the technological means, which enables SOF to achieve and maintain the operational advantage over all adversaries regardless of theater of employment or meteorological conditions.

Description

- General program principles:
 - Expand emphasis on technology.
 - Exploit access to overall R&D community.
 - Play a greater role in defense science and technology planning.
 - Target critical technology sources — seek productive partnerships.
 - Establish continued/credible presence — greater involvement of senior leaders.
 - Coordinate with and make greater use of components.
- Special operations technology development:
 - Leverage technology base to focus on SOF deficiencies and goals.
 - Identify, influence, and insert relevant technology into SOF materiel.
 - Does not develop leading edge, but is able to use leading edge when necessary.
- Links non-systems technology opportunities to USSOCOM technology development objectives and mission area deficiencies.
- Exploits technology developments of other organizations through aggressive cooperative joint projects.
- Special operations special technology:
 - Funds demonstration of emerging advanced technologies.
 - Links advanced technologies to SOF deficiencies.
 - Evaluates applied technologies in as realistic an operational environment as possible.
- Examples of projects:
 - Very Slender Vessel personal inertial navigation system
 - Personal inertial navigation system
 - COVI
 - Head mounted thermal vision
 - Color night vision fusion
 - Maximum efficiency language trainer
 - Special operations micro robotic vehicles
 - Remote miniature weather station
 - Advanced sensors
 - Aircraft off/on load system — Autonomous landing guidance

MILITARY CONSTRUCTION

Facilities for New Force Structure

Mission

Provide facilities support for SOF force structure.

Description

- Patrol coastal pier facilities.
- Airlift parking apron.
- Advanced SEAL Delivery System (ASDS) facility.
- 528th Special Operations Support Battalion operations and supply complex.

Status

- *Facilities currently under construction:* operations complex, Fort Bragg, North

Carolina; aircraft parking apron, Hurlburt Field, Florida; battalion headquarters building, Fort Knox, Kentucky; and patrol coastal pier facilities, Naval Air Base, Little Creek, Virginia.

- *Future projects:* amphibious operations support building, Fleet Tactical Warfare Center, Dam Neck, Virginia; operations support facility, Naval Station, Guam; refueling vehicle shop, Harrisburg IAP, Pennsylvania; ASDS facility, Pearl Harbor, Hawaii; and MH-53 squadron operations facility, Hurlburt Field, Florida.

Replacement Facilities

Mission

To replace obsolete SOF facilities.

Description

- Replacement of the air operations training facility.
- Replacement of the avionics/electronic countermeasures (ECM) pod maintenance facility.

Status

- *Facilities currently under construction:* air operations training facility, El Centro, California, and the avionics/ECM pod maintenance facility, Harrisburg, Pennsylvania.

SOF Training Facilities

Mission

Provide modern facilities to improve SOF training, increase safety, and reduce training costs.

Description

Facilities for maritime, aviation, medical, and operations training.

Status

- *Facilities currently under construction:* special operations medical training center,

Fort Bragg, North Carolina; simulator facility, Hurlburt Field, Florida; and aircrew training facility, Kirtland Air Force Base, New Mexico.

- *Future projects:* maritime training complex, Camp Pendleton, California; operations and logistics facility, Naval Air Base, Coronado, California; and language sustainment training facility, Fort Bragg, North Carolina.



Special operations medical training center, Fort Bragg, North Carolina.

