



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

MEMORANDUM FOR AFSPC NAF, CENTER AND WING COMMANDERS
HQ AFSPC DIRECTORS

FROM: AFSPC/CC
150 Vandenberg Street, Suite 1105
Peterson AFB CO 80914-4020

SUBJECT: Year in Review 2010

1. Over the course of 2010, the AFSPC team of over 46,000 men and women provided space and cyberspace capabilities to US, allied and coalition forces engaged in operations around the globe...and beyond. AFSPC people achieved mission success while expanding our combat capability. With the space and cyberspace capabilities we provided, deployed forces were able to plan, coordinate, maneuver and strike with precision, agility and impact.
2. As the Air Force's lead Major Command for cyberspace, we spearheaded our Service's efforts in this newest and critically important operational domain. In 2010, we advanced our technical capabilities, career field selection and management, organizational structure and C2 and professional education and training. With our partners in Air Education and Training Command (AETC), we graduated our first Undergraduate Cyberspace Training (UCT), Cyber 200 and Cyber 300 classes. Having reached Initial Operational Capability (IOC) in 2009, 24th Air Force achieved Full Operational Capability (FOC) status in October and was designated Air Forces Cyber (AFCYBER) in December. Our work with cyberspace is a marathon and we are committed to advancing at a swift, but deliberate pace.
3. Our accomplishments in space were equally impressive. In 2010, we launched several first-of-its-kind spacecraft, to include GPS IIF, SBSS and AEHF-1. The Launch and Range Enterprise continued its record of successful national security launches. With operational acceptance of WGS-3, SATCOM combat capability increased by 100%. Through the space surveillance network, we enabled assured access to space and safer on-orbit operations for the DoD, civil, commercial and international space community.
4. I am proud of our people and the many advances that allowed our forces to produce decisive results for the Nation. The vision and diligence they demonstrated in 2010 will be foundational to our success in 2011 and beyond. I am humbled and honored to have served with you in AFSPC. Our Airmen, civilians and contractors demonstrated the boldness, adaptability and resolve befitting our legacy as Airmen. Aim high...fly, fight and win!

C. ROBERT KEHLER
General, USAF
Commander

Attachment:
AFSPC 2010 Accomplishments

AFSPC 2010 Accomplishments

Key Milestones

- 24 AF achieved FOC status
- 24 AF designated AFCYBER as the USAF component to US Cyber Command
- Launched three "first-of-a-kind" satellites including:
 - Global Positioning System (GPS) Block IIF--first GPS payload launched on Evolved Expendable Launch Vehicle (EELV)
 - Advanced Extremely High Frequency (AEHF-1)--will provide enhanced jam resistant communications to COCOMs
 - Space-Based Space Surveillance (SBSS)--will detect and characterize debris and other space objects
- Completed Critical Design Review and gained DoD requirements validation for production of the first block of next generation GPS III satellites
- Gained requirements validation and completed acquisition strategy for Joint Space Operations Center (JSpOC) Mission System (JMS)
- Conducted first launch of Minotaur IV rocket carrying a National Security Space payload (SBSS)
- Launched, tested and recovered America's first unmanned, reusable, long-duration space plane, the X-37B Orbital Test Vehicle
- Graduated first classes from UCT, Cyber 200 and 300
- Broke ground for the new Space Education and Training Center at Peterson AFB
- Supported inaugural launch of Space Exploration Technologies' (Space-X) Falcon 9 rocket and Falcon 9's NASA Commercial Orbital Transportation Demo
- Continued the record of consecutive successful National Security Space launches
- Shaped and began implementation of 2010 National Space Policy
- Shaped and implemented new USAF space management structure

Joint Fight Contributions

- Forward-deployed over 2,700 Airmen to the USCENTCOM and other Combatant Command (COCOM) areas of responsibility (AORs) to participate in combat and other critical operations
- 16th and 380th Space Control Squadrons (SPCS) surpassed five years of deployed duty for Operation Silent Sentry
- Provided ten additional Full Motion Video Joint Predator feeds to USCENTCOM in response to urgent need
- Implemented mission assurance efforts supporting Remotely Piloted Aircraft (RPA) combat sorties and executed first-ever Cyber Escort missions on Air Tasking Order in support of USCENTCOM
 - Established first-ever Cyberspace Operations Liaison Element at AFCENT
- Wideband Global SATCOM (WGS) Block I (WGS 1 - 3) fully operational with launch and on-orbit acceptance of WGS-3

- Initiated “Expanded 24” GPS Constellation to aid terrain-challenged warfighters; largest constellation reposition effort in GPS program history
- Launched first GPS IIF satellite with enabled Selective Availability Anti-Spoof Mode (SAASM) capabilities
- The Space Innovation and Development Center's AF TENCAP continued to increase combat capacity across all domains for Joint forces by completing 17 projects this year, with 51 projects ongoing
 - Fielded project to collect, convert and forward Bomb Impact Assessment messages transmitted from Joint Air-to-Surface Standoff Missiles to AOC, fulfilling AOC requirements to assess friendly kinetic operations at tactical and component levels
 - Developed cutting edge RPA detection capability--system installed and tested onboard a Navy ship and Army is purchasing additional units to deploy
 - Led enhancement of geolocation system in support of USCENTCOM, improving system capabilities for protecting SATCOM by 55%
- Provided real-time Missile Warning to Combatant Commanders and National decision makers for over 200 missile launches
- Identified and reported over 4,500 special IR events--150% increase over 2009 and highest operations tempo and largest volume in Space-Based Infrared System (SBIRS) history
- The Joint Space Operations Center (JSpOC) tracked 22,500 space objects and 112 collision avoidance maneuvers by Space Situational Awareness (SSA)-sharing partners (148% increase over 2009)
- Transitioned first-ever AFSPC hyperspectral imager (TACSAT-3) from experimentation to operational status; provided Operationally Responsive Space (ORS) enabling technology demonstrations and new support to warfighter
- Worked with AF Intelligence, Surveillance and Reconnaissance (ISR) Agency and HQ AFSPC/A2 to obtain direct, timely intelligence support for 24 AF units conducting command, control and operational execution
- In its second year, Space Protection Program provided key protection recommendations to AFSPC and NRO leadership on Position, Navigation and Timing, Assured Command and Control and recommendations for 2010 National Space Policy development
- Optimized use of DoD Space Range--supported 479 "live-fire" events in CY10--43% increase from 2009
- Supplied ten new satellite links for intelligence and support to Haiti earthquake relief
- Distributed Mission Operations Center-Schriever integrated first Space Models into Joint Training Community and planned and executed 26 Joint/COCOM/Service exercises--space support and training to over 35,000 personnel

Key Enabling Accomplishments

- AFSPC conducted a total of 92 Congressional Engagements to inform Congressional Members/Staff on AFSPC mission, organization, space and cyberspace capabilities
 - AFSPC/CC appeared before House and Senate Armed Services Committee Strategic Forces Subcommittees for 2010 Space Posture Hearings

- 24 AF/CC appeared before House Armed Services Committee Terrorism and Unconventional Threats and Capabilities Subcommittee to testify on Military Department Organization for Cyber Operations
- AFSPC Leadership team briefed AFSPC strategic way ahead to Armed Services and Defense Appropriations Committee staffers
- AFSPC hosted 53 Staff Delegations and participated in the Capitol Hill Visit Program (10 Wing/CCs, 2 NAF/CCs, 2 Center/CCs and one Office/CC)
- Updated AFSPC-NRO Memorandum of Understanding--reinforcing collaboration on personnel matters, assured access to space and operations
- Improved quality of life for AFSPC professionals assigned to NRO, including the ribbon-cutting of a new fitness center
- Advanced AFSPC-NRO-NASA launch cooperation, including a signed Letter of Intent for future collaboration
- Ceased operations at Onizuka AFB under BRAC 2005; relocated 21 SOPS operations to Ellison Onizuka Space Operations Facility at Vandenberg AFB with no negative impact to Air Force Satellite Control Network (AFSCN) operations
- 45 SW hosted our service's 2010 Air Force Week (October 2010)—successfully executing the AF-wide public communication program that allows community members opportunity to receive thanks for supporting the military, meet Airmen and learn about the AF mission
 - Air Force Week Cocoa Beach 2010 included Air Force-themed days at Walt Disney World, Sea World and the Kennedy Space Center, as well as performances by Air Force bands and demonstrations by the Thunderbirds, Honor Guard and pararescue Airmen in central Florida communities
- Delivery of Standard Space Trainer--common platform for all future space operations training; first delivery was this Fall for Defense Satellite Communications System (DSCS)
- AFSPC organizations provided over 4,000 hours of initial and advanced training for cyber operators, intelligence personnel, developers and other professionals across the AF
- Advanced Space Operations School responded to high demand for courses--increased courses 150% to accommodate additional 360 FY10 students from across the Services
- AFSPC second only to AETC in enlisted personnel CCAF degree completion in 2010
- Cyberspace operations Air Force Specialty Codes became reality
 - Cyberspace Defense officers (17DXA) and Cyberspace Control officers (17DXB)
 - Enlisted Cyberspace Defense Operations specialty (1B4XX)
- Cyberspace SMEs worked with Goodfellow AFB intelligence officer course instructors to create entirely new cyberspace intelligence block of instruction for new intelligence officers
- Air Force Network Integration Center (AFNIC) led efforts to develop DoD and AF's networkiness concept--an operational assessment that provides a holistic review of everything connecting to a DoD or AF network
- Air Force Frequency Management Agency was re-designated Air Force Spectrum Management Office (AFSMO)
 - Preserved AF Spectrum Access during Department of Commerce "Fast Track" evaluation of spectrum for 5-year transition to broadband wireless

- AFSPC set the bar for Strategic Sourcing in the Air Force in awarding Front Range Simplified Acquisition of Base Engineering Requirements (SABER) Contract, providing support covering over 200 miles from Cheyenne, Wyoming to Southern Colorado, including seven DoD installations
- Produced a Sexual Assault Prevention video focused on bystander intervention
 - 30 AFSPC Airmen participated in video and AFSPC/CV introduced video at November 2010 AF Leaders' Sexual Assault Prevention and Response Summit
 - Video now on YouTube and being shown Air Force-wide
- AFSPC People Helping People-Integrated Delivery System team:
 - Conducted Quality of Life Focus Groups with 2,000 active duty, spouses and civilian members and findings shared with Wing Commanders, AF Community Action Information Board and AF Services Transformation Board
 - Six School Liaison Officers were hired to address military family school issues
- Designed, planned and executed Schriever 2010 and supported Unified Engagement 2010 Title 10 Wargame
- 17th Test Squadron (TS) enabled 65% reduction in SBIRS Highly Elliptical Orbit (HEO) operations certification timeline for AFSPC
- AFSPC relinquished inspection responsibilities for 20 AF and three missile wings at three geographic locations and assumed responsibility for 24 AF and five wings/centers at over 100 worldwide locations--a significant inspection footprint increase
- Invested over \$48M in energy and water conservation opportunities--water conservation efforts pushed 21% reduction of water use in FY10 from an FY07 baseline; 15% ahead of Congressional and executive order mandates
- Invested \$283M in facility and infrastructure improvements, including \$42M invested directly in efficiency projects and \$7.1M to improve Airmen dormitories
- Provided quality homes and stronger communities via housing privatization
 - Partnered with three private sector developers constructing 487 housing units worth \$122M; renovated 375 units at \$24M and demolished 366 legacy units
 - Renovated 95 units at Los Angeles AFB
 - Constructed 154 new units and demolished 108 units at Peterson AFB
 - Constructed 242 new units and a community center at Schriever AFB
 - Renovated 72 units, replaced 223 roofs, demolished 68 units and constructed a community center at Patrick AFB
 - Constructed 91 new units, renovated 208 units, demolished 190 units at Vandenberg AFB
- AFSPC Safety:
 - 68% reduction in safety mishaps--fewest in 7 years
 - Sponsored AFSPC-wide private motor vehicle Air Force Culture Assessment Safety Tool survey; 17K participated; set first-ever MAJCOM baseline
 - Succeeded in closing unexploded ordinance danger area on Vandenberg AFB--10+ year undertaking--public safe from World War II bomb range

Significant Awards

- SECAF presented 380 SPCS with Joint Meritorious Unit Award for direct support to USCENTCOM combat operations by detecting over 240 satellite interference events while defending communications links for over 1,800 remotely piloted vehicle sorties
- 67th Network Warfare Wing (NWW) became first Air Force cyber unit to win USSTRATCOM Omaha Trophy in category of global operations
- AFSPC Security Forces deployed from Buckley AFB received the AF Combat Action Medal for their actions while engaged with enemy insurgents in the vicinity of Balad AB, Iraq
- 17 TS won "AFOTEC Test Team of the Year"
- AFSPC History Office awarded Air Force History and Museums Program's 2010 Gen Bryce Poe II Award as best MAJCOM history office in area of annual history, exemplifying excellence in every aspect of annual history research and publication
- HQ AFSPC/IG won Lt Gen John P. Flynn Award for outstanding performance as best MAJCOM IG Complaints Resolution Program Office--a first for AFSPC
- SMSgt Sarah Sparks (HQ AFSPC/A4) named AF Materiel Management Staff Enlisted Manager of the Year and one of AF's 12 Outstanding Airman of the Year for 2010
- Lt Col Mike Rokaw (SMC) won inaugural National Space Club Schriever Award for "excellence in space operations/acquisitions by a member of our nation's military space community"
- Mr. Duane Judy (460 SW/ATO) named 2010 USSTRATCOM Antiterrorism Program Manager of the Year in recognition of his efforts to enhance the protection of space missions supporting USSTRATCOM missions
- Peterson AFB and Thule chapels won combined award for Terence P. Finnegan Award for Air Force Level Outstanding Chaplain Corps Medium Team Category
- AFSPC planned and conducted Guardian Challenge, the world's premier space and cyberspace combat competition, which hosted the Under Secretary of the Air Force and United Kingdom representatives this year and presented the following major awards:
 - Schriever Trophy for Best Space Launch Wing to 45 SW
 - Aldridge Trophy for Best Space Operations Wing to 460 SW
 - King Trophy for Best Systems Wing to Space Development and Test Wing
 - Polifka Trophy for Best Cyberspace Operations Wing to 67 NWW
 - Etchberger Trophy for Best Combat Communications Team to 3rd Combat Communications Group