AGENDA

- Near-Term AF ATE Opportunities/Contract Vehicles
- USAF ATS/PGM updates
- AF Budget Impacts
- FY 16 Budget Review
- Top AF Programs
- World Aviation News
- Aviation News
ATE Opportunities

- **Armament Testers**
  - **O-Level Testers/ I-Level Testers**
    - Long-term goal: Have a standardized Armament tester across Bombers, decreasing the number of testers for each platform type
      - Existing testers and other viable sources being considered
    - **BAT Pre-Solicitation Day 18-19 Nov 2015**
      - Draft RFP data will be released prior to above event,
      - Industry advised to watch FedBizOps for updated program information at: https://www.fbo.gov/index?s=opportunity&mode=form&id=8f02f4b58fa1af38fd8e38321d7a7cf4&tab=core&cview=1
    - BAT is placed under the “Should Schedule” test case.
    - F-22 COLT I-Level requirements will continue to be supported by COLT

- **VDATS® Progress**
  - **104** Total VDATS® currently fielded or in production for legacy and new customer requirements:
    - Delivered for Legacy ATS replacements: 63 Digital-Analog (DA) stations
    - In Manufacturing for Legacy ATS replacements: 7 DA stations
    - Delivered for new workload requirements: 36 DA stations
  - Utilized in AF Depots (Warner Robins ALC, Oklahoma City ALC, and Ogden ALC), Tobyhanna Army Depot and currently, one Intermediate Level location
  - 2 core configurations: DA-1 and DA-2
  - All TPS efforts (Contractor or Organic) must be developed IAW the VDATS® TPS Style Guide and MIL-PRF-32070A
  - Approximately **989 TPSs** developed and approved for production, and used on VDATS®
  - VDATS® currently supports over 30 weapon system program workloads for numerous weapon system platforms such as: A-10, AC-130, B-1B, B-2, B-52, C-130J, C-17, C-5, E-8 (JSTARS), F-15, F-16, KC-135, MC-130H, Navy: EP-3, P-3C, SH-60B, UP/VP-3A, Navy Ships: OC-135, and UH-1N

**VDATS® Systems Software, and TPS handbook is the key to standardization**
ATS PGM Update

- **JSECST**
  - Production of 670A testers & retrofit kits = 35 delivered to date
  - Retrofit Kit installation validated

- **CMBRE**
  - A joint use tester (AF, Navy, Marines, and 31 FMS countries), but not a family of testers
  - 1000th delivered to AF

- **CBATS Progress**
  - PXI based systems with 2 configurations
    - 101 (70) deployed at Hill AFB and Kadena AFB
    - 201 (54) deployed at Hill AFB, Kadena AFB, and Robins AFB

- **ATS Challenges**
  - **Cyber Security (previously called Information Assurance)**
    - Requirement for ALL ATS systems
    - Improvements for legacy ATS
    - Standards for future ATS acquisitions

  *NOTE: Embedded Systems at risk, Study launched to focus on RPAs. (Scientific Advisory Board)*

- **Changes in ATS Management and Oversight**
  - ATS Division Chief: Jimmy Bailey
  - Depot ATS Section Chief: Nicola Bruno
  - ATS Deputy Director: Vacant
FY-16 Budget DoD Request

- DoD requested $534.3B Plus OCO Submitted to Congress 2 Feb
  - Goal eliminate BCA
  - AF $152.9B - $16B over FY15
    - O&M $47.8B
    - Procurement $25.3B ($6B more than FY15)
    - R&D $18B ($2B more than FY15)
    - SE budgets buried within Weapon system programs
  - Meets Majority of QDR demands
  - FY16 Budget exceeds SEQ limits - Exceeds BCA by $38B
  - Efforts to relax spending limits on DoD in work by Congress
    - AF and other services holding the line on National Security requirements. i.e. Manpower and weapons systems needs.

- AF Issues going forward
  - $300B needed to sustain and Modernize the US Nuke Enterprise over next 10 years
  - Currently only Half of the CAF is combat ready (SECAF) Need to resolve BCA and SEQ
    - ACC releases 2015 Strategic Plan to address modernization and how to transform USAF to meet 21 Century Challenges
  - USAF may No longer be the Best Global AF, but at risk of becoming the Best Regional AF in the world.
  - Infrastructure too large, need BRAC and Cuts in Civilian personnel
FY-16 Budget

- House and Senate version of the FY-16 NDAA
  - $515B (496.4B) Core plus $89B for OCO
    - Concerns from DoD that OCO funding takes away from long-term planning needed for modernization
    - Sent to President on 20 Oct, 22 Oct President Veto
    - Congress Reworking entire FY16 Budget and pursuing a 2 year deal
      - More into base Defense budget versa OCO
      - $25B over the BCA
      - Extends SEQ thru 2025
      - Base Budget $548B Plus some OCO
  - Full authorization for AF Top 3 programs F-35, LRS-B and KC-46
  - Prohibit A-10 Retirement, protects E-3, KC-10 JSTARS, and EC-130
  - Major changes to Services Retirement plans
  - CR Budget agreement thru 11 Dec

- SECAF - 50 New starts at Risk if CR or No Budget
  - F-35 Production will be impacted by a CR and lack of Defense Budget for FY16
  - Kendall “Greatest threat to US is lack of a reasonable Defense Budget”.
    - Technology edge being eroded.

- DoD National Military Strategy
  - Released July 2015
    - Address how to employ US forces to cover the multitude of global issues
    - Stresses need for Agility, innovation and Integration
AF Key Programs

Top 3+ USAF Focused/Protected Requirements:

- **F-35**
  - Over 140 AC delivered to date, 651 AC planned world wide in 7 Countries by 2020.
    - 200 Pilots 1800 Mx Trained
  - Goal to get cost to $85M by 2019, $75M ea in the future, $105M now
    - Block software issues continue to impact schedule
  - AF monitoring Navy with thrust to 3-Level Mx to lower sustainment costs
  - AF IOC Aug 2016 (Ramping up Mx Manpower needs based on Production)
    - Early F-16 to F-35, Hill 388th activated first F-35 SQ 21 July, (15) AC by Sept (79) AC by 2019
      - Navy 2019, USMC IOC declared 31 July Yuma (10) AC
  - F-35 bases and schedule
    - Eielson 2 SQ July-Nov 2020, Brulington VT July 2020-May 2021, Lakenheath UK June 2021-Sept 2022
    - AC at Luke, Eglin, Nellis and Edwards
  - AF standing up a Integration office to assist in fielding AC
  - 53 yr LCC $1.4T – Congress now questioning total qty of F-35 needed.
  - MROs for Airframe/Engine support Italy, Japan**, Turkey. First International F-35 Roll out FACO, Italy
  - Norway’s first F-35 nearing completion
  - ALIS and AF Networks under Cyber attack daily. Special software/Certifications going forward.

- **KC-46A Tanker (Pegasus)**
    - Delayed due to wiring harness, Fuel Management issues.
    - Write downs of over $800M to date
  - Production 179 thru 2027 (15 AC a yr)
  - 18 Combat ready AC by 2017 IOC maybe impacted by above
  - KC-Y-X likely will be unmanned

- **LRS-B Airborne Strategic Deterrence –LRS Family**
  - **NGC awarded the LRS-B, LM/Boeing Protest possible**
  - Expect LRS AC fielded by 2024, Nuke certified 2026
  - Plan 80-100 AC or less, Target cost $550M per copy, Plan 16-20 AC per year, 5 Lots
    - First lot 21 AC
    - $21.4B EMD phase
  - **Standard Maintenance support plan for the LRS-B**

- **Other Priorities**
  - T-X (FYDP FY17) $600M in next 5 years, Award FY18, IOC 2023
    - **Redesigned AC** now the key
    - 350 AC
  - JSTAR Replacement - Competitors NGC, LM, Boeing
    - In risk reduction phase
    - Planned 2023 IOC, based on Commercial Business jets
World & Aviation News

China
- Aggressive stances continues
  - ADIZ - Island grab South China Sea China Sea/ Creating Islands expanding
  - Seen as further attempt to push US out of the region and land grab contested land/Islands
- Chinese UAV MQ-9 Look alike on display
- Y-20 Airlift first flight March YC-15/C-17 look alike.
- Roll out of F-35 look alike Sept 2015 during vist by PACAF/CC
- Building second of 4 planned Carriers
- China pursuing Hypersonic vehicles and Weapons
- #5 Military World exporter
- China12% increase in FY15 Defense Budget - China ~$200B, Russia ~$100B
- GDP exceeded US 1 Dec largest economy in the world
- NOTE: Large Weapon Systems build up in Pacific/Middle East/ and Old Eastern Block countries
- China to fly their competitor to 737-A320 next year C-919, Orders for 400, market of 6000 in China

Russia
- Go ahead for New Bomber PAK-DA Flying Wing design
  - Production 2020 IOC 2025-2030
- New ground launched and sea launched ALCM being tested (START Violation)
- Modernizing entire ICBM fleet by 2020, near-term bomber fleet upgrades TU160 by 2019
- Has already modernized their Nuclear arsenal, 150 New AC and Helos to be delivered CY15.
  - Plan 1000 New AC by 2020
- 5th Gen fighter T-50 PAK-FA first production 2016
  - 50+ AC by 2020
- Hedging on Non-Proliferation efforts and previously signed no aggression treaties
- Spending over $631B over next 5 Years for above,,
- Deploying forces forward
  - Pressing NATO, Canadian airspace, and advancing in the Arctic Region
  - Plan to begin Operations in Gulf of Mexico and coastal US (Cold War profile)
  - Syria
- NOTE: Russian Economic wows may impact this aggressive modernization plan

UCAV/RPA efforts proceeding
- X-47B, X56, Fury continues flight test
- UCLASS RFP expected soon
- X-37B returns from 2 years in orbit, and re-launched again in May
- UAV/RPA spending to double in next decade
- USAF ramping up RPA Orbits by 50% in next 4 years
- Retire Predators by 2018 in lieu of all Reaper Fleet
- B-52 Re-engine being considered again along with increased weapons load.
Aviation News

- **US Bomber fleet stable thru 2012 then reduced by (5)AC each year going forward**
  - B-1B to GSC 1 Oct, all Bombers now under GSC 8th AF.
  - B-2 planned to remain in service thru 2058
    - Msn Capability rate at 50%
  - B-52 planned service thru 2040
    - First of 30 De-Nuked B-52s by 2017, Nuke fleet (66) AC 20 B-2 - 46 B-52s

- **E-3 AWACS fleet in NATO being reduced from 17 to 14 AC.**

- **F-16V makes first flight in Oct.**

- **Next Generation Fighter study FY15 ($$ Provided) Exploring options**
  - AF 2030+ Air Dominance Fighter F-X
  - Navy F/A-XX
    - Potential Mach 5 + AC, Directed Energy, Advanced Stealth, New Propulsion and sensors +
    - Additive technologies that can be retrofitted to 4th and 5th Gen AC
  - Likely a joint effort

- **Top AF R&D efforts for FY15**
  - Hypersonic
  - Autonomous Flight
  - Directed Energy Weapons
  - Fuel efficient Engines
  - Cyber protection

- **Flex Tech Alliance Ashton Carter**
  - $75M DoD Project 162 Industry players
  - Wearable Technology

- **ISIS airstrikes**
  - 75% USAF 25% US Navy - US carrying 70% of all sorties, (KBA 1000 ISIS per month*)
  - A-10 back in the fight Nov 2014, New defined end life 2027-28
    - Both House and Senate Defense Budgets protect A-10 in FY16
  - F-22 Leading Legacy AC into the fight
Aviation News

- ACC exploring new A-10 for CAS. May impact F-35 use
  - Based on a light Attack platform.
- Nuke Modernization being impacted by SEQ/BCA
  - GSC establishing a “SAC light” dedicated group
  - AF F-35 being fitted for updated B-61 for mid 2020s.
- Last C-17 came off the Longbeach production line Sept 2015
- F-22 Life potential 2050-60
- Space Shuttle Replacement underway with Demo vehicles
  - Boeing, NGC and Master Space Systems
- LM Proposing a U-2/Global Hawk replacement - TR-X

- AIA study
  - US Military FMS Sales Flat for 2014 at $87B
  - Projects significant reductions if SEQ returns in FY16
    - Reductions in F-35
    - Retire KC-10, Global Hawk, reduce MQ-9 buys and reduced Depot Budgets along with lower R&D

- Boeing projects a Commercial need for over 38,000 new AC over next 20 years – worth $5.6T

- Leadership changes
  - Ashton Carter - new SECDEF Feb 2015
  - LtGen Ellen Pawlikowski - New AFMC/CC
  - MG Lee Levy - New AFSC/CC Tinker

- 60 years ago this year - Anniversary of the beginning of Vietnam War