Headquarters U.S. Air Force

Integrity - Service - Excellence

Transforming Precision Strike



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U.S. AIR FORCE



Our Theme...



Balancing Precision Strike for the Joint Force Commander across **Asymmetric Battlefields**



- > By definition, it is difficult to characterize this fight
- We can predict some of its attributes
 - > Fleeting and mobile targets
 - Difficult combat ID: red, blue and gray
 - Specific, strategic high-value "targets"
 - National Command Authority participation?
 - > Wide range of terrain
 - Low collateral damage tolerance
 - > Anti-access scenarios: political, geographic, and forces
 - > Time-sensitive effects
 - Low and high technology: IED's to cruise missiles
 - Unpredictable time, place or tempo



Balancing...



- Are we out of balance?
- > The asymmetric threat demands we continuously assess
- Within precision strike, balancing:
 - Kinetic versus non-kinetic
 - Cost versus capability
 - Long range versus short range
 - > Joint versus service
 - > Weapons versus systems to facilitate weapons and effect
 - Persistence versus responsiveness

<u>Technology</u> has changed, and continues to change, the definition of <u>precision</u>



Getting to the EFFECT



- National Military Strategy and the Joint Force Commanders set objective
- Precision strike was laser guided bombs and JDAM
 - > Now it encompasses a wide range of technologies
- > Given the asymmetric battlefield, determine the effect required
 - Integrated Capabilities Review and Risk Assessment (I-CRRA)
- USAF CONOPS lead us through the effects to the capability
 - Global Strike
 - Global Precision Attack
 - Global Mobility
 - Homeland Security
 - Space and C4ISR
 - Nuclear Response



Drives us to...



- Effects-based planning (not necessarily destruction) ...Swiftly <u>defeat</u> the enemy, <u>survive</u>, and get ready to <u>do it again</u>
- > Platforms and systems to deliver the effect
 - > survivable, integrated, global, persistent
- Combat Identification—instantaneous and infallible
- > Seamless <u>machine-to-machine</u>—data, communications, decision
 - > Remove man from the loop where possible
- Kinetic and non-kinetic precision
- And systems to facilitate:
 - Networks and datalinks, data fusion and decision aids, sensors and seekers



Technology needs



> Networked warfare:

- Data links—bandwidth and speed
- Integrated inputs and tailored outputs, automated activity
- Automated decision making
- Combat identification—operator and weapon
- Kinetic solutions
 - <u>Weapons of Mass Destruction</u>—protection from Chemical Biological Radiological Nuclear Explosive (CBRNE)
 - > All-weather, self-track and guide, moving targets, self-BDA
- Non-kinetic solutions—still "precise"
 - Directed Energy
 - > Information Operations





- Strike inside enemies decision cycle, anywhere in the world
 - > Link 16
 - Advanced Tactical Targeting Technology (AT3) and Tactical Targeting Network Technology (TTNT)
 - Weapons data link





- > Deny sanctuary to the enemy, Deny C4ISR
 - > Blue force tracker
 - > E-10A
 - > Information Operations





- Neutralize mobile targets
 - > Small Diameter Bomb Increment II
 - > AESA Radars
 - > JSTARS





- Penetrate and defeat next generation anti-access systems
 - > F/A-22, JSF, J-UCAS
 - > Self-defense countermeasures
 - > Airborne Electronic Attack
 - Advanced HARM, AIM-120D



GLOBAL PRECISON STRIKE

FROM... TO...

- SMART BOMB/GUIDED BULLETs
- 90% Pk BY 1 AIRCRAFT STANDING OFF
- E-10A—PERSISTENCE AND PRECISION
- KINETIC ENERGY (LONG RANGE)
- EVERY BOMB A UAV
- INTEGRATED WEAPONS SYSTEMS

- ALL WEATHER, DAY OR NIGHT, STAND-OFF
- LONG RANGE STRIKE—GLOBAL REACH
- SHOOTERS AS SENSORS, SENSORS AS SHOOTERS
- DIRECTED ENERGY
- SERVICE 20-30 TARGETS/SORTIE
- AUTONOMOUS EXECUTION -CONUS BASED



THANKS!



For the Precision Strike Association
 Thank you for your professionalism
your commitment
and your focus on this subject

My pledge...

Lets work this hard together!

