



THE AIR UNIVERSITY



# STEALTH INTEGRATION

**SOS 16A Think Tank**

The Intellectual and Leadership Center of the Air Force



# Initial Tasking & Objective



“As a service, What functions should we not be performing; Why should those areas be eliminated/restructured/overhauled; and How do those changes impact national security today and into the future?”



# Re-Thinking the Question



“What *process* (versus function) should we not be performing; Why should this *process* be eliminated/restructured/overhauled; and How do those changes impact national security today and into the future?”



# Guiding Principles



The US Air Force should not be pursuing Low Observable technology as the primary process of achieving a ‘stealth’ advantage in support of national military strategy. This approach is inefficient and rapidly becoming ineffective.



# Stealth Defined



AF doctrine refers to stealth solely in the physical form

air threats. Typically, escort to low-observable ("stealth") aircraft requires special consideration and planning at the [air operations center](#) (AOC) level.

❖❖ Low-observable (stealth) technology.

countermeasures; and low observable (LO) or stealth technologies. Passive air

- ❖ **Stealth and Low Observable (LO) technology.** Stealth and LO technologies are those measures, normally designed into a weapon system, which attempt to hide or minimize the likelihood of detecting its presence during mission execution, or reduce the vulnerability to enemy threat systems.

\*Annex 3-01: Counterair



# Defining Stealth for Doctrine



“The art of concealing actions or operations by exploiting an enemy’s weakness to cause misdirection, gain the element of surprise, and leverage a strategic advantage.”

Not exclusively LO – Should be integrated at all doctrinal levels





# Current Approach



- Investing heavily in Low Observable technology
- Missed opportunities to incorporate TTPs and training to maximize capability



\$1M



\$85\*M



\$137M



\$1.8B



# LO Centric Exploits

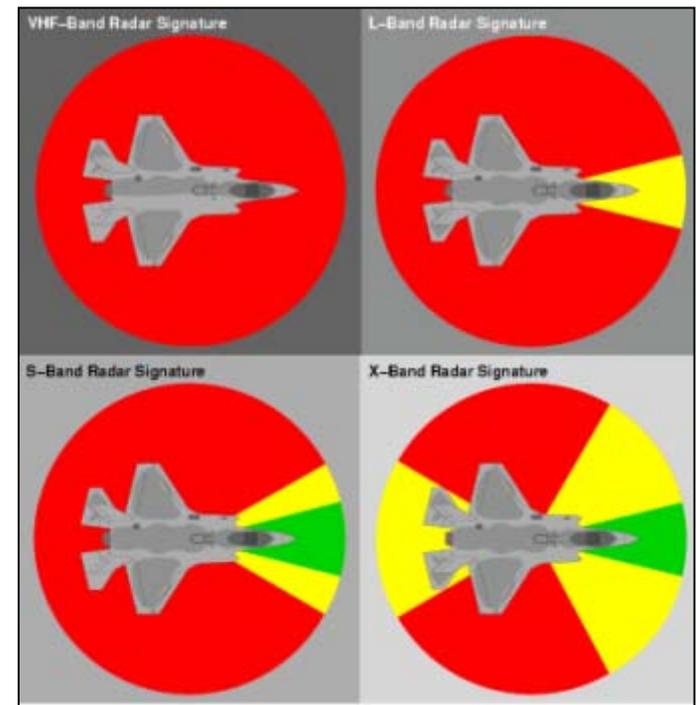


- As LO increases, counter-LO increases
  - Russia and China primary focus
  - Effective and efficient, old systems new again
  - VHF, S-Band & L-Band vs. X-Band

- Detecting Low Observable
  - Multistatic radars
  - Passive Coherent Location
  - Over The Horizon Radars
  - IR Detection Systems



Passive Antennas (TDOA)



Air Power Australia



# Force Multiplier?



1,341



1,763



# Current Force Investment



Doctrine  
Organization  
Training  
Material  
Logistics  
Personnel  
Facilities  
-  
Policy

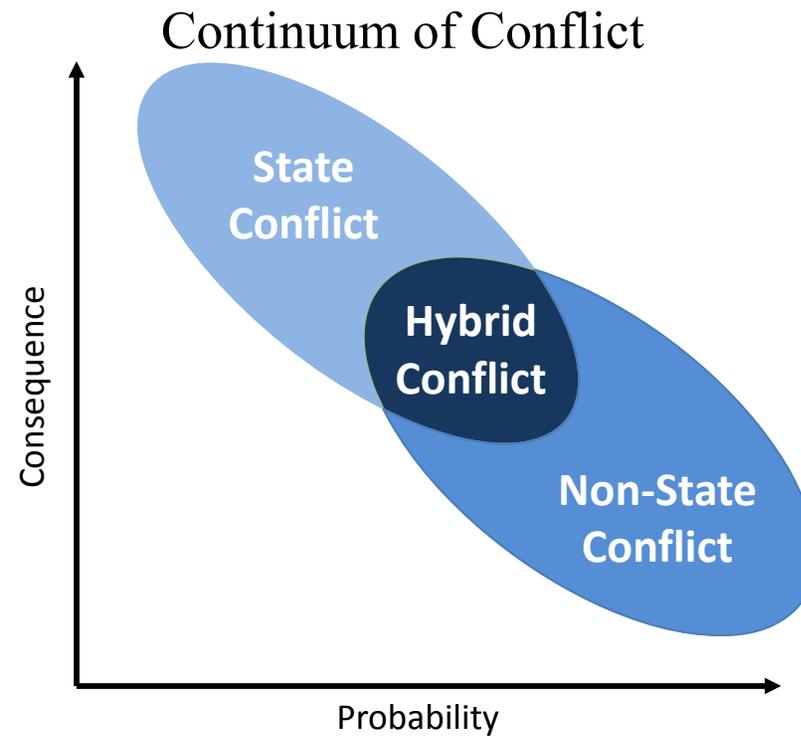
DoT **M** LPF-P

## Current Total Force Capability

STEALTH



# Resulting Influence



Evaluate goals, objectives, and strategy in light of procurement and replacement



# Deception in the Armed Forces



- Army: Mountain Warfare doctrine mentions “deception” 7 times
- Navy: Can hide an entire Carrier Strike Group at sea, disguising the location of the main carrier, and maneuvering to a position of advantage.



# Roadmap



- Embrace stealth at the core – OPSEC, Recruitment, Training, Planning, Execution, Recovery
- AFDD-1 – Define Stealth so that it can be incorporated into all levels of doctrine
  - AFDD-1 → AFDD Annex → ALSA → Joint Publications → AFTTP → 3-3/3-1
- Enable training in stealth operations i.e. FLAGS, ME, Base Exercises
- Weigh the benefit of employment versus cost of exposure before deciding to execute
- Showcase capability at strategic locations to deter and assure i.e. HHD



# Doctrinal Concepts



- Guarantee capability to penetrate with a “stealth” fleet and hold any target at risk with little to no warning.
  - OPSEC
  - Military Deception
  - Create uncertainty and complicate targeting
- Persistence: Covert or overt in hybrid and non-state conflicts
- Lethality: Numbers matter
  - i.e. Force ratio & Standoff Weapons inventory



# Way Forward



**D**octrine  
**O**rganization  
**T**raining  
**M**aterial  
**L**ogistics  
**P**ersonnel  
**F**acilities  
-  
**P**olicy

# DoTMLPF-P Future Force Capability STEALTH



# THE AIR UNIVERSITY

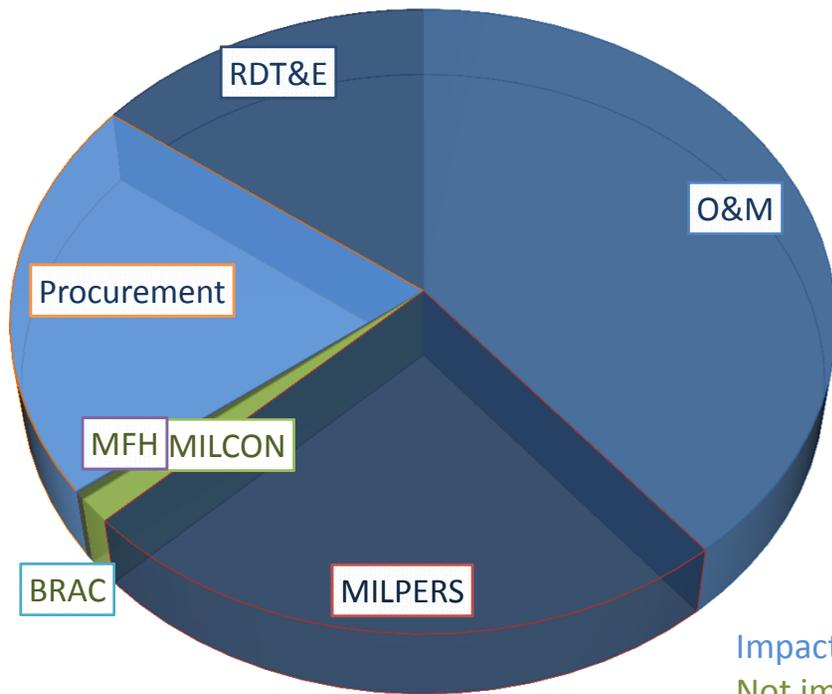


“All warfare is based on deception. Hence, when we are able to attack, we must seem unable; when using our forces, we must appear inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.”

– Sun Tzu



# FY16 President's Budget



Impacted by F-35 procurement  
 Not impacted by F-35 procurement

## F-35 Procurement

**FY15** 28 (\$2.5B)

**FY16** 44 (\$3.8B)



1,341



1,763  
(\$150B+)



# Revaluating F-35 Procurement



- 1440 F-35 = 60 Squadrons by 2030 (current production)
- F-35 Procurement Savings = \$27B
- Re-invest a portion into A-10 and F-16 O&M
- Allocate a portion for implementation and training
- Realize cost savings with remainder

