Force Multipliers for the Joint Battlespace: Issues, Challenges and Opportunities

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Deputy Director
AF Operational Capability Requirements (AF/XOR)
Introduction

Context
Issues & Challenges
Opportunities

Joint Air Dominance
QDR
GWOT
Phase IV Ops

UNCLASSIFIED

Source: AF/XOR-J
Context from An Airman’s Perspective

- Nation at War
- Transformation to Capabilities-Based Planning
- Demands on the Budget
- QDR as a Backdrop

- Air Dominance
  Overmatch, Excess or Balanced?

- Non-State and State actors employing "unconventional" methods to counter stronger State opponents – terrorism, insurgency, etc (erode our power)

- State actors employing military forces in well-known forms of military competition and conflict (challenge our power)

- Terrorist or Rogue State employment of WMD or methods producing WMD-like effects against American interests (paralyze our power)

- Competitors employing technology or methods that might counter or cancel our current military advantages (capsize our power)
Department’s End-to-End Process

DAB Capability Area Reviews (CARs)

- Strategic Planning Guidance
- Defense Planning Scenarios
- Family of Concepts
- Transformation

**Capabilities Based Assessment**

- Capabilities
- Tasks
- Attributes
- Metrics
- Gaps
- Shortfalls
- Redundancies
- Risk areas
- Non-materiel solutions
- Materiel solutions
- S+T initiatives
- Experimentation

- Refined concept
- Analysis of Alternatives
  Technology Development Strategy
  System Engineering
- Affordable military-useful increment
  Technology demonstrated
  Initial KPPs
- Revise KPPs
  LRIP
- Detailed design
  IOT&E
- System integration
  DT&E / IOT&E

Concept Decision

Analysis of Alternatives
Technology Development

MS “A”

CDD
System Development

MS “B”

CPD
Production

Services

Evolutionary or Spiral Development

OSD (AT&L)-led Capability Roadmaps

SECDEF Joint Chiefs of Staff & Joint Requirements Oversight Council

Joint Staff / OSD

OSD (AT&L, PA&E), Services and OSD (DOT&E) -- Joint Staff (JROC)

**Policy**

Capabilities Definition

Concept Refinement

Acquisition and Test

Source: JS J8/CAD
External Forces May Drive DoD’s Budget South

Powerful Political-Economic Forces Are in Play

- Boomer Retirements
- Social Security Reform
- Tax Reform
- Growing Deficit
- Imbalance of Payments
- $60B per year for Global War on Terror

Long Range Federal Outlays (Trillion $)

Federal Debt 1970-2004

Balance of Payments

Source: AF/XPX
Where’s the Defense Budget Headed Next?

Cyclical Nature of Defense Budgets

18 years

18 years

18 years

DoD Budget Authority (FY02 $B)


3 yr draw down

7 yr draw down

13 yr draw down

PB05 Guidance

PB06 Guidance

Reality?

Draw-downs occur approximately every 18 years. Is now the time?
Oldest Air & Space Force in US History

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Fiscal Years

Source: AF/XOR-J
What the AF Has Will Not Last

Assumes $11.8 B in F-15 and A-10 extensions (12,000 hr F-15s and 16,000 hr A-10s)

F-16s cannot be SLEP’ed further

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Source: AFSAA
AF Investment: Enable the Joint Team

Reductions in joint combat forces and foundations paid for increased emphasis on joint enabling forces
Where We’ve Been:

Aircraft Buys

- 1966: 1,400
- 1970: 1,200
- 1974: 1,000
- 1978: 800
- 1982: 600
- 1986: 400
- 1990: 200
- 1994: 100
- 1998: 50
- 2002: 0
- 2006: 0

Inventory (TAI)

- 1966: 15,000
- 1970: 12,500
- 1974: 10,000
- 1978: 7,500
- 1982: 5,000
- 1986: 2,500
- 1990: 1,000
- 1994: 500
- 1998: 250
- 2002: 0
- 2006: 0

Average Age (years)

- 1966: 30
- 1970: 25
- 1974: 20
- 1978: 15
- 1982: 10
- 1986: 5
- 1990: 0
- 1994: 0
- 1998: 0
- 2002: 0
- 2006: 0

USAF Buys & Inventory
Way DOWN - Average Age
Way UP

Source: AF/XPX
### Innovative Concepts
- CONOPS/CARRA
- Agile Acquisition

### Future Total Force
- Integrating Active/Guard/Reserve (JSTARS, Predator, Nellis, Richmond Wing)

### Technology Application
- Stealth
- Directed Energy
- Precision Munitions
- GPS

### Network Centric
- Air Operations Center
- Link 16

### Mixing Old with New
- Close Air Support w/heavy bombers
- Special Ops

### Recapitalize the Force
- Aircraft
- Real property

### Modernize the Force
- F/A-22, C-17, KC-X
- ISR, E-10A/B/C

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**AF 2025 Transformed Future Force**

- Global Military Leverage
- Control Air and Space
- Exploit the Medium
- Joint Enabling
- Smaller/More Capable

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*Source: AF/XPX*
Transforming Organizations: Changing How You Fight

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“Tactical” and “Strategic” define effects, not platforms

1980
1990
2000

1992 Functional Organization Shift
1998 Expeditionary Structure Shift

SAC/MAC/TAC Reorganized Into ACC & AMC To Meet New Strategic Environment

1998: Expeditionary Air Force (EAF) concept unveiled

TODAY: Future Total Force (FTF)

“AEF” and “Strategic” define effects, not platforms

Source: AF/XPX
Operational Efficiencies: Through Transformation

Solution:
- Retire least capable, most expensive aircraft
- Retain most capable and experienced personnel
- Stand-up CAF Associate Unit organizations

Three Squadrons to Send Two

Home Station Training  Deployed (24/7 Ops)

Fully Resource Combat Capability

Increasing Reliance on Reserve Component

<table>
<thead>
<tr>
<th>Year</th>
<th>Combat Coded Aircraft</th>
</tr>
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<tbody>
<tr>
<td>FY70</td>
<td>10,000</td>
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<tr>
<td>FY80</td>
<td>5,000</td>
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<tr>
<td>FY90</td>
<td>4,300</td>
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<tr>
<td>FY00</td>
<td>1,800</td>
</tr>
</tbody>
</table>

Source: AF/XPX

Active Duty  ARC

Source: ABIDES
Space Control & Space Superiority

Space Situation Awareness
“Key Counterspace enabler – COP on steroids”

Offensive Counterspace
“Prevent enemy from using space against us”

Defensive Counterspace
“Ensure we can use space systems”

Counterspace …. Operations to **attain and maintain** a desired degree of **space superiority** by allowing **friendly forces to exploit** space capabilities while **negating an adversary’s ability** to do the same (AFDD 2-2)

Source: AF/XOS-SC
Net Centric Warfare -- 2005

Figure 5.3—Air Force FY 2005 Communications Network Architecture

Source: AF/XOR-J
Net Centric Warfare -- 2013

Figure 5.6—Air Force FY 2013 Communications Network Architecture

Source: AF/XOR-J
More Capable, Multi-Role / Multi-Function Aircraft
Joint Air Dominance
Into the Future

- Two Decades of Dominance
- No Peer Today in Wealth, Technology or Capability
- Competition / Challenges on the Horizon
- Focus / Emphasis for the Future
2025 Future Total Force

- **Modernization with Aggressive Divestment**
  - Meets OSD fiscal Guidance
  - Manages Investment bow wave

- **Smaller Force, Increased Capability**
  - 25% fewer fighters
  - Higher crew ratios for increased utilization
  - 100% PGM capable and 90%+ LO fighter force

- **Even More Support to Joint Enablers**
  - More airlift/refueling capability from smaller force
  - Rejuvenated more capable space constellations
  - 24/7, all weather, persistence air breathing ISR
  - All weather CAS

- **Re-organize/Re-shaping for the Future**
  - Integrating Active, Guard and Reserve
  - Battlefield airmen to support all ops
  - Properly aligned warfighting HQ and Space
  - More AEF deployable personnel

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Source: CSAF Posture Statement (Apr 2005)
The Planner’s Dilemma: Now, Then, and In Between

Near-Term
We missed the big picture: Rise of transnational terror

Long-Term

Strategy
I n t e g r i t y - S e r v i c e - E x c e l l e n c e