

Headquarters Air Combat Command

Precision Engagement In The USAF



Major General Dave Clary
Air Combat Command
Vice Commander

This Briefing is:
UNCLASSIFIED



Overview



- **Snapshot of Current Operations**
- **Global Strike**
- **Precision Engagement**
- **F-22**
- **Gaps**

Challenging Times





Air Force Priorities



- **Fight and Win The Global War on Terror**
- **Develop and Care for Airmen and Their Families**
- **Recapitalize and Modernize Our Force**



Deployed Airmen



- **35,000 Airmen deployed**
 - **25,000 CENTCOM AOR**
- **10,000+ deployed on 179-day rotations**
- **1,000+ deployed on 365-day rotations**
 - **677% increase since 2005**





CENTCOM AOR



- **Operating out of 10 major bases**
 - 60 different locations
- **80,000 sorties over the past year**
- **250 sorties per day in Iraq and Afghanistan**





CENTCOM AOR





Homeland Defense



- 48,000 sorties since 9/11
- Stand up of 1st AF AOC





Today's Enemies





Tomorrow's Threats





Threat





Required Capabilities





AF CONOPS Construct



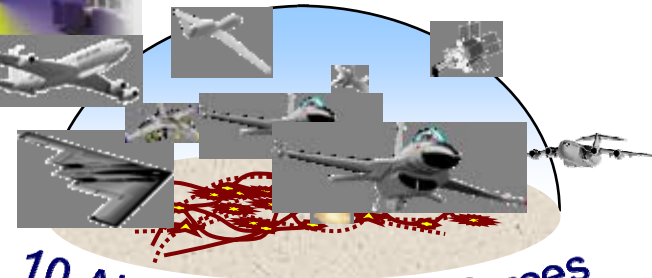
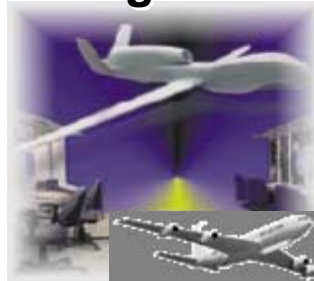
Global Power



Global Reach



Global Vigilance



Strategy

Air and Space Expeditionary Force (AEF) is the USAF foundation to prepare, respond, deploy, and employ for any task

Tasks

Capabilities Review & Risk Assessment

Homeland Defense & Civil Support CONOPS

Global Strike CONOPS

Global Mobility CONOPS

Global Persistent Attack CONOPS

Nuclear Response CONOPS

Space & C4ISR CONOPS

Agile Combat Support

Timeframe: 2025
 Global Strike CONOPS
 High Level Operational Concept Graphic (OV-1)
 Viewpoint: Air & Space Campaign Level
 REF: Global Strike CONOPS Draft Ver. 2.33 (1 Mar 06)

Surv & Recce (Space-Based)

Surv & Recce (Local)

Space Superiority

GLOBAL NAVIGATION TIMING
 SPACE-BASED EARLY WARNING
 NAT'L SPACE-BA
 SATCOM
 WEATHER
 NEAR-SPACE

UAV
 LOCAL AREA SENSORS
 MICRO UAV

LONG-RANGE STRIKE

UNMANNED STRIKE ASSETS
 MANNED STRIKE ASSETS

Air to Air Superiority

SEAD

INTRA-THEATER STRIKE (ITS)

AIRBORNE C2
 UNMANNED STRIKE ASSETS
 MANNED STRIKE ASSETS

SPACE **MARITIME**

TBM & CM

STRATEGIC RESOURCES

TST
 CBRNE
 IADS
 C4&ISR
 IO
 TACP
 SPECIAL OPERATIONS
 LEADERSHIP

PERSONNEL RECOVERY

RECOVERY SUPPORT ASSETS
 RECOVERY ASSETS

ELECTRONIC ATTACK (EA)

EA ASSETS

NETWORK ATTACK (NetA)

NetA ASSETS

FORCE PROTECTION

COMAFFOR

INFLUENCE OPERATIONS

IFO ASSETS
 PA PSYOP OPSEC
 COUNTERPROPAGANDA
 MILDEC CI

INTEL

AF DCGS
 WOC/EOC
 TACC
 JAOC
 UC
 WFHQ
 SPACE AOC
 C2

AGILE COMBAT SUPPORT

AIRLIFT ASSETS
 AIR REFUELING ASSETS
 GLOBAL MOBILITY

NETWORK-CENTRIC WARFARE

**DESIRED EFFECTS:
 RAPID STRIKE
 GAIN ACCESS**

CRITICAL CAPABILITIES

ENABLING CAPABILITIES
 SURVIVABILITY CAPABILITY



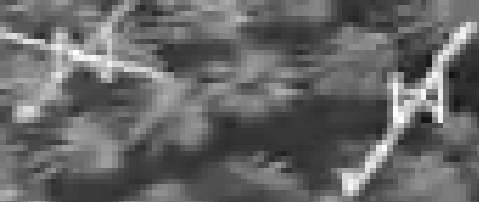
Precision...





A-G TV NARO SURD UNTL

02



LMVE

FRAC/E

0M

AREA

XMTH

(384M)

L 3.4

000:02

SWAP ITGE

DCI T

10-NO-TW

00

W





Leaps in Capability





Doumer Bridge

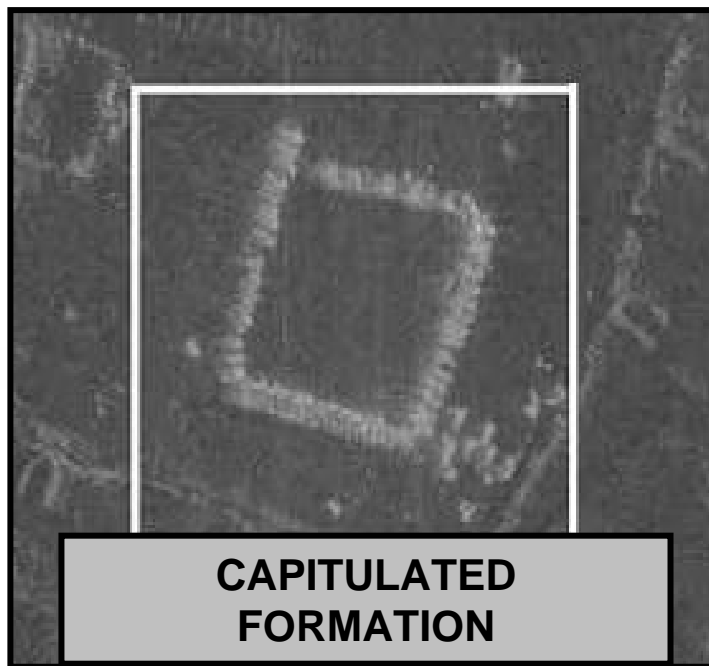




Iraqi Capitulation



To avoid destruction, follow Coalition guidelines.



**CAPITULATED
FORMATION**



Example of an IADS





Example of an IADS



**Stealth Fighter at
High Altitude
Employing
Supercruise**

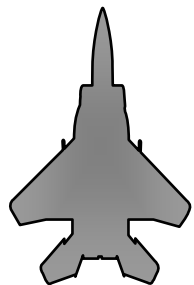


The Solution

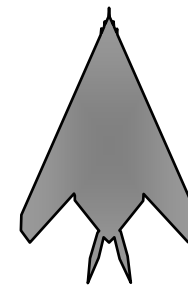




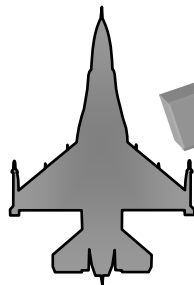
F-22 Multi-Role Capability



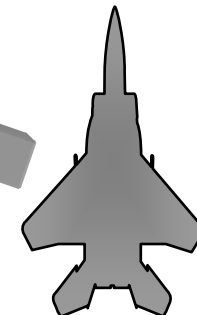
F-15C
Air
Superiority



F-117
Stealth
Strike



F-16CJ
SEAD



F15E
Precision
Strike



F-22 Performance Capabilities



- **Altitude: 60,000 ft**
- **Speed: 800 KCAS**
Mach: 2.0
Supercruise > Mach 1.5
- **G Load: 9**
- **AoA: -60 to > +60 deg**





Supercruise Advantages

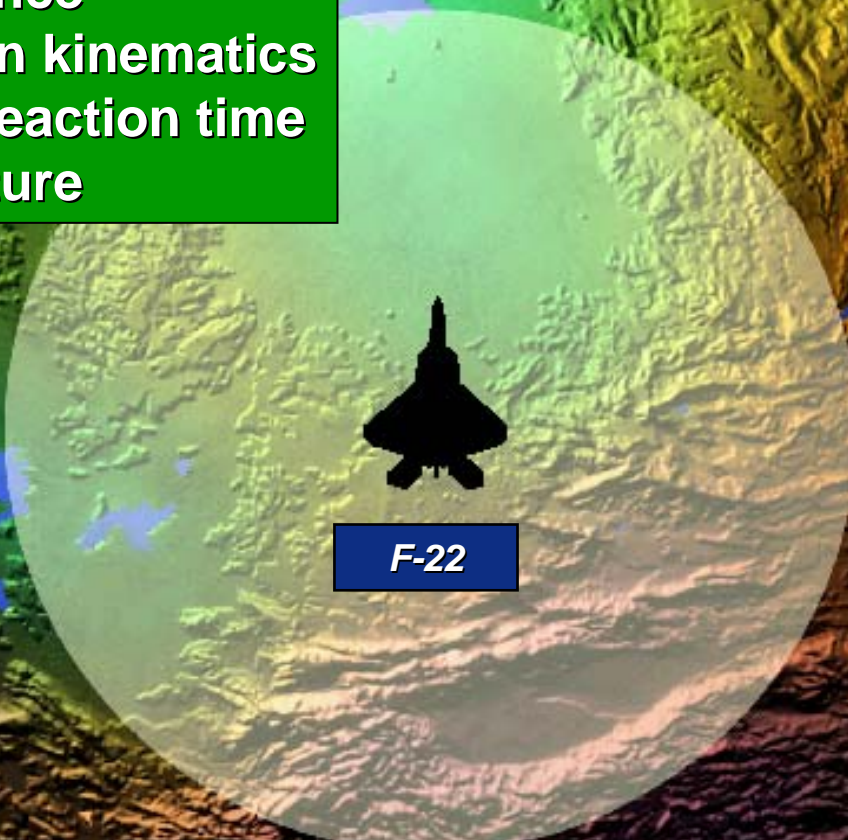


- Increased presence
- Improved weapon kinematics
- Shorten enemy reaction time
- Lowers IR signature

*Conventional
Fighter*



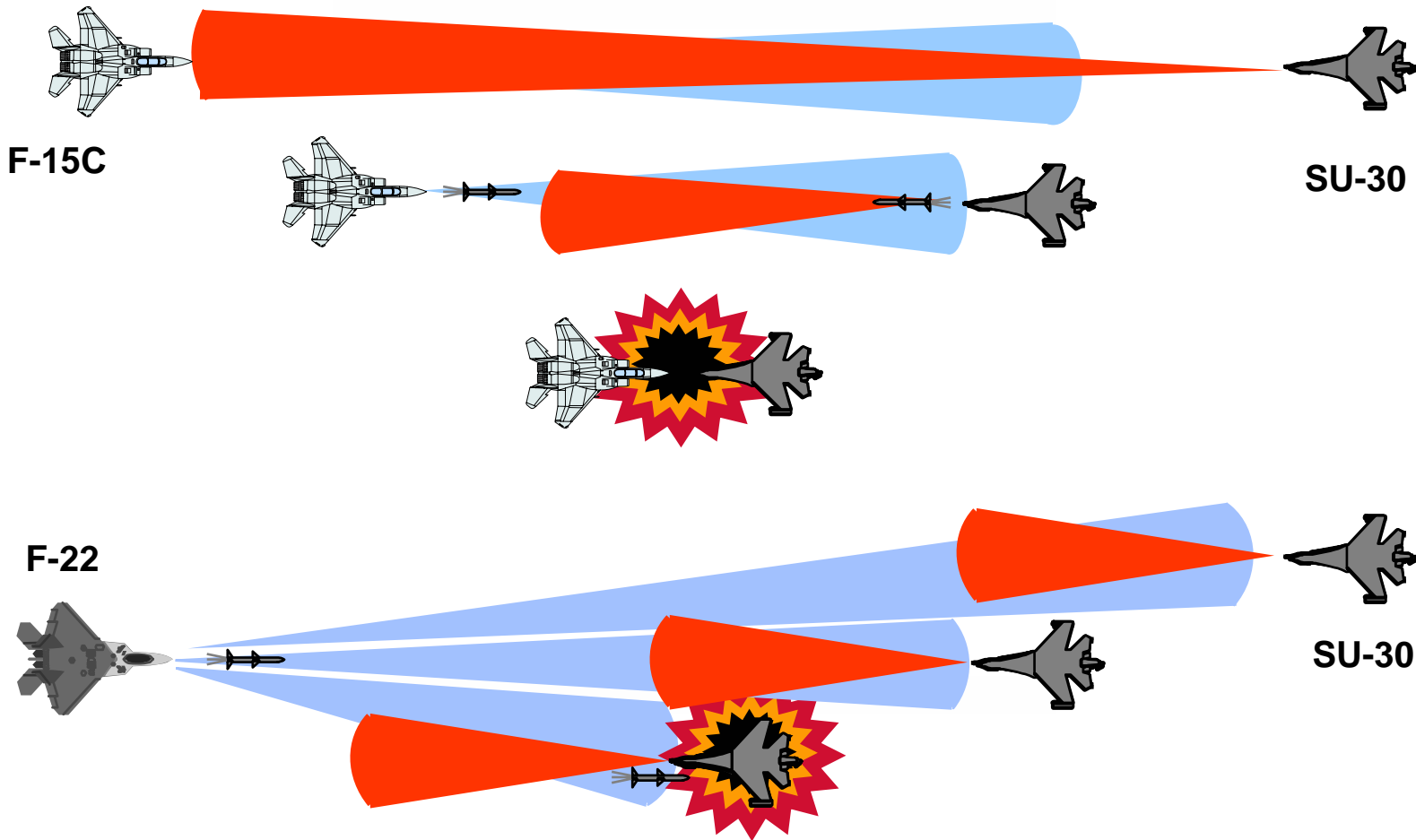
F-22



In 15 Minutes, an F-22 Can Cover Nearly 3 Times More Air Space



Stealth in Air to Air

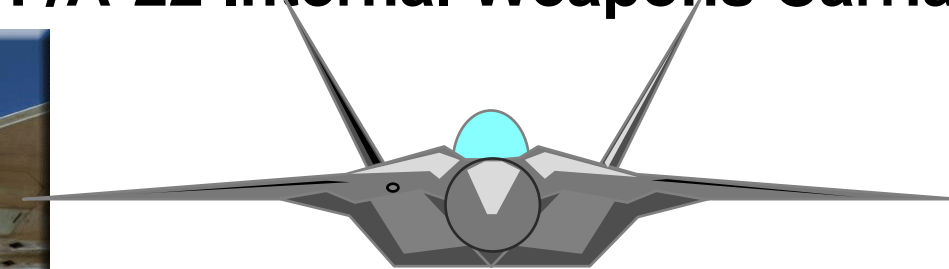


First Look, First Shot, *First Kill*



F-22 Weapons

F/A-22 Internal Weapons Carriage



Gun: M61 Cannon 480 rounds

Side Bays:

✖ 2 x AIM-9M/X ✔

Center Bay:

✖ ✖ ✖ 6 x AIM-120C ✔ ✔ ✔

or

✖ ✖ 2 x AIM-120C/ 2 x 1000# JDAM ✔ ✔



Valuable Air-to-Ground Capability

All Weather

**Near Precision
Joint Direct Attack
Munition (JDAM)**

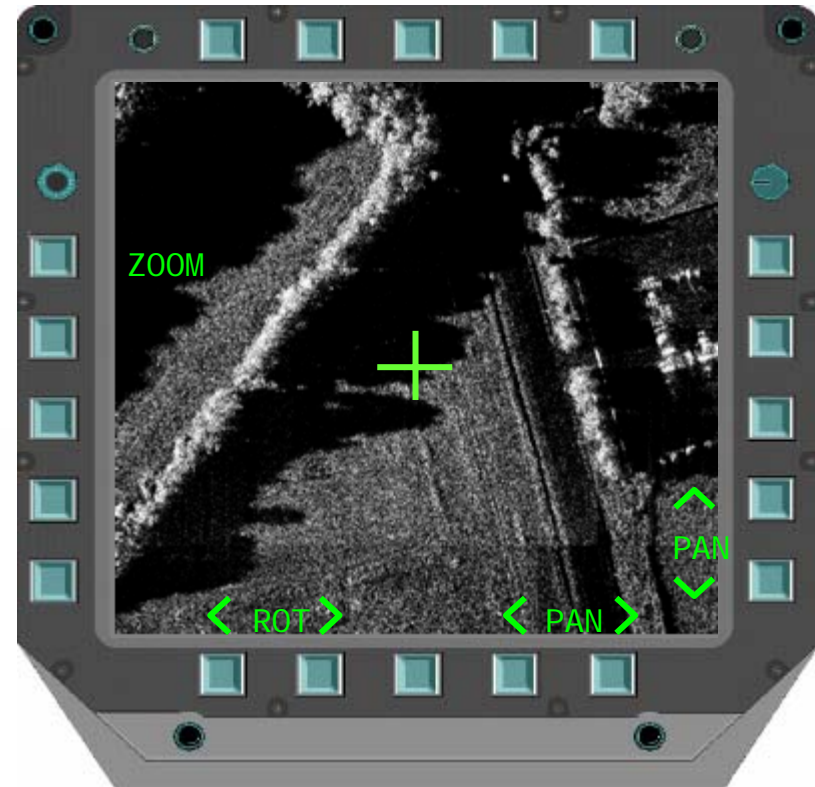
**Four 5000 Pound
External Wing
Hardpoints**



F-22 Battlefield Integration



- **Currently GBU-32 Only (Awaiting SDB)**
- **Combat HAMMER drops successful (50k @ 1.5M)**
- **Bomb on Coordinate ONLY**
 - **Future Upgrades allow Self-Generation of Coords**





Increasing 5th Gen Fighters





Complementary / Synergistic

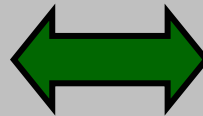


F-22A

F-35A

Complementary Missions

Air-to-Air Dominance



Persistent Attack

- Air Interdiction (AI)
- Close Air Support (CAS)

Incidental / non-optimized capability for complementary missions

Synergistic Missions

**Suppression / Destruction of Enemy Air Defenses (SEAD/DEAD)
Strategic Attack (SA)**

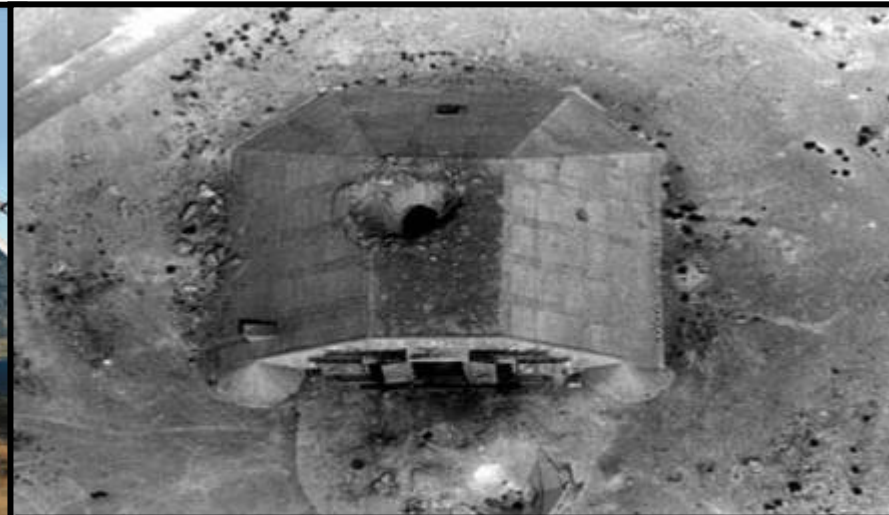
Unique capabilities combine to accomplish mission they could not do alone

Common Mission Elements

**Intelligence, Surveillance and Reconnaissance (ISR)
Electronic Attack (EA)**

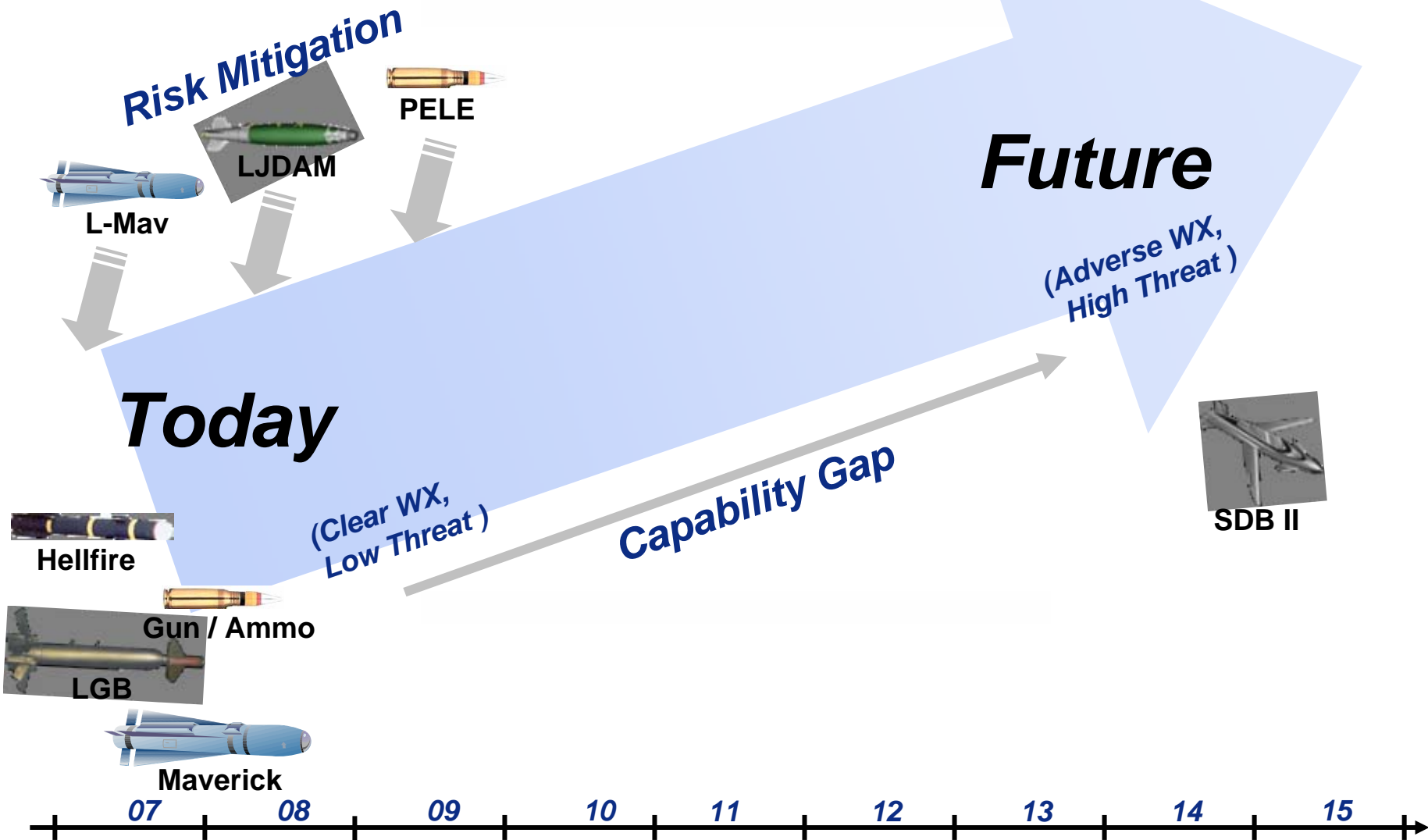


Capability Gaps





Moving Target Capability



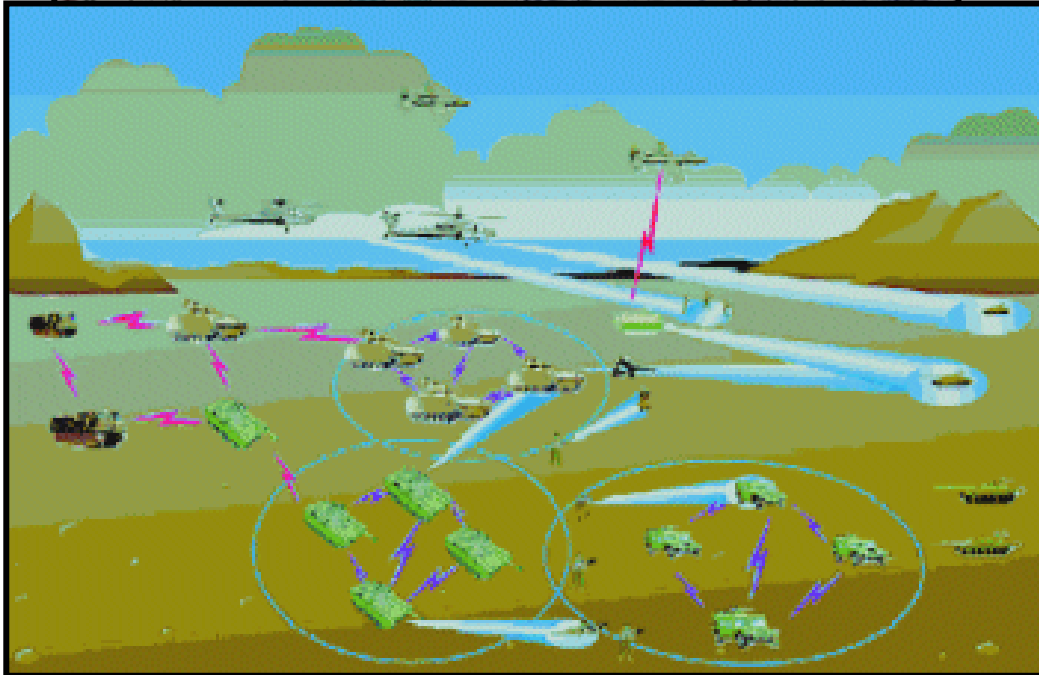


Hardened / Deeply Buried





Combat ID





Lowering Collateral Damage





Challenges Ahead





One Joint Fight...



