



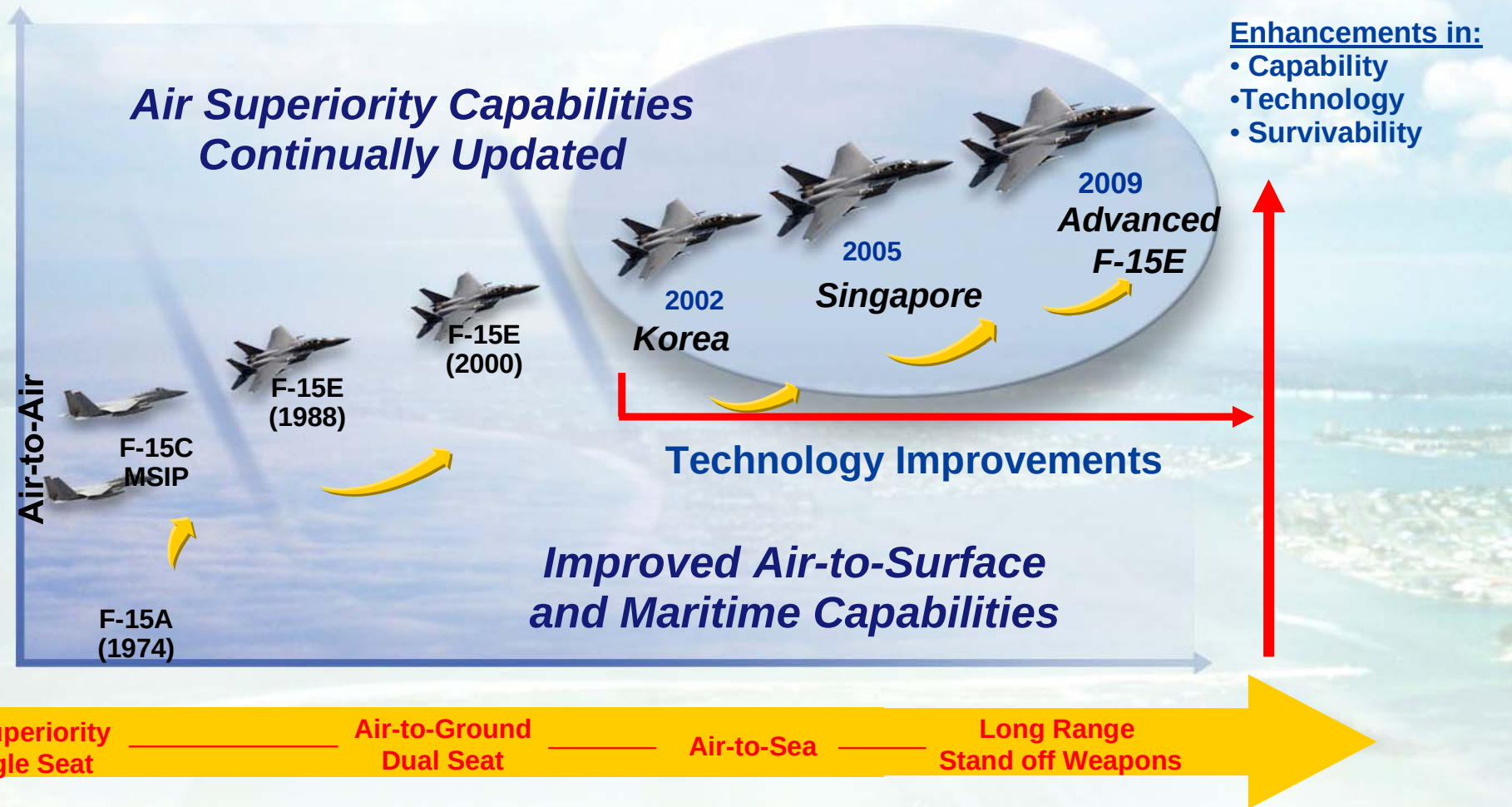
F-15 SILENT EAGLE

Brad Jones
F-15 Future Fighters
Program Manager
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Distinguished Heritage and Continued Growth



Unequaled Multirole Mission Flexibility in a Single Aircraft

F-15 Silent Eagle

Day 1 Warfighter and Multirole Aircraft



F-15SE First Days of the Warfighter

- Provides RCS Reduction Package
- Internal Carriage Capability To Include:
 - Air-to-Air Missiles (AIM-9 and AIM-120s)
 - Air-to-Ground Munitions to include (JDAM and SDBs)
- Configurable to F-15SE Multirole Capable aircraft in approximately 2 hours.



F-15SE Multirole (Air-to-Air and Air-to-Ground)

- Provides Long Range Weapon capability
- Integrated with Long Range Standoff weapons like the SLAM-ER and Harpoon Block II missiles
- Total Fuel: 34,700 lbs (Conformal Fuel Tanks + three ext tanks)
- Max T/O GW: 81,000 lbs (~ 29,500 lbs payload)
- Weapons: All Satellite and Laser guided precision stand-off munitions, air-to-air weapons, 20 mm gun

Why Did We Design the Silent Eagle?



Current International F-15 Versus “5th Generation A/C”

- Survivability

International
F-15

5th Gen

- Stealth

(Frontal Aspect)



- Electronic Warfare



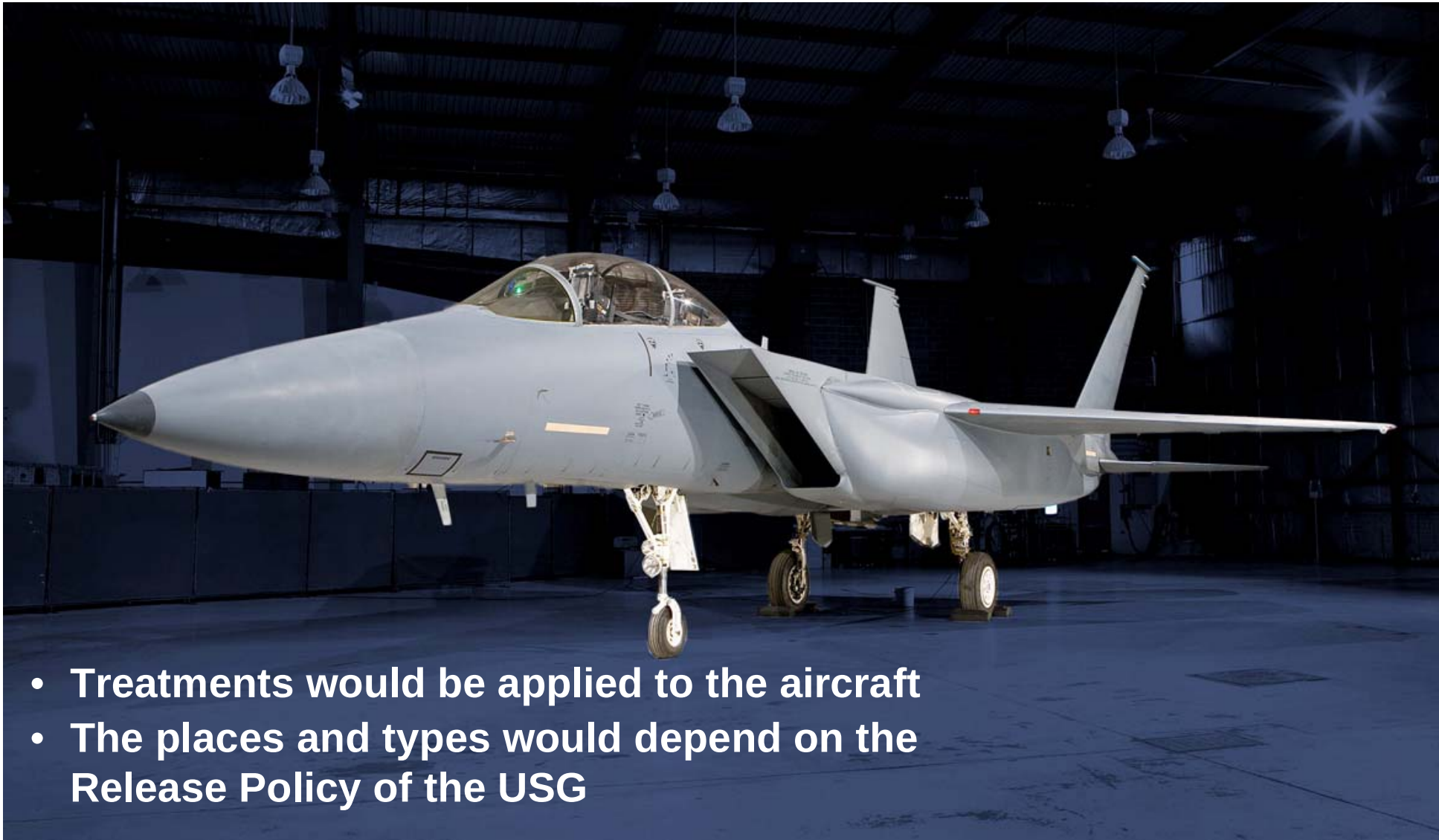
- Stand Off Weapons



- System Redundancy



The F-15 Silent Eagle Radar Cross Section Reduction



- Treatments would be applied to the aircraft
- The places and types would depend on the Release Policy of the USG

Conformal Fuel Tanks With Internal Weapons



**Conformal Fuel Tanks
With Internal Weapons**



Click on Picture to run Video

Internal Carriage Demonstration Model

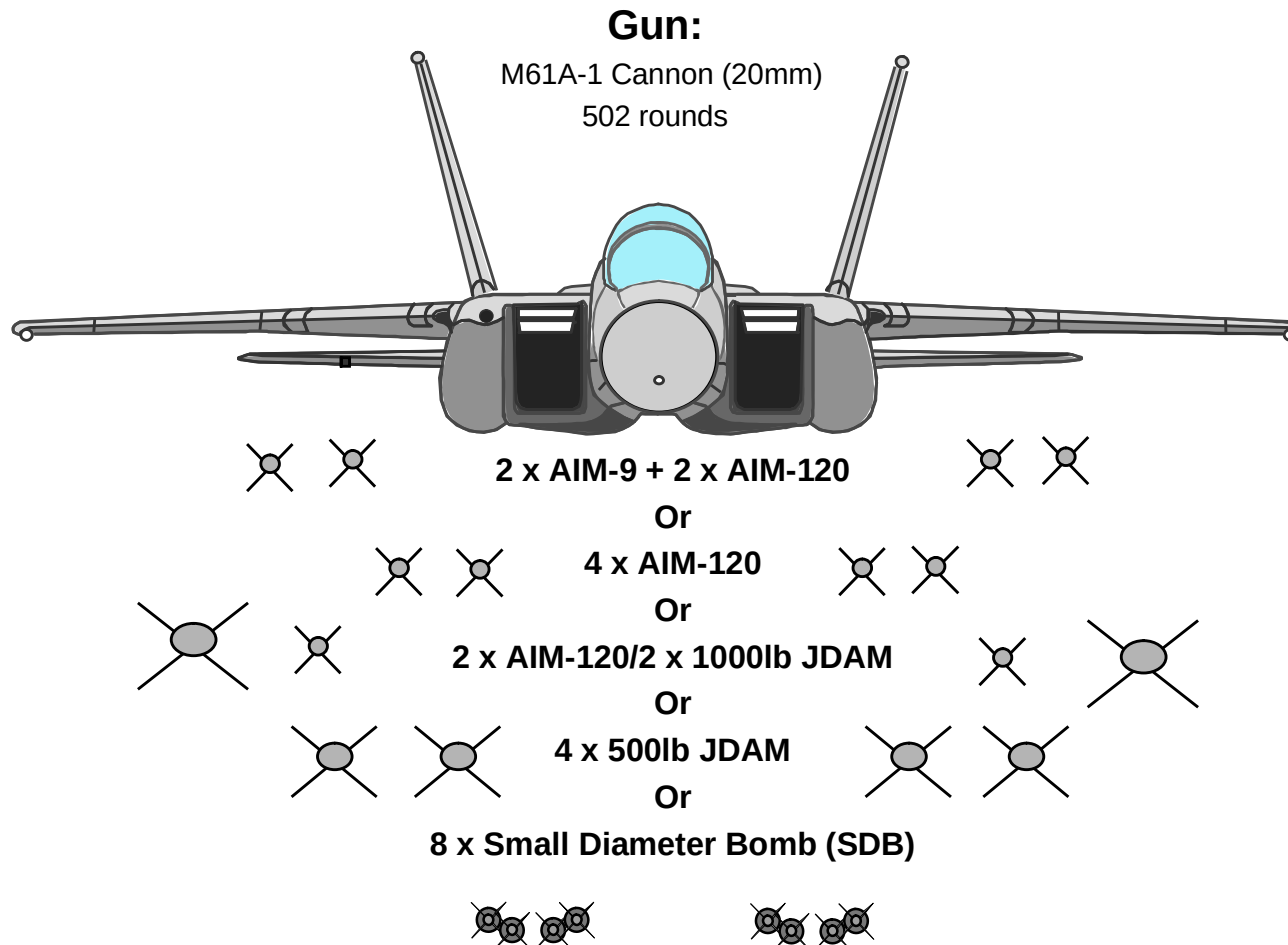
- **New F-15 internal weapon carriage**
 - Stores air-to-air and air-to-ground weapons internally
 - Equipped with 2 internal bays designed for multiple weapon configurations
- **Reconfigurable weapon capability provides enhanced flexibility**
 - Retrofit options are available
 - **Quick and easy CFT replacement**



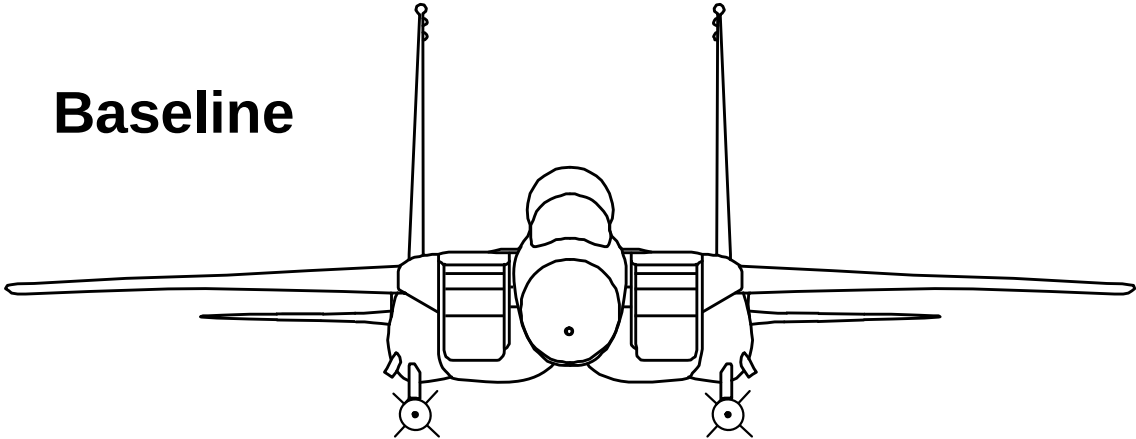
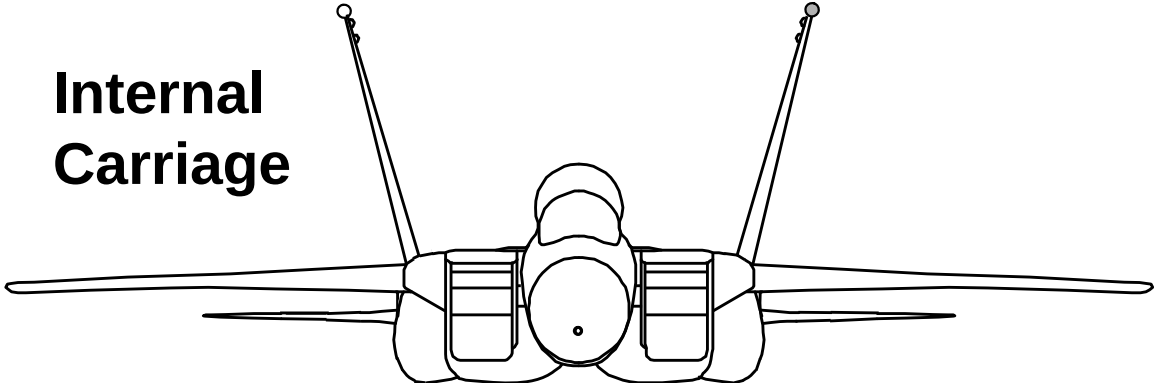
**Conceptual approach to
Internal weapons carriage**

Internal Weapons Payload

F-15 Internal Weapons for Special Day 1 Missions



F-15 Mission Radius

	Approximate Mission Radius (NM)	
	<u>A/G</u>	<u>A/A</u>
Baseline 	1000	900
Internal Carriage 	800	720

Using same Air-Ground and Air-Air mission profiles and F110-GE-129 engines

F-15SE Multirole Configuration



Weapons Payload Flexibility Maximizes Warfighter Combat Capability

Survivability Multi-Faceted Approach

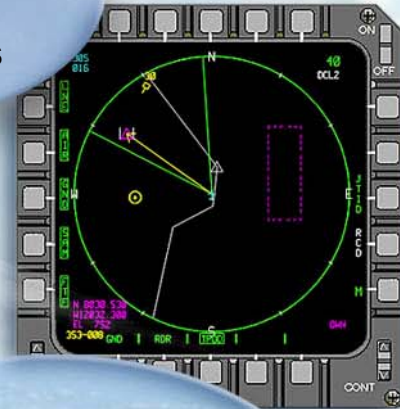
Multi-Faceted Approach

- Fully integrated
- AESA compatible
- All internal
- Digital EW System



Situational Awareness

- Network enabled
- Onboard systems



Advanced Sensors

- Long range AESA
- Fully integrated
 - IRST
 - EO/IR
- Digital EW



Aircraft Design

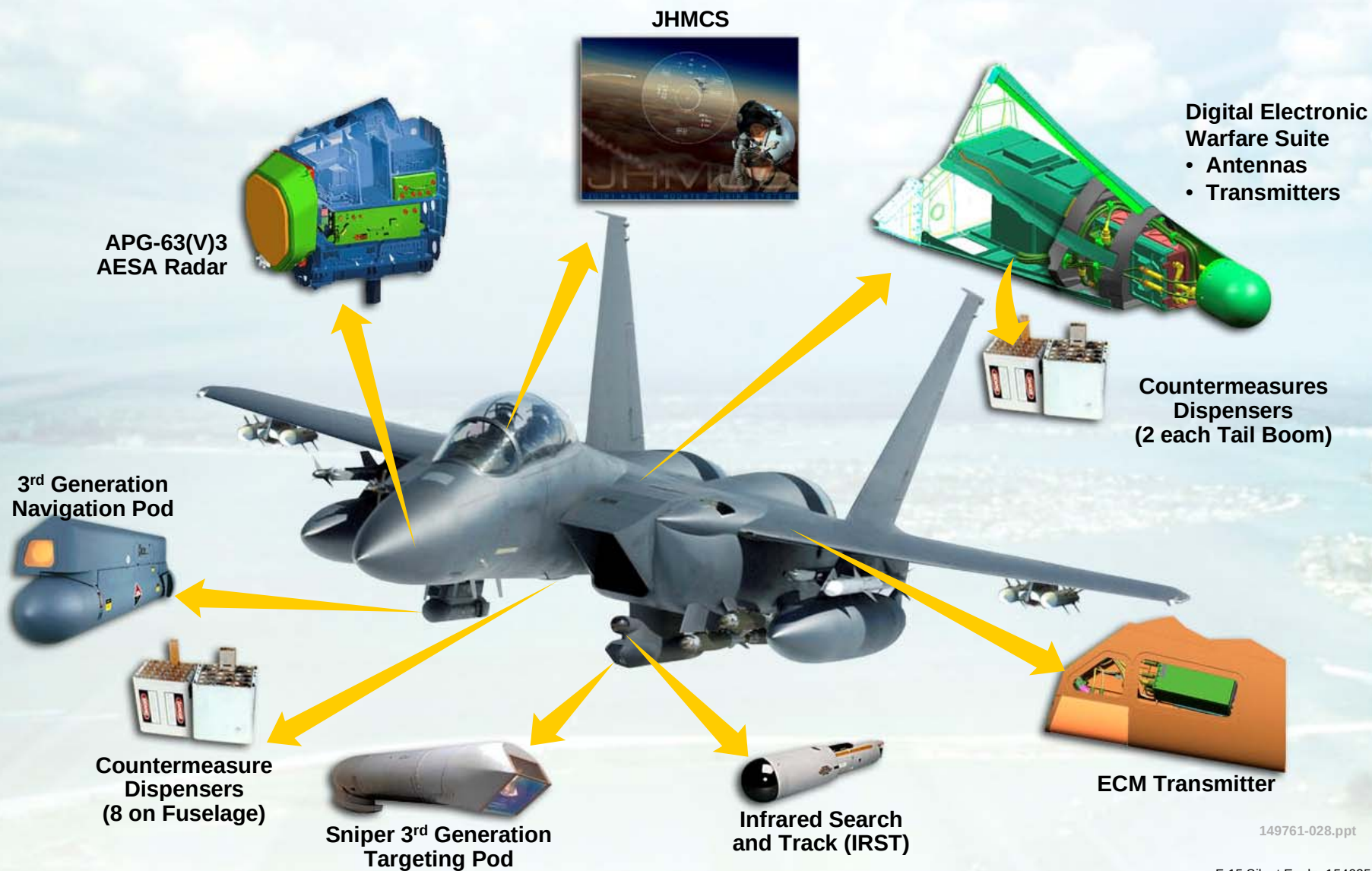
- Redundant systems
- Robust structures
- Speed
- RCS package

Weapons

- Longer standoff ranges
 - SDB/Harpoon/SLAM-ER
- Self-protection
 - AIM-9/AMRAAM



Advanced F-15 Sensor Suit



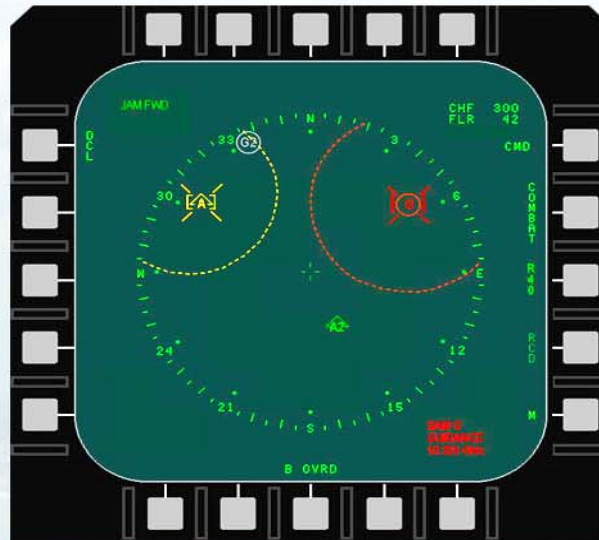
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Digital Electronic Warfare System (DEWS)

Single State-of-the-Art Digital EW System

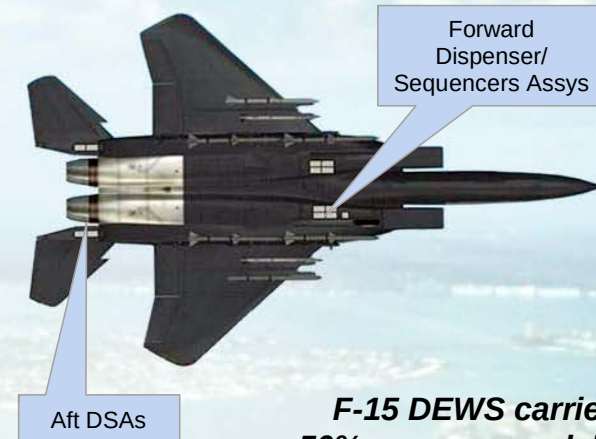
- Replaces four legacy systems
- Leverages F-22 and F-35 EW Programs

***F-15 DEWS offers full
quadrant detection and
response control***



Interoperable with AESA radar

- Operates with wideband agile radars and other RF systems



***F-15 DEWS carries
50% more expendables
than the F-15C/E***

Performance

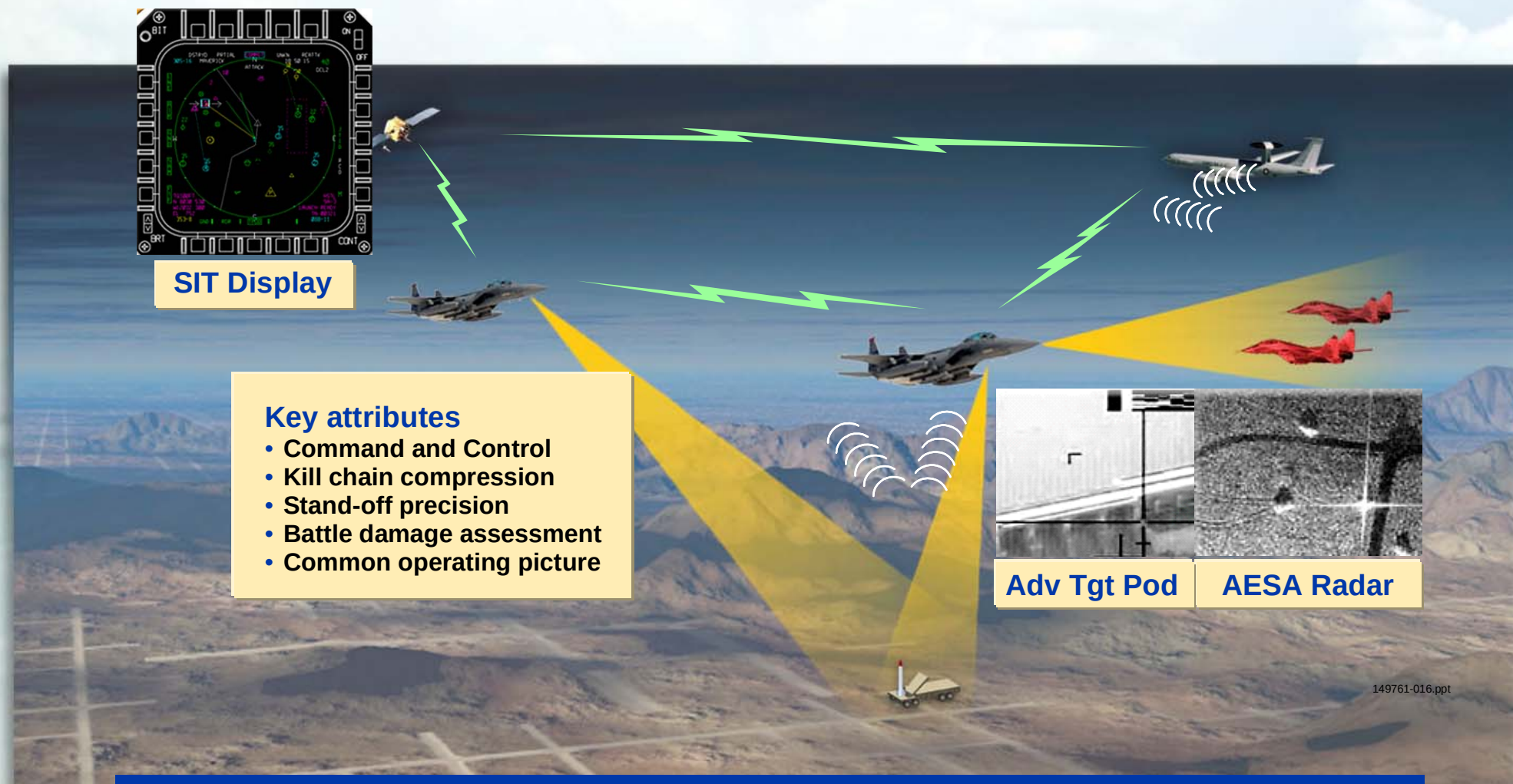
- Enhanced SA with improved sensitivity, accurate threat location and rapid response
- Enhanced response techniques, timing and aspect control

Support

- 60% fewer LRU's
- Numerous maintainability improvements
- Over 200% throughput and memory growth reserve

***DEWS Ensures Mission Effectiveness and Survivability in
Any Threat Environment***

Network Enabled Sharing Sensor Data without Voice Communications



Maximum Real-time Situational Awareness

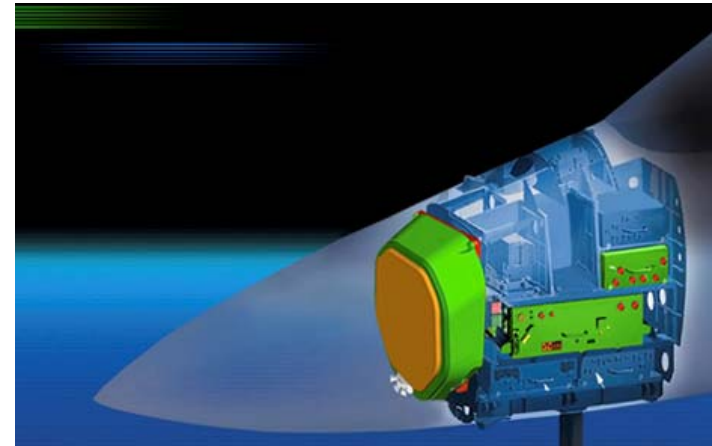
F-15SE

Incorporates Proven Technology

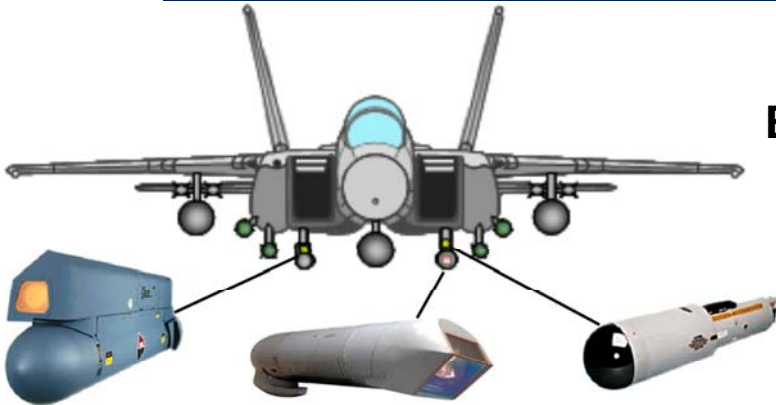
Joint Helmet Mounted Cueing System



Active Electronically Scanned Array Radar



Advanced Electro-Optical and Infrared Sensors



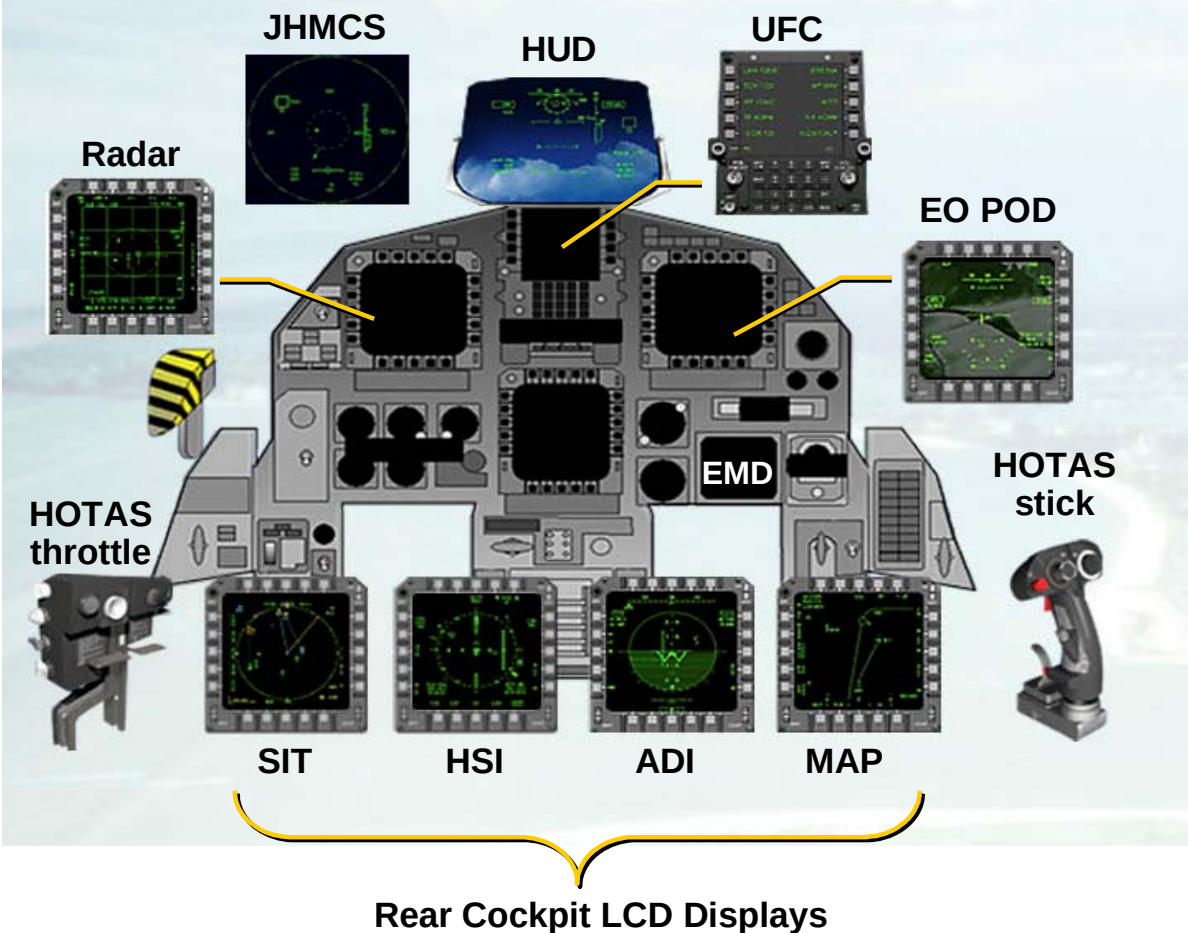
Fused Situational Awareness Displays



Integrated Sensors and Networking Provide Connectivity and Interoperability

Integrated Missionized Crew Stations

Full multirole mission capability
from the front seat



Missionized rear cockpit provides
enhanced capability, flexibility,
and situational awareness

Silent Eagle International F-15 Versus 5th Gen

- Survivability

	<u>International F-15</u>	<u>5th Gen</u>
Stealth (Frontal Aspect)		
Electronic Warfare		
Stand Off Weapons		
System Redundancy		



F-15 SILENT EAGLE

Questions?