

The background of the slide features a large, detailed image of an F-15EX fighter jet in flight, viewed from a low angle, showing its delta-wing configuration and various armaments. A smaller, similar jet is visible in the lower-left corner. The jets are flying through a hazy, light blue sky.

Missile Warning

Countering Emerging Threats with F-15EX

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Own the Spectrum. Win the first battle.

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BAE SYSTEMS

Comprehensive Missile Warning Solution (CMWS) – three generations of threat warning – millions of flight hours and countless lives and platforms saved

CMWS(V)1 – Early 2000s to today

UV-based missile warning system



CMWS(V)2– 2010s to today

2-Color Advanced IR Warning System



CMWS(V)3 – today to 2030s

Next gen 2-color IR Long Range
Air-to-Air Threat Warning

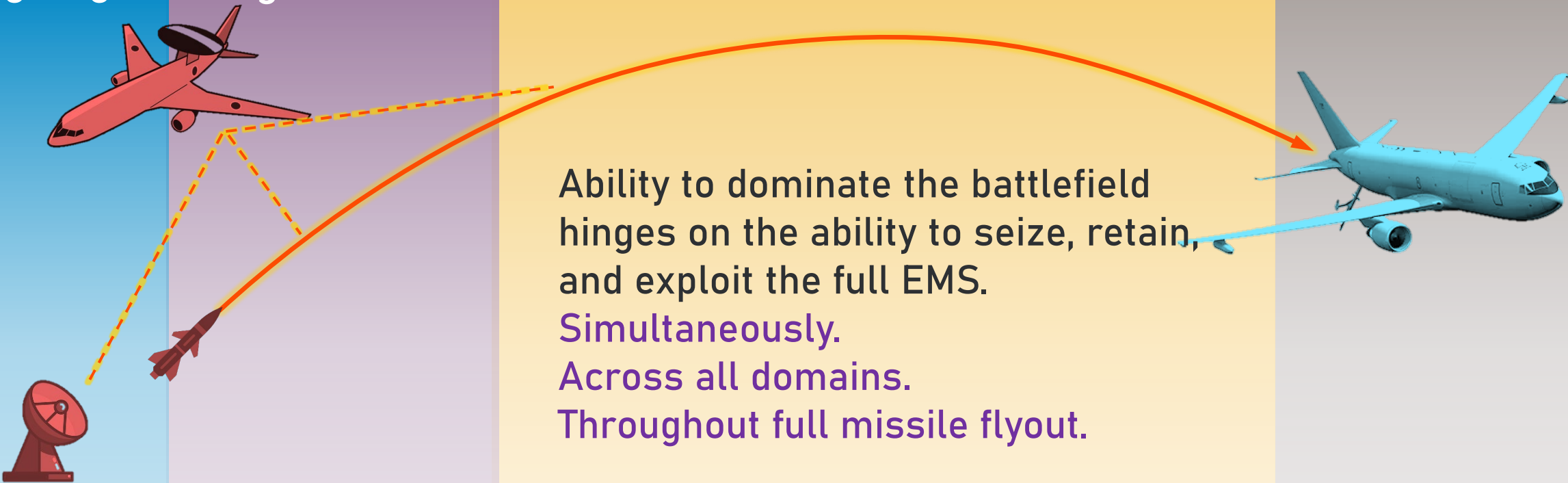


Pre-launch tracking and targeting

Post-launch boost and guidance

Mid-course

Terminal guidance



Ability to dominate the battlefield hinges on the ability to seize, retain, and exploit the full EMS. Simultaneously. Across all domains. Throughout full missile flyout.

$2\pi \cdot \check{G} \cdot v \dagger \mathbb{E} W \pi$

$8\mathbb{E} \mathbb{A} \mathbb{A} \mathbb{E} \check{s} \dagger \mathbb{A} \mathbb{E}$

$_ \mathbb{E}, \mathbb{E} - \mathbb{D}, \check{s} \mathbb{A} \mathbb{E}$

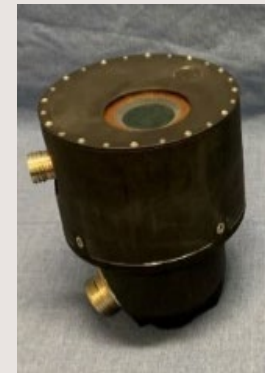
$8 \cdot \geq G \dagger \pi \ 2\pi \Delta \dagger \check{s}$

$2 \check{G} \ \dagger \dagger \ \mathbb{E} _ \mathbb{E}, \mathbb{A} \cdot \ s \ \mathbb{E} \dagger \cdot \cdot \ \mathbb{E} \ll$

CMWS(V)3 is the next gen 360° passive EOIR sensor for F-15EX enabling warning and countermeasures against air-to-air and surface-to-air long range threats

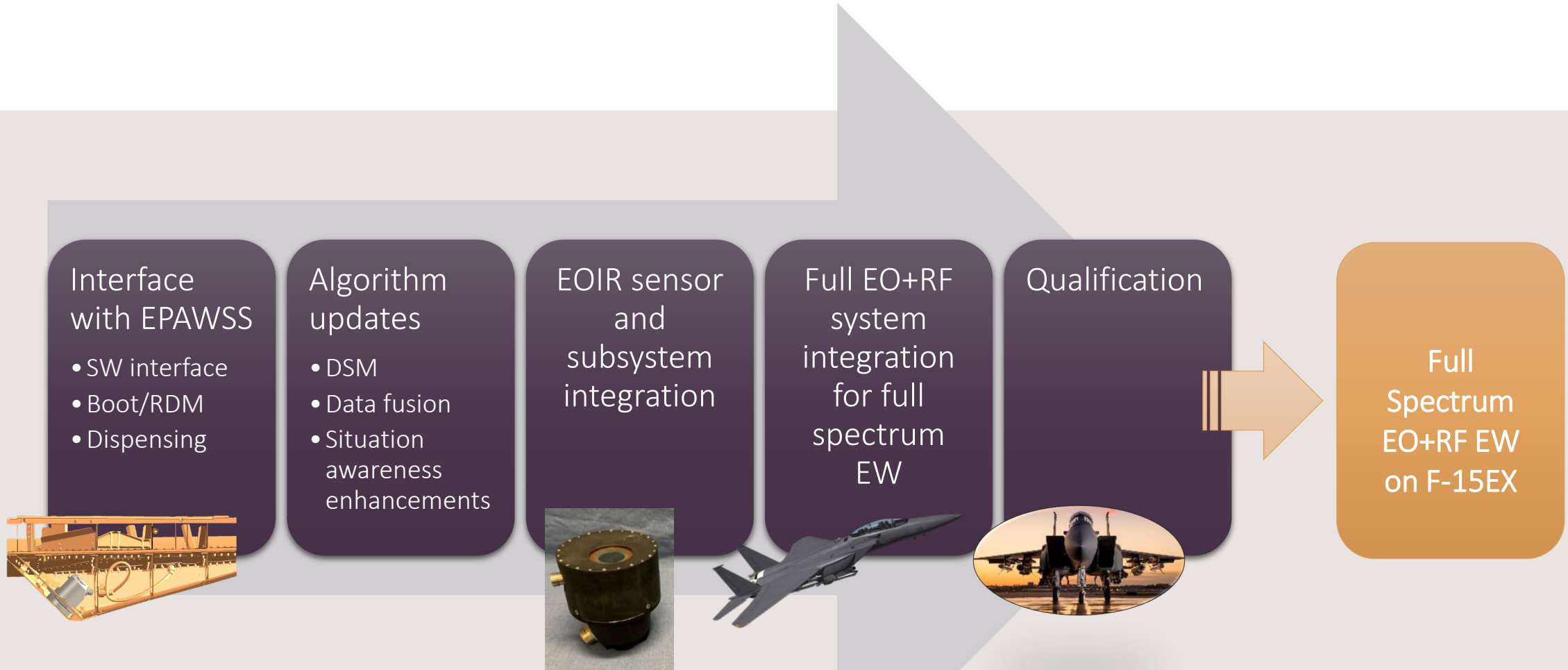
This 360° two-color EOIR sensor enables F-15EX to penetrate and strike deep targets because:

- It enables early detection of inbound air-to-air and surface-to-air RF threats
- Permitting exploitation and countering of these RF threats through their full flight envelope
- This breaks the kill chain sooner by enhancing existing RFCM solutions and enabling future kinetic kill weapons

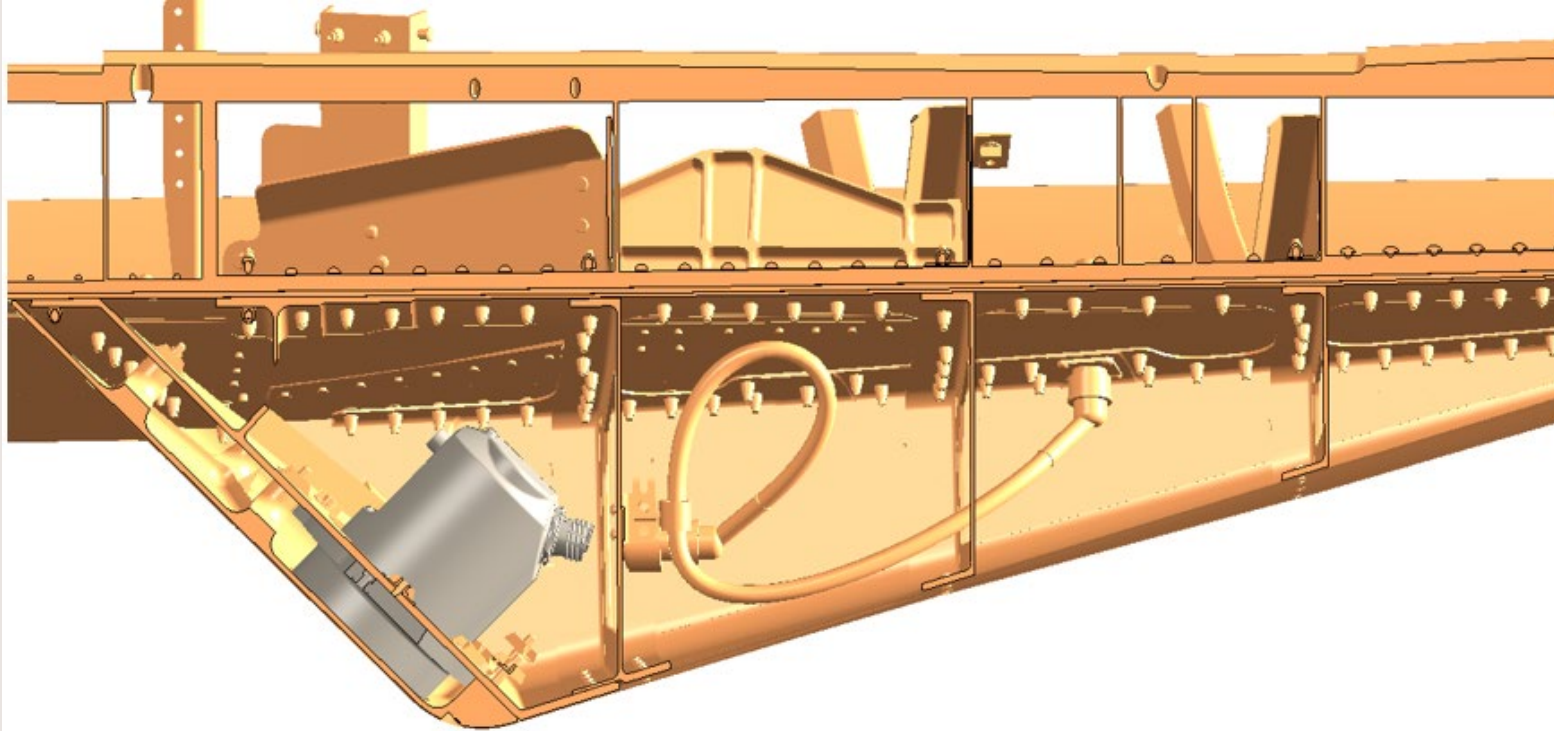


Integrating full spectrum EO+RF Electronic Warfare to F-15EX

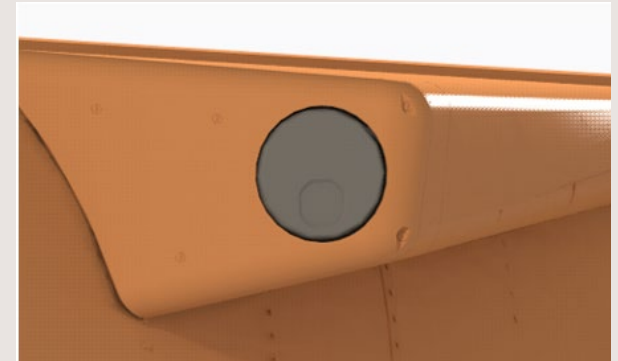
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F-15EX sensor fit check aircraft survey

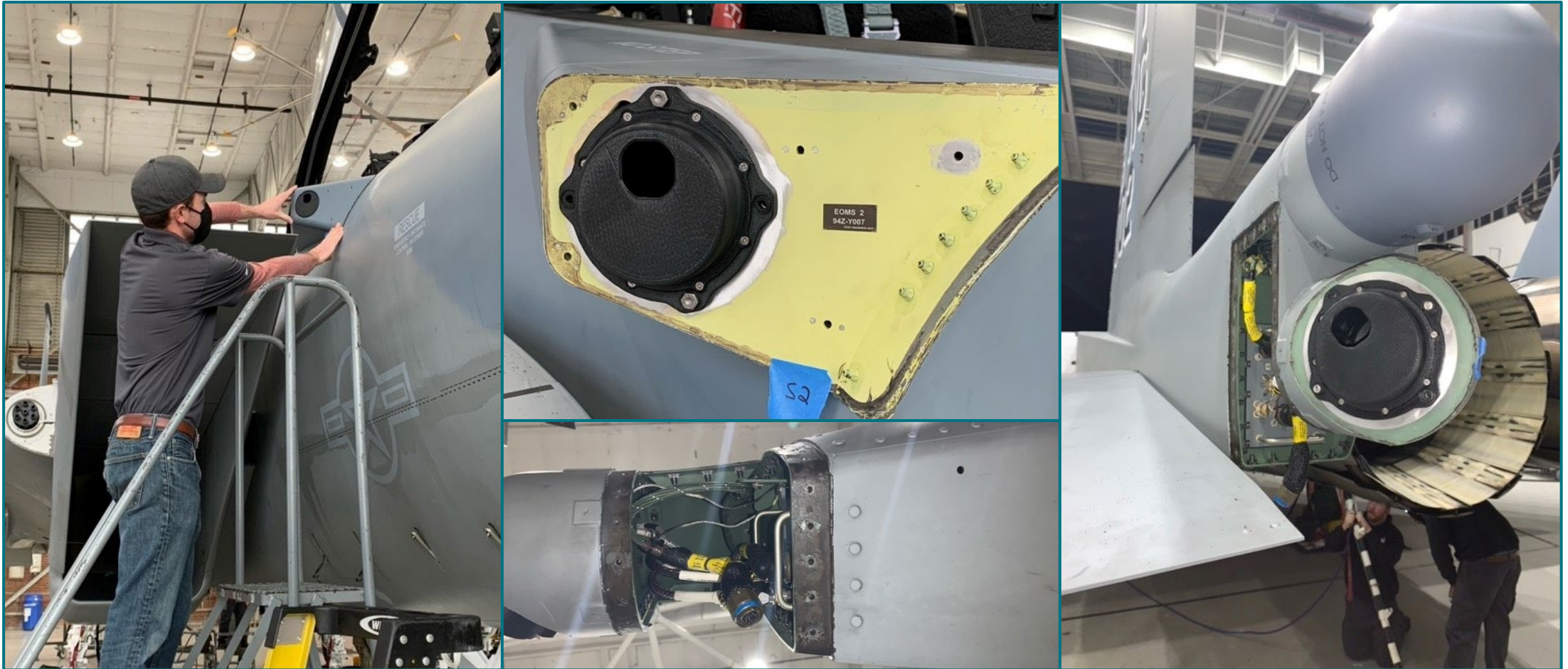


Existing CMWS(V)1 EOMS Installation



New CMWS(V)3 EOIR Fit Check

F-15EX survey and sensor fit check using existing A-Kit fairings and cabling



Sensor installs directly into existing CMWS(V)1 A-Kit

Installation Objectives:

- Use **existing** CMWS(V)1 A-Kit mounts and wiring when possible
- Conform to existing **form/fit** envelope with added functionality
- **Minimal impact** to weight, power, and thermal dissipation
- Integration with **EPAWSS** and countermeasures
- Qualify **Full Spectrum IR+RF EW**



Model shown installed during aircraft survey

