CAPT John Schiaffino F-35 TSS PMO

F-35 Training Systems and Simulation PMO
Vision

Training Systems

BASIC — THRU — ADVANCED — TRAINING

Family of Trainers
(large to small footprint)
Aligned w/ Aircraft Capes
High-Fidelity Environment
Modern HW & SW Architecture

Enabling <u>Lethality</u> via a family of connected trainers in a <u>high-fidelity</u> environment

Distributed Mission Training

V-22, CVN, MH-60S, NCTE, Harrier, E-2C, F/A-18

F-22, F-15E, A-10, DMON, ITAC, B-1B, E-3C
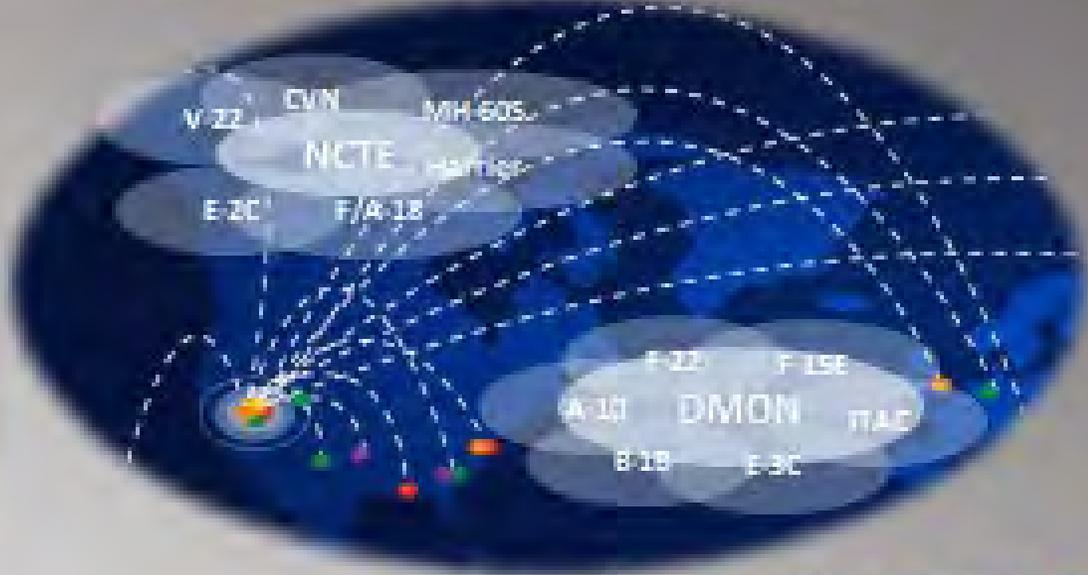
Networking F-35 FMTSims globally
Virtual Constructive cross-platform training
Links multiple Sims via network

REUSE

Joint Simulation Environment
Gov't-owned, High Density Threat Environment

REUSE

Integrates High-Fidelity models (F-35-in-A-Box, Red Forces, Blue Forces, weapons, datalinks) that provide an operationally relevant, simulated environment

FIAB

Enables F-35 <u>capability verification</u> and experimentation via 14 simulators that can replicate Blue and Red Air. Leverage environment for Training

Effects Based Simulator that provides a scalable architecture across various hardware form factors (small, deployable) suitable for F-35 tactics development and training

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F-35 Training Systems and Simulation PMO
Baselined to enable F-35 Lethality

Air Vehicle Alignment

Capability Insertion

Aircraft capabilities inserted into Trainers and JSE within 6wks of aircraft SW release

Threat Fidelity Improvement

Increased Threat & IAW User Priorities

Develop
Sim Interoperability

V-22, CVN, MH-60S, NCTE, Harrier, E-2C, F/A-18

F-22, F-15E, B-10, DMON, ITAC, B-1B, E-3C

FMSims interacting across Service Networks enabling large-scale training

Next Gen Training 'Family' & Re-Architecture

Modular SW

Open HW & SW

Agile and modern Next Generation Trainers

Roadmap
FY22-27

- Aircraft Capabilities < 6-wks into Pilot Trainers
- Threats are operationally relevant with realistic behaviors
- JSE
  - Complete IOT&E
  - Transition to Block 4
- Small Footprint Trainer developed and fielded
- 100% FMSims DMT capable

Deliver

- 90 trainers and courseware delivered across the F-35 enterprise
- JSE: Air-System alignment for follow-on F-35 capability verification

- US Deliveries (FY22-27)
  - Pilot Training Devices: 40
  - Maintainer Training Devices: 2

Sustain

>150 Trainers across 20 sites

Optimizing Trainer Availability

FMSim Tech Refresh

CPFH Affordability Target by end of FY25

- Achieve FMSim Availability Targets by FY25
- FMSim Tech Refresh Phase 1 completed by FY23
- Achieve Training CPFH goals by FY25

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Key Takeaways

Training and Simulation will be the <u>ONLY</u> way we can test and assess F-35 <u>evolving</u> capabilities

Training in an <u>operationally relevant</u> simulated environment = LETHALITY

Without a properly trained operator…it does <u>not matter</u> what the aircraft "*can do*"

To achieve the PMO Vision, and meet the training needs of the warfighter, <u>proper resourcing and continued advocacy are required</u>

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