



U.S. AIR FORCE



AFLCMC... *Providing the Warfighter's
Edge*



AFPEO Agile Combat Support Portfolio Update

Training and Simulation Industry Symposium
16-18 June 2020



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16 June 2020
Mr. Paul Waugh
AF Program Executive Officer
Agile Combat Support



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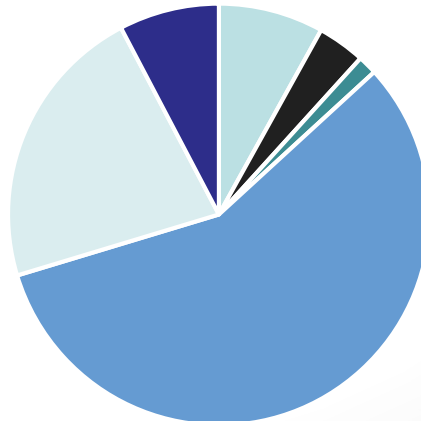
Agile Combat Support

\$7.25B
active year funds
(USAF & FMS)



1,600
people

271
programs



■ 1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6



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Human Systems



Support Equipment & Vehicles



We Provide

Simulators



Automatic Test Systems



Electronic Warfare & Avionics



AFMETCAL





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ACS Is Everywhere





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What We've Been Doing



DAF ACT





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Program Executive Officer Intent



- Build the Brand
- Strengthen Enterprise Collaboration
- Strategic Roadmaps
- Accelerate Innovation – Lead AFLCMC





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Leadership call to go FAST!

Speed with Discipline



- Air Force emphasizing a focus on
 - Agile Software development
 - Digital Engineering (Enterprise)
 - Open Architectures
 - Integrated Digital Logistics

“...instead of trying to hone requirements to meet an unknown threat 25 years into the future, the Air Force would rapidly churn out aircraft with new technologies — a tactic that could impose uncertainty on [near-peer competitors like Russia and China](#) and force them to deal with the U.S. military on its own terms.”

Air
US Air Force’s next-generation fighter inches forward with a new program head
 By: Valerie Insinna | October 3



This rendering of a Next Generation (Lockheed Martin)

OMAHA, Neb. — The U.S. Air Force is hoping to rapidly produce a new fighter aircraft through agile engineering and other technologies. The service stood up a new program head to lead the effort.

Air Force Association
The US Air Force’s radical plan for a future fighter could field a jet in 5 years
 By: Valerie Insinna | September 16



Concept art released by the the Air Force Research Lab in 2018 shows a potential next-generation fighter concept, or F-X. (Air Force Research Laboratory)

WASHINGTON — The U.S. Air Force is preparing to radically alter the acquisition strategy for its next generation of fighter jets, with a new plan that could require industry to design, develop and produce a new fighter in five years or less.



Digital Engineering Journey

Traditional Acquisition

- Paper-based acquisition
- 2D-Drawings flowed to suppliers
- Many disparate data sources
- Federated/proprietary design tools
- Government insight is limited to contractual deliverables
- Ops and Mx data is not linked to digital thread

Current ACS DE

- Traditional RFP; Paper-based reqmt
- Product definition model flowed to suppliers
- Current DE initiatives include AM, limited 3D drawings, IPD
- Limited focus on MBSE; SCARS, R-EGI, NTS-III
- Inconsistent data management
- Full data right CDRLs not realized on all programs

Objective DE

- MBSE-based requirements
- 3D Models flowed to suppliers
- All data is contained within one PLM system
- Physics-based design/sustainment tools are integrated into PLM system
- Gov't develops MBSE from outset
- Digital twin is developed to integrate design, as-built
- Ops and Mx data for each system

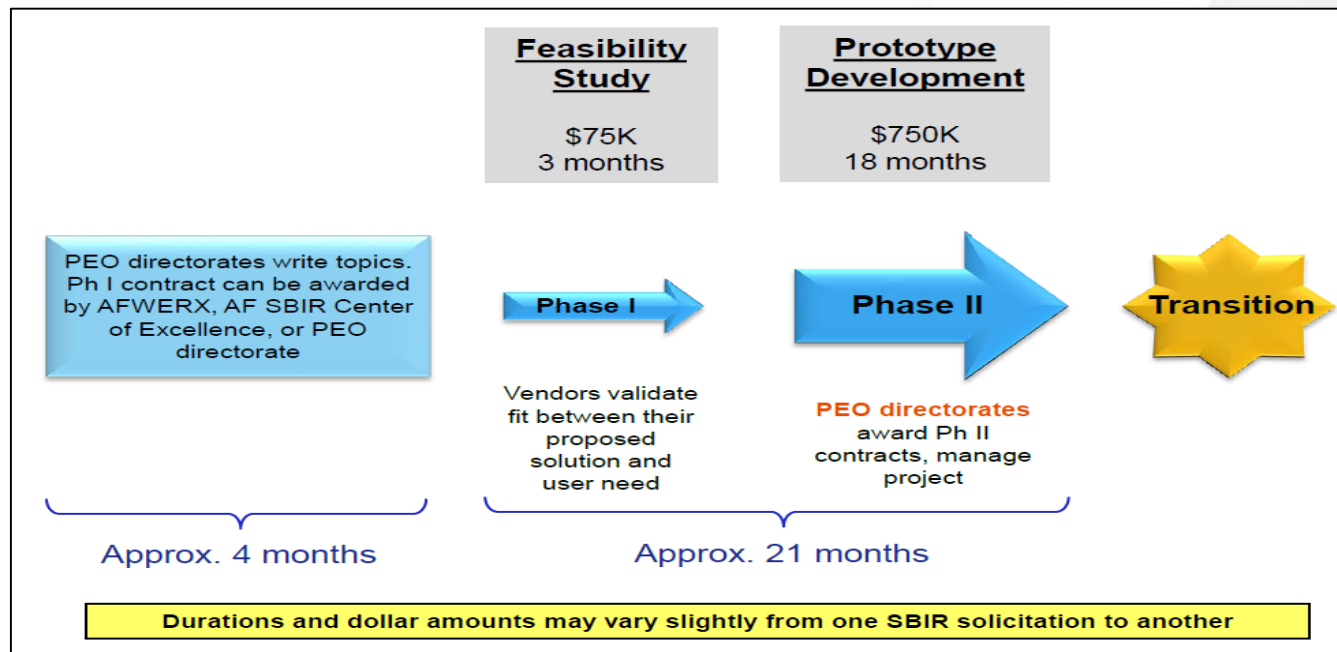


Opportunities and Challenges

- **Continuing to execute legacy programs while launching new efforts--without additional manpower**
 - Human Systems and Simulators portfolios experiencing significant growth

- **Continuing innovation**

- Small Business Innovative Research (SBIR) still evolving
- Focus on dual-use/commercial technologies
- Transitioning efforts an imperative—early engagement with applicable program office(s) during Phase I is critical
- Successful Simulators Pitch Day in Dec at I/ITSEC





Summary

- **COVID-19 Presented Challenges & Opportunities**
- **PEO Intent Remains Unchanged**
- **Speed with Discipline**
- **Accelerating Digital Engineering and other Tools**



Every Airman... Every Aircraft... Every Day! We ARE... Agile Combat Support!

