Air Force Simulators Innovation
The Innovation Match Game

SCTF Summit
11 Aug 2021
I/ITSEC Special Event – Innovation Match Game

• Match Innovation technology to use cases in a game show format
  • Submissions from vendors and use cases from AF Units will be gathered prior to event
  • Vendor technologies available to view on Expo Floor during I/ITSEC

• Benefits
  • Showcases training technologies ready for transition
  • Targets successful SBIR Phase II tech, but not limited to SBIRs
  • Match vendors with end users ready to deploy ideas
  • Provides expertise from Sims Innovation toward getting on contract

• Goal is to transition from ideas prototype to deployment
MAJCOM/Training Unit participants will be the “hunters” in this game

• Units will present their need e.g. – need for a part-task trainer for Flux Capacitor calibration and service for DeLorean Time Machines

• We will match them with three prototypes to consider for this need, and then work with unit on how to transition prototype into contract and sustainment

• Much like the House Hunters TV show – the presentations at IITSEC will be scripted to fit in the allotted timeframes for the event

• No contracts will be awarded at I/ITSEC as part of this event
Playing Innovation Match Game

1. Aircrew Training personnel describe the challenge
2. Present three different prototypes
3. Audience Votes!
4. Reveal the choice for transition project
Schedule for Vendor Participants

- 10 Sept – Vendor Application Deadline
- 20 Sep - 15 Oct – Match “Hunters” to prototypes
  - Assess and Sort prototype projects
  - Internal Selections and Matching
  - Virtual presentations from vendors to “Hunters”
  - Identify Vendor Finalists
  - Build event scripts
- 15 Oct – Finalize Vendors that will “Pitch” on stage
- 16 Oct - 1 Nov – Record video presentation portions
- 2 Nov - 8 Nov – Finalize scripts
- 9 Nov - 19 Nov – Virtual Rehearsal sessions
- 30 Nov - 2 Dec – I/ITSEC !!
Innovation Match Game – How To Participate

• Requirements for Training Unit submissions
  • Identified training need/gap
  • Willingness to participate in prototype transition
  • Advocate for sponsorship/funding within their organization
  • Unit submissions will open in July https://www.aflcmc.af.mil/simulators/

• Requirements for vendor submissions
  • Successful previous DoD prototype implementation (SBIR or otherwise)
  • Willingness to pitch at I/ITSEC Event
  • Vendor submissions will open in July https://www.aflcmc.af.mil/simulators/

• Note! No contracts will be awarded at I/ITSEC as part of this event
  • Timeline for each project is dependent on budgets and organizational need
I/ITSEC 2021
Innovation Match Game
Further info contact:
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Sims Innovation Update

MAJCOM Summit

10 Aug 2021
The Goal: Improving Aircrew Production

Goal State – cut time, the same levels of proficiency

<table>
<thead>
<tr>
<th>Proficiency</th>
<th>Time</th>
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<tbody>
<tr>
<td>UPT</td>
<td>Undergraduate Pilot</td>
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<tr>
<td></td>
<td>Formal Training Unit (FTU)</td>
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<tr>
<td></td>
<td>Training in Assigned unit</td>
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<td></td>
<td>Upgrade Training</td>
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<td></td>
<td>Mission Rehearsal</td>
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<tr>
<td>IQT</td>
<td>Initial Qualification</td>
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<tr>
<td>MQT</td>
<td>Mission Qualification</td>
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<tr>
<td>Full</td>
<td>Continuation</td>
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</tbody>
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Traditional Pilot Training - many years to full proficiency
NEW SPECTRUM OF DEVICES

Data-Driven Learning Management System

Opportunity Zones

DBT = Device Based Training
CSS = Cockpit Systems Simulator
ITD = Immersive Training Device
PID = Personal Immersive Device
WST = Weapons Systems Trainer
VR = Virtual Reality
MR = Mixed Reality

Passive | Active  |
|--------|--------|
DBT     | PID    |

Visual |
PID    |

Application |
ITD    |

Motion |
Fluid  |

Concept adapted from 97th OG
Typical Training Instructor/Student Interaction

- Information flows to student through tools, with little to no feedback.
- Instructor works through each tool separately with student.
- Data collection on performance is mostly entered by the instructor.
- Feedback to student is largely through instructor.

This manually intensive for instructors to manage, & does not scale.
Future Vision of Training Systems

Future is Data Centric, with networked tools that assist Instructors, and provides students with self-executed training options.

Concept adapted from Maj Mark Budgeon, 11th BW
Sims Innovation Update

- Ten Pitch Day 2020 SBIR Phase II projects
- Six Pitch Day 2019 SBIR Phase II projects, at or near completion
- Four Successful transitions to Phase III contracts
- Challenge projects
  - With AFWERX and ACC – Accelerating Pilots to Combat Ready Aviators
  - With AFWERX/STRIKEWERX & GSC - Mixed Reality Air Refueling Challenge
  - With RCO – B-21 Raider Training Systems Innovation Challenge
- Member Operator Training Analytics Reports (MOTAR) – a training data hub to enable delivery of digital training systems and content
Questions?