



# AFAMS INNOVATIONS SECTOR (AIS) UCF TECH GROVE



## PTN MISSION

The Air Force PTN concept, bridge the classroom-to-enterprise simulator gap. AETCs initiative, "reimagine" how learning is delivered to Airmen and the pilot training pipeline. The program explores prototyping training environments that integrate various technologies to produce pilots in an accelerated learning-focused manner.

## EXPERTISE

- Computer Scientists
- Engineers
- Graphic Artists
- M&S Subject Matter Experts
- Training Pilots
- Operational SMEs

## SUPPORTED SITES

- AFAMS, Orlando, FL
- UCF Tech Grove, Orlando, FL
- AFLCMC, Dayton, OH
- Det 24, San Antonio, TX

## CAPABILITIES

### Traditional PTN trainers ...

Light Weight Simulator prototype training environment integrating various Immersive Training technologies.

Transform training with a learning-focused manner to scale pilot training pipeline.

- Accelerated learning
- Reduced traditional training by 35%
- Personalized training plans
- Configurable edge devices to train anywhere
- Distance learning compatible
- Common multiplayer environment (INW)



Superior computing power and VR technology enhancements, desktop-size commercial low cost off-the-shelf (COTS) hardware can generate realistic environments and accurately simulate aircraft physics in real-world conditions. PTN can continually upgrade equipment with little additional investment. With collaborative AR/VR software, development the PTN program can pipeline innovative integration methods. Additionally, this technology allows us deepen our understanding the trainees progress; an example is the use of data tracking as a built-in solution, so instructors and trainers get constant feedback on students' progress.



## Ideating a Universal Future Synthetic Environment

Expand training spectrum – scale capability across AF  
Steer insight into MS Standards for USAF & DoD community



Why at UCF Tech Grove:

- Allows 3rd party solutions for today's M&S hurdles
  - Means for local & small brand vendors to innovate
- Serve as "Sandbox" to offer innovative solutions and be easily reconfigurable to baseline Configuration.
- Venue to help bring USG, Commercial, and Academia partners together for collaborative solution thinking.



Innovations  
Points of Contact

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