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FAA Center of Excellence for  
Technical Training and Human Performance

**Fund Development &  
Partnership Task Force**

*November 6-7, 2018*

# Task Force Meeting Goals

- Review where we are (current & prospective funders)
- Discuss key benefits/themes for potential new funders
- Current/New Funder Mapping Exercise
- Assign/Review Action Items

# COE TTHP Mission and Outcomes

The purpose of the FAA Center of Excellence for Technical Training and Human Performance is to establish and manage a consortium of government, academia, and industry collaboration to evaluate and create solutions for the enhancement of the training and operational performance of all air transportation personnel (e.g., pilots, mechanics, air traffic controllers, technicians, safety operators, engineers).

<https://coetthp.org/>

At-A-Glance Metrics	Year 3 Outcomes
# Core Institutions	16
# Research Grants	70
# Principal Investigators	50+
# Subject Matter Experts	100+
# Student Researchers	70+
# Industry Partners	45
# Affiliate Members	10

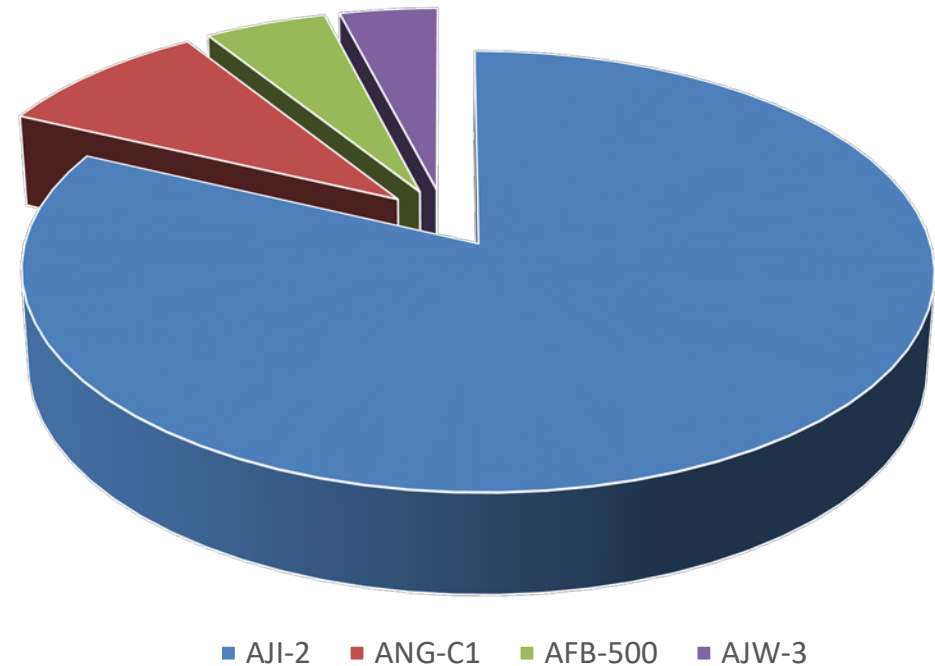
*FAA COE TTHP, Established August 12, 2016*

# Current Funders (\$7.4 Million)

## Federal Aviation Administration

- AJI-2, Air Traffic Organization (\$5.84M)
  - 27 projects
- ANG-C1, NextGen (\$650K)
  - 1 project
- AFB-500, Flight Standards (\$372K)
  - 3 projects
- AJW-3, Flight Program Operations (\$549K)
  - 4 projects

*Center of Excellence Funding Trends*



**\*\* Per Public Law 101-508: The federal share shall be 50% of the costs of conducting research activities.**

## Benefits of Working with the COE TTHP

- Approved grant and IDIQ contract vehicles for use by government and industry organizations
- Lower cost services due to matching contribution requirements by core institutions
  - *\$3,317,220 matched funds for research efforts to date*
- Access to 150+ experienced aviation researchers and practitioners
- Capacity to conduct prototype testing at 30+ research site locations nationwide
- Access to research library of study findings and recommendation reports

# Proposed Research Roadmap

## 1. Workforce Development and Training

1.1 Human Capital

1.2 Management and Systems

1.3 Instructional Design and Training Delivery

1.4 Technology

## 2. Analytics

2.1 Data Aggregation and Data Mining

2.2 Statistical Forecasting

2.3 Optimization

## 3. Safety

3.1 Situation Awareness

3.2 Hazardous Conditions

3.3 Cybersecurity

3.4 International

## 4. Human Factors

4.1 Perception

4.2 Cognition

4.3 Workload

4.4 Skill Acquisition

# Sample Examples of Relevant Research Topics

## ***Recruitment and Hiring:***

- How can performance assessment results of FAA internship candidates be tracked and incorporated (e.g., prior learning and/or experience credit) into the information used during the hiring and selection process?
- How can prior learning credits be used to expedite the time to certification of aviation professionals transitioning from the military to the FAA?

## ***Performance:***

- To what extent can personal background, prior professional experience, and prior training and qualifications predict and/or explain initial training performance and early on-the-job performance?

## ***Knowledge Management:***

- How can the FAA implement a knowledge management plan to capture the performance trends and experience lessons of professionals prior to retirement?

## ***Change Management:***

- What are the best change management process recommendations for significantly improving the acceptability and support of training administrators and trainers in the use of technology and innovative training practices for next generation aviation professionals?

## ***Organizational Culture:***

- How do you improve the intergenerational culture and communication preferences of a diverse trainer/trainee learning environment and maintain training quality?

# Current Funder Organization Working Notes

Follow On Business – FAA

<b>Funder Organization</b>	<b>Org/Person Responsible</b>	<b>Key Messages</b>	<b>Contact Plan</b>	<b>Other Notes</b>
AJI				
ANG-Next Gen				
AFB-500				
AJW				



# New Funder Organization Working Notes

## New Potential Sponsors

<b>Funder Organization</b>	<b>Org/Person Responsible</b>	<b>Key Messages</b>	<b>Contact Plan</b>	<b>Other Notes</b>
FAA-HR				
DoD				
A4A				
Other Airlines				