

# COE TTHP Third Annual Technical Meeting

Analysis of a Tech Training Course for  
Specific Part-Task Training  
Implementation and Enhancement Based  
on the Addition of New Technology

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# Project Overview

- Work commenced January 2017 (Tech Monitor: Dr. Hezekiah Braxton)
- Review of the literature
- Focused on Augmented Reality as the “New Technology”
- Used FAA Course 43062001, FDIO-G Hardware Maintenance as the test bed for the project
- Created opportunities for AR interface to alter how work is accomplished
- Provided a written report of work accomplished in October 2018 and March 2019
- Close out briefing anticipated by June 2019

# Research Design

- Review of the Literature
  - Examined best practices (industry and in higher learning)
  - Examined capabilities of Augmented Reality
- Methodology
  - Select one Tech Ops course
  - Analyze the learning framework of the course
  - Examine ways to introduce AR in task completion
  - Examine changes in workforce (Master Tech-Tech)

# Preliminary Findings

- Master Tech
  - Fully understands how to perform maintenance on specific pieces of equipment
  - Available remotely, rather than on site
- Tech
  - Prepares for maintenance activity
    - By watching video
    - By reviewing publications (created expressly for the task)
    - Makes contact with Master Tech
    - Uses AR device to maintain contact with Master Tech

# Preliminary Recommendations

- Examine workforce development documents
- Streamline training (less in residence, more by remote device)
- Create interface protocols for Master Tech and Tech for task completion
- Create videos to support just-in-time training
- Develop a database of competencies

# Anticipated Project End State

- The project has been concluded

# Value and Impact to the FAA

- Adjustments in how training is conducted will save money
- Adjustments on how knowledge/skills/abilities are obtained will save money in Tech Ops training
- Augmented Reality will provide an extra layer of oversight and quality assurance