

**COLLIN DAVIS McDONALD**  
**M.S., AVIATION SAFETY & SECURITY**

**PROFESSIONAL PROFILE**

---

- Higher Education Faculty member with international civil aviation experience as a pilot and manager in a variety of roles and responsibilities.
- Passionate aviation educator excelling in collegiate teaching and individual development as a professional flight instructor.
- Dedicated mentor volunteering with non-profit organizations nationally and internationally

**EDUCATION**

---

- **Ph.D., Higher Education Administration: Educational Leadership**, Liberty University, VA,  
*Excepted 2028* GPA: 4.0 (currently)
- **M.S., Aviation Safety & Security**, Middle Tennessee State University, TN,  
2022 GPA: 4.0
- **B.S., Aviation Maintenance Management**, Middle Tennessee State University, TN,  
2017 GPA: 4.0

**ACADEMIC /TEACHING EXPERIENCE**

---

**Faculty Member Aerospace Department**, Middle Tennessee State University, 2022 to present

- Professional Pilot Faculty Member teaching in both concentration and core classes.
- Developed the Curricula of AERO 3510 – Instrument Operations in the NAS to include experiential components such as local visit to a TRACON Tower and Concentration Projects designed to give students practical components related to the information discussed in class. Currently acting as the Instructor of Record for this class.
- Volunteer in many highschool or after school programs teaching the next generation of pilots about aviation and education at Middle Tennessee State University.
- Currently in the planning phase for an international aviation camp (tentative start date 2024).

**Graduate Teaching Assistant**, Middle Tennessee State University, 2020 to 2022

- Classes taught include Aerospace Maintenance Shop Practices (AERO 1380), Advanced Aerospace Accessories Systems Maintenance and Repair (AERO 4381), and Advanced Aerospace Systems Overhaul (AERO 4371) at MTSU.

**Aircraft Maintenance Technician**, MTSU Flight School, 2020 to Present

- Developed various guides for student workers at MTSU’s Maintenance Facility including onboarding training, maintenance checklist, and aircraft documentation checklist to be used writing logbook entries
- Routinely train student workers on the proper maintenance procedures enforcing both safety and professionalism in their development

### **Certified Flight Instructor and Aviation Mentor, 2015 to Present**

- Accumulated 1,200 flight hours with over 500 Hours of Dual Given
- Volunteer with the Sattler Foundation Aviation Summer Camp (Lebanon, TN) as a lecturer and mentor actively molding the next generation of aviators
- Developed the Private Pilot and Instrument Pilot curriculum for Class Bravo Air, LLC flight school in Lebanon, TN with a team of highly skilled and motivated instructors
- Established and taught the first Private Pilot Accelerated Ground Course at Class Bravo Air, LLC
- Volunteered with the State of Kentucky's 4-H Aviation program leading various ground and flight labs
- Presented at several Experimental Aviation Association and Young Eagle meetings lecturing on aviation history and my undergraduate thesis project *Retracing the Birth of Air Travel* and the flight of the *Vin Fiz*.

### **Owner and Manager, Multi Engine Training LLC, 2018-2019**

- Managed and operated a Part 61 flight training facility out of Lebanon, TN using a Piper Aztec to train commercial pilots on multi-engine operations and procedures
- Developed professional relationships with field management and parts vendors to maintain and operate the aircraft

### **Missionary and Medical Relief Pilot, Papua New Guinea, 2018**

- Volunteered with a small humanitarian aviation non-profit organization (*That They May Know*) in Papua New Guinea providing medical and ministerial assistance through aviation
- Taught in the non-profit's school developing students both in academics and skills by learning to teach in other cultures

### **Undergraduate Research Assistant, Middle Tennessee State University, 2014 to 2016**

- Volunteered as a Subject Matter Expert (SME) for the Maintenance Coordinator position in the NASA FOCUS Lab in the MTSU Aerospace Department which included leading the maintenance concentration training as an undergraduate senior

## **HIGHLIGHTS OF PROFESSIONAL CAREER**

---

### **Professional Pilot Professor, Middle Tennessee State University (Tenure-track)**

- Developed multiple demonstrations and experiential components to classes enriching student understanding and learning.
- Expanded the current systems training in our Professional Pilot classes to deepen the understanding of powerplant and airframe systems building a foundation for successful careers in our students.
- Main liaison to high school outreach programs encouraging the next generation to overcome the challenges associated with pursuing a career in aviation by providing advice and mentorship.

### **Aircraft Maintenance Technician, MTSU Flight School, 2020 to Present**

- Created a training program for the student workers operating in the Part 141 Flight Training Facility to increase the safety and speed of the onboarding process
- Promoted within first six months to Documentation Manager for the MTSU Flight School Maintenance Facility managing the fleet's permanent records for scheduled and unscheduled maintenance
- Currently assisting Flight Schedule Pro (aircraft scheduling program utilized by MTSU) in beta testing the maintenance Work Orders and Logbook Entries development. This program will eventually allow MTSU to maintain fully electronic documentation that flight instructors and students can reference remotely.

**Graduate Teaching Assistant**, Middle Tennessee State University, Aerospace Department, 2020 to 2022

- Taught both lectures and labs of varying complexity in the MTSU aerospace program
- Operated as the turbine ground lab instructor demonstrating the BeechJet ground operations during turbine engine classes training the students with hands on scenario-based training in system checks

---

## FAA CERTIFICATES & LICENSES

---

• Multi Engine Instructor (MEI)	December	2017
• Certified Flight Instructor – Instrument (CFI-I)	October	2017
• Certified Flight Instructor (CFI)	November	2015
• Commercial Pilot (ASES)	March	2019
• Commercial Pilot (AMEL)	November	2017
• Commercial UAS Operator	October	2019
• A&P Mechanic Certificate	June	2017
• Authorize Inspector (Initial)	May	2022

---

## RESEARCH EXPERIENCE

---

- *Retracing the Birth of Air Travel.* (2017) Undergraduate Honors Thesis completed at MTSU
- *Comparative Analysis of Part 147 Schools.* (2022) Graduate Thesis completed at MTSU

---

## PUBLICATIONS

---

- McDonald, C. D. & DuPont, G. (2022). “The history of the maintenance human factors of the ‘dirty dozen’.” Graduate Paper written in coordination with the CEO of System Safety Gordon DuPont on the accidents surrounding the twelve human factors plaguing the maintenance industry..

---

## PRESENTATIONS

---

- McDonald, C. D. (2023). “A Quantitative Analysis on the Affects of COVID-19 in Associate Programs versus Bachelor Programs using Initial Written Exam Scores for Aircraft Mechanics.” Southeastern STEM Education Research Conference (S2ERC) 2023. Cookeville, TN.
- McDonald, C. D. (2023). "Of Plagues and Commandments: COVID-19 and the Part 147 Rewrite." *Accepted.* University Aviation Association (UAA) Conference 2023. St. Petersburg, FL.

---

## CURRICULA DEVELOPED

---

### Higher Education Curricula:

- *Aviation Safety Lecture Series* – (Proposed) AERO 3000 – Aviation Lecture Series – A class modeled after UH 3000 at MTSU providing for a 1 credit opportunity to explore a variety of safety, training, and industry topics with representatives and experts on the topic providing lectures during the class. Currently in the proposal stage for hopeful approval and application in the 2024-2025 academic year.
- *Concentration Projects* – (addition) AERO 3510 – Instrument Operations in the NAS – These projects gave UAS, Management, and Dispatch students a specific challenge in Aviation and allowed them to use skills gained in the Instrument Operations class to solve this problem that is tangential to their typical degree path.

### External to Higher Education:

- *Documentation Checklist for A&P Mechanics in MTSU Maintenance Hangar* – 2022 (Murfreesboro, TN)
- *Onboarding for Student Workers in MTSU Maintenance Hangar* – 2020 (Murfreesboro, TN)
- *Multi-engine Commercial Training Program* – 2018 – Multi Engine Training, LLC. (Lebanon, TN)
- *Instrument Pilot Training Program* – 2017 – Class Bravo Air, LLC. (Lebanon, TN)
- *Private Pilot Training Program* – 2017 – Class Bravo Air, LLC. (Lebanon, TN)
- *Private Pilot Accelerated Ground Course* – 2017 – Class Bravo Air, LLC. (Lebanon, TN)

## HONORS & AWARDS

---

- |   |           |
|---|-----------|
| • James Buchanan Fellowship Program, MTSU Honors College                | 2013-2017 |
| • James Rardon Aviation Maintenance Student of the Year, ATEC           | 2017      |
| • Ingram-Montgomery Honors Scholarship, MTSU Honors College             | 2017      |
| • Col. James Gregory Aviation Scholarship, MTSU Aerospace Department    | 2017      |
| • Tiara Foundation Chair Award of Excellence, MTSU Aerospace Department | 2016      |
| • Wallace R. Maples Aerospace Scholarship, MTSU Aerospace Department    | 2015-2016 |
| • Paul Martin Honors Scholarship, MTSU Honors College                   | 2015      |
| • Excellence in Aviation Scholarship, MTSU Aerospace Department         | 2014      |

## PROFESSIONAL DEVELOPEMENT

---

- |  |   |
|--|---|
| • Current volunteer with the Flagship Detroit Flying the DC-3.                       | • Over a decade of aircraft ownership experience including a Piper Aztec and Maule. |
| • Managing an aviation content Youtube Channel – <a href="#">The Flying Mechanic</a> | • FAA Wings Instructor  |

## SERVICE

---

- |  |           |
|--|-----------|
| • Mentor with Bill Sattler Aviation Foundation (Lebanon, TN) | 2016-2022 |
| • Mentor with Kentucky 4-H Aviation Camp (Tompkinsville, KY) | 2017-2018 |
| • MTSU Honors College Student Council Member                 | 2016-2017 |
| • Student President Aviation Maintenance Club (MTSU)         | 2016-2017 |
| • MTSU Student Ambassador                                    | 2015-2016 |