

MELANIE PORTER, ACTAR, EIT

EDUCATION:

B.S. in Mechanical Engineering, Florida State University, Tallahassee, FL, 2021

REGISTRATION:

Accredited Traffic Accident Reconstructionist (ACTAR), Registration No. 5292
Engineer in Training (EIT), Florida, NCEES ID 23-045-77

EXPERIENCE:

Accident Reconstructionist, Knott Laboratory, LLC, Centennial, CO, November 2025 to Present

Project Engineer, Quest Engineering & Failure Analysis, Tallahassee, FL, August 2022 to October 2025

Manufacturing Engineering Intern, Heatcraft Worldwide Refrigeration, Tifton, GA, May 2019 to August 2019



ACCIDENT RECONSTRUCTION:

Ms. Porter has been involved with numerous forensic engineering investigations of motor vehicle collisions involving passenger vehicles, commercial vehicles, motorcycles, bicycles, scooters, and pedestrians. Ms. Porter has assisted with investigations involving property damage, personal injury, death, and product liability. These investigations involve documentation and analysis of physical and digital evidence and the application of physics and engineering principles to ultimately determine causation. Ms. Porter has been involved in visibility studies and vehicle testing.

Ms. Porter has had training in the use of specialized tools and instruments for use during forensic investigations, including high-definition laser scanners, the Bosch Crash Data Retrieval (CDR) tool, and unmanned aerial systems (drones). Ms. Porter has experience and training several aspects of accident reconstruction, including analysis of crash data from electronic data recorders in passenger vehicles and commercial vehicles, 3D data manipulation and analysis, photogrammetry, video analysis, accident simulation, accident reconstruction calculations and techniques, traffic signal interpretation and analysis, and visibility analysis. Ms. Porter is familiar with federal and state regulations, driving rules, and industry codes, standards, and regulations. At Knott Laboratory, Ms. Porter is responsible for inspecting and documenting crash sites and involved vehicles, imaging event data recorders, analyzing crash evidence, analyzing digital data, managing projects, technical communication, and report writing.

CERTIFICATIONS

Ms. Porter holds the following certifications:

- Licensed Drone Pilot (FAA Part 107 Remote Pilot Certificate)
- Bosch Crash Data Retrieval Technician

PROFESSIONAL AFFILIATIONS

Ms. Porter is a current member of the following societies:

- NAPARS National Association of Professional Accident Reconstruction Specialists
- INCR International Network of Collision Reconstructionists

SPECIALIZED TRAINING

1. "Summarization of the 2026 EDR Symposium Updates." Training. Knott Laboratory. Centennial, CO. 2026.
2. "The Geometry of Safety: Understanding Conflict Points and Innovative Road Design." Training. Knott Laboratory. Centennial, CO. 2026.
3. "Ethics: From Theory to Practice." Training. ASCE. 2026
4. "FAA Commercial Certification (Part 107)." Training. Drone Pilot Ground School. 2026.
5. "Bosch CDR Tool Technician Training." Training. Institute of Police Technology and Management. 2025.
6. "History and Development of Crush Analysis in Accident Reconstruction." Training. Quest Engineering & Failure Analysis. Tallahassee, FL. 2025.
7. "ACTAR Test Preparation Course." Training. Institute of Police Technology and Management. Tallahassee, FL. 2025.
8. "Virtual CRASH Live Classroom Training Course." Training. VCRASH ACADEMY. Gainesville, FL. 2024.
9. "The Latest and Greatest on Downloads: CDR Summit Highlights." Training. Quest Engineering & Failure Analysis. Tallahassee, FL. 2024.
10. "Roadway Evidence Analysis Methodologies." Training. Quest Engineering & Failure Analysis. Tallahassee, FL. 2024.
11. "Traffic Crash Reconstruction for Engineers." Training. Northwestern Center for Public Safety. Tallahassee, FL. 2023.
12. "Basic Physics: Notes for Traffic Crash Investigators and Reconstructionists." Training. Quest Engineering & Failure Analysis. Tallahassee, FL. 2023.
13. "Zero to Hero in Cloud Compare." Training. ai2-3D. 2023.
14. "PhotoModeler Collision Reconstruction." Training. PhotoModeler Technologies. 2022.