

PATRICK NELSON, ACTAR

EDUCATION:

A.A.S in Intelligence Studies and Technology, Community College of the Air Force, Maxwell AFB, AL 2018
A.A.S in Administration of Justice Studies, Rio Salado College, Tempe, AZ 2018

REGISTRATION:

Accreditation Commission for Traffic Accident Reconstruction (ACTAR) #5272

EXPERIENCE:

Accident Reconstructionist, Knott Laboratory, LLC, Centennial, Colorado, July 2026 to Present
First Sergeant, Arizona Air National Guard, Phoenix, Arizona, March 2013 to Present
Accident Reconstructionist, Maricopa County Office of the Public Defender, Phoenix, Arizona, March 2025 to June 2026
Police Detective, Gilbert Police Department, Gilbert, Arizona, December 2011 to March 2025
Police Officer, Sahuarita Police Department, Sahuarita, Arizona, August 2004 to December 2011



CONSULTING EXPERIENCE:

Mr. Nelson has designed and executed accident reconstruction and analyses for civil, criminal, and administrative proceedings involving passenger vehicle, commercial vehicle, and multi-vehicle collision events. His scope of practice includes scene documentation and mapping, vehicle inspection protocols, Event Data Recorder (EDR) imaging and interpretation, momentum and energy-based crash analysis, Principal Direction of Force (PDOF) determination, and pre-impact and post-impact speed analysis. Analytical work has been conducted using industry-standard crash simulation software and CAD-based scaled diagramming tools. Representative analyses include conservation of linear momentum (COLM) envelope geometry, intersection sight-distance and clearance-timing evaluation, rebuttal analysis, and evidentiary interpretation of null EDR results.

In the course of delivering findings to clients, Mr. Nelson has provided expert consulting and testimony support to attorneys, insurers, and litigants in both plaintiff and defense capacities, as well as in criminal defense and prosecutorial contexts. He has authored expert reports, rebuttal reports, addendum reports, and supplemental forensic analyses, and has prepared comparative expert analysis matrices in response to opposing expert opinions. Mr. Nelson has conducted review of manufacturer safety recall data, discovery materials, and investigative case files in support of litigation strategy and defense preparation.

MEMBERSHIPS AND PROFESSIONAL AFFILIATIONS:

Mr. Nelson is a member of the following technical and professional societies:

NAPARS – National Association of Professional Accident Reconstruction Specialist
IAARS – International Association of Accident Reconstruction Specialist
SATAI – Southwestern Association of Technical Accident Investigators
CAARS – California Association of Accident Reconstruction Specialist
NATARI – National Association of Traffic Accident Reconstructionist and Investigators
NDIA – National Defense Investigators Association
NAPD – National Association of Public Defenders
SAE International