Andrew Damien (Andy) Irwin

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EDUCATION

The University of Texas, Austin, Texas

1. Research assistant at the Ferguson Structural Engineering Laboratory, a part of the Balcones Research Center, 1985 - 1988
2. Bachelor of Science in Architectural Engineering, May 1988
3. Engineer in Training (EIT) Exam (now known as the Fundamentals of Engineering Exam), Spring 1988

Northwestern University, Evanston, Illinois

1. Traffic Accident Investigation I, April 1998
2. Traffic Accident Reconstruction I, April 1998
3. Traffic Accident Reconstruction II, April 1998

Texas A&M University, College Station, Texas

1. Conference on Reconstruction and Safety on the Highway, October 1998
    a. Vehicle Crash Tests
    b. Crash Algorithms
    c. Crush Analysis
2. Commercial Vehicle Inspection and Collision Investigation, August 1999

Society of Accident Reconstructionists

1. 1998 Annual Conference
    a. Investigation of Accidents Involving Vehicle Fire & Vehicle Fire Demonstration
    b. Daytime/Nighttime Visibility Issues in Accident Investigation
    c. Motorcycle Collision Investigation
    d. Injury Biomechanics in Low Speed Collisions

Engineering Dynamics Corporation

1. Human, Vehicle, Environment (HVE) Forum, April 1999
2. EDC Reconstruction, January 2000

Texas Department of Public Safety

1. Licensed Manager / Private Investigator – Investigations Company, May 2001 to Present

The Society of Automotive Engineers

1. 2004 Government/Industry Meeting
    a. Rollover Crashworthiness
    b. Side Compatibility Crashworthiness

c. Frontal Compatibility Crashworthiness\
d. Data Applications for Crash Avoidance and Crashworthiness
e. ITS Crash Avoidance Technologies

Bosch Corporation

1. Crash Data Retrieval System Operator's Certification Course, July 2004
2. Crash Data Retrieval System Users Conference, January 2008

Texas Association of Accident Reconstruction Specialists

1. Cummins, Caterpillar and Detroit Diesel/Mercedes Electronic Control Module Capabilities and Resources Course, June 2005

Leica Geosystems

1. High-Definition Laser Scanner Training, October 2009
2. High-Definition Laser Scanner Training, February 2010

Scientific Analysis, Inc.

1. Heavy Vehicle Electronic Control Module Download Training, December 2010
2. Bosch Crash Data Retrieval System Training, February 2014
3. Hyundai Air Bag Module Download Training, April 2014
4. Heavy Vehicle Electronic Control Module Download Training, December 2016
5. Crash Data Retrieval Systems Training, September, 2019
6. Berla Data Retrieval System Training, November 2019
7. Heavy Vehicle Electronic Control Module Download Training, November 2019

Crash Safety Solutions, LLC

1. Human Factors for Traffic Crash Reconstruction, December 2018

United States Air Force

1. Officer Training School, November 1988
2. Specialized Undergraduate Navigator Training, September 1989
3. Combat Survival School, October 1989
4. Lead-In Fighter Training, December 1989
5. F-111D Weapon Systems Officer Conversion Training, June 1990
6. Water Survival School, June 1990
7. F-111F Instructor Weapon Systems Officer Course, October 1992
8. F-111F Flight Examiner/Evaluator Weapon Systems Officer Upgrade Program, April 1993
9. Air-Ground Operations School (AGOS), July 1993
10. F-15E Weapon Systems Officer Conversion Training, December 1994
11. Squadron Officers School, February 1995
12. Arctic Survival School, February 1996
13. F-15E Functional Check Flight Weapon Systems Officer Upgrade Program, February 1996
14. F-15E Instructor Weapon Systems Officer Course, May 1996
15. F-15E Flight Examiner/Evaluator Weapon Systems Officer Upgrade Program, December 1996
16. Supervisor of Flying Upgrade Program, December 1996

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North Harris County Community College, Houston, Texas

1. Automotive Engines I, May 1983

Motorcycle Safety Foundation

1. Motorcycle Rider Safety Basic Course, 1989
2. Motorcycle Rider Safety Advanced Course, 1991

EXPERIENCE

January 1998 to Present:

Vice President and Accident Reconstructionist: Aperture, LLC. (formerly Scientific Analysis, Inc.)
Accident investigation, reconstruction, and analysis for passenger and commercial vehicles through employment of engineering and scientific disciplines. Accident scene and vehicle inspection, photography, and measurement. Production of trial and testimony aids such as accident site diagrams, maps, charts, and crime scene exhibits. Deposition, arbitration and trial testimony.

November 1988 to December 1997:

Professional Military Officer: The United States Air Force
Combat Mission Ready aircrew in the F-111D, F-111F, and F-15E fighter aircraft. Responsible for world-wide deployment and employment of U.S. Air Force fighter aircraft. Responsible for the direct employment of air to ground and air to air weaponry. Instructor responsibilities included academic, simulator, and in-flight instruction on operation and employment of the F-111F and F-15E. Flight Examiner responsibilities included evaluation and certification of Combat Mission Ready status for all unit assigned aircrew in the F-111F and F-15E. Conducted in-flight testing, evaluation and certification of F-15E aircraft being returned to flying status. Responsible for overseeing daily fighter flying operations for the entire base.

Career Flying Experience: Total Fighter Time: 1496 hours
Combat Time: 126 hours

AWARDS AND DECORATIONS

NATO Medal

Air Medal, with 1st Oak Leaf Cluster (OLC)

Aerial Achievement Medal

Air Force Commendation Medal

Army Commendation Medal

Air Force Outstanding Unit Ribbon, with 2nd OLC

Southwest Asia Service Medal, with 1st OLC

Armed Forces Expeditionary Medal

Combat Readiness Medal, with 2nd OLC

National Defense Service Medal

Air Force Overseas Short Tour Ribbon

Air Force Longevity Service Award Ribbon, with 1st OLC

Small Arms Expert Marksmanship Ribbon

Air Force Training Ribbon

Pacific Air Forces Inspector General Outstanding Performer Citation

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AFFILIATIONS

The Society of Automotive Engineers (SAE)

The American Society of Mechanical Engineers (ASME)

Texas Association of Accident Reconstruction Specialists (TAARS)

Society of Accident Reconstructionists (SOAR)

National Association of Professional Accident Reconstruction Specialists (NAPARS)

PRESENTATIONS

1. "Prosecuting and Defending Truck and Auto Cases - Digital Breadcrumbs: Using Tech Trails to Find Your Way in Truck and Auto Cases", State Bar of Texas Continuing Legal Education, November 6-7, 2025, Houston, Texas
2. *"Telling Your Client's Story Using Accident Reconstruction",* 360 Advocacy Annual Meeting, Las Vegas, Nevada, February 2020
3. *"The Application of State of the Art Technologies to Truck Crash Reconstructions",* 360 Advocacy Annual Meeting, Las Vegas, Nevada, February 2019
4. *"Presentation of Accident Reconstruction Utilizing 3D Laser Scanners",* Denton Police Department, Denton, Texas, July 2018
5. *"Presentation of a Tractor Trailer / Pedacyclist Accident",* ProSight Specialty Insurance, Morristown, New Jersey, April 2018
6. *"Presentation of a Tractor Trailer / Passenger Vehicle Collision",* Federation of Defense and Corporate Counsel (FDCC) Winter Meeting, Amelia Island Florida, February 2018
7. *"Accident Reconstruction",* Permian Basin Trial Lawyers Association Annual Meeting, Horseshoe Bay, Texas, August 2016
8. *"Accident Reconstruction and Air Bag Data",* Allstate Insurance Company, The Woodlands, Texas, June 2003
9. *"Accident Reconstruction & Technology",* Texas Criminal Defense Lawyers Association, Fort Worth, Texas, December 2002
10. *"Accident Reconstruction"*, American Academy of Forensic Sciences (AAFS) 54th Annual Conference, Atlanta, GA, February 2002
11. "*Automobile Accident Reconstruction"*, Society of Automotive Engineers (SAE), Arlington, Texas, November 2001
12. *"Vehicle Measurement and Damage Analysis Utilizing 3-Dimensional Digitizers*", Texas A&M CRASH 98 Conference, October 1998
13. *"F-15E Close Air Support Capabilities in Bosnia and Herzegovina"*, presented to The Secretary of Defense of the United States of America; the Honorable William J. Perry, Aviano Air Base, Italy, November 1995
14. *"Close Air Support Operations on the Korean Peninsula"*, presented to the Vice Commander of the United Nations Command for The Republic of Korea, the Chairman of Korean Joint Chiefs of Staff, and the Commanding General of the 2nd Infantry Division (U.S. Army), Camp Red Cloud, Republic of Korea, April 1994

PERSONAL

Resides and works in Dallas, Texas. Married, with four children.

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