

Andrew J. Thoresen

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Education:

Marquette University, Milwaukee, WI: Bachelor of Science in Electrical and Electronic Engineering

FE Certification, 2003

PE Certification, 2007; Licensed in Arizona (License: 47603), California (License: E19615), New Mexico (License: 19441), Nevada (License: 020220), Idaho (P-17140).

Work Experience:

Principal Electrical Engineer; May 2004 to Present

Oracle Forensics Inc, Phoenix, AZ

- ❖ Lead engineering expert on over 2500 fire/personal injury cases.
 - ❖ Unique experience as an equally split Plaintiff and Defense expert.
- ❖ Experience as a lead engineer in Criminal, Civil, and Military Investigations.
 - ❖ Criminal:
 - ❖ Lead engineering expert for Alameda County, 36-fatal, [Ghostship Fire](#).
 - ❖ Lead engineering expert for Maricopa County, [Michael Marin](#)
 - ❖ Civil:
 - ❖ Lead engineering expert on thousands of cases. Notable cases Examples:
 - ❖ [Valley Fire](#), [Glass Fire](#), [San Mateo Limo Fire](#), [Juarez, Mexico Candy Explosion](#), [LDS Church Fire \(ATF task Force\)](#), [Ranch Market](#), [Mark Kia Dealership](#)
 - ❖ Military:
 - ❖ [US Navy U.S.S. Bonhomme Richard](#)
- ❖ Professional Photographer.
 - ❖ Commonly retained on non-electrical cases given unique talent as a forensic photographer.
 - ❖ Routinely works for Charitable Foundations as a portrait photographer.
- ❖ Expert in loss site documentation, including: evidence preservation, evidence collection, scene reconstruction, 3D Reconstruction Renderings, CAD documentation, Microscopy, Radiography, Advanced Proprietary Imaging Techniques.
- ❖ Expert in electrical engineering, failure analysis, and electrocution.
- ❖ International experience.
- ❖ Best known for: (1) Distilling complex failure modes down to very simple explanations, (2) Presenting polished presentations which quickly illustrate highly complex failures, (3) Best laboratory and scene documentation in the industry.

Examples of Classes taught by Mr. Thoresen in Forensic, Electrical Engineering:

- ❖ Electrical Appliance Fires (Schaumburg, IL) 11/02, International Association of Electrical Inspectors (Tempe, AZ) 7/06, Electrical Engineering Analysis and Evidence Collection (Scottsdale, AZ) 4/10, Electrical Engineering - Beyond Subrogation (Tempe, AZ) 4/1, Arc Mapping/Live Burn Demonstration at The City of Phoenix Fire Department HQ (Phoenix, AZ) 11/12, Forensic Electrical Engineering – A whiff of Electrical (Phoenix, AZ) 11/12, Electrical Fire Case Summary for Phoenix Fire Department Investigation Department (Phoenix, AZ) 2/13, Arson 2 (Prescott, AZ) 4/2013, Electrical Forensic Engineering for Phoenix Fire 3/2016, Lithium Battery Failures 3/2016, Ventilation Fan Fires, 4/2017.

Examples of Manufacturing Companies that Mr. Thoresen has consulted with as a Forensic, Electrical Engineer:

- ❖ Broan-NuTone, Universal Metal Industries, Philips, Gibraltar Industries, Toyota, Norcold, Cooper Industries, Leviton Manufacturing, Electrolux, General Electric, Carrier Corp, Lennox.

Examples of Insurance Companies that Mr. Thoresen has consulted with as a forensic electrical engineer:

- ❖ State Farm, Allstate, Travelers, Liberty Mutual, American Family, Country Financial, Finpac, ANPAC, Farmers, Farm Bureau, USAA, Mercury, Kemper, Nationwide, Hartford, Philadelphia, Mercury

Previous Work History:

Electrical Engineer/Manager of Southwest Territories, September 2002 to May 2004

Anderson Engineering of New Prague Inc, Phoenix, AZ

- ❖ Oversaw all day-to-day operations of the Phoenix office
- ❖ Deciphered the failure modes associated with hundreds of different electrical/water devices
- ❖ Electrical-fire scene investigations
- ❖ Consulted on cases for attorneys and aided in the litigation processes

Electrical Engineering Department, June 2001 to August 2001

Life Fitness, Franklin Park, IL

- ❖ Completed different tasks in reliability engineering:
 - ❖ Keypad enviro-chamber testing
 - ❖ Electrical component stress analysis
 - ❖ New component qualification testing:
 - ❖ MOSFET testing
 - ❖ NPN-BJT testing

Electrical Engineering Department, May 2000 to May 2001

Johnson Controls Inc, Milwaukee, WI

- ❖ Extensive testing with Metasys software, HVAC systems and thermostats
- ❖ Tested different types of thermostats
- ❖ Engaged in different capacitor, voltage ripple testing for power supplies.

Publications:

1. VENTILATION FAN FIRES: Overheated Windings and Malfunctioning Thermal Limit Switch Lead to Arcing, Fire Technology, 8/11/2014, Author
2. Fire Investigator: Principles and Practice to NFPA 921 and 1033, Chapter 6 (Electrical), Fourth Edition, Coauthor, Editor

Committees:

1. UL 507 Standard Technical Panel (STP)

Charitable Photography Endeavors:

1. AZ Department of Child Safety
2. Make-A-Wish
3. Children's Heart Gallery

RECORD OF EXPERT WITNESS TESTIMONY

<u>Date</u>	<u>Type</u>	<u>Case Name</u>	<u>Jurisdiction</u>
October 2 nd , 2020	ARB	Moscatel vs Swagton	San Bernardino Superior (CA) CIVDS1823524
August 27 th , 2020	ARB	Miramonte vs Colter Electric	Coconino Superior (AZ) CV 1-19-0001-9542
April, 2020	Depo	Miramonte vs Colter Electric	Coconino Superior (AZ) CV 1-19-0001-9542
January 23, 2020	Depo	Allstate/SF v APS	Superior Court (AZ) CV2017011033
May 31 st , 2019	Depo	Arifi vs. HM Sky Harbor	Superior Court (AZ) CV2017015571
May 1 st , 2019	Depo	Scottsdale vs Broan	US District Court (CA) 18-cv-00748-JAK-SP
February 12, 2019	Trial	Bergeson vs. West Frontier	Pima County (AZ) CV 2008-0002
January 4 th , 2019	Depo	Vasquez vs Allstate	Superior Court (AZ) CV201603368
November 9 th , 2018	Depo	Milton vs BNSF	Superior Court (AZ) CV2017013075
April 20 th , 2018	Depo	Donley v Dometic	Yuma Country Superior S1400CV201700074
December 21 st , 2017	Arb	Siebert v APS	Superior Court No. CV2017-004548
December 6 th , 2017	Depo	Farmers v AZ Golf	Superior Court (AZ) No. CV2016-050257
August 29 th , 2017	Depo	Farmers v Mercedes	Yuma County (AZ) Superior No. S1400CV201600008
August 7 th , 2017	Trial	Khalaj v Leviton	Maricopa (Az) Superior No. CV2015006917
October 24 th , 2016	Depo	Farmers Vs. Elster	Maricopa County (AZ) No. CV2013-053623
September 28 th , 2016	Depo	Farmers v. Amazing Lighting	Bernadillo (NM) Court No. D-202-CV-2015-01379
August 30 th , 2016	Arb	Engdahl V. Zone Electric	Superior (AZ) Court No. CV 2012-007435
April 28 th , 2016	Depo	Rouda V. Jakel	Superior (AZ) Court No. CV 2015-002143

<u>Date</u>	<u>Type</u>	<u>Case Name</u>	<u>Jurisdiction</u>
April 20 th , 2016	Depo	Engdahl V. Zone Electric	Superior (AZ) Court No. CV 2012-007435
March 29/30, 2016	Trial	Libby V. Lichte	Pima County (AZ) Superior No. CV20117776
November 14 th , 2015	Depo	Schneider V. Hobbico	Maricopa County (Superior) No. CV2012018271
October 14 th , 2015	Video Depo	Casual Nails V. Jackson	Pima County (Superior) No. CV20127258
October 28 th , 2013	Depo	Negrete V. Broan	Yuma County (Superior) No. CV2011-01081
October 9 th , 2013	Trial	Boyle V. Ford	Pima County (Superior) No. CV2012-0675
September 20, 2013	Depo	Boyle V. Ford	Maricopa County (Superior) No. CV2012-0675
August 20 th , 2013	Depo	Amica Vs. Broan	Maricopa County (Superior) No. CV2012-002388
June 10 th , 2013	Depo	Feather vs. Auto Owners	Maricopa County (Superior)
April 8 th , 2013	Depo	State Farm vs. Jakel	Maricopa County (Superior) No. 2011-001424
November 14 th , 2012	Depo	State Farm vs. Jakel	Maricopa County (Superior) No. 2011-001424
Sept 20 th , 2012	Depo	Voboril Vs. Gockel	Yavapia County (Superior) No. cv1300cv20080295
June 14 th , 2012	Trial	State of Arizona vs. Michael Marin	Maricopa County (AZ) Superior No. CR2009-154846
June 7 th , 2012	Trial	State of Arizona vs. Michael Marin	Maricopa County (AZ) Superior No. CR2009-154846
January 31 st , 2012	Depo	Lichte Vs. Libby	Pima County (AZ) Superior No. CV20117776
November 18 th , 2011	Defense Interview	State of Arizona vs. Michael Marin	Maricopa County (AZ) Superior No. CR2009-154846
September 27 th , 2011	Depo	Western Ins. Vs Chandler Stonebridge	Maricopa County (AZ) Superior No. CV2010-050842
May 13 th , 2011	Depo	State Farm Vs. Venom	Bernalillo County (NM) Second Court cv 2009-11769
October 20 th , 2010	Depo	Lliff Vs. Ford Motor	Maricopa County (AZ) Superior Court cv2008-013588
April 8 th , 2010	Depo	Redemptorists Vs LJS Electric	Pima County (AZ) Superior Court cv2007-5799

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October 5 th , 2009	Depo	Farmers Ins. Vs. Haskins Electric	Maricopa County (AZ) Superior Court cv2008-050895
November 7, 2008	Depo	RTB Enterprises vs Rural Metro	Yuma County (AZ) Superior Court cv2006-00704
February 11, 2008	Depo	CAU vs Whirlpool	Maricopa County (AZ) Superior Court cv2006-01345
November 16, 2007	Depo	Taylor vs Sienna Apts	Maricopa County (AZ) Superior Court cv2006-000926
October 3, 2006	Depo	Amica Mutual v. US Green Fiber	Maricopa County (AZ) Superior Court cv2004-014969