



**G A R R E T T**  
ENGINEERS, INC.

## *CURRICULUM VITAE*

### **THOMAS J. LEPPER, CFEI** **TIRE, FIRE & AUTOMOTIVE CONSULTANT**

#### **SUMMARY**

Over thirty years experience as a consultant, inspector, and evaluator within the automotive industry. More than twenty years experience as a forensic automotive consultant for nationally known insurance companies and law firms. Certified Fire and Explosion Investigator (C.F.E.I.) and is also a registered locksmith in the State of California through the Bureau of Security and Investigative Service. Qualified to testify in the Superior Court for the State of California.

#### **AREAS OF EXPERTISE**

Specialist in automotive, motorcycle, tractor trailer, recreational vehicle (RV), farming, and construction equipment component analysis and mechanical failures in the areas of:

- Tire Separations and Failures
- Fire Cause and Origin
- Theft and Forced Entry Issues
- Brake Systems and Failures
- Transmissions
- Automotive Paint Issues
- SDM interrogation with CDR Tool
- Fuel and fluid contamination issues
- Song-Beverly Act vehicle Inspections
- Steering and Suspension Systems
- Seat Belt and Air Bag Issues
- Mechanical Defects
- Throttle/Unwanted Acceleration Issues
- Wiring and Electrical Issues
- Impact Damage Issues
- Racetrack / Racecar Incidents
- Laboratory analysis
- Dealership Vehicle Inspections Issues

#### **PROFESSIONAL AFFILIATIONS AND LICENSES – CURRENT OR HAVE HELD**

- National Association of Fire Investigators
- Certified Fire and Explosion Investigator Number 13841-9472
- Bureau of Security & Investigative Services, Registration Locksmith Number LOC 13420
- Southern Association of Technical Accident Investigators
- California Conference of Arson Investigators
- Sports Car Club of America National Competition License
- Sports Car Club of America Pro Competition License
- National Auto Sports Association Pro Racing License
- N.H.R.A Competition License
- Porsche Club of America Competition License
- SCCA – World Challenge Professional Racing License

FORENSIC DIVISION • (800) 229-3647

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[www.garrett-engineers.com](http://www.garrett-engineers.com) Effective April 8, 2013

- Grand – American Competition License

## **EDUCATION**

University of Albuquerque

**Automotive and Aviation Safety, Systems and Design**

Southern Illinois University

**Bachelor of Science, Education**

## **ADDITIONAL ACCREDITED TRAINING**

- **California Conference of Arson Investigators**  
20 hours training in Advanced Fire/Arson Investigation March 2010
- **CDR – Technicians Refresher Course – August 2009**
- **ARC – CSI Crash Conference – Las Vegas, NV June, 2004**
- **Institute of Police Technology and Management – University of North Florida**  
CDR Tool – User Certification Course – February 11-14, 2004
- **California Conference of Arson Investigators**  
20 hours training in Advanced Fire/Arson Investigation March 2008
- **Lee S. Cole Automotive Fire School**
- **National Police Training Institute**  
Tire Failure and Analysis
- **Southern Association of Technical Accident Investigations**  
Mechanics of Low Speed Impact (Actual Demonstrations)  
Accident Reconstruction
- **National Institute of Forensics Studies**  
Traffic Accident Scene Documentation and Damaged Vehicle Inspection Methodologies
- Completed over 800 hours towards California Private Investigator's License

## **PROFESSIONAL HISTORY**

1997 – Present            **GARRETT ENGINEERS, INC. - LONG BEACH, CA**

1993 – Present            **FORENSIC AUTOMOTIVE COMPONENT EXPERT**

Automotive consultation for nationwide insurance companies, nationally known rental car companies, and law firms.

- Investigation of automotive failures and defects within the engine (gasoline and diesel), transmission, brake systems, suspension systems, steering systems, wiring issues, fuel contamination issues, vehicle fluid analysis, air bag and seat belt issues, fire cause and origin, theft issues and tire failures including tread separations and other manufacturing defects.

- Investigation of motorcycle failures and defects within the engine, transmission, brake systems, fuel contamination issues and fluid analysis, suspension systems, fire cause and origin, wiring issues, and tire failures including tread separations and other manufacturing defects.
- Investigation of tractor/trailer (big rigs), recreation vehicles (RV), farming and construction equipment failures and defects with the engine (gasoline and diesel) transmission, brake systems, fuel contamination issues and fluid analysis, suspension systems, fire cause and origin, wiring issues, and tire failures including tread separations and other manufacturing defects.
- Qualified witness in Superior Court, State of California.
- Conducted and participated in over 5,000 investigations.
- Report and correspondence generation.
- Documentation review and analysis.
- Extensive photograph and video experience.

1987 – Present      **VEHICLE/TIRE SPECIALIST**

- Independent tire testing and design consultant for Toyo Tires, Goodyear Tires, Tokico Shocks, B.F. Goodrich Tires, Hancock Tires, and General Motors – Chevrolet Division.

1986 – 1988      **OWNER, TOAD HOLLOW AUTO REPAIR**

- Full service car auto repair facility located in Martinez, California.
- Race car design and preparation.

1978 – 1982      **INDEPENDENT CONTRACTOR**

- Race car driver, race car technical inspections, technical race car performance, repair and development work.

1975 – 1985      **AIR TRAFFIC CONTROLLER**

- 1983 – 1985      **UNITED STATES AIR FORCE**, Instructor
- 1980 – 1981      **FEDERAL AVIATION ADMINISTRATION**  
Air Traffic Control, Oakland Center/Ocean.
- 1975 – 1978      **UNITED STATES AIR FORCE**  
Fully licensed and certified tower and RADAR control; officer/foreign instructor.