

MARK A. M. EZRA, PE

EDUCATION

1972 to 1973 Victoria University of Manchester Manchester, England
Diploma in Technology: Theory and Practice of Automatic Control

1969 to 1972 Victoria University of Manchester Manchester, England
Bachelor of Science in Mechanical Engineering

1968 to 1969 William Penn Charter School Philadelphia, Pennsylvania
United States High School Diploma

1965 to 1968 Carmel College Wallingford, England
Nine 0-Level Certificates

PROFESSIONAL EXPERIENCE

March 2006 to Present MK & Associates, LLC
Senior Mechanical Engineer/Co-owner

Performs forensic engineering analysis in the area of mechanical systems. Work includes analysis of defects in design/manufacturing of machines, nail guns and required guarding of machinery, mechanical products, negligence cases and accident reconstruction as applied to automobiles, motorcycles, over-the-road trucks and industrial safety.

Failure analysis projects have been undertaken on large industrial gearboxes, industrial machines utilizing chain drives, piston aircraft engines, and large air handling turbines in commercial buildings, farm equipment including augers, bail accumulators and spreaders, motorcycle accidents with emphasis on braking, accident reconstruction, and motorcycle stability.

Failure analysis projects have also been undertaken into the cause/origin of failures of large industrial gearboxes and speed reducers, and in water pipe fittings and valves installed in domestic and commercial buildings. Additional work has involved vibrational aspects of failure in large HVAC units, patent infringement cases, and explosion analysis.

Trial testimony has been accepted in both state and federal venues.

May 1996 to June 2006 Nouveau Depart
Consulting Mechanical Engineer

Worked through Senne, Kelsey & Associates, Product and Highway Safety Institute and The Institute of Safety Analysis, Inc. performing forensic

engineering analysis in the area of mechanical systems including analysis on failure of piston aircraft engines and light aircraft accidents, analysis and evaluation of safety and reliability and hazard assessment of systems and structures, accident reconstruction of motorcycle crashes and automobile crashes.

January 1996 to September 1998 Performance Aircraft Manufacturers
Manager; Technical Director

Development of high performance modifications to piston aircraft engines. Manufacturing of competition aerobatic aircraft airframe components. Manufacturing of replica fuselage structures and components. European representative of Carter Engines, Inc. for the certified overhaul of piston aircraft engines. European sales agent for Wicks Aircraft Supply and sales of U.S. made standard aircraft components.

January 1988 to September 1996 M. A. P.
Founder and General Manager

Importation and distribution of certified General Aviation aircraft parts and agent for certified overhaul and repair of piston aircraft engines from the United States. Interface with government agencies concerning regulatory affairs, technical translation and interpretation of regulations and aeronautical information, crash investigation and analysis. Manufacturing of replica aircraft fuselages and repair of certified aircraft components.

January 1981 to December 1995 Self Employed
Consulting Engineer

Specialized in the analysis of motorcycle accidents, motorcycle stability, motorcycle gas tank design and leg guarding on motorcycles. Private consulting contract for investigation of safety design improvements for motorcycle gas tank collision protection for Yamaha Motor N.V., Amsterdam, Holland. Analyzed workshop organization and profit control for motorcycle dealerships in France. Negotiated distribution agreements for United States motorcycle products in France and advised clients on technical development and testing of high performance turbocharger kits for motorcycles. Engaged in forensic engineering with specialization in product liability issues. Provided evaluation and advice to the city of Milwaukee, Wisconsin on the development of specifications for police motorcycle safety requirements; advice concerning the selection of police motorcycles and recommended near term safety improvements. Mechanical engineering consulting for MATCO Manufacturing, manufacturers of aircraft wheels and brakes.

March 1986 to December 1987 SUD-Alim SA
Director General; Technical Director

Supervise technical support and repair facility for electronic products such as touch screens, monitors, keyboards and power supplies to the computer industry. Modification and assembly of custom applications of touch screens and high definition monitors. Technical liaison with companies such as Serge Dassault, Thompson CFS and SNCF (French National Railways). Technical translation of operating manuals for products produced in England and the United States.

August 1979 to December 1980 University of Utah Innovation Center
Project Manager

Review of applications made by inventors to the Utah Innovation Center. Investigation and development of light weight variable speed transmissions for small vehicular and light industrial applications. Provision of technical evaluation and recommendations concerning new mechanical projects presented for review to the Utah Innovations Center.

January 1975 to July 1979 Yamaha Motor NV in Holland
European After Sales Service Controller, Motorcycles

Evaluation and investigation of technical failures in the marketplace reported by twelve European importers. Technical liaison with the factory in Japan. Implementation of modification programs in co-operation with the European importers. Member of new product (motorcycle) European testing/acceptance team. Supervision of translation of the workshop and owner manuals from English into four European languages.

November 1973 to December 1974 Foxboro-Yoxall, LTD
Products and Systems Engineer

Technical support of several pneumatic instruments in the product range. Implementation of engineering changes, resolution of production line anomalies and technical support for specific applications requested by customers. Specification of valves and instrumentation used in compressor surge control for large gas pipe lines. Organization of documentation for completed customer systems.

PUBLICATIONS AND SEMINARS

“Forensic Engineering Analysis of Trailer Sway Accidents”
National Academy of Forensic Engineers, Volume Xxv, Number 1; June 2008 Issue
Authored By Mark A. M. Ezra, PE and Daniel J. Landiss

“Forensic Engineering Investigation Of Motorcycle Instability Induced Crashes”
National Academy Of Forensic Engineers, Volume Xxi, Number 1; June 2004 Issue
Authored By Mark A. M. Ezra, PE

“Motorcycle Design Defects--Identifying Common And Unnecessary Hazards”
Trial Magazine, November 1982 Issue
Authored By A. Ezra, M. Ezra And P. Gaus

“A Method Of Limiting Pressure Build-Up In Motorcycle Gasoline Tanks Due To Tank Deformation In An Accident”
ASME 82-Wa/De-5, Published 1982
Authored By A. Ezra And M. Ezra

“Aspects Of Motorcycle Braking And Handling For The Defense Of Drivers Involved In Car/Motorcycle Collisions.”
Missouri Organization Of Defense Lawyers, Fall Newsletter, 2005
<[Http://Modllaw.Com/Bridge.Asp?Pagenummer=47559](http://Modllaw.Com/Bridge.Asp?Pagenummer=47559)>
Authored By Mark A. M. Ezra, PE

“Advanced Accident Re-Construction for Forensic Engineers Series Seminar”

July 17-19, 2009, St. Louis, MO

CERTIFICATIONS

Missouri P.E. License, No. E 2002003156

Board Certified Diplomate in Forensic Engineering By NAFE/ Council Of Engineering And Scientific Specialty Boards

Chartered Engineer (CEng), Register No. 508104

European Engineer (Eur Ing), Register No. UK/23739

- Continuing Education Subjects:
- Pre-2017
 - NEC 2008: Wiring and Protection
 - SAE: 3-day seminar, Advanced Accident Reconstruction
 - OSHA: OSHA Regulations and Workplace Accidents
 - OSHA: General Industry Regulation
 - Mechanical Engineering, Analysis of Lawnmower Guarding.
 - Mechanical Engineering, Analysis of Nail Gun Kickback and the Effects of Trigger Design.
 - Motorcycle Handling and Control.
 - California Superbike School 2008- 2011: High Performance Motorcycle Riding Techniques.
- **2017:**
 - ASME: Ethics for Engineers: Doing the Right Thing when no One is Looking
 - ASME: Guide to Mobile Crane Standards
 - ASME: Essential-Rules for Construction of Single-Failure-Proof Cranes and Cranes in ASME NOG-1 and ASME NUM-1
 - A17.6 Standard for Elevator Suspension, Compensation and Governor Systems.
 - The Bar Association of Missouri: Marijuana in the Workplace

National Society of Professional Engineers

Member, Society Of Automotive Engineers

Missouri Society of Professional Engineers

Member, American Society Of Mechanical Engineers

Member, Institution Of Mechanical Engineers (UK)

National Academy Of Forensic Engineers

• *Fellow*

Chartered Engineer , (United Kingdom)

Private Pilot Certificate:

• *Single Engine Land; Single Engine Sea; Gllider; IFR Qualification; Complex Aircraft Sign Off ;Tail Wheel Sign Off.*

Motorcycle Licenses:

• *750cc+ Qualification: France, United Kingdom; Holland.*

Missouri, USA Motorcycle License

More Than 250,000 Miles Of Experience.

LANGUAGES

English: mother tongue

French: Speak, write, read at excellent level

Dutch: Write and read fairly well;

comprehension good

INTERESTS AND ACTIVITIES

Classic car and motorcycle restoration and high performance modifications

Amateur built aircraft and radio controlled aircraft and aerobatic piloting