

Dr. Garber is a Senior Managing Consultant at ESi. Dr. Garber is a physician and engineer with over 30 years of military and civilian experience in transportation accident investigation.

He was the first and only full-time Medical Officer at the U.S. National Transportation Safety Board, participated in well over 1000 investigations in all transportation modes, and has presented testimony to Congress regarding medical issues in transportation accidents. He specializes in the investigation of medical issues in transportation and other accidents, including the evaluation of pathology, toxicology, human performance, and biomechanics in accident investigation.

Dr. Garber has addressed a wide range of medical and human factors issues in all transportation modes, including physical standards, fatigue, perception, medication use, visual impairment, obstructive sleep apnea, substance dependence, injury analysis, egress and evacuation concerns, ergonomics, and the effects of pre-existing disease on transportation operator performance, among others. Additional work specific to aviation has included investigations of hypoxia, spatial disorientation, and visual and vestibular illusions. He has often been called upon to evaluate the potential role of subtle cognitive impairment from a variety of causes in complex transportation accidents. Dr. Garber also has expertise in the optimization of ergonomics for customized office and industrial workstations. He has held a private pilot certification since 1996.

#### **Contact Information**

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#### **ESi Atlanta**

420 Technology Parkway NW  
Peachtree Corners, GA 30092

#### **Areas of Specialization**

- Medical Analysis
- Transportation Policy
- Human Factors & Ergonomics
- Accident Investigation & Reconstruction
- Biomechanics
- Injury Causation

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#### **Education**

MSME, Bioengineering. Georgia Institute of Technology. 1996

MPH, Occupational and Environmental Medicine. Harvard University School of Public Health. 1991

MD. Emory University School of Medicine. 1987

BA, Psychology/Sociology (Magna Cum Laude). Duke University. 1982

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## Licenses & Certifications

- SCUBA Certification (PADI), 1992
- Basic Life Support Certification, Current
- Medical Review Officer, 2011 – Present
- Maryland Medical Licensure since 1999 (inactive)
- Georgia Medical Licensure, 1994 – Present
- Board Certification in Preventive Medicine (Aerospace Medicine), 1993
- Diplomate, National Board of Medical Examiners, 1988

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## Positions Held

**Engineering Systems Inc., Atlanta, Georgia**

- Senior Managing Consultant, 2011 – Present

**VA Medical Center, Atlanta, Georgia**

- Staff Physician, 2004–2020

**Wright State University School of Medicine, Dayton, Ohio**

- Clinical Assistant Professor, Department of Community Health, 2002–2015

**University of Texas Medical Branch at Galveston, Galveston, Texas**

- Clinical Assistant Professor, Department of Preventive Medicine and Community Health, 1997–2014

**National Transportation Safety Board, Atlanta, Georgia & Washington, DC**

- Medical Officer, 1996–2011

**POSTURx Office Ergonomics, Inc.,**

- Chief Operating Officer, 2006–2008

**U.S. Coast Guard Clinic, Washington, D.C. & National Naval Medical Center, Bethesda, Maryland**

- Staff Physician, 1997–2003

**Roswell West Medical Center, Roswell, Georgia**

- Medical Director, 1995–1996

**CDC Occupational Health Clinic, Atlanta, Georgia**

- Contract Physician, 1994–1996

**Georgia Institute of Technology Student Health Center, Atlanta, Georgia**

- Staff Physician, 1994–1995

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### **U.S. Air Force, Various Locations**

- Flight Surgeon, 1987–1994
- Chief of Flight Medicine, 1988–1990
- Chief of Aeromedical Services, 1992–1994

### **USAF School of Aerospace Medicine, Brooks AFB, Texas**

- Resident, Aerospace Medicine, 1992

### **Embry-Riddle Aeronautical University, Laughlin AFB, Texas**

- Adjunct Assistant Professor (Human Factors), College of Continuing Education, 1989–90

### **Wilford Hall USAF Medical Center, Lackland AFB, Texas**

- PGY-1, Internal Medicine, 1988

### **NASA, Kennedy Space Center, Florida**

- Teaching Assistant, NASA Space Life Sciences Training Program, 1985

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## **Professional Affiliations/Honors**

### **Physician's Care Clinic, Atlanta, Georgia**

- Physician Volunteer, 2021 – Present

### **Human Psychopharmacology: Clinical and Experimental**

- Peer Reviewer, 2015 – Present

### **Human Factors and Ergonomics Society**

- Peer Reviewer, Annual Meeting, 2015–2024

### **Aerospace Medical Association**

- Member, 2003 – Present
- Member
- Recipient, Harry G. Moseley Award, 2001
- Ross McFarland Student Award, Life Sciences and Biomedical Engineering Branch, 1997
- Certificate of Commendation, Young Investigators Award, Space Medicine Branch, 1991

### **Aerospace Human Factors Association**

- Charter Member
- Member, Life Sciences and Biomedical Engineering Branch

**International Research Council on the Biomechanics of Injury**

- Recipient, Bertil Aldman Award, 2011

**American College of Occupational and Environmental Medicine**

- Recipient, President's Award, 2011

**Great Plains College of Occupational and Environmental Medicine**

- Recipient, John W. Hardy, MD Memorial Award, 2011

**NASA**

- Member, Medical Policy Board, 2007–2011

**National Transportation Safety Board**

- Dr. John K. Lauber Award, 2001

**Journal of the American Medical Association**

- Peer Reviewer, 1997 – Present

**Air University**

- Distinguished Graduate, Squadron Officer's School

**Federal Motor Carrier Safety Administration**

- Member, Medical Expert Panel on Schedule II Opioids and Stimulants & CMV Crash Risk and Driver Performance, 2014

**Aviation, Space, and Environmental Medicine**

- Member of Editorial Board, 1999–2001, 2008 – Present

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**Publications**

"Cluster of Legionellosis Cases Associated with Manufacturing Process," **M.A. Garber**, H.M. Mohamed, L. Zielinski, A. Diedhiou, N. Clemons, J.C. Smith, J.L. Rinsky, R. Ritter, M. Willby, N. Burton, K. Feldmann, K. Dunn, R. Whisenhunt, V. Greer, A.M. Acosta, C.E. Lucas, K.C. Henderson, C. Edens, and L. Bell, *Emerging Infectious Diseases*, Vol. 31, No. 1, pp. 41–49, January 2025.

"Migraine Prophylaxis Using Novel Monoclonal Antibody Injections in a Commercial Pilot," **M.A. Garber**, J.I. Sirven, R.S. Roth, and J.M. Hemphill, *Aerospace Medicine and Human Performance*, Vol. 91, No. 10, pp. 824–825, 2020.

"Complex Medical Issues: Timing Is Critical," **M.A. Garber**, *Strictly Speaking: DRI Product Liability Committee Newsletter*, Vol. 16, No. 3, December 2019.

"Office Ergonomics: Computer Work Need Not be Such a Pain in the ..." **M.A. Garber**, *Defense Lawyer: A Magazine for the Civil Defense Trial Bar*, Vol. 15, No. 1, pp. 25, 2018.

"Postmortem Ethanol in the Setting of Ethanol-Containing Automotive Fuel," **M.A. Garber**, D.V. Canfield, R.J. Lewis, S.D. Simmons, and D.L. Radisch, *American Journal of Forensic Medicine and Pathology*, Vol. 34, No. 1, pp. 7–8, 2013.

"Obstructive Sleep Apnea: Concerning and Costly," **M.A. Garber**, *Georgia Defense Lawyer*, Winter 2013.

"Undisclosed Medical Conditions in the International Aviation Community: The Risks of Medical Certification Systems Based Upon Voluntary Self-Disclosure," **M.A. Garber**, D. Amster, and D. McQueen, *Issues in Aviation Law and Policy*, Vol. 12, No. 1, pp. 47–66, 2012.

"National Transportation Safety Board: Case Studies," **M.A. Garber**, *Clinics in Occupational and Environmental Medicine*, Vol. 2, pp. 139–153, 2002.

"Association of Postmortem Blood Hemoglobin A1C Levels with Diabetic Conditions in Aviation Accident Pilot Fatalities," **M.A. Garber**, V.L. White, A.K. Chaturvedi, and D.V. Canfield, *Office of Aerospace Medicine, Federal Aviation Administration, DOT/FAA/AM-01/12*, July 2001.

"Medical Guidelines for Space Passengers," **M.A. Garber**, *Aviation Space and Environmental Medicine*, Vol. 72, pp. 948–950, 2001.

"Bone Loss During Simulated Weightlessness: A Biomechanical and Mineralization Study in the Rat Model," **M.A. Garber**, D.L. McDowell, and W.C. Hutton, *Aviation Space and Environmental Medicine*, Vol. 71, pp. 586–592, 2000.

"You're the Flight Surgeon," **M.A. Garber**, *Aviation Space and Environmental Medicine*, Vol. 64, pp. 868–869, 1993.

"Protein Casting: A New Replication Technique for Observing Fluid Surface Structures," **M.A. Garber**, *Journal of Electron Microscopy Technique*, Vol. 2, pp. 71–72, 1985.

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## Presentations

"I Don't Feel So Good: Medical and Psychological Issues in Aviation Accidents," **M.A. Garber**, *Embry-Riddle Aviation Law and Insurance Symposium*, January 2016.

"Fatigue Management and Sleep Disorders," **M.A. Garber**, *Gulfstream Aerospace Flight Test Engineers, Savannah, GA*, June 2015.

"The Gillingham Illusion in an Aviation Accident," **M.A. Garber** and W.R. Ercoline, *Annual Scientific Meeting of the Aerospace Medical Association*, May 2015.

"Dual Disciplines: Where Medicine and Engineering Intersect," **M.A. Garber**, *University of Alabama Richard C. Bradt Lecture, Tuscaloosa, AL*, November 2014.

"Fatigue Countermeasures in a Record-Setting Around-the-World Flight (Abstract)," **M.A. Garber** and T.C. Horne, *Annual Scientific Meeting of the Aerospace Medical Association*, May 2014.

"Old Dogs/New Tricks: Aging Drivers and Emerging Technologies," **M.A. Garber**, *Defense Research Institute Product Liability Conference*, April 2014.

“You Can't Find It if You Don't Look for It: Medical Issues in Forensic Investigation,” **M.A. Garber**, Georgia Defense Lawyers Association Annual Meeting, June 2013.

“What Do We Really Know? Reporting of Pilot Medical Conditions: An International Perspective,” **M.A. Garber**, International Civil Aviation Organization Session of the Annual Scientific Meeting of the Aerospace Medical Association, May 2013.

“Unworkable? Adverse Consequences of Occupational Impairment,” **M.A. Garber**, Pennsylvania Occupational and Environmental Medicine Society, September 2012.

“Medical Issues in Accident Investigation,” **M.A. Garber**, U.S. Air Force Residents in Aerospace Medicine, August 2012.

“Wake Up and Work! Sleep Disorders in the Occupational Setting,” **M.A. Garber**, Georgia Safety, Health and Environmental Conference, September 2012.

“The Role of Accident Investigation in Biomechanics Research, **M.A. Garber**, International Research Council on the Biomechanics of Injury (IRCOBI) Conference, Zurich, Switzerland, 2011.

“Airbags in General Aviation Restraint Systems,” **M.A. Garber**, ISN Workshop on Biomechanical Experiments and Workshop on Light Aircraft Safety, Krakow, Poland, September 2011.

“Wake Up and Drive! Sleep Disorders in Transportation Accidents,” **M.A. Garber**, Annual Scientific Conference of the Association for the Advancement of Automotive Medicine, October 2010.

“Substance Dependence in General Aviation Accidents: NTSB Recommendations (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2010.

“Medical Issues in Marine Accidents (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2010.

“Medical Issues in Commercial Motor Vehicle Accidents (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2010.

“Sleep Disorders and Medical Certification for Transportation Operators,” **M.A. Garber**, National Sleep Foundation Sleep Health and Safety Conference, March 2010.

“Sleep Apnea in Transportation Accidents (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2008.

“Physiological Incidents and General Aviation Avionics Displays: Flight Data Recorders for the Common Man? (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2008.

“Case Report: Color Vision and Breathing Patterns in an Air Cargo Accident (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2005.

“Passenger Anoxic Brain Injury Following Alaskan High Altitude Sightseeing Flight (Abstract),” **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2004.

"A Piece of the Puzzle: The Role of Directed Toxicological Research in a High-Profile General Aviation Accident Investigation (Abstract)," **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 2001.

"A Primer on Aircraft Accident Investigation for the Aerospace Medicine Investigator," **M.A. Garber**, M.J. Antunano, R.D. Banks, A.H. Bellenkes, M.M. Cohen, J.R. Fraser, R.W. Hansrote, R.E. Kind, J.C. Neubauer, R.B. Raymond, C.J. Ruehle, F. Sahiar, S.J. Veronneau, and G.N. Wagner, Aerospace Medical Association, January 2000.

"NTSB Bus Crashworthiness Special Investigation (Abstract)," **M.A. Garber**, American Academy of Pediatrics Annual Meeting, October 1999.

"Aeromedical Accident Investigation at the National Transportation Safety Board (Abstract)," **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 1999.

"The Role of Corrective Lenses in a Commercial Aviation Accident (Abstract)," **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 1998.

"The Effect of Size Appropriate and Proper Restraint Use on Injury Severity of Children," **M.A. Garber**, E.B. Weinstein, M.M. Sweeney, M.D. Eastwood, J.G. Osterman, and J.V. Roberts, Society of Automotive Engineers: 2nd Child Occupant Protection Symposium, Warrendale, PA, 1997.

"The Role of Pulmonary Surfactant in Extreme Altitude Exposures (Abstract)," **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 1992.

"Asymmetrical Otolith Signals in Modified Gz Environments (Abstract)," **M.A. Garber**, Annual Scientific Meeting of the Aerospace Medical Association, May 1991.