



Mark I. Montrose

Mark Montrose is principal consultant of Montrose Compliance Services, Inc., specializing in electromagnetic compatibility (EMC). He was responsible for regulatory compliance at major high technology companies in Silicon Valley, California prior to going independent. He has over forty-five (45) years of hands-on experience as a system designer, educator, consultant and product design engineer with an expertise acquiring conformity assessment on a world-wide basis. Work experience includes design, test and certification of Information Technology plus Industrial, Scientific and Medical Equipment. He specializes in the international arena for the European and Korean EMC Directives as well as other countries with legally mandated EMC regulations.

Professional services include design analysis at the circuit and component level, as well as system integration with a focus on applying simplified physics on how electromagnetic fields are established, propagated and their propensity to cause harmful disruption. His primary approach on applied engineering is to mitigate creation of undesired RF energy at the source. Testing, troubleshooting and debugging difficult EMC problems is his expertise regardless of technology classification or environment of use.

Montrose Compliance Services is assessed as an EMC test laboratory (ISO/IEC 17025). Mark performs conformity assessment for companies wishing to enter both the European, Korean and international markets using the Technical File route, specializing in semiconductor manufacturing equipment. He is an *iNARTE* (Global Exemplar) certificated *Master EMC Design Engineer*.

Education

California Polytechnic State University (1979), San Luis Obispo, California

- Bachelor Degree - Electrical Engineering
- Bachelor Degree - Computer Science

University of Santa Clara (1983), Santa Clara, California

- Master Degree - Engineering Management

A brief summary of professional activities within the IEEE follows:

- Life Senior Member of the IEEE
- Past Division VI Director and *Member of the Board of Directors of the IEEE (2009-2010)*
- Long term retired board member (18-years) - IEEE Electromagnetic Compatibility Society (EMCS)
- First President and Society Founder - IEEE Product Safety Engineering Society (PSES) (2004-2005)

IEEE activities with the EMC Society includes being a past Distinguished Lecturer, the founder of the Electromagnetic Product Safety Technical Committee of the IEEE EMC Society (TC-8) and creator of the Signal Integrity Technical Committee (TC-10). He received major citations from the IEEE EMC Society for outstanding contributions to educational and society operations including three high-level awards; Technical Achievement, the prestigious Laurence G. Cumming award and Honored (Life) Member. He is a life member in the American Radio Relay League (ARRL) with an Amateur Extra Class License K6WJ, as well as a dual-decade member of the *dB* Society.

Mark authored and presented technical papers and published two Journal articles on sophisticated printed circuit board and system design concepts, theory and layout related to EMC and signal integrity at IEEE International EMC Symposiums and Colloquiums worldwide. He also has presented at international conferences, as an invited speaker as well as seminars, to corporate clients worldwide. Providing technical knowledge in addition to private hands-on training, testing and troubleshooting related to any aspect of EMC is frequently done. Mark was a long-time instructor for the University of California, Santa Cruz extension program and has been engaged numerous times as an expert witness dealing with patent infringements and many other aspects of engineering design disputes.

Mr. Montrose authored the following best-selling academic reference/textbooks. Most books are published under the sponsorship of the IEEE EMC Society with translations into Chinese, Japanese and Korean.

- ***Printed Circuit Board Design Techniques for EMC Compliance***, 1st ed.–1995, 2nd ed.–2000 (John Wiley & Sons/IEEE Press).
- ***EMC and the Printed Circuit Board - Design, Theory and Layout Made Simple***, 1999 (John Wiley & Sons/IEEE Press)
- ***Testing for EMC Compliance - Approaches and Techniques***, 2004 (John Wiley & Sons/IEEE Press)
- ***EMC Made Simple - Printed Circuit Board and System Design***, 2014 (Montrose Compliance Services)
- ***Electronics Packaging Handbook***. Contributing Author – Chapter 6. 2000 (IEEE Press/CRC Press)
- ***Printed Circuits Handbook***. Contributing Author – Chapter 15. 2016 (McGraw Hill)