Joe Chott
1184 N. Starr Road, Apache Junction, AZ 85119; 480-772-8296
BSEE/MSEE University of Missouri at Rolla
iNARTE Certified EMC Engineer since 1990
Senior Member of IEEE

Chief Engineer

EMC Matters LLC, Arizona
2011 to present
Provided component and satellite system EMI/EMC design support for the global ViaSat-3 GEO satellite constellation from 2017 to 2018. Each ViaSat-3 satellite is expected to provide more than 1 Terabit per second (Tbps) of total network capacity for residential, commercial aviation, maritime, enterprise and government sectors.

Provided EMI/EMC design and test support for Iridium Next (a commercial space program) from 2011 to 2016 in a consulting role, as well as supporting several government programs for satellite EMI/EMC design and verification.

Participated in an industry-wide update to AIAA S-121-2009, Electromagnetic Compatibility Requirements for Space Equipment and Systems (released as S-121A-2017).

Master EMI/EMC Engineer

Orbital Sciences/General Dynamics AIS/GD C4S/Spectrum Astro, Arizona
2000 to 2011
Supported a multitude of government satellite programs (NASA, etc.) in the role of Lead EMI/EMC Engineer, developing EMI/EMC requirements, flowing down those requirements, assisting in hardware design, and coordinating verification testing.

Designed, developed requirements for, and coordinated the contract and installation of an EMI/EMC Laboratory for component and satellite testing. The new EMI/EMC Laboratory consisted of a large anechoic shield room with a shielded vestibule, having state of the art automated test hardware and associated software, to support verification of various unit and satellite level EMI/EMC requirements.

Participated on an industry-wide team to develop an up-to-date Satellite EMC Requirements specification for AIAA. S-121-2009, Electromagnetic Compatibility Requirements for Space Equipment and Systems, was released in 2009.

Lead EMI/EMC Engineer

Motorola SATCOM, Arizona
1993 to 2000
As a member of the Iridium satellite design team, responsible for the compatible system operation (from an EMC perspective) of the Iridium satellite constellation.

Led the Iridium Space Vehicle (SV) EMC design/test effort with various domestic and foreign subcontractors, four launch providers, from SV EMI requirements definition, EMC subsystem design and system integration, and SV system design verification tests. This commercial

program used innovative design techniques, driven by short cycle time production needs, which greatly exceeded standard industry practices and achieved unprecedented technical success. This effort resulted in the compatible operation of a complex 66+ satellite constellation, with no EMI/EMC problems during 20 years of on-orbit operations.

Provided technical leadership in the EMI/EMC area, establishing credibility with our Customers and product groups, enabling collaboration across multiple partners/subcontractors to achieve optimum design solutions.

Tailored EMI requirements for cost effective allocation (conducted/radiated emissions and susceptibility) across system boundaries, assuring flexible and compatible interfaces via upfront design/analyses/test.

Technical Manager, EMC/TEMPEST/Radiation Effects

Motorola GSTG, Arizona
Responsible for all Government Systems and Technology Group (GSTG) EMC/TEMPEST/Radiation Effects design and test activities.

Managed the rapid expansion of the EMC/TEMPEST/Radiation design/test department (from 15 to 35 people) to three sites with nine test chambers, providing credible and cost effective on-site EMC design and test capability.

Developed, substantiated and executed project/department/capital budgets, assuring a strategic technical focus in line with rapidly increasing hiring and work projections, technology advancements and 24x7 design and test support.

Spearheaded and obtained approval for personal and laboratory EMI/EMC accreditation processes, allowing compliance with industry-wide standards -- a requirement for doing business with various customers.

Consulted/interfaced with building/facility design personnel and consultants from an EMC/grounding/shielding perspective to preclude EMI/ESD problems associated with personnel safety, test and production operations.

Lead EMC Engineer & Group Manager

McDonnell Astronautics Company, Missouri
Supported space, missile and commercial projects in EMC design and test. Responsible for all company space, missile and commercial programs in the areas of EMC design and test.

Engineer/Senior Engineer

McDonnell Astronautics Company, Missouri
Major contributor in a series of Navy research EMV contracts characterizing, analyzing and modeling the RF susceptibility of integrated circuits and optimizing new shielding effectiveness design and test techniques.