



WICHITA STATE  
UNIVERSITY

NATIONAL INSTITUTE  
FOR AVIATION RESEARCH

## HIGH INTENSITY RADIATED FIELDS (HIRF) AND LIGHTNING WORKSHOP

Electromagnetic Effects Compliance for Aircraft  
HIRF/Lightning Design, Test Methods, and Regulatory Compliance

**April 9-12, 2019**  
**9:00AM - 5:00PM (T, W, TR)**  
**9:00AM - 2:30PM (F)**

### Environmental & EME Test Labs

3800 S. Oliver - Building 23L  
Wichita, KS 67210

### Fee:

- \$2,500 if registered before March 16, 2019
- \$2,750 if registered after March 16, 2019

### Contact:

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### Register:

[https://www.niar.wichita.edu/  
niarfaa/WorkshopRegistration/  
HighIntensityRadiatedFieldsHIRFCourse.aspx](https://www.niar.wichita.edu/niarfaa/WorkshopRegistration/HighIntensityRadiatedFieldsHIRFCourse.aspx)

### About the course:

This comprehensive workshop will provide an awareness of all aspects HIRF and Lightning systems and aircraft testing in regard to compliance to the existing rules. In addition, with recent revisions to guidance material and FAA policy towards Fuel Tanks (25.981) and PED tolerance, it is critical that anyone working in this field be up to date on the developments;

### Topics include:

- Background and Why HIRF is important?
- The FAA/European requirements to demonstrate compliance – FAA/EASA Harmonized HIRF and Lightning requirements
- Equipment Qualification
- Aircraft certification and testing
- Pitfalls and problems
- Design issues
- Discussion of 25.981/25.954 Rule Revision
- Discussion on PED tolerance Policy

With emphasis on practical measurement and design guidance, this workshop is particularly relevant to engineers and technicians involved in aircraft HIRF and Lightning Clearance. As part of the practical presentations, the class will be provided demonstrations concerning critical aspects of the HIRF/IEL testing.

### Presenters:

**Billy Martin** (NIAR: EME Lab Director: Regarded as one of the technical experts on HIRF and Lightning in the United States), **Dave Walen** (FAA's Chief Scientific and Technical Advisor for HIRF, EMC and Lightning), **Jeff Phillips** (NIAR), **Tim McDonald** (EMA) and **Dr. Vignesh Rajamani** (Senior Associate, Electrical Engineering & Computer Science Practice, Exponent).