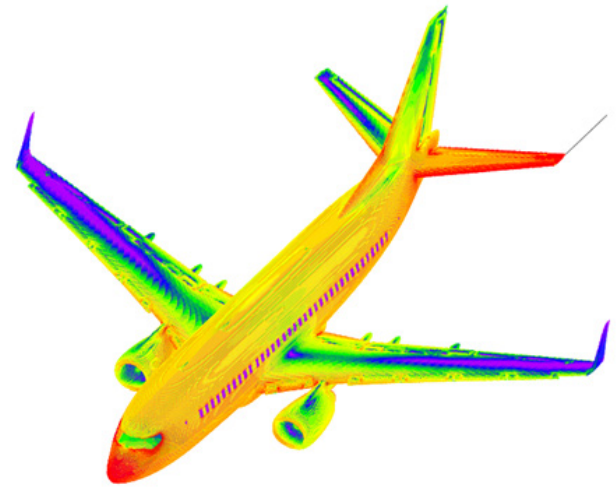


Take aerospace operations to new heights! EMA has decades of electromagnetic environmental effects (E3) experience to optimize performance, enhance safety, ensure mission success, and help you earn FAA certification.

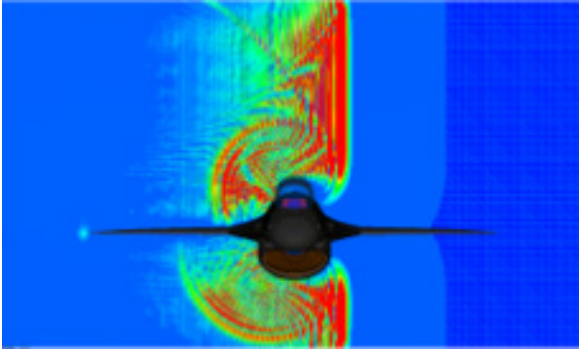
### What Does EMA Do?

- Testing: We develop a procedure plan and perform physical testing (HIRF, lightning, EMI/EMC) including compliance testing from vendors.
- Simulation: We can predict and address potential interference, optimize bonding/shielding/ grounding, extrapolate coupon test data to the platform, perform lightning zoning, and more.
- Airworthiness assessments: We do all planning, reporting and interface with the FAA.
- Mitigating issues: We identify issues early and create mitigation strategies.



### Test Capabilities

- Indirect & direct effects aircraft testing
- AC 25.981 fuel ignition testing
- AC 25.981 tank current/ voltage measurements
- DO-160 Section 20 & 22 equipment testing
- HIRF aircraft transfer function testing (LLSC & LLSF)
- Voltage, current, magnetic field measurements
- Component A & H generators for measurements on pins, cable bundles, and structural components
- Open circuit voltage & short circuit current measurements
- HIRF & TPED testing to quantify the internal EM environment
- Testing can be done on-site, we will come to you.



### Simulation

Ansys EMC Plus is the fastest time-to-value product for E3 including lightning, HIRF, EMP and EM Radiation Hazards to Personnel, Ordnance, and Fuels (EMRADHAZ)

#### Advantages:

- Achieve desired performance, service life, and reliability
- Simulate during the design phase, before a prototype aircraft is built
- Model validation to support similarity assessment for future variants
- Reduce test scope
- Accurate means for troubleshooting design issues
- Ansys EMC Plus is listed in the SAE Aerospace Recommended Practice guidelines (SAE ARP5415)
- Determine if mitigations are effective
- Reduce time to market and cost of electronics designs



### Platforms

EMA supports all types of aircraft and has past experience with:

- Airplanes of all sizes
- Helicopters
- eVTOLs
- Aircraft subassemblies
- Fuel Tanks
- Drones
- Spacecraft
- All other types of aircraft

### DER Services

Our on-staff FAA Designated Engineering Representative is certified in lightning, HIRF, and EMI/EMC with substantial aircraft certification experience working with the FAA and military.