ENSURING THE SAFETY OF VITAL AIRCRAFT ELECTRONICS

HIRF testing is a form of EMC testing applicable to equipment that is subject to extreme electromagnetic environments and/or mission critical equipment whose failure would be hazardous to human safety.

As greater dependence is placed upon an aircraft’s electrical and electronic systems performing functions required for safe flight operations, concern has increased for the protection of these systems.

Concern for the protection of electrical and electronic systems in aircraft has increased substantially in recent years due to:

- Reduction in the electromagnetic shielding afforded by new composite materials
- Increased use of electrical and electronic systems to perform flight and landing functions
- Increased susceptibility of systems to HIRF due to:
  - Increased data bus and processor operating speeds
  - Higher density integrated circuits and cards
  - Greater sensitivities of electronic equipment
- Expansion of frequency usage above 1GHz
- Increasing severity of HIRF environment because of an increase in the number of RF transmitters

NTS employs a variety of tools and techniques to produce accurate testing that is fully compliant with all required specifications.

SPECIFICATIONS WHICH INCLUDE HIRF CERTIFICATION:

- FAA HIRF Rule and Advisory Circular 20-158
- RTCA/DO-160E/F/G: All Categories, All CW, SW and Pulse Test levels
- Boeing Requirements: All CW, SW and Pulse test levels
- Airbus Requirements: All CW, SW and Pulse test levels

ABOUT NTS

Every hour of every day, NTS is fully invested in helping you build better, stronger, safer, more reliable products, and bring those products to market quickly and efficiently. Since conducting our first rounds of tests in 1961, NTS has become one of the largest commercial test laboratory networks in North America.

Our test, inspection and certification services cover environmental, dynamics, EMC, wireless, product safety, materials, ballistics and much more. NTS engineers and technicians have exceptional knowledge of all test and conformity requirements in both domestic and international arenas. Our client partners in Aerospace, Defense, Telecom and Energy rely on NTS to make sure they’re putting their best products forward, and so can you.