

Keeping it Right

Getting something right is a great feeling, but it is only the beginning.

Consistency and continuous improvement are key to "Keeping it Right." It means maintaining success, nurturing relationships, adapting to change, and embracing personal growth. The adage "Once you get something right, the next step is to keep it right" encapsulates the importance of consistency and continuous improvement in various aspects of life. Envitest Lab has emphasized the notion that achieving success or accomplishing a goal is not enough; maintaining and sustaining that success is equally crucial.

In any endeavour, whether personal or professional, attaining a desired outcome is often the result of hard work, dedication, and strategic planning. However, the journey does not end there. Once we have achieved a positive outcome, it is imperative to put in the effort to maintain that level of excellence or success.

This principle holds true in numerous areas of life. For instance, in relationships, the initial stage of building a strong connection requires effort, understanding, and effective communication. However, to maintain a healthy and fulfilling relationship, it is essential to continue nurturing it, addressing challenges, and adapting to the changing needs and dynamics of both individuals involved.

Similarly, in professional settings, accomplishing a milestone or achieving a business objective is a significant accomplishment. However, to sustain that success, it is necessary to consistently deliver quality work, adapt to market changes, and continuously improve skills and processes. Complacency can lead to stagnation and make it difficult to compete or remain relevant in a rapidly evolving world.

Envitest Lab always strive to Mastering new skills, adopting a healthy practice, achieving a important milestone, ensuring quality and consistency. Yet, the real test lies in maintaining those achievements, consistently practicing the skill and incorporating the habit into daily routines.

Envitest Lab believes in the concept of "keeping it right" and emphasizes the need for consistency, perseverance, and a growth mindset. We understand that success is not a one-time event but an ongoing journey. By committing to continuous improvement, learning from mistakes, and adapting to new challenges, we sustain our achievements and strive for even greater heights. We stay vigilant, maintain our accomplishments, and continuously strive for improvement in order to make our customers successful.



Inside this issue

Why Keeping it Right.....	2
Electrical Power Characteristics of Aircraft.....	2
Electrical Safety Measurement ...	3

Special points of interest

- **Comprehensive Testing Capabilities:** Envitest Lab provides a comprehensive suite of environmental testing services, covering various test parameters.
- **State-of-the-Art Facilities:** Envitest Lab boasts state-of-the-art facilities and advanced equipment to conduct precise and accurate testing. The lab is equipped with modern instruments and technologies to ensure reliable results.



"Why Keeping it Right"

Why keeping it right is important:

- * It builds trust.
- * It saves time and money.
- * It improves quality.
- * It sets a good example.

Keeping it Right is a fundamental principle that holds significant value in various aspects of life. Whether it's in personal relationships, professional endeavours, or personal growth, there are compelling reasons why maintaining quality, consistency, and excellence is crucial. One key reason for keeping it right is the establishment and preservation of trust. Consistency and reliability are pillars of trust. Envitest consistently deliver on our promises,

maintain high standards, and demonstrate reliability, and we build trust with others.

Trust forms the foundation of strong relationships with our clients. By keeping it right, we demonstrate our commitment to reliability, integrity, and accountability, fostering trust and deepening connections.

Keeping it right also serves as a source of inspiration and motivation for Envitest Lab. When we set and maintain high standards, we become role models for those around us. Our commitment to excellence encourages and motivates others to push their limits and strive for greatness.

Keeping it right is the pursuit of growth. By maintaining high standards and consistently striving for excellence, we challenge ourselves to grow and evolve.

"Compliance with MIL-STD-704 is essential for manufacturers, suppliers, and operators of military aircraft to ensure interoperability, safety, and performance of electrical systems."

Why Envitest

Envitest Lab was started to fulfil a need in the market and to provide a solution to a problem.

To provide a niche service: Envitest is started to provide a specific service and simplify the solutions. Envitest identified a gap in the market for type of testing and monitoring service and decided to start to fill that gap.

To innovate in an existing industry: Another aim of Envitest was to bring innovation to an existing industry. Envitest have developed new technologies and processes for environmental testing that are more efficient, accurate, or cost-effective than what is currently available.

Electrical Power Characteristics of Aircraft

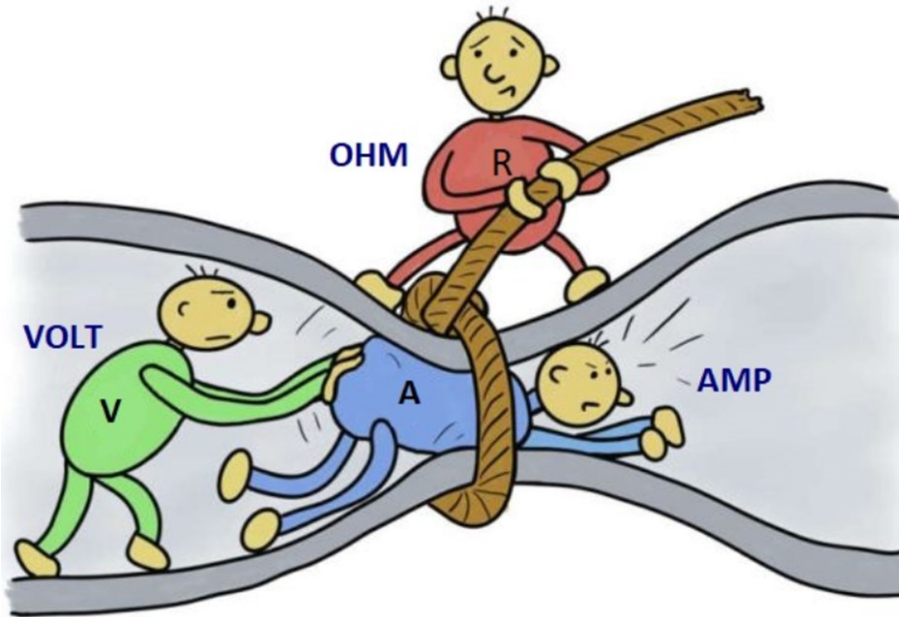
Aircraft electronics and other electrically powered equipment used in aircraft must be tested under extreme power conditions to ensure proper operation during regular use. MIL-STD-704 testing helps ensure the compatibility of these aircraft electronics and equipment with the power received from the aircraft's electric power system. MIL-STD-704, also known as Military Standard 704D, is a set of standard requirements and guidelines established by the United States Department of Defense (DoD) for the electrical power characteristics of aircraft. It specifically focuses on the power supply requirements for aircraft, including voltage, frequency, and waveform quality, to ensure the compatibility and reliability of electrical systems on aircraft.

At Envitest, we now provide a test facility for MIL-STD-704, known as 'Aircraft Electric Power Characteristics', to verify the requirements and characteristics of aircraft electric powered equipment.

For conducting these tests, Envitest utilizes a sophisticated AMETEK Programmable Power Supply with a capacity of 3000VA/3000W. It has an output of up to 400VAC at 1200Hz and up to 500VDC, accompanied by all other necessary high-end monitoring equipment.

MIL-STD-704 defines six distinct operating conditions for the electrical system.

- * Normal electrical power
- * Power transfers
- * Abnormal electrical power
- * Emergency electrical power
- * Engine starting
- * Power failure



Testing and Compliance helps Product safeguards against energy sources, and intended to reduce the likelihood of pain, injury and, in the case of fire, property damage. The objective is to help and understand the fundamental principles of safety in order to design safe equipment.

Electrical Safety Measurement

We all know that everything around us is made of tiny particles called atoms. Atoms consist of a positively charged nucleus at the centre and negatively charged electrons orbiting around it. When electrons are flowing through a conductor, we can say that an electric current is flowing. It is important to be aware of the safety risks associated with electricity. Electric current can cause burns, shock, and even death. It is important to take precautions when working with electricity. Here are some of the key measurement criteria we follow to certify the equipment fit-to-use:

Electrical safety: The measurement requirements for the electrical design of equipment, including the use of insulation, fuses, and circuit breakers.

Mechanical safety: The measurement requirements for the mechanical design of equipment, including the use of guards, covers, and other safety features.

Fire safety: The measurement requirements for the fire safety of equipment, including the use of fire-resistant materials and the installation of fire suppression systems.

Electromagnetic compatibility: The measurement requirements for the electromagnetic compatibility of equipment, including the use of filters and shielding to prevent interference with other electronic equipment.

User interfaces: The measurement requirements for the user interfaces of equipment, including the use of clear and concise instructions and the avoidance of hazards such as electric shock and fire.

Documentation: The measurement requirements for the documentation of equipment, including the provision of safety instructions and maintenance information.

Labeling: The measurement requirements for the labeling of equipment, including the use of warning labels and the identification of hazardous components.

Envitest Laboratories helps our customer by taking up such measurements to protect users, installers, and maintenance personnel from hazards associated. We help to prevent fires and other damage caused by equipment by properly carrying out test and measurements at our ultra-modern test facility.

What is MIL-STD-704

The purpose of MIL-STD-704 is to provide a standardized approach to power generation, distribution, and utilization on aircraft. It defines the electrical power parameters that need to be met by the aircraft's power sources, such as generators and converters, as well as the equipment and systems that rely on the power supply.

Key aspects covered by MIL-STD-704 include:

- ◇ Voltage Requirements
- ◇ Frequency Requirements
- ◇ Transient Response
- ◇ Waveform Quality
- ◇ Power Source Compatibility

TEST CAPABILITIES

Envitest has full fledge test facility to perform all 7 power groups listed below.

- ◆ SAC (single phase 115V/400Hz)
- ◆ TAC (three phase 115V/400Hz)
- ◆ SVF (single phase 115V various frequency)
- ◆ TVF (three phase 115V various frequency)
- ◆ SXF (single phase 115V/60Hz)
- ◆ HDC (270V DC)
- ◆ LDC (28V DC).

Our Services

- ◆ *Climatic Simulations*
- ◆ *Dynamics & Vibration*
- ◆ *Contamination and Ingress*
- ◆ *Materials / Metallurgical Testing*
- ◆ *Aircraft Electrical Testing*
- ◆ *Electrical Safety Testing*
- ◆ *Optical Fibre Cable Testing*
- ◆ *Telecom Interface Testing*
- ◆ *International Approvals*

ABOUT ENVITEST LAB

ENVITEST abbreviated for “ENVIRONMENTAL TESTING”, established in 2017 at Bangalore Electronic City, is a ISO/IEC 17025 certified company with an unlimited vision backed by professionals having great experience in problem solving, with an objective to offer high-quality testing and inspection, pre-compliance and certification, engineering services for the across the globe products at best quality results, consistent process, and affordable cost.

We serve across domains products for the compliance and certifications. Over time we kept on adding the new testing facilities to bring more opportunities for growth but would allow to provide a more complete portfolio of testing solutions to our customers. From our humble beginnings, we have grown from a simple test house who worked on the world’s most complex engineering projects to become a leading test lab of standard and custom test services.

Throughout our journey to become one of the premier worldwide service providers of testing solutions, we have held true to the philosophy that the customer comes first. This dedication to customer service has allowed us to work with leading manufacturers in over 22 industries including aviation, automotive, aerospace, defense, medical, energy, to name a few. Located in Bangalore, our campus is comprised of two buildings with over 10,000 square feet of space. Each building has been tailored to provide flexibility, comfort, and safety for everyone while providing room for continued growth and innovation.

ENVITEST LABORATORIES PVT LTD

ISO/IEC 17025 (NABL) Accredited Laboratory – Certificate # TC7490
DGAQA Approved Lab – Certificate # 1408/LAB/DGAQA/TECH-COORD/12
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