

## Independent Verification & Validation

*Avionics verification solutions for aerospace and defense programs*



**E**NSCO, Inc. brings a rigorous approach to Independent Verification & Validation (IV&V) that is driven by precise guidelines. In more than three decades of experience conducting IV&V, ENSCO has developed comprehensive capabilities to customize and streamline the IV&V process, cutting costs by reducing the hours required to reach completion without compromising results.

### Critical expertise

ENSCO has more than 30 years of experience in IV&V, during which time it has conducted more than two million hours of formal verification and test. This experience includes verification of most major aircraft systems, engine controls and weapon systems, as well as space shuttle and missile systems. These experts provide full verification lifecycle solutions encompassing both software and hardware. ENSCO can quickly staff large or small IV&V teams depending on the project needs and critical schedule milestones. ENSCO can design and build integrated test stand solutions to mitigate risk and reduce testing time on high dollar assets.

### Highest standards

ENSCO works within military formal safety-critical standards, including:

- DO-178B (up to Level A)
- DO-254 (up to Level A)
- SEAL 1-3
- Military Standards

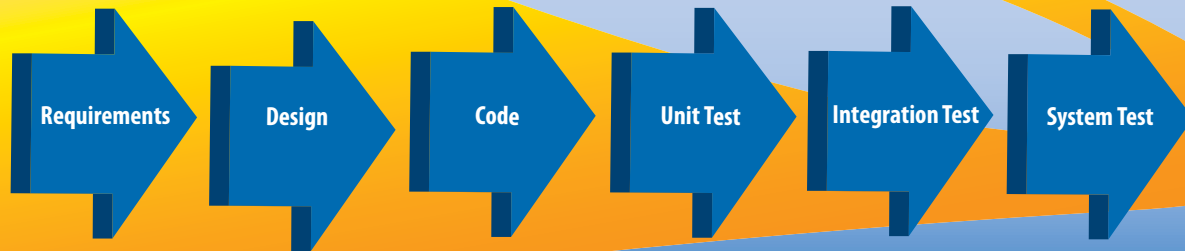
**Delivering the highest quality and most cost-effective IV&V solutions**

### ENSCO advantage

Since 1969, ENSCO has provided exemplary IV&V solutions for its customers. The company has kept pace with evolving standards to ensure its ability to offer customers the latest IV&V advantages. Customers that rely on ENSCO IV&V include:

- BAE Systems
- BARCO
- Crane Aerospace and Electronics
- GE Aviation
- Goodrich
- Hamilton Sundstrand
- ITT Electronics Systems
- Kollsman
- L-3 Communications
- Lockheed Martin
- MOOG Inc
- Northrop Grumman
- Pratt & Whitney
- Raytheon
- Rockwell Collins
- Unison Industries

# ENSCO IV&V PROCESS



## Tests • Reviews • Analyses

DO-178B		DO-254	
<b>Tests</b>			
Black Box Structural Coverage Module	White Box RBT	RBT Physical Tests	Simulation Tests Structural Coverage
<b>Reviews</b>			
Requirement Design Code	RBT Traceability	Requirement Design Code	RBT Traceability
<b>Analyses</b>			
Traceability SRC-Object Data/Control/Variable Structural and Requirement Coverage	Memory Usage Timing/Throughput Linker/Stack Calling Tree	Traceability Requirement Coverage Structural Coverage Gate Usage	Timing/Throughput Elemental Pin Level Test Coverage

Contact ENSCO to discuss your custom IV&V solution.

ENSCO has refined its process through its work on military and commercial IV&V programs, including:

- A-10 Thunderbolt II
- AH-64 Apache
- Airborne Warning and Control System (AWACS)
- B-2 Spirit
- B-52 Stratofortress
- E-2C Hawkeye
- F-15 Eagle
- F-16 Fighting Falcon
- F-18 Hornet
- F-35 Joint Strike Fighter (JSF)
- Joint Surveillance Target Attack Radar System (JSTARS)
- U-2 Dragon Lady
- MH-47 Chinook
- Airbus A 350
- Airbus A 380
- Airbus A 400
- Boeing 787 Dreamliner
- Embraer 170/190



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