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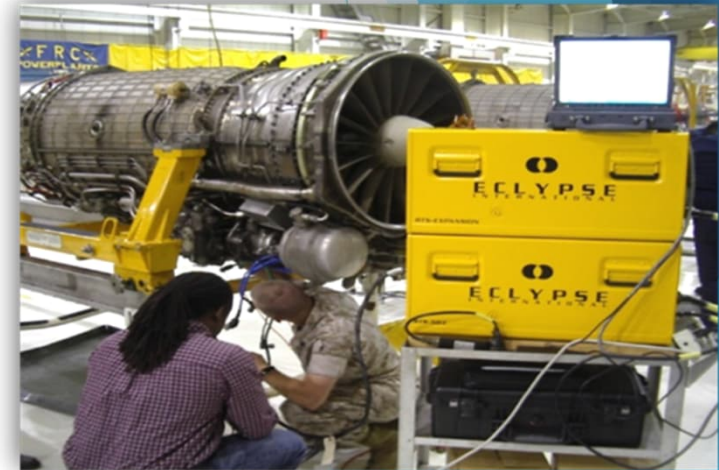
All About AWTs

Eclipse



Agenda

- ▶ Introduction
 - ▶ Acronyms
 - ▶ AWTIS Configurations
 - ▶ AWTIS - A Complete Test System
 - ▶ Applications
 - ▶ Examples of Test Programs Completed
 - ▶ Platforms
 - ▶ Benefits
- ▶ Summary
- ▶ Conclusion





Introduction



AS9100
CERTIFIED
ISO 9001



Acronyms

AWTS	Automatic Wire Test Set
CCA	Circuit Card Assembly
CPU	Central Processing Unit
DMU	Digital Measurement Unit
ELM	External Load Module
ELITE	Eclipse Language Integrated Test Executive
HTA	HTML Application
ID	Interface Device

IDE	Integrated Development Environment
RAX	Random Access
SM	Switch Module
TCU	Test Control Unit
TPS	Test Program Set
TAR	Test Adapter Response
UUT	Unit Under Test



AWTS Configurations

100000-02
NSN: 4920-01-528-5517

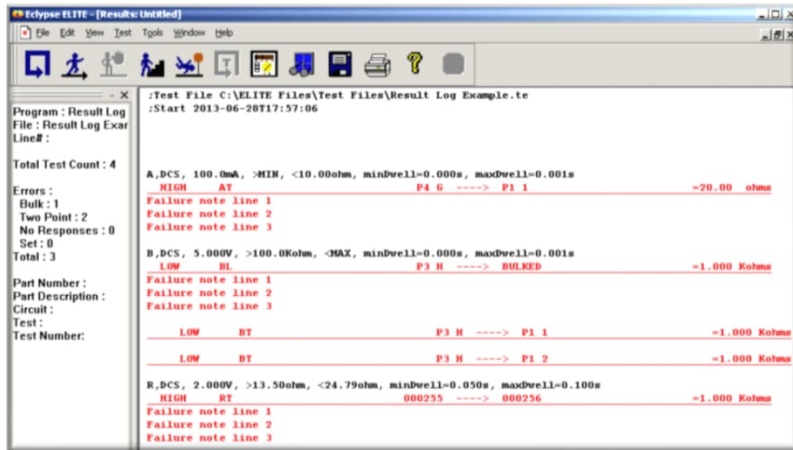


100000-03
NSN: 4920-01-644-2084





AWTS is a complete Test system



National Institute of Standards
and Technology (NIST) Compliant

- ▶ All Configurations Provide Test Execution and Development
- ▶ ELITE™ v2.11 software
- ▶ Used at each level of maintenance (I, O, D)
- ▶ Precision Measurements - extremely accurate
- ▶ Records all test measurements, allowing data analysis and trending
- ▶ Meets Mil-PRF-28800 Class 1 and 2, is scalable

- ▶ Received Authorization to Operate
 - ▶ Commander Naval Air System Command
 - ▶ “This authority means the AWTS software meets the Navy’s stringent cyber security risk requirements for use in the fleet to help our maintainers conduct electrical testing of aircraft and systems.”
- ▶ Authorized by Army 160th SOAR
 - ▶ For use with Logbooks on Digital Integrated Maintenance Environment (DIME)



Examples of Test Programs Completed

- ▶ Aircraft Flight Control System (CH-53E)
- ▶ Inter-Communication System (HC130)
- ▶ Engine Harness (P-3, FA-18)
- ▶ P408 QEC (EA-6B)
- ▶ De-Ice Harness (P-3)
- ▶ Anti-Skid (E-6B)
- ▶ Auto-Pilot (E-6B)
- ▶ TACAN Chassis (EA-6B)
- ▶ Mission Avionics Rack (H-60B)
- ▶ AFCS Control Panel (H-60)
- ▶ Caution Advisory Panel
- ▶ Miscellaneous Relay Panel
- Main Landing Gear/Anti-Skid (C-5)
- Radar Harness (B-1B)
- SCAS (B-1B)
- Bogie (C-5)
- Strut (C-5)
- Main Landing Gear (C-5)
- ALR-69 (HC-130)
- Stabilator Amplifier (UH-60M)
- Radar Receiver Chassis (APG-73)
- Blade De-Ice Distributor (UH-60)
- JHAR100C Voltage Regulator (400Hz Generator)





Applications

- ▶ Resistors
- ▶ Capacitors
- ▶ Diodes
- ▶ Zeners
- ▶ Transformers
- ▶ Relays
- ▶ Switches
- ▶ Circuit Breakers
- ▶ 1553 couplers
- ▶ Rate Gyro

- Variacs (variable transformer)
- Potentiometers
- LEDS
- Light Bulbs
- Time Delay Relays
- Oscillators
- Operational Amplifiers
- Stepper Motors
- DC Motors
- AC Motors (-03)

- LVDT
- Synchro
- Resolver



Platforms Using AWTs - +

- A-10
- B-1B
- C-5
- F-5
- F-15
- F-16
- HC-130
- HH-60G
- MC-130
- HH-60T
- HH-60J
- C-2
- CH-46E
- CH-53E
- E-2
- E-6B
- EA-6B
- F/A-18
- HH-60H
- MH-53E
- MH-60R
- MH-60S
- MQ-8B
- MQ-8C
- S-3B (NASA)
- SH-60B
- V-22
- C-17



Benefits

- ▶ AWTS and CTP are able to detect root cause fault related to Intermittent System Failures
- ▶ Allows for Proactive, Preventative and Predictive maintenance
- ▶ Return on Investment (ROI) of successful AWTS implementations experience up to a 5.6 to 1 ROI.
 - ▶ \$M per year saving through reducing the erroneous replacement of good systems
 - ▶ \$M per year savings in improved testing efficiency
 - ▶ increase of aircraft availability
 - ▶ reduction of pilot reported discrepancies for each electrical system test implemented
 - ▶ reduction of mission aborts for each electrical system test implemented.



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Conclusion

- ▶ Attend an Eclipse training course, there is a course for each level of expertise.
- ▶ Email support@eclipse.org
- ▶ Use Programmer and Operator Manuals
- ▶ Use ELITE's help menu
- ▶ Call Eclipse 1-951-371-8008





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