For more than 25 years, Southwest Research Institute® (SwRI®) has provided support equipment development services to the U.S. Air Force. Since 1999, the Avionics and Support Systems Department has supported A-10 auxiliary equipment and developed the A-10 Portable Automated Test Station (PATS) baseline.

SwRI has developed multiple rugged computer systems for the USAF that have successfully met MIL-STD-810 and MIL-PRF-28800 requirements. SwRI has in-house environmental and electromagnetic imaging (EMI) testing environments operated by experienced staff familiar with the rigors of military ruggedness testing.

The Renegade-30, designed by SwRI for long service life, is not limited by the availability of any particular module. The unit features passive cooling, which allows uninterrupted function in inclement weather including wet and dusty environments. The optional slim form factor can be built to meet high-portability niche applications.

FEATURES

Maintenance and Diagnostics Capabilities

- 28 VDC and 115 VAC 400 Hz sense and measurement
- LRU OFP upload and checksum
- Avionics bus data monitoring and diagnostics
- Weapon station checkout and diagnostics
- Tail number tracking and report generation
- Gigabit Ethernet connectivity
- Umbilical cable testing
- Rainproof enclosure
- AC/DC operation

Compatibility

- PATS-30 compatible core system
- Software compatible with Suite 7B OTP
- Backward-compatible with all PATS Model 30 peripherals including cable sets and MicroCID cartridge

Modular Design

- Unit assembled using COTS modules
- Each module interfaced to the next using standardized bus architecture
- Modules can be upgraded or substituted without major redesign

Reduced Maintenance Cost and Downtime

- Embedded cable management system (ECMS) simplifies internal cable routing
- Faster servicing of modules
- Improved overall system reliability
- Quick replacement of damaged modules

Power Flexibility

- Designed to operate from 9 VDC to 40 VDC without external regulation
- Optional AC power interface for 50 Hz, 60 Hz, or 400 Hz bench power
### System Specifications
- **Processor:** Intel® Atom™ 1.8 GHz dual core
- **Memory:** 2 GB DDR3-800
- **Storage:** 4 GB solid state
- **Network:** 4x Ethernet gigabit MB/s, 1x Ethernet gigabit console port, 4x MIL-STD-1553 BC/RT
- **I/O:** RS-232, 2x USB 2.0, optional 1x RS-422/485, MicroCID SCSI interface, power, diagnostic, PATS J16
- **Software:** MS Windows® XP A.10 OTP
- **Power:** 9 VDC to 40 VDC up to 50W autosensing, 50 Hz, 60 Hz, or 400 Hz AC supplies available

### Environmental Specifications
- **Temp:** -40° to 70°C operational, -40° to 80°C storage, Passive cooling
- **Humidity:** 90% non-condensing at 60°C

### Ordering Information
- **Part Number:** 20131100-10 Renegade Model 30 Rugged ATE and User Guide
- **Accessories:**
  - 20132100-10 Calibration Fixture
  - 20133100-10 110 VAC 60 Hz Power Supply/Cable
  - 20133110-10 110 VAC 50 Hz Power Supply/Cable
  - 20133120-10 110 VAC 400 Hz Power Supply/Cable
  - 20133200-10 A-10 DC Power Cable

Southwest Research Institute is an independent, nonprofit, applied engineering and physical sciences research and development organization using multidisciplinary approaches to problem solving. The Institute occupies 1,200 acres in San Antonio, Texas, and provides more than 2 million square feet of laboratories, test facilities, workshops, and offices for nearly 3,000 employees who perform contract work for industry and government clients.

We welcome your inquiries. For additional information, please contact:

**Daniel Zajac**
Senior Research Engineer  
(210) 522-4293  
daniel.zajac@swri.org

**Christopher Camargo**
Director-R&D  
(210) 522-2095  
christopher.camargo@swri.org

### Avionics and Support Systems Department
Southwest Research Institute  
6220 Culebra Road · PO. Drawer 28510  
San Antonio, Texas 78228-0510

swri.org  
avionics.swri.org

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