

**NORTHROP GRUMMAN***Electronic Systems***AN/ALR-93(V)1****Radar Warning Receiver/Electronic Warfare Suite Controller**

The AN/ALR-93(V)1 Radar Warning Receiver/Electronic Warfare Suite Controller provides superior performance to protect tactical, transport and special mission aircraft in today's modern electronic combat environment. The AN/ALR-93(V)1 is a computer controlled radar warning receiver (RWR) that provides automatic detection and display of RF signals in the C through J frequency bands. Using state of the art processing and a robust tri-receiver architecture, Northrop Grumman has produced a system that offers advanced capabilities, but is compact, lightweight and consumes little power.

The AN/ALR-93(V)1 is designed to operate in dense, complex RF threat emitter environments with near 100% probability of intercept (POI). By combining the wideband acquisition capability of an amplified Crystal Video Receiver (CVR) with the fast frequency measurement of an instantaneous frequency measurement (IFM) receiver and the selectivity of a

digital receiver, the AN/ALR-93(V)1 is able to reduce threat ambiguities, increase detection range, and still achieve a high POI. The AN/ALR-93(V)1 is the best RWR to ensure mission success.

The AN/ALR-93(V)1 provides threat warning to the aircrew both aurally over the aircraft's audio system and visually on the system's azimuth display and control indicator. The system can also be integrated with an aircraft's control and display system. Aural warnings are in the form of tones. Visual warnings are in the form of customer programmable alpha-numeric symbols.

The AN/ALR-93(V)1 also provides a flexible mission recording capability. The recorder, in conjunction with the AN/ALR-93(V)1 Software Support Facility, provides the user with the capability to record electronic warfare mission data and replay the results for post flight mission analysis.

## AN/ALR-93(V)1

### Radar Warning Receiver/Electronic Warfare Suite Controller

The AN/ALR-93(V)1 emitter library is customer reprogrammable using the Software Support Facility and training provided by Northrop Grumman. The system is approved for in-country programming, using indigenous threat data or data obtained through government to government channels.

Northrop Grumman is able to offer a complete Integrated Logistics Support package for the maintenance of the AN/ALR-93(V)1. Using state of the art computer controlled test equipment and instruction by a staff of experienced professionals, Northrop Grumman can help ensure that the system is operational when needed.

#### Features

- Frequency Coverage – C/D, E to J
- Receiver Types – Amplified CVR, IFM and a selection of state of the art wideband and narrow band digital receivers
- DF Accuracy – 15° root mean square (E to J Bands), omni directional (C/D Bands)
- Emitter types detected and processed – pulsed, continuous wave (CW), pulse Doppler, low probability of intercept, jitter/stagger, pulse compression, pulse repetition interval (PRI) agile, frequency agile, and PRI agile-frequency agile
- Emitter Library Storage – 2000 modes
- Programmability – Both operational flight program and emitter library are contained on EEPROM. Library changeable parameters allow the user to tailor many aspects of system performance
- Software – ‘C’ higher order language
- Weight – 60 lb (27.2 kgm)
- Power – 198 W
- Interface Options – RS-232C, RS-422, two dual redundant MIL-STD-1553B, and discretes
- Warning – Both visual and aural
- Built-in-Test (BIT) – Background BIT, operator initiated BIT (>95% LRU fault detection), maintenance initiated (>95% SRU fault detection)
- MTBF – 742 hours
- Logistics Support – Complete in-country logistics support packages available for hardware and software maintenance
- Environmental – Flight hardware is qualified to MIL-E-5400
- Multiple latest state of the art power PCs
- Fully reprogrammable pre-processor
- Employs modern software-defined radio technology

*For more information, please contact:*

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*Specifications and features subject to change without notice.*