

# Military Communications

Avionics/Navigation Radio Test Systems and Upgrade Kits



**AEROFLEX**  
A passion for performance.

As a leader in the testing of Military Radio and Avionics systems, Aeroflex has released a new line of test systems designed to upgrade the Aeroflex GRM-122 SINCGARS Radio Communications Test System currently fielded by the US Army.

These new systems provide additional capabilities to test Army airborne radio and navigation systems, including the software and cables to test the ARC-231. This system replaces the capability provided by the MK-994A/AR for automated minimum performance and alignment functions.

## AVAILABLE SYSTEMS

### MTS-ANR - Avionics, Navigation and Radio Military Test System

The MTS-ANR is a complete system that provides testing capabilities for Airborne SINCGARS, HAVE QUICK I/II and Life Support radios as well as Avionics and Navigation Systems. This system includes the TS-4317 Communications Test Set with the required interface connectors and hardware to support the four Radio Personality Modules (RPMs) that are part of the MTS-ANR. Plus, all cables required to test a wide range of currently fielded and future radio systems are provided to ensure complete testing capabilities.

When combined with the RPM-001, the TS-4317 based system becomes the GRM-122 (or RCTS-001) test system for SINCGARS used extensively in the US Army and Marine Corps.

When combined with the RPM-002HQ, the system becomes the RCTS-002HQ (PL-1549/GRM) for testing Army airborne HAVE QUICK I/II radio systems including the ARC-231.

Adding the RPM-003B (PL-1553/GRM) to the TS-4317 provides advanced testing of life support radios including the PRC-112B, B-1, D and G models as well as the PRC-90 and URT-33 families of radios.

For avionics testing, the *new* RPM-012 (PL-1550/GRM) Avionics module provides testing capabilities for the AN/ARN-89 Direction Finder, AN/ARN-123 radio supporting VHF omni-range (VOR) bearing, beacon (MB) position, localizer (LOC), glide-slope (GS) information, and instrument landing system (ILS) approach. In addition, the RPM-012 tests VOR, ILS, GS and MB functions on the AN/ARN-147 and the AN/ARN-149 Low Frequency Direction Finder.

DC power for the radios under test is provided by the PS-1A (PP-8571) Power Supply.

The MTS-ANR is the ultimate test system offered by Aeroflex for complete testing of Airborne SINCGARS, HAVE QUICK I/II, LIFE SUPPORT and AVIONICS/NAVIGATION Systems.

### RCTS-012 - Avionics/Navigation Test System

For those who are interested in upgrading their avionics and navigation test systems only, Aeroflex offers the RCTS-012, which includes the TS-4317 Communications Test Set with the required interface connectors and hardware to support the RPM-012 Radio Personality Module for testing Army airborne avionics systems.

The RCTS-012 includes the following:

- TS-4317 Communications Test Set
- J-4843A RPM Generic Applique Housing
- RPM-012 (PL-1550GRM) including the following cable sets

For the very latest specifications visit [www.aeroflex.com](http://www.aeroflex.com)

and accessories:

Cable Kit, RPM-012,AN/ARN-89  
Supports R-1496 and C-7292A

Cable Kit, RPM-012,AN/ARN-123  
Supports R-2023, R-2139 and C-10048A

Cable Kit, RPM-012,AN/ARN-147  
Supports R-2594 and C-12550

Cable Kit, RPM-012,AN/ARN-149  
Supports R-2382, C-12491 and C-12192

PS-1A Power Supply (PP-8571)

Plus all cases required to transport and ship the components.

Case, RPM Units (RPM-002HQ, RPM-003B, RPM-012),  
maximum capacity is three RPMs

Case, PS-1A

Case, Cables

### AVAILABLE GRM-122 UPGRADE KITS

For Army Aviation Units that are currently using the GRM-122 (RCTS-001) system for testing SINCGARS radios, Aeroflex offers a number of upgrade kits to provide advanced testing capabilities for Avionics, Navigation or HAVE QUICK I/II and Life Support Radio Testing.



#### GRM\_122\_AV\_KIT

NSN 4920-01-551-6540

The GRM\_122\_AV\_KIT provides existing users of the GRM-122 with a complete and comprehensive upgrade path to transform their test systems into the full test capabilities offered by the MTS-ANR. With the addition of this upgrade kit, an existing GRM-122 system will perform all functions of the RCTS-002HQ, the RCTS-003B and the new RCTS-012.

The GRM\_122\_AV\_KIT includes the following:

RPM-012 (PL-1550GRM) including the following cable sets and accessories:

Cable Kit, RPM-012, AN/ARN-89

Cable Kit, RPM-012, AN/ARN-123

Cable Kit, RPM-012, AN/ARN-147

Cable Kit, RPM-012, AN/ARN-149

BIT Test Fixture, TF-252 (RPM-012)

RPM-003B (PL-1553/GRM) including the following cable sets and accessories:

Cable Kit, RPM-003B, PRC-90

Cable Kit, RPM-003B, URT-33

Cable Kit, RPM-003B, PRC-112

Carry Case, RPM-003B Accessories

RPM-002HQ (PL-1549/GRM) including the following cable sets and accessories:

Cable Kit, RPM-002, W1 RT-1704

Cable Kit, RPM-002, W2 C-10604 and C-12319

Cable Kit, RPM-002, W4 RT-1167C, 1518, 1518C

Cable Kit, RPM-002, W6 RT-1614

Cable Kit, RPM-002, W7 RT-1300,A,B, RT1354

Cable Kit, RPM-002, W31 C-6533

Cable Kit, RPM-002, W32 RT-1808

Cable Kit, RPM-002, W33 C-12601

Cable Kit, RPM-002, W34 AM-7189

Cable Kit, RPM-002, W35 AM-7565

Cable Kit, RPM-002, W36 AM-7566

BIT Test Fixture, TF-204A (RPM-002HQ)

PS-1A Power Supply (PP-8571) including the following accessories:

AAPS-01 Kit, Handles System

Plus all cases required to transport and ship the components.

Case, RPM Units (RPM-002HQ, RPM-003B, RPM-012),  
maximum capacity is three RPMs

Case, Cables

Case, PS-1A

#### RPM-12CK

NSN 4920-01-552-0586



NAV Indicator Screen

GRM-122 units may be upgraded to test, align and troubleshoot navigation systems by adding the RPM-12CK Upgrade Kit. This kit includes the RPM-012, cables and accessories.

The RPM12CK Kit includes the following:

RPM-012 (PL-1550/GRM) including the following cables sets and accessories:

- Cable Kit, RPM-012, AN/ARN-89
- Cable Kit, RPM-012, AN/ARN-123
- Cable Kit, RPM-012, AN/ARN-147
- Cable Kit, RPM-012, AN/ARN-149
- BIT Test Fixture, TF-252 (RPM-012)

*Plus all cases required to transport and ship the components.*

Case, RPM Units (RPM-002HQ, RPM-003B, RPM-012), maximum capacity is three RPMs

Case, Cables

*(PS-1A Power Supply sold separately)*

### **RPM2HCK**

For users of the GRM-122 that require only airborne radio communication testing, this kit includes the RPM-002HQ, cables and accessories to provide testing capabilities of VHF and UHF HAVEQUICK I/II radios including the ARC-231. The RPM2HCK Kit includes the following:

RPM-002HQ (PL-1549/GRM) including the following cable sets and accessories:

- Cable Kit, RPM-002, W1 RT-1704
- Cable Kit, RPM-002, W2 C-10604 and C-12319
- Cable Kit, RPM-002, W4 RT-1167C, 1518, 1518C
- Cable Kit, RPM-002, W6 RT-1614
- Cable Kit, RPM-002, W7 RT-1300,A,B RT1354
- Cable Kit, RPM-002, W31 C-6533
- Cable Kit, RPM-002, W32 RT-1808
- Cable Kit, RPM-002, W33 C-12601
- Cable Kit, RPM-002, W34 AM-7189
- Cable Kit, RPM-002, W35 AM-7565
- Cable Kit, RPM-002, W36 AM-7566
- BIT Test Fixture, TF-204A (RPM-002HQ)

*Plus all cases required to transport and ship the components.*

Case, RPM Units (RPM-002HQ, RPM-003B, RPM-012), maximum capacity is three RPMs

Case, Cables

*(PS-1A Power Supply sold separately)*

### **ADDITIONAL INFORMATION**

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#### **National Stock Number (NSN) List**

RCTS-001 (AN/GRM-122)	6625-01-432-8369
RCTS-003B	6625-01-556-0332
GRM_122_AV_KIT	4920-01-551-6540
RPM-12CK	4920-01-552-0586
RPM-2HCK	4920-01-552-0630
PS-1A (PP-8571)	6130-01-573-0829

#### **Point of Contact for Army Users**

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P.O.C Robert Mansfield  
DSN 992-1322  
Commercial 732-532-1322

#### **EXPORT CONTROL:**

This product is controlled for export under the International Traffic in Arms Regulations (ITAR). A license from the U.S. Department of State is required prior to the export of this product from the United States.

#### **EXPORT WARNING:**

Aeroflex's military products are controlled for export under the International Traffic in Arms Regulations (ITAR) and may not be sold or proposed or offered for sale to certain countries including: Belarus, Burma, China, Cuba, Haiti, Iran, Liberia, Libya, North Korea, Somalia, Syria, Sudan, and Vietnam. See ITAR 126.1 for complete information.

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