



DEPARTMENT OF THE NAVY
 HEADQUARTERS, UNITED STATES MARINE CORPS
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NORMAL

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U.S. MARINE CORPS SUPPLY INSTRUCTION

**READINESS REPORTING CRITERIA FOR PHASE V
 TACTICAL REMOTE SENSOR SYSTEMS**

1. Purpose. The purpose of this instruction is to promulgate instructions to ensure uniform and consistent readiness reporting for the Phase V Tactical Remote Sensor Systems (TRSS).

2. Cancellation. SI-09855A-15/1.

3. Information. TRSS is a suite of sensors, relays, and monitoring equipment that provides the Marine Corps with improved remote, all-weather capability to continuously monitor activity within, and in proximity to, a given objective area. The TRSS will replace the Marine Corps Vietnam era Phase III family of remote sensor equipment.

a. TRSS is a Critical Low Density (CLD) combat essential item fielded under several Principal End Items (PEI's). TRSS is employed by the Sensor Control and Management Platoons (SCAMP).

b. The SCAMP's concept of employment and the inherent flexibility of TRSS allow TRSS to be employed in a wide variety of configurations to support Marine Air-Ground Task Force (MAGTF) operations. Past experience with the Phase III remote sensor systems has shown that the inherent flexibility of these systems lends itself to wide interpretations of readiness status. In some cases these interpretations are distortions of actual equipment readiness.

c. The lack of uniform readiness reporting criteria may cause commanders to be provided with distorted information, which could delay identification and correction of readiness problems.

d. The TRSS family of equipment consists of five major items. These are organized into a system configuration listed in paragraph 3.

4. Major Items Affected

<u>Description</u>	<u>NSN</u>	<u>TAM No.</u>	<u>I.D. No.</u>
UNATTENDED GROUND SENSOR SET, AN/GSQ-257	6350-01-343-7134	A3255	09632A

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<u>Description</u>	<u>NSN</u>	<u>TAM No.</u>	<u>I.D. No.</u>
SENSOR MOBILE MONITORING SYSTEM, AN/MSC-77	6350-01-382-1826	A2306	09856A
RELAY ASSEMBLY, RE-1162/U	5945-01-384-4790	A2296	09784A
PORTABLE MONITOR, AN/USQ-121	7035-01-363-9067	A1221	09769A
TEST SET, TRSSV, TS-4458/GSQ	6625-01-390-9667	A3013	09864A

NOTE

The information herein is provided to address the readiness of the TRSS from a system perspective. The readiness of individual components of TRSS PEI's will be determined in accordance with the respective technical manual. This instruction will be updated if and when changes to the TRSS system configuration are made.

5. Deadline Criteria. The information provided in paragraphs 4a through 4e will be used to determine how the equipment will be reported in Marine Integrated Maintenance Management System (MIMMS).

a. Unattended Ground Sensor Set (UGSS) AN/GSQ-257. The UGSS consists of a variety of detectors and transmitters which perform the basic detection function for TRSS. The UGSS provides 120 individual "sensors sets" which can be employed in a variety of mixed configurations as determined by the sensor employment plan. While the loss/non-availability of one or even several sensor sets will not impede the overall sensor mission, the continued degradation of sensor capability could decrease the desired flexibility of the UGSS to unacceptable levels.

(1) Each UGSS will be assigned a local serial number consisting of the using unit Activity Address Code (AAC) and three assigned numerals (i.e...20362001). All UGSS components will be identified to a specific UGSS. These components will not be moved from set to set except as authorized by those procedures outlined in MCO P4790.2.

(2) The UGSS will be considered degraded (category code X) when any of the individual components listed in table 1 reach a readiness rate of less than seventy five percent (75%).

(3) The UGSS will be considered deadlined (category code M) when any of the individual components listed in table 1 reach a readiness rate of less than sixty percent (60%).

<u>EQUIPMENT (Part of UGSS)</u>	<u>AUTHORIZED</u>	<u>75%</u>	<u>60%</u>
Encoder Transmitters	96	72	58
Seismic Intrusion Detector	96	72	58
Infrared Intrusion Detector	24	18	14
Magnetic Intrusion Detector	24	18	14
Air Delivered Sensor	24	18	14

Table 1. UGSS Readiness Factors.

b. Relay Assembly RE-1162/U. The relay assembly represents the TRSS capability to overcome radio line of sight obstacles imposed by terrain and distance. Its configuration allows it to be used on one or two channels.

(1) The relay assembly will be considered degraded (category code X) if one of the relay's two receivers is not operating within specifications.

(2) The relay assembly will be considered deadlined (category code M) when both receivers cannot operate within specifications, the Very High Frequency (VHF) transmitter cannot operate within specifications, or the relay cannot throughput sensor data.

c. Sensor Mobile Monitoring System (SMMS) AN/MS-77. The SMMS provides the TRSS sensor monitoring capability by receiving, decoding, displaying, storing, and reporting sensor data. It consists of a High Mobility Multi-purpose Wheeled Vehicle (HMMWV) mounted shelter which contains two independent workstations. One of the workstations can be removed and placed to provide an intermediate level remote monitoring capability.

(1) The SMMS will be considered degraded when:

(a) Any of the external Radio Frequency (RF) sets cannot meet specifications outlined in the SMMS technical manual.

(b) There is a loss of the capability to displace one workstation.

(c) One of the communications radio sets is inoperative.

(d) The RF set internal to one Intelligent Communications Controller (ICC) fails to meet specifications outlined in the SMMS technical manuals.

(e) One Signal Data Recorder (SDR) fails to properly respond to operator input.

(f) There is an inability to print reports.

(g) The Environmental Control Unit (ECU) is inoperative.

(2) The SMMS will be considered deadlined when:

(a) Both ICC's have internal RF sets which cannot meet specifications outlined in the SMMS technical manual.

(b) All of the communications radio sets are inoperative.

(c) There is an inability to tune relays locally from either SDR.

(d) Both SDR's fail to properly respond to operator input.

(e) The power generation unit is inoperative.

d. Portable Monitor AN/USO-121. The portable monitors provide the TRSS user the ability to verify sensor operation and determine detection radii during placement. The portable monitor may also be used for single channel manual monitoring.

(1) The portable monitor will be considered degraded when the battery is low or audio functions are inoperative.

(2) The portable monitor will be considered deadlined when it cannot meet performance specifications outlined in the portable monitor technical manual less those in paragraph 4d (1).

e. Test Set TS-4458/GSQ. The test set is a Special Purpose Test Equipment (SPTE) which provides the maintenance personnel with the hardware and software required to test and evaluate select TRSS components.

(1) The test set will be considered degraded when:

(a) One of the RF tuning boxes is inoperative.

(b) The reception indicator is inoperative.

(c) One of the receivers internal to the ICC is inoperative.

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- (2) The test set will be considered deadlined when:
- (a) Both RF tuning boxes are inoperative.
 - (b) The test set fails to respond to operator input.
 - (c) The test set cannot transmit commands to a relay.

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