



# **REMBASS (Remotely Monitored Battlefield Sensor System)**

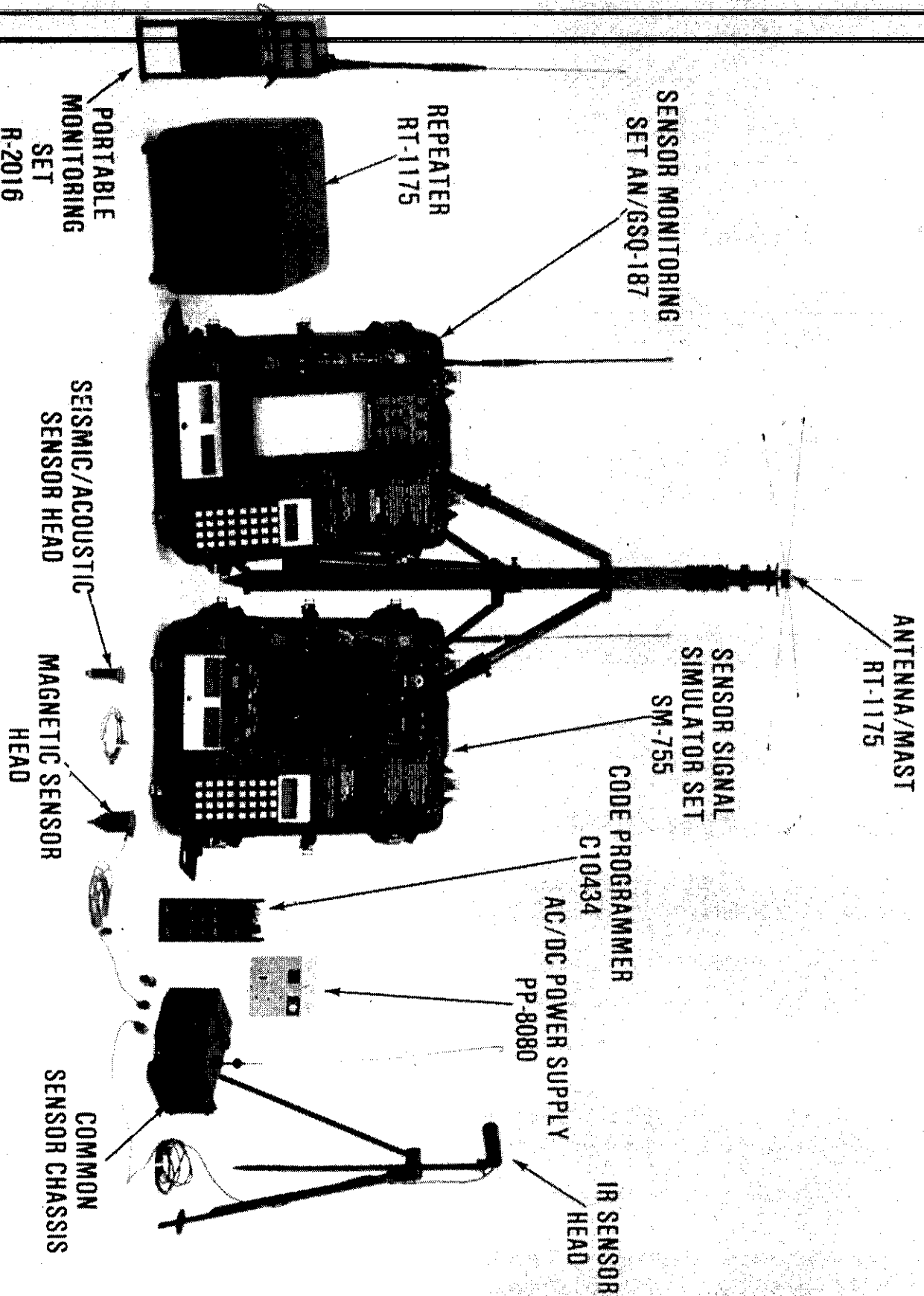
**AN UNATTENDED GROUND SENSOR SYSTEM THAT**

- 1. DETECTS**
- 2. CLASSIFIES**
- 3. PROVIDES DIRECTION OF MOVEMENT**

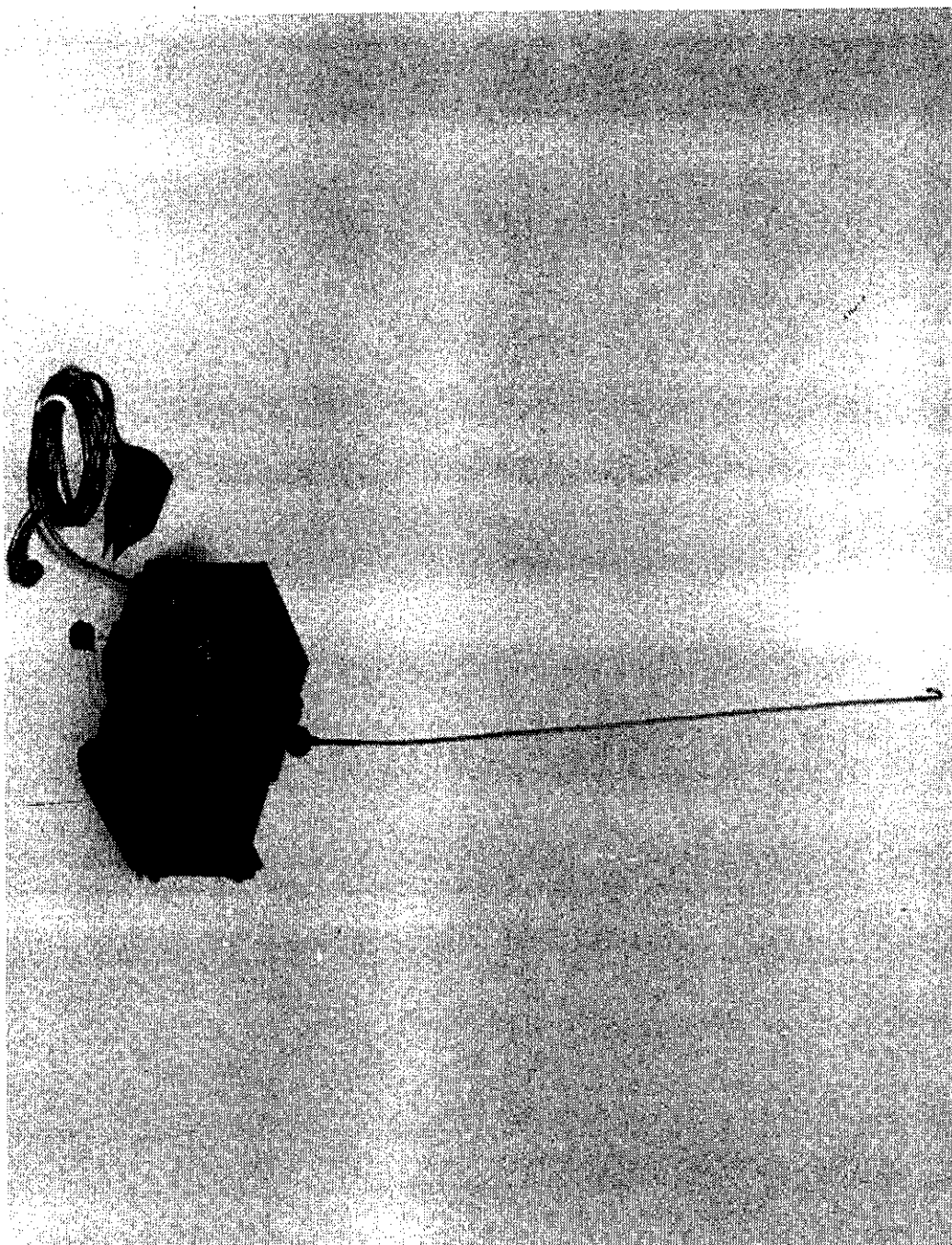
**UTILIZING**

- 1. SEISMIC/ACOUSTIC SENSORS**
- 2. MAGNETIC SENSORS**
- 3. INFRA-RED SENSORS**

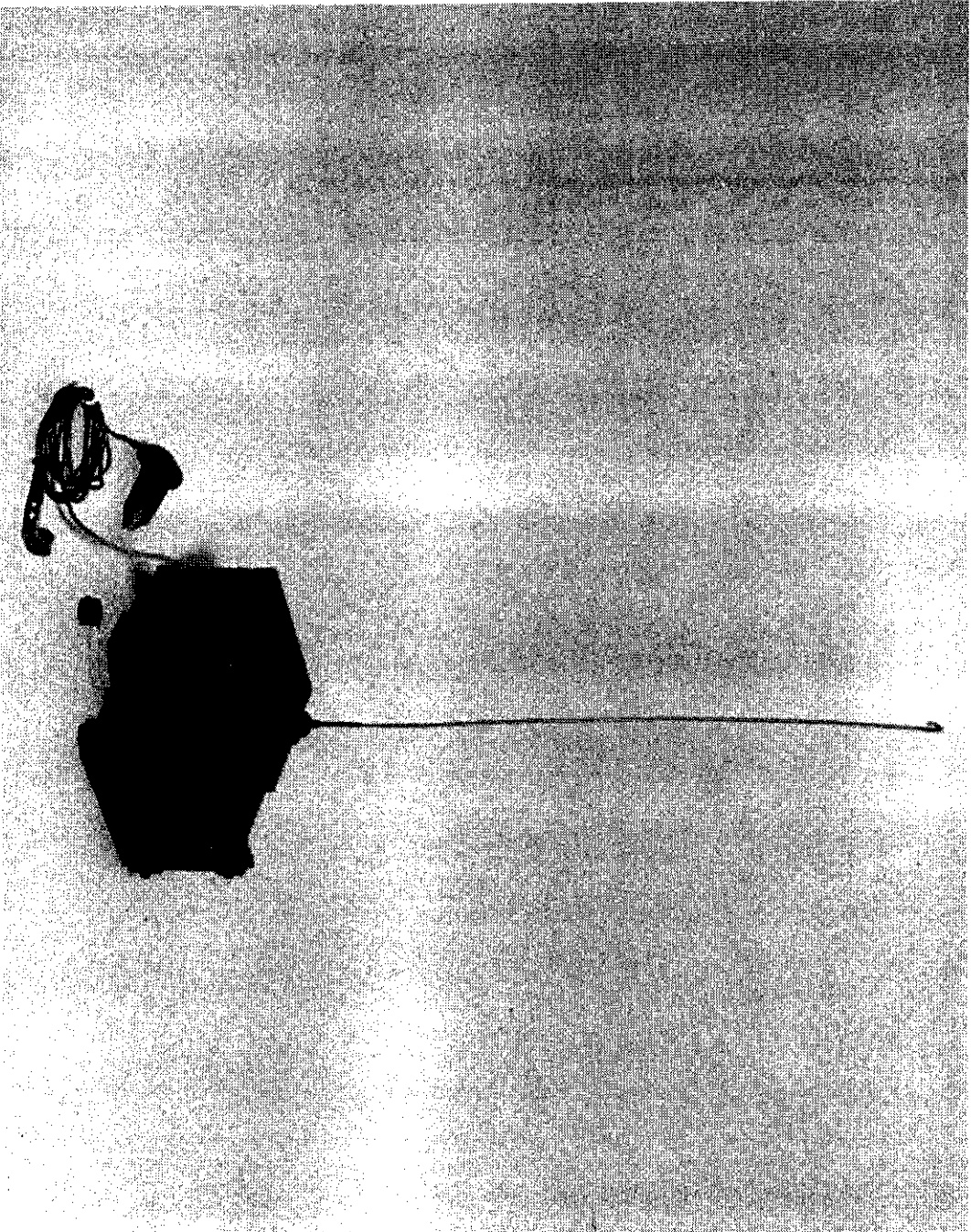
# REMBASS



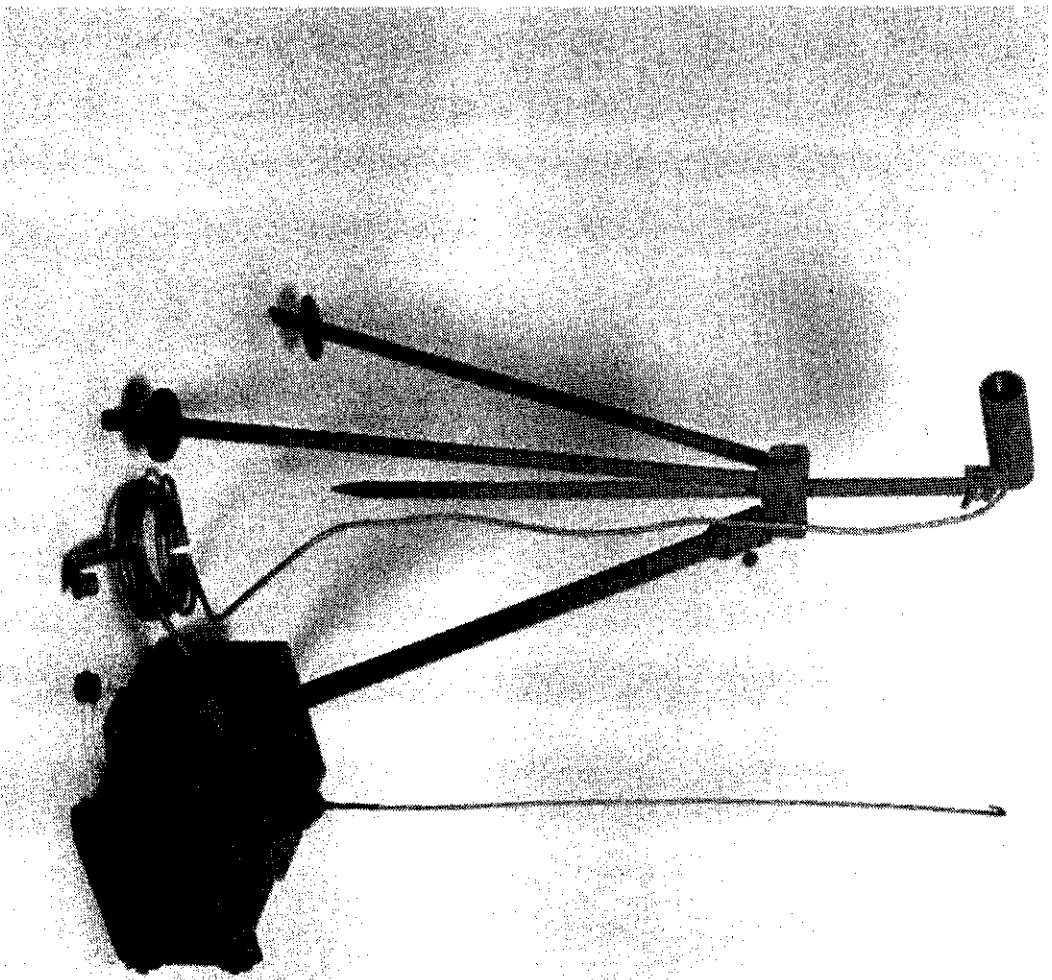
**Sensor, Anti Intrusion, DT-561  
(Magnetic)**



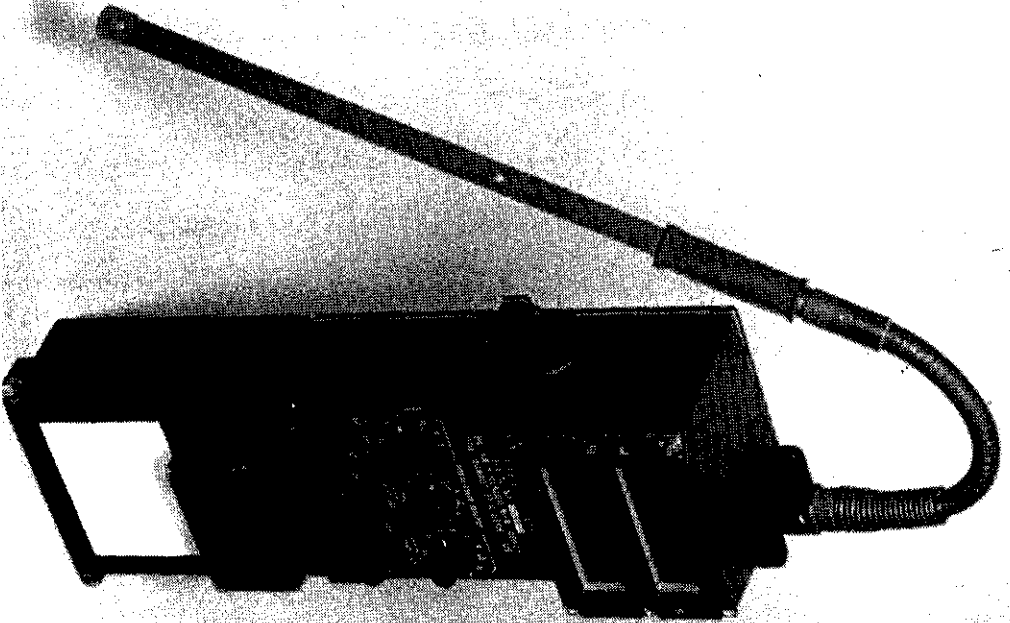
**Sensor, Anti-Intrusion, DT-562  
(Seismic/Acoustic Classifier)**



**Sensor, Anti-Intrusion, DT-565  
(Infra-Red)**



**Monitor, Radio Frequency, R-2016  
(Portable Monitor Set)**

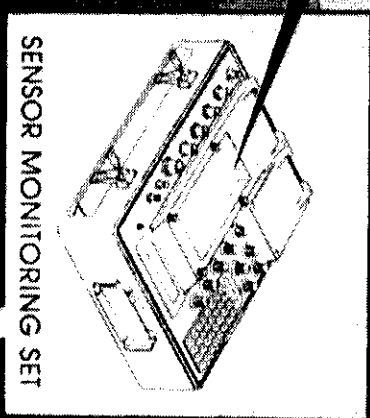
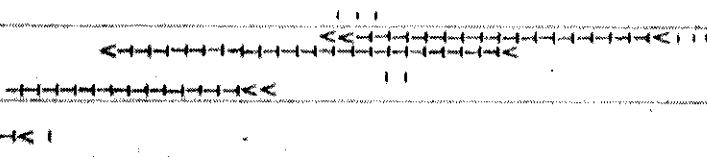




ROUTES SURVEILLANCE  
SCENARIO



-001000001001--  
4312567890  
AAAAAAAAAA

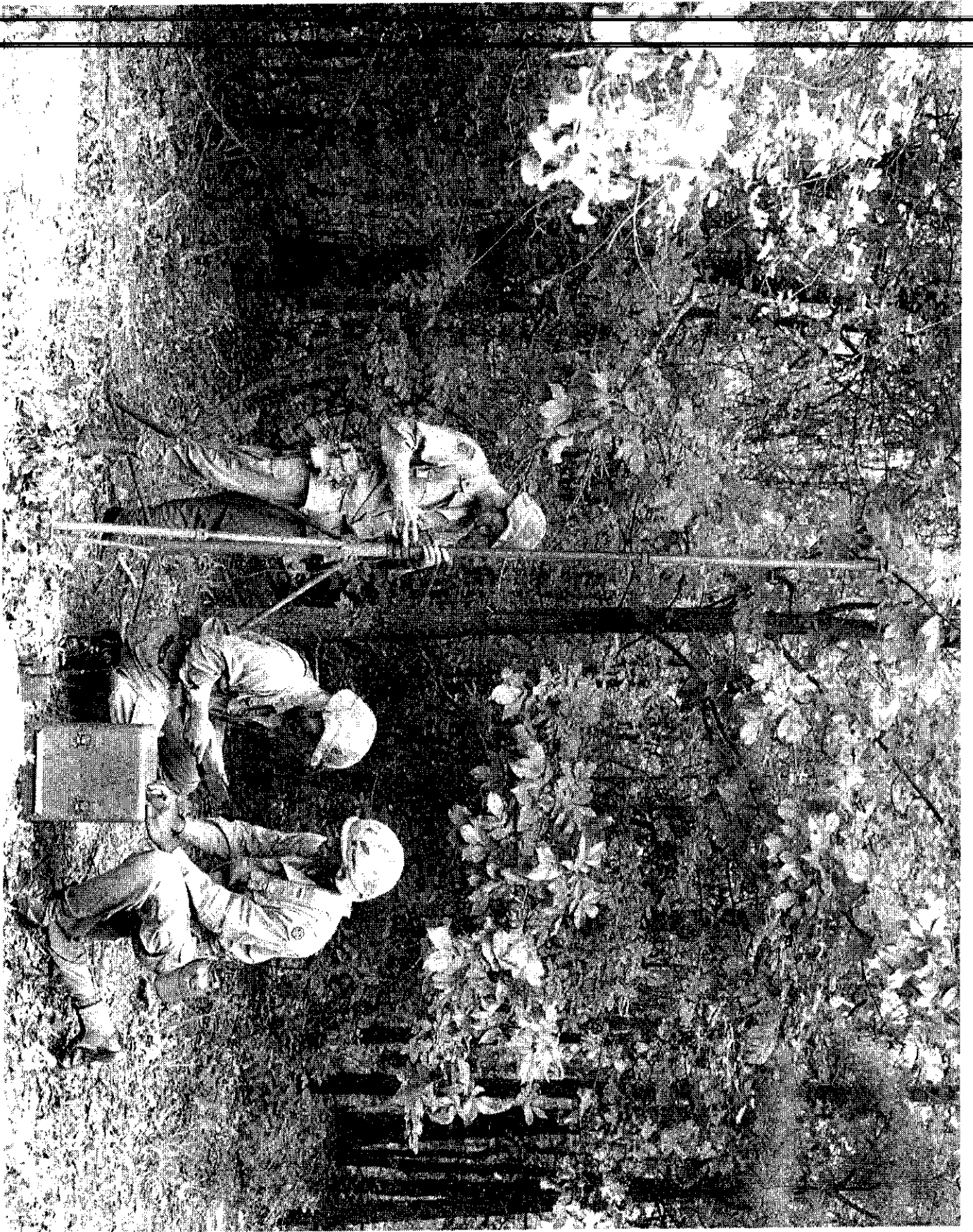


MONITOR PRINT-OUT





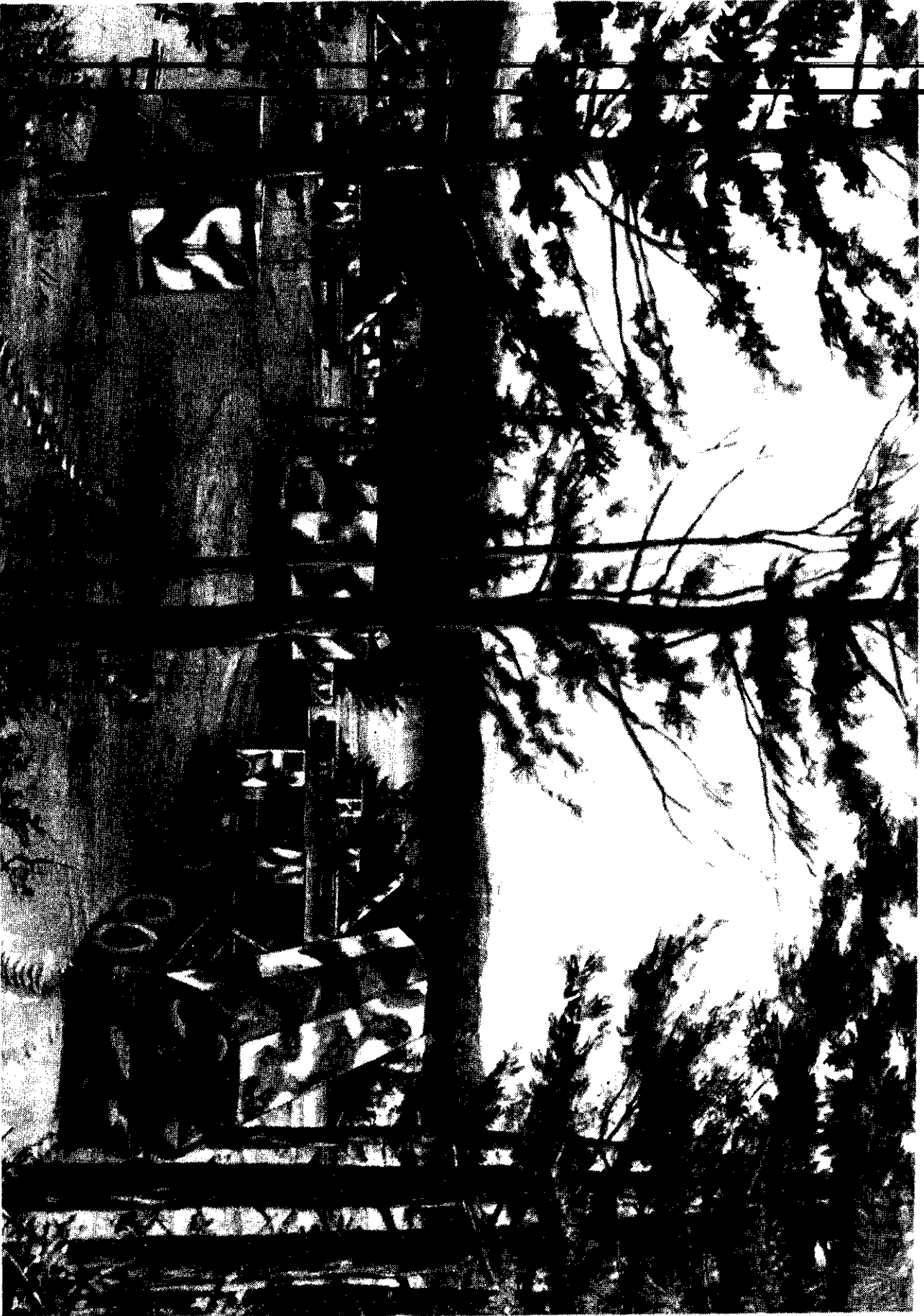


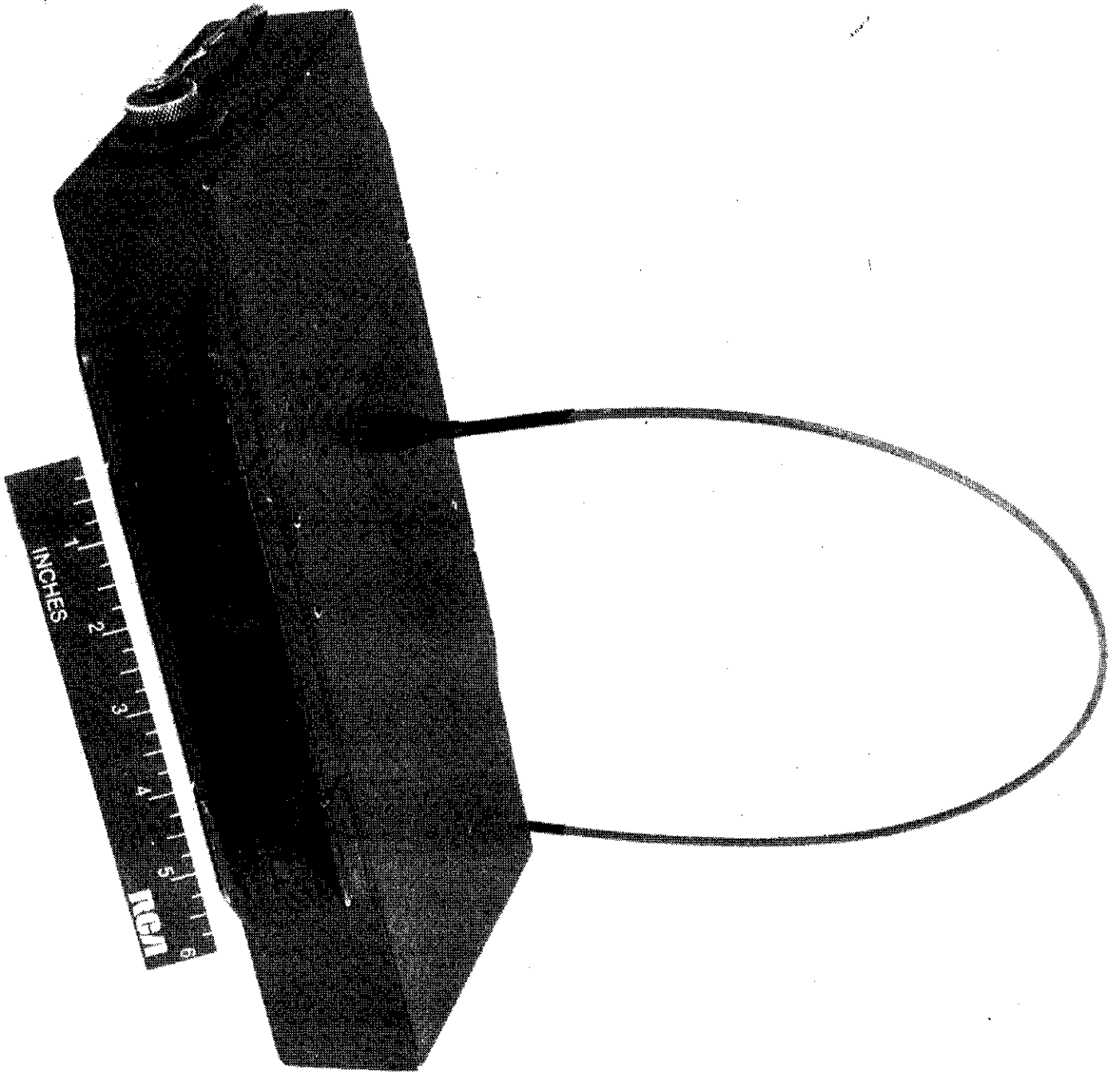






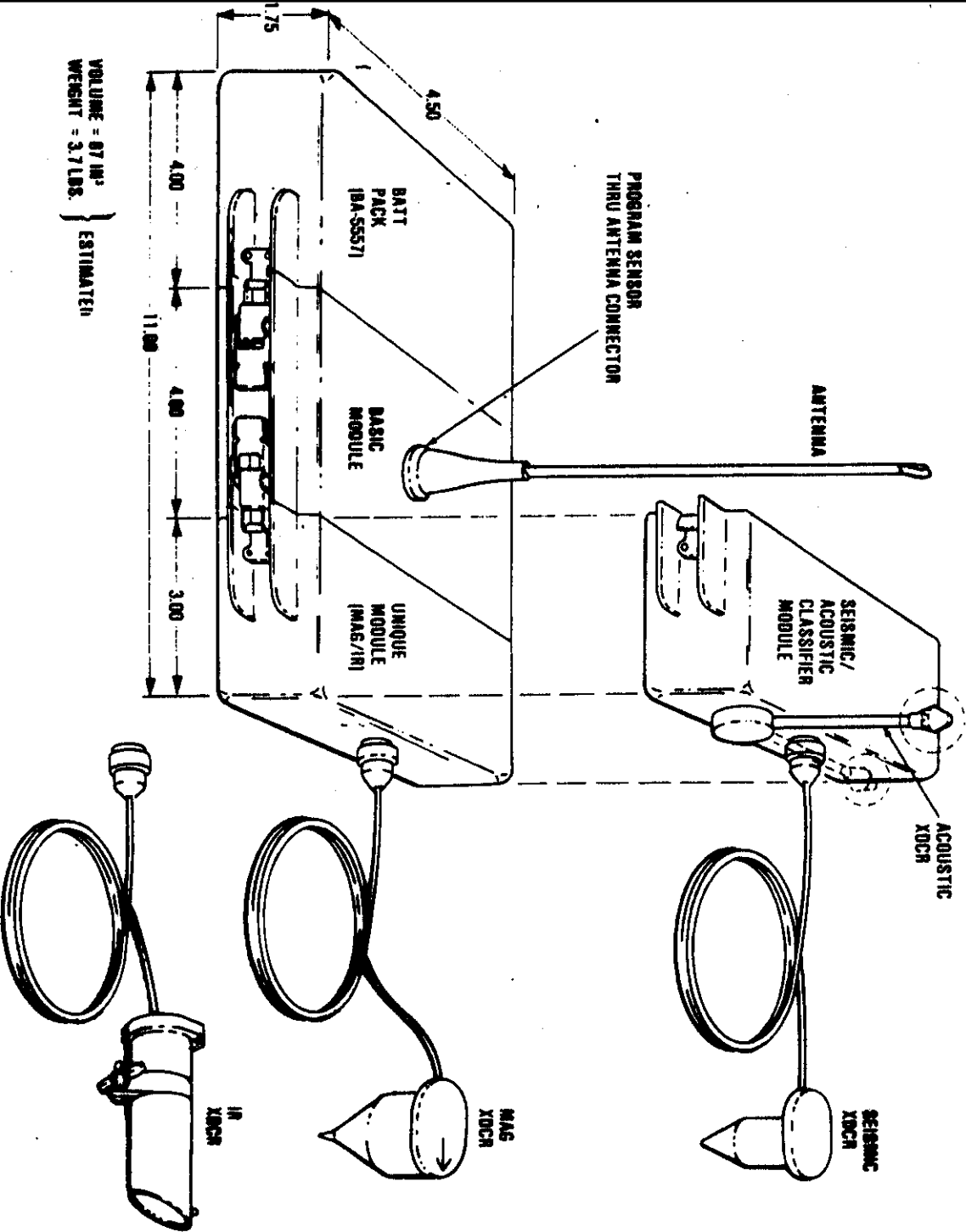
**GLCM FLIGHT DISPERSED MODE**

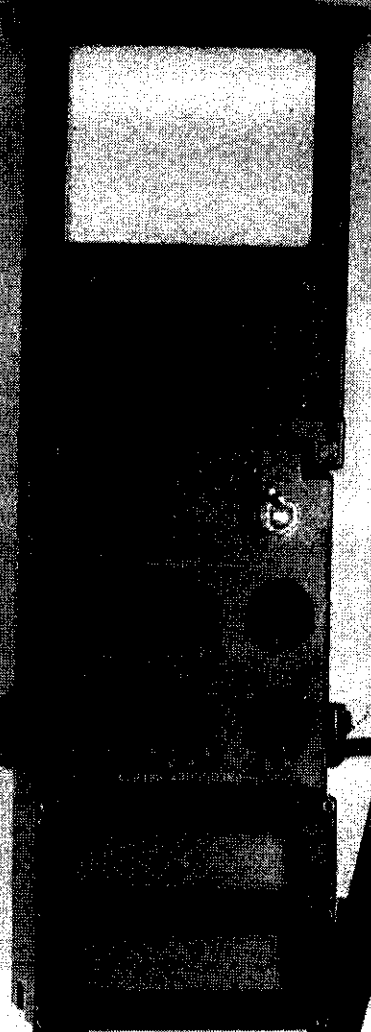
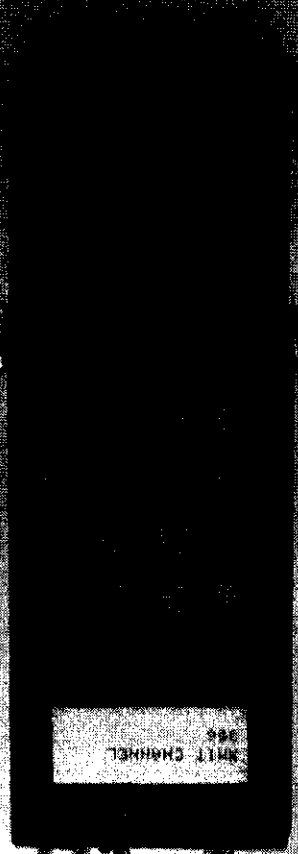






# RGT Sensor Packaging Concept





# **Future Hardware Development**

# REMI

AIR & ARTILLERY DELIVERED EQUIPMENT STATUS



REMBASS

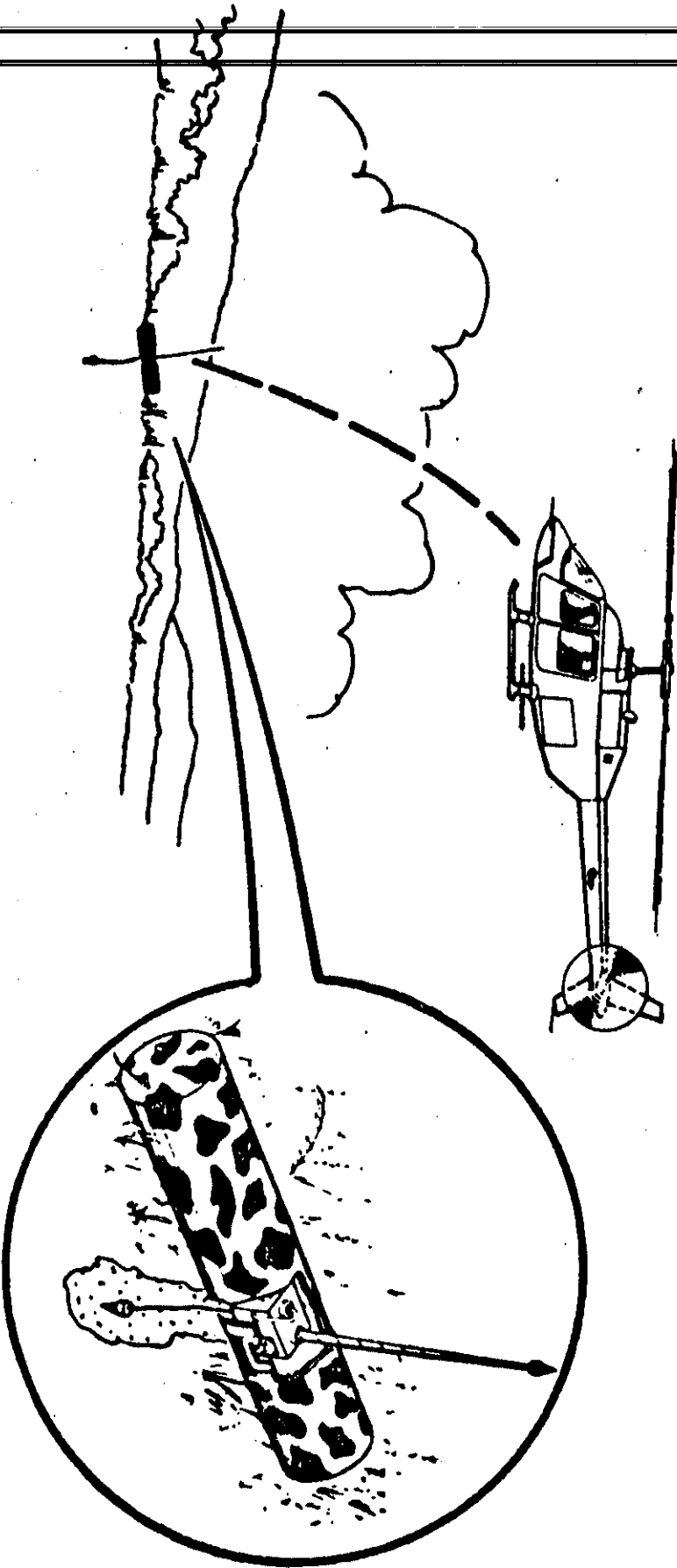
1978/79 AIR-DROPPED PROTYYPES (SENSORS/REPEATERS) FABRICATED  
CONTRACTOR CONFIDENCE TESTS COMPLETED

1970 FY79 BUDGET CONSTRAINED; FURTHER DEVELOPMENT & TEST  
OF AIR/ARTILLERY UNITS DEFERRED TO CONCENTRATE ON  
HAND EMPLACED SYSTEM

1979/81 ARTILLERY PROTOTYPES SUCCESSFULLY FIRED AT YUMA  
(COMPLETED AFTER FUNDS CONSTRAINED)

**RB71**

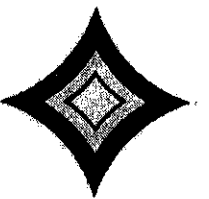
**DT 567 Air Drop Sensor**



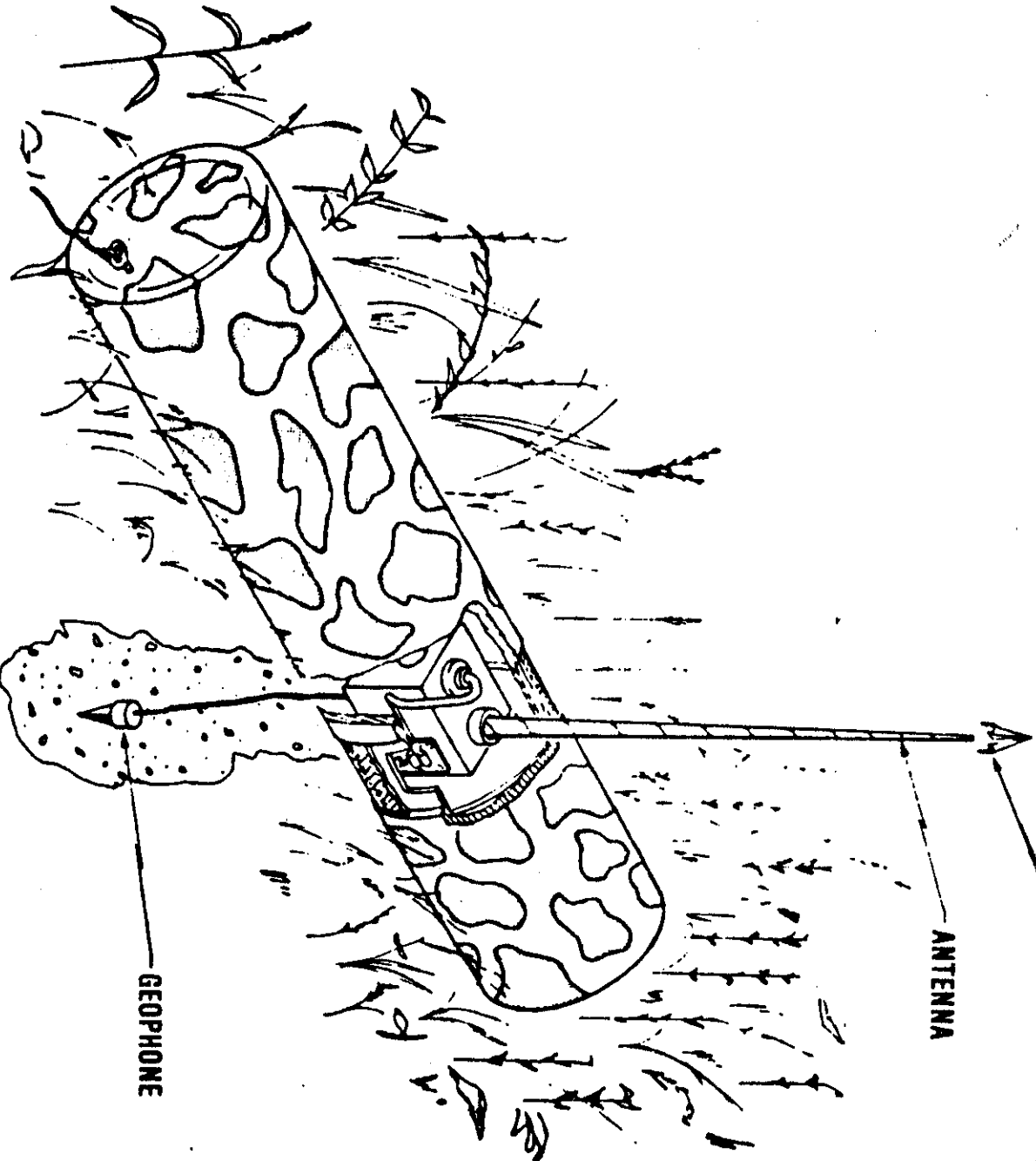


**REMI**

**DT-567 SURFACE EMPLACED SENSOR**



**REMBASS**

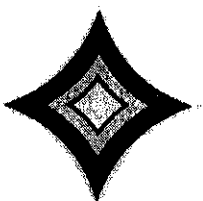


MICROPHONE/WINDSCREEN

ANTENNA

GEOPHONE

**REMI**

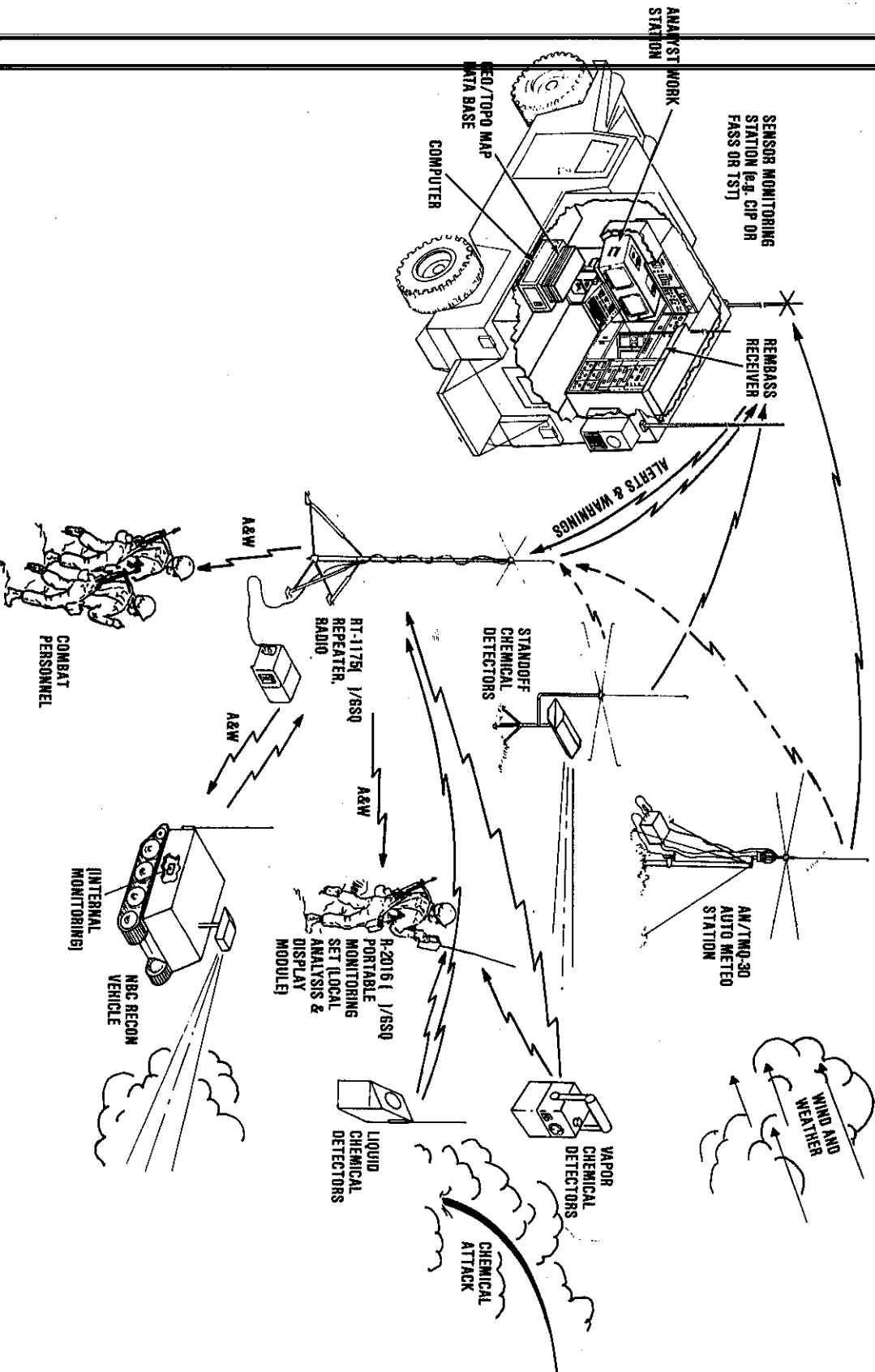


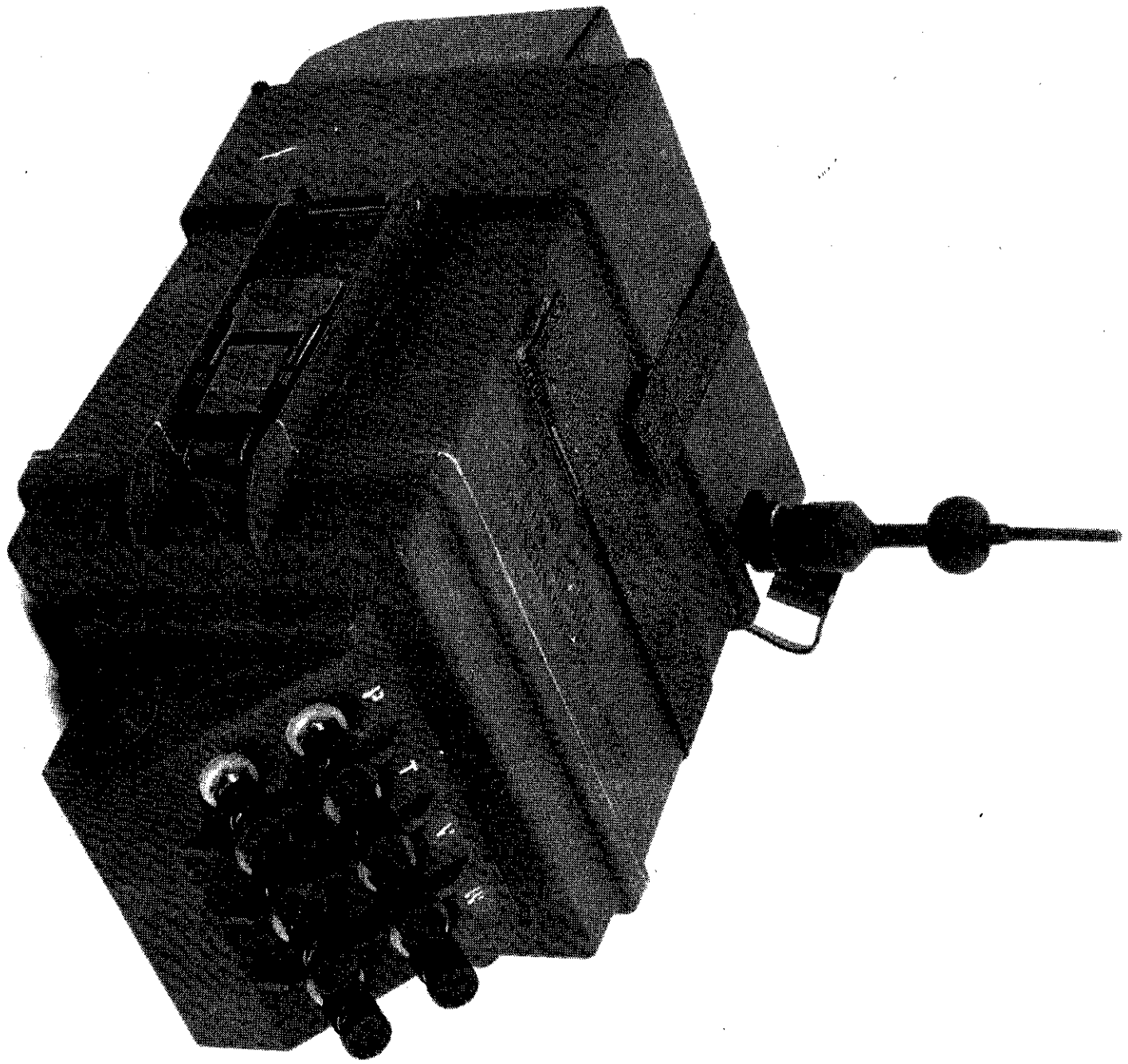
**REMBASS**



- 25 Rds Fired at Yuma
- Fired Zone 8
- Gun Hardened 19,300G

# RG-1 REMBASS Based Chemical Detection, Monitoring and Alerting Network





**RG71**

## **System Benefits**

- **Commonality**  
**REMBASS Data Link/  
Interoperability**
- **High Reliability**  
**6000 hrs MTBF**
- **Lithium Battery**



# **REM** Summary of Key Points

- **CARRY-ON DEPLOYABLE**
- **ALL WEATHER, ALL TERRAIN, ALL ENVIRONMENT & ALL THE TIME OPERATION**
- **OPERATE IN MASKED AREAS**
- **CUES, COMPLEMENTS MORE VULNERABLE, EXPENSIVE AND SHORT DURATION SENSORS**
- **VERSATILE APPLICATIONS**
- **LOW DETECTABILITY - SMALL, LOW VISIBILITY - SENSE AT DISTANCE - NARROW BAND BURST TRANSMISSION**
- **DESIGN COMMONALITY & SIMPLICITY - O&M, SUPPORT & TRAINING ECONOMIES**
- **MODULAR, EVOLUTIONARY DESIGN**
- **PHASED IMPLEMENTATION, PRODUCT IMPROVEMENT**



**REMBASS**