

## Section VII. Electronic Warfare

Deploying electronic warfare assets far forward with LAR and other forward units provides the MAGTF commander with an increased capability to target and attack enemy electronic systems. The mobile electronics warfare support system (MEWSS), which is organic to the radio battalion, is an electronic warfare system which is mounted in an LAV. This system can be employed with LAR and other highly mobile units without impeding the mobility of the unit.

### 4701. Definitions

**Electronic Warfare--** is any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. Also called EW. There are three major subdivisions within electronic warfare: electronic attack, electronic protection, and electronic warfare support.

- a. electronic attack (EA)--**That division of electronic warfare involving the use of electromagnetic, directed energy, or antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability. EA includes actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum, such as jamming and electromagnetic deception.

Electronic attack includes:

- (1) **electronic jamming--** The deliberate radiation, reradiation, or reflection of electromagnetic energy for the purpose of preventing or reducing the enemy's effective use of the electromagnetic spectrum, and with the intent of degrading or neutralizing the enemy's combat capability.
- (2) **electromagnetic deception--** The deliberate radiation, reradiation, alteration, suppression, absorption, denial, enhancement, or reflection of electromagnetic energy in a manner intended to convey misleading information to an enemy or to electromagnetic-dependent weapons, thereby degrading or neutralizing the enemy's combat capability.

Among the types of electronic deception are:

- (a) **manipulative electronic deception--** Actions taken to eliminate revealing, or convey misleading, electromagnetic telltale indicators that may be used by hostile forces.
- (b) **simulative electronic deception--** Actions taken to simulate friendly, notional or actual capabilities to mislead hostile forces.
- (c) **imitative electronic deception--** The introduction of electromagnetic energy into enemy systems that imitates enemy missions.

- b. Electronic Protection (EP)--** That division of electronic warfare involving passive and active means taken to protect personnel, facilities, and equipment from any effects of friendly or enemy employment of electronic warfare that degrade, neutralize, or destroy friendly combat capability.

- c. electronic warfare support (ES)--** That division of electronic warfare involving actions tasked by, or under direct control of an operational commander to search for, intercept, identify, and locate sources of intentional or unintentional radiated electromagnetic energy for the purpose of immediate threat recognition. Thus, electronic warfare support (ES) provides information required for immediate decisions involving electronic warfare operations and other tactical actions such as threat avoidance, targeting, and homing. ES data can be

used to produce signals intelligence (SIGINT), both communications intelligence (COMINT) and electronics intelligence (ELINT).

- a. **Signals Intelligence (SIGINT)** is a category of intelligence comprising either individually or in combination all communications intelligence, electronics intelligence, and foreign instrumentation signals intelligence, however transmitted.
- b. **Communications Intelligence (COMINT)** is the technical and intelligence information derived from foreign communications by other than the intended recipients.
- c. **Electronic Intelligence (ELINT)** is the technical and geolocation intelligence derived from foreign noncommunications electromagnetic radiation emanating from other than nuclear detonations or radioactive sources.

## 4702. Planning and Employment Considerations

EW is a complex aspect of military operations that occurs in an increasingly crowded electromagnetic spectrum. EW must be fully integrated with MAGTF and joint operations in order to achieve its full potential, such integration requires careful planning. In order to be fully integrated into an operation, EW planning must begin in the earliest stages of operation planning. EW planners must coordinate their planned activities with other users of the electromagnetic spectrum as well as third party participants that EW does not wish to disrupt. EW is centrally planned and decentrally executed.

EA and ES activities are performed by EW units as a result of specific tasking from the MAGTF commander. These taskings, if given, appear in the operations order given to a unit by higher headquarters. If a unit discovers that the enemy is using a radio frequency, this information is reported to higher headquarters through intelligence channels.

EP activities are practiced by all MAGTF units. These measures include such actions as daily changes in frequencies and unit call signs, use of encrypting devices, authentication procedures, and use of frequency hopping radios. EP measures are normally prescribed in the MAGTF, GCE, ACE, CSSE communications plan.

Employment of MEWSS with an LAR unit does not automatically imply that the LAR unit commander has total freedom to employ the MEWSS. The MEWSS's activities will normally be controlled by the radio battalion, who will employ the system in accordance with the MAGTF commander's guidance. The specific tasks which the LAR unit commander can use the MEWSS to accomplish will be prescribed in the operations order given to the LAR unit by higher headquarters.

Employment of the MEWSS in SEAD operations must be closely coordinated with ACE attack aircraft and EW platforms, as well as with LAR and other fire support coordination agencies. This close coordination will reduce the potential for one unit's activities interfering with the activities of another and thus produce the maximum degradation of enemy air defense systems.