

## **Electromagnetic Interference (EMI), Electromagnetic Force (EMF), Radiation, Radio Frequency (RF) Spectrum**

### **Proficiency Code: A**

Electromagnetic interference (EMI) is unwanted energy given off by electronic circuits and picked up by other circuits.

EMI can be caused by enemy, neutral, friendly, or natural sources, and must be resolved on a case-by-case basis.

EMI from DoD Users. When the EMI clearly results from another DoD user, attempt to resolve the interference at the lowest organizational level. After all local efforts have been exhausted to resolve the EMI, request assistance through command frequency management channels.

EMI from Non-DoD Users. Request assistance through command frequency management channels. Do not go directly to the Federal Communications Commission (FCC) or any other agency. Air Force-owned equipment may cause EMI that appears to originate from a nongovernment source. AFFMA personnel will coordinate with the FCC and other government agencies if the investigation shows that non-Air Force equipment caused the EMI.

EMI from suspected hostile sources. The primary difference between hostile and nonhostile EMI is intention. All incidents should initially be treated as nonhostile EMI until proven otherwise.

Radio Frequency (RF) Spectrum - The RF spectrum includes the frequencies from 3.0 kHz to 400 GHz. The presently allocated spectrum is from 9 kHz to 300 GHz.

Monitors and assesses AF communications within the VHF, UHF, FM, HF, and SHF frequency bands (mobile phones, Land Mobile Radios, wireless Local Area Networks).

Additional Information:

AFI 10-707