

5 FAH-2 H-730 VERY HIGH FREQUENCY/ULTRA HIGH FREQUENCY (VHF/UHF)

*(CT:TEL-16; 02-28-2006)
(Office of Origin: IRM/APR/RG)*

5 FAH-2 H-731 VHF/UHF BROADCAST RANGE

*(TL:TEL-2; 05-23-2002)
(Uniform all agencies)*

Within an individual mission, official U.S. Government personnel use VHF/UHF networks for line-of-sight communication between the embassy, residences of mission personnel, and official vehicles.

5 FAH-2 H-732 VHF/UHF NETWORKS

5 FAH-2 H-732.1 Typical Emergency Action Committee (EAC) Network Configuration

*(TL:TEL-8; 08-05-2003)
(Uniform all agencies)*

Emergency Action Committee (EAC) VHF/UHF networks typically consist of base stations, mobile radios in selected official vehicles, portable or hand-held units, and a repeater. Base stations and selective call encoders and encryption loaders are typically located at Post 1 and/or the Information Programs Center (IPC), which is often designated the mission's safe haven. Other base stations are located at specified residences and offices, which have been so designated in the post Emergency Action Plan (EAP).

5 FAH-2 H-732.2 Typical Emergency and Evacuation (E&E) Network Configuration

*(CT:TEL-16; 02-28-2006)
(Uniform all agencies)*

Emergency and Evacuation VHF/UHF networks typically consist of base stations, mobile radios in official vehicles, portable or hand-held units, and a repeater. Base stations and selective call encoders are typically located at

Post 1 and/or the IPC. Other base stations are located at specified residences and offices, as necessary. Unsecure handhelds are distributed to all Department of State employees who are not on the EAC, as well as *State* TDYers and other qualifying U.S. Government personnel. Secure handhelds *should be* distributed to all members of the core EAC.

5 FAH-2 H-732.3 Typical Administrative Network Configuration

(CT:TEL-16; 02-28-2006)
(Uniform all agencies)

Administrative VHF/UHF networks typically consist of base stations, mobile radios in official vehicles, portable or hand-held units, and possibly, a repeater. Base stations are typically located at a central location, such as the Motor Pool, GSO Warehouse, GSO Maintenance, and the Administrative section. A base station or other radio unit is often located *with the telephone operator* for emergencies and monitoring.

5 FAH-2 H-732.4 Operational Testing

(CT:TEL-16; 02-28-2006)
(Uniform all agencies)

- a. *All VHF/UHF radio systems* must be tested biweekly or as directed by the *Chief of Mission* to ensure the operational readiness of equipment and the competence of users. Anyone who might use the networks in an emergency, including spouses and children, should participate in these tests.
- b. Where Marine security guards (MSGs) are on site, the MSG standing watch at Post 1, under Regional Security Officer (RSO) supervision, *must* act as network control *by conducting* the radio tests on the EAC and/or the E&E networks, *forwarding* the results to the RSO and Information Programs Officer (IPO) for evaluation.
- c. IPC must coordinate with the Administrative Section to conduct biweekly radio tests on the Administrative network(s). Results are forwarded to the IPO and *the Regional Information Management Center (RIMC)*, as necessary, for evaluation of equipment operations.

5 FAH-2 H-732.5 Radio User Training

(CT:TEL-16; 02-28-2006)
(Uniform all agencies)

IPC *must* train all participants to use the Department of State equipment assigned to them and *how to* arrange repairs of the equipment. The RSO

and Information Management Officer (IMO), *in coordination* with the post's executive office, *should establish firm commitments from all users to ensure active participation in the biweekly testing.*

5 FAH-2 H-733 RADIO ENCRYPTION SYSTEMS (OVERSEAS)

(CT:TEL-16; 02-28-2006)
(State)

The Bureau of Information Resource Management's Radio Programs Branch (IRM/OPS/ITI/LWS/RPB) provides all overseas missions two-way radios equipped with Digital Encryption Standard (DES) or Advance Encryption Standard (AES). These encryption algorithms provide limited protection from unauthorized interception of voice communications and are only approved for the transmission of Department of State Sensitive But Unclassified (SBU) and Department of Defense For Official Use Only (FOUO) communications. Under no circumstances should DES- or AES-equipped radios be used for the transmission of classified information, as defined by Executive Order 12958.

5 FAH-2 H-733.1 Controlling and Safeguarding (DES/AES) Radios

(CT:TEL-16; 02-28-2006)
(State)

- a. The classification of DES/AES radio equipment, whether loaded with active DES/AES key codes or not, is Sensitive But Unclassified - No Foreign Nationals (SBU/NOFORN). Foreign Service Nationals (FSNs), Locally Employed Staff (LES), or Third-Country Nationals (TCNs) must not be permanently issued portable (hand-held) DES/AES radios.*
- b. The installation of the DES/AES radios must be limited to vehicles assigned to the Chief of Mission, Marine security guards, Regional Security Office, and those vehicles specifically identified in the mission's Emergency Action Plan (EAP) for evacuation use.*
- c. Spare DES/AES-equipped radios must be zeroized and stored in secure locations only accessible by Information Programs Center (IPC) personnel. Under no circumstances should DES/AES-equipped radios be stored where noncleared personnel may have unescorted access to the equipment.*
- d. The cleared American direct-hire State employee responsible for access and use of vehicles equipped with DES/AES radios must routinely monitor*

their use by noncleared personnel; i.e., sign-out roster, trip schedule, etc. During working hours, if possible, vehicle keys should be secured by cleared American personnel and logged out and in when the vehicles are used. After working hours, cleared American personnel must secure vehicle keys to prevent unauthorized access. For inventory reporting procedures, please refer to 5 FAH-2 H-853 and the Worldwide Property Account System (WPAS).

- e. *The American direct-hire responsible for vehicles must request the IPC to either:*
 - (1) *Remove the DES/AES-equipped radio(s) prior to taking the vehicle offsite for servicing, or*
 - (2) *Assign a cleared American employee to remain with the vehicle during the entire offsite maintenance procedure.*

5 FAH-2 H-733.2 Maintenance

(CT:TEL-16; 02-28-2006)
(State)

- a. *Maintenance of DES/AES-equipped radios must only be performed by Information Management Technical Specialist (IMTS) or Information Management Specialist (IMS) personnel. Foreign nationals may install and remove vehicle and fixed DES/AES equipment, if escorted by cleared personnel. When maintenance requirements of DES/AES radio equipment exceeds the capabilities of post IMSSs, equipment must be shipped via classified pouch to the Regional Information Management Center (RIMC) or IRM's Radio Program Branch for servicing. Under no circumstances should DES/AES equipment be serviced by overseas maintenance providers.*
- b. *All DES/AES radio equipment in storage or maintenance channels must be zeroized of all key codes. If not equipped with a zeroize feature, a randomly produced key code must be loaded in order to overwrite the mission's actual operational code.*

5 FAH-2 H-733.3 Key Loaders and Keying Material

(CT:TEL-16; 02-28-2006)
(State)

- a. *IRM's Radio Programs Branch and Systems Integrity Division (IRM/OPS/ITI/SI) must provide DES/AES cryptographic key codes and effective periods. Key codes will be provided telegraphically or through standard Communications Security (COMSEC) channels as determined by the RPB. All DES/AES cryptographic key loaders (Motorola KVL-3000)*

must be controlled by the Information Programs Officer (IPO) and stored in the mission's Information Programs Center (IPC).

- b. Only personnel who hold active cryptographic clearances for use, issued by IRM/OPS/ITI/SI, can handle, load, or destroy DES/AES keying equipment and key codes. All DES/AES key loading equipment and key codes must be listed in the mission's COMSEC Emergency Destruction Plan (EDP). All DES/AES cryptographic codes, whether locally produced or Department provided, must be classified CONFIDENTIAL/NOFORN and secured appropriately.*

5 FAH-2 H-733.4 Compromise and Loss of DES/AES Equipment (Actual or Suspected)

*(CT:TEL-16; 02-28-2006)
(State)*

The integrity of DES/AES encryption keys and equipment is critical to ensuring that communications are protected. Any DES/AES radio equipment, keying equipment, or key codes that are lost, stolen, seized, captured, or otherwise compromised, must be reported immediately to the IPO and RSO. A telegraphic report must be submitted to RPB within 24 hours.

5 FAH-2 H-733.5 Emergency Destruction

*(CT:TEL-16; 02-28-2006)
(State)*

- a. The mission's IPO and RSO must determine the appropriate course of action, based on local conditions, to protect the integrity of the Department's DES/AES equipment. For any given situation that requires the abandonment of DES/AES radio assets, all action should be taken to ensure that the DES/AES equipment does not fall out of American control. In a nonemergency situation, the equipment must be sent via classified pouch to the mission's designated safe haven post for secure storage.*
- b. In the event the mission should execute its COMSEC Emergency Destruction Plan (see 5 FAH-6 on ClassNet), all DES/AES radio equipment must be collected, zeroized, and secured in the mission's IPC after its use is no longer practical. DES/AES-equipped radios that must be abandoned with vehicles must be destroyed using an appropriate destruction device (e.g., a sledge hammer) if removal of the equipment is not possible. DES/AES equipment must never be abandoned, in working condition, if the potential of theft or capture is likely.*

5 FAH-2 H-733.5 Use of DES/AES-Equipped Radios by Foreign Nationals

*(CT:TEL-16; 02-28-2006)
(State)*

Foreign nationals may be granted temporary use of DES/AES-equipped radios if approved in writing by the mission's RSO. However, foreign national access and use of DES/AES radios must be limited to immediate operational requirement. When foreign nationals are granted access to DES/AES radio equipment, all cleared DES/AES radio users must be notified that foreign nationals have been granted access to the encrypted system.

5 FAH-2 H-734 THROUGH H-739 UNASSIGNED