

Cybersecurity and Infrastructure Security Agency (CISA) Shared Resources (SHARES) radio service

The SHARed RESources (SHARES) High Frequency (HF) Radio program provides an additional means for users with a national security and emergency preparedness mission to communicate when landline and cellular communications are unavailable. SHARES members use existing HF radio resources to coordinate and transmit messages needed to perform critical functions, including those areas related to leadership, safety, maintenance of law and order, finance, and public health. <https://www.cisa.gov/resources-tools/programs/shared-resources-shares-high-frequency-hf-radio-program>

- A. The Federal government, through CISA, has established a High Frequency (HF) radio service for national security and emergency preparedness entities.
 - 1. Almost 200 radio channels are available for use by authorized users.
 - 2. Utilizes the Winlink email service to send data.
 - 3. Do not have to have an FCC license to utilize.
 - 4. Do not have to be a Ham radio operator, but Hams are a natural fit.

- B. Necessary equipment
 - 1. Many state and local radio operators utilize existing amateur radio HF transceivers, antenna tuners and broadband antennas that are opened up to make use of the SHARES frequencies.
 - 2. In order to utilize the SHARES Winlink service, users should acquire a Pactor-4 modem. <https://scs-dragon.com/>

- C. Registering as a SHARES User
 - 1. Fill out a SHARES Form 1 to obtain an authorization.
 - 2. Instructions are on the backside of the Form.
 - 3. Sign for the Station and Entity point Point-of-Contact (POC).
 - 4. No service fees, no use fees, no license fees, and no license needed.

- D. EMP Protection
 - 1. Have a backup HF transceiver radio, antenna tuner, and modem stored permanently in faraday bags or cages.
 - 2. Hook up the operational HF transceiver to an EMP surge protection device (SPD) and ferrites on the antenna and power cables. Hook the radio antenna to an A/B switch with a dummy load on the B side. Keep the radio switched to “B” when not in use.