Winlink

Winlink Operating Modes

When composing a new message, you must choose how the message will be sent as:

- **Winlink Message**: Your station makes a radio connection to a Radio Message Server (RMS). The RMS makes an Internet connection to a Common Message Server (CMS) that is the central message repository. Your messages are sent via radio to the RMS and then through the Internet to the CMS until the recipient connects and downloads messages addressed to themselves. This mode is efficient and highly reliable. Winlink operates multiple CMS that synchronize with each other frequently to provide completely redundancy. The system can run without interruption with only one CMS in operation. Over the last 15 years, the Winlink central system has been available 99.99% of the time. If an RMS is down and unable to receive a connection, the client can connect to a different RMS. Since all messages are stored in the central CMS database, it doesn't matter which RMS and sender and recipient connect to.
- **Radio-Only Message**: Where as the previous mode relies on an Internet connection between the RMS and a CMS, this mode does away with the CMS and the internet connection it relies on. Instead, messages are sent to a designated RMS for storage until it is retreaved. This mode of operation can operate with local and total Internet outages. For testing and exercises, messages can be composed and sent into a Hybrid RMS as "Radio-Only Messages." Because of the way these messages are tagged and the type of connection made to the RMS, these messages are forced to be handed using radio-forwarding mode even if the Internet is available.
- **Peer-To-Peer Message**: This mode of operation transfers messages directly from one client station to another client station without going through an RMS or a CMS and without the Internet. This is like a "simplex" mode, which requires:
  - Both stations to be on the air at the same time and on the same frequency, which must be clear.
  - Both stations must use the same transmission protocol (Packet, Winmor, Pactor, etc).
  - Messages cannot be sent to Internet e-mail accounts.

Main source: https://winlink.org/content/overview_winlink_hybrid_network