

E-MAIL OVER HIGH FREQUENCY HAM RADIO

Questions or want to see an HF e-mail in your inbox?

Send a regular e-mail to Al at

K7NHV@winlink.org

If that doesn't work, try K7NHV@ARRL.net

For more information

Outfit	Web page
Winlink:	www.winlink.org
Airmail software:	www.airmail2000.com
SCS modems are made by:	www.scs-ptc.com
U.S. dealer for SCS modems	www.yachtwire.com

Sample 18 MHz. QSO, with K7NHV on Vashon Island
receiving 2 e-mails and sending 5 e-mails via KQ4ET, Virginia Beach, VA:

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2006/02/01 20:48:42 Calling KQ4ET
2006/02/01 20:48:47 Connected to KQ4ET
1k7nhv
<Pactor3: , Speed= 200, Freq= -25>
[WL2K-2.1.8-B2FHIMT$]
Welcome to PMBO KQ4ET [FM16xu] Virginia Beach, VA

***Frequency List by center frequency***
Station 1: 3628.7(All) 7067.9(P1&2) 18106.9(P3) 145.730(1200)
Station 2: 10146.5(P3) 14110.0(P3) 21098.7(P3) 441.050(9600)
10 cm Solar Flux Index {SFI = 078 on 2006/02/01 13:41 UTC}

*****Attention Users*****
Thanks for the business. Joel/KQ4ET
*****
PMBO KQ4ET last contacted the Central server 1 min ago.

K7NHV de KQ4ET QTC 2 Msgs 620 bytes>
[AirMail-3.2.035-B2FHIM$]
; KQ4ET de K7NHV (CN87sk) QTC: 5 23839 10211
FC EM 1171_K7NHV 5003 2458 0
FC EM 1173_K7NHV 275 236 0
FC EM 1174_K7NHV 536 406 0
FC EM 1178_K7NHV 8040 3392 0
FC EM 1176_K7NHV 9985 3719 0
F> C8
FS YYYYY
Sending "Fw: [wl2kemcomm] Linux boxes", 2458 bytes (51% compressed)
Sending "generator wiring", 236 bytes (14% compressed)
Sending "Airmail", 406 bytes (24% compressed)
Sending "Fw: [wl2kemcomm] paalink-unix", 3392 bytes (58% compressed)
Sending "Fw: [wl2kemcomm] paalink-unix", 3719 bytes (63% compressed)
; 21.5 Mins left K7NHV de KQ4ET
FC EM 325XMAOF595L 310 262 0
FC EM G06AHNKY9PDH 310 261 0
F> 74
FS YY
Receiving 325XMAOF595L "Service Message"...Decoded OK
Receiving G06AHNKY9PDH "Service Message"...Decoded OK
; KQ4ET de K7NHV
FF
; 20.4 Mins left K7NHV de KQ4ET SK
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E-MAIL OVER HIGH FREQUENCY HAM RADIO TERMS

Airmail: A client (end user) program written by Jim Corenman KE6RK. It supports Pactor (all popular TNCs) Paket (PTC II and Kantronics TNCS) and Telnet connections. Can work as a limited BBS and forward in all FBB and WL2K protocols.

AMTOR: Amateur teletype over Radio. A basic digital protocol used in the 80s but no longer popular.

ARES®: Amateur Radio Emergency Service®, an ARRL Voluntary Field organization.

ARRL: The American Radio Relay League. An organization representing Amateur Radio Operators, Worldwide.

AX.25 protocol: The signaling protocol typically used by Winlink 2000 for passing data on VHF/UHF "Packet" channels.

B2F Protocol: The WL2K binary protocol that allows multiple addresses, mixed radio and email addresses, and attachments.

BBS: Bulletin Board System (also called an MBO). This is the station that hosts the message system.

CMS: The Common Message Servers (CMS) are the common coordinating server engines central to the Winlink 2000 "star" Network configuration. They coordinate the traffic between the participating network stations (PMBOs) as well as serving as the e-mail and position reporting interface. All this is done over the Internet in order to make the amateur radio spectrum more efficient, leaving these radio frequencies available for end-users.

Digi: Short for digipeater. A simple Radio/TNC device that relays digital AX.25 packets.

HF: A High frequency - Frequencies between 3 and 30 megahertz.

MID: A message identification number that identifies the messages that flow into and out of the system.

MBO: An abbreviation for 'mailbox operator'. Applies specifically to radio-based mailboxes operated by amateurs.

Modem: See TNC below.

Pactor I, II, III: The signaling protocols used by Winlink 2000 HF radio channels to carry its B2F format. Pactor is the invention of the SCS GmbH & Co. KG.

Paclink AGW & Paclink Postoffice: A Winlink 2000 client email server application that enables the use of a single or multiple computers with email programs such as MS Outlook, MS Outlook Express, Netscape, Eudora, etc. for the purpose of sending and receiving email via Telnet or VHF/UHF Packet. Paclink utilizes the AGW Packet Engine to drive Packet modems, including computer sound cards. With one single Paclink application, in front of a firewall and behind a router, multiple computers may be enabled with radio email when used with the Winlink 2000 network system.

PMBO: A Winlink 2000 participating network MBO. PMBOs or Radio Message Servers, communicate with each other through the CMS's in a "star" network configuration via the Internet, and with the end-users over radio or Internet via Telnet or WEB Browser Access..

SMTP Mail: The Internet Engineering Task Force (IETF) RFC 2821 which define the standards for Internet email.

Sysop: A system operator - the amateur control operator who operates a PMBO.

Tepnet: A protocol for transmission of information between two ports on the Internet.

Telpac: A Winlink 2000 application that allows the connection of a VHF/UHF modem either directly or via the AGW Packet Engine with a Paclink or Airmail user application, and converts the AX.25 Packet to Internet Telnet for connection to a Winlink Participating Station's (PMBO) Telnet Server.

TNC: Terminal Node Controller or radio modem. A device that is used to send digital signals over radio. Radio modems may carry a variety of protocols and formats, depending on the efficiency and purpose of their application.

VHF/UHF: Very High Frequency/Ultra High Frequency - Usually line of sight for "last mile" communications using the AX.25 Pactor protocol which wraps around the Winlink B2F compressed binary format.

WL2K: Abbreviation for Winlink 2000. This is the MBO programs and servers that implement the Winlink 2000 message system.