



WINLINK 2000 (WL2K) AND ARES

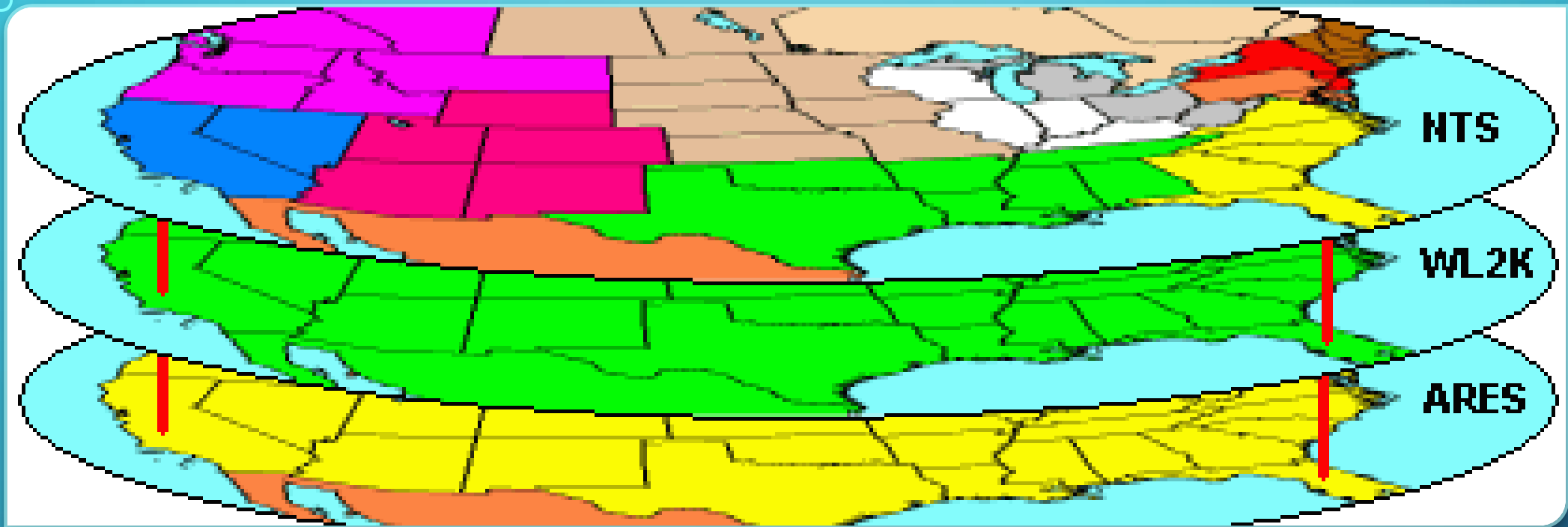
BILL POND NOWP AND MIKE MCPHERSON KQ9P

ALBEMARLE AMATEUR RADIO CLUB

14 OCTOBER 2014

WHY DO WE CARE ABOUT WL2K?

- The technological evolution of the packet BBS system
- Multi-band, multi-mode for maximum choice, flexibility, and ability to get the traffic through
- Familiar email interface and capabilities, including attachments and connectivity to the Internet for communication with non-WL2K email addresses
- ARES® units all over the country standardizing on WL2K, including us here in Virginia District 3 (Albemarle, Buckingham, Cumberland, Fluvanna, Greene)



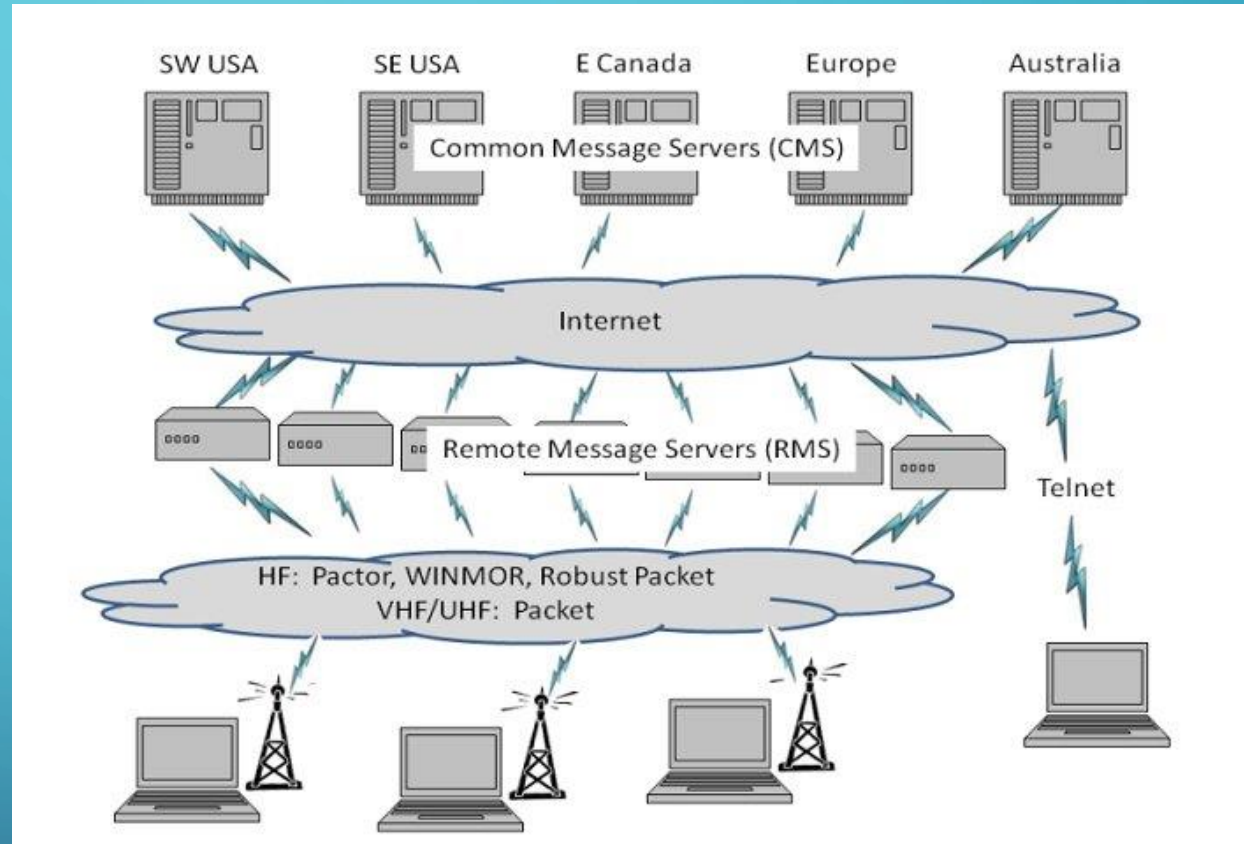
<http://wx4j.com/WL2KLayersWeb12.htm>

WHERE DOES WL2K FIT?

Immediate delivery in most cases, so it fits in as a tactical communication capability.

HOW DOES WL2K WORK?

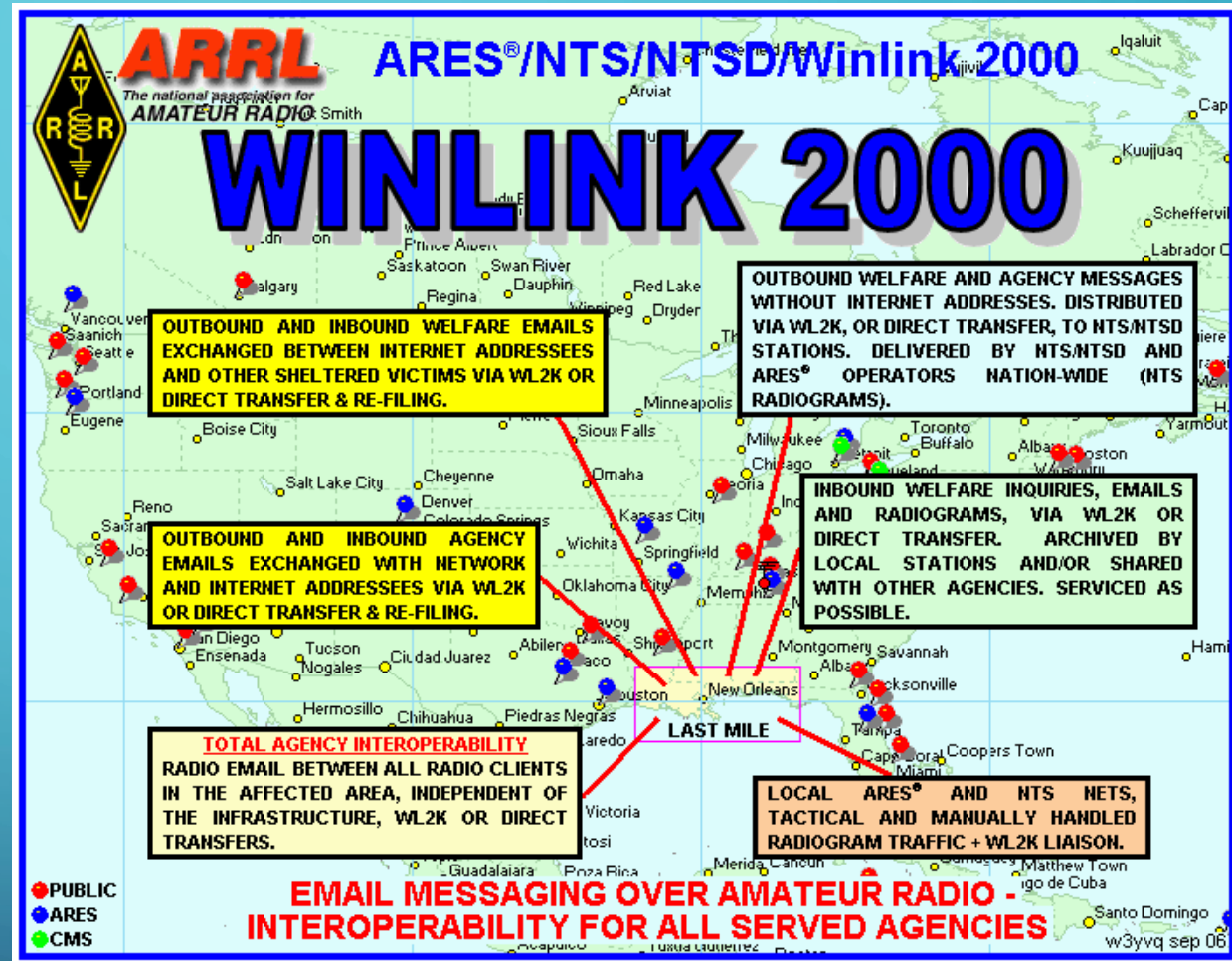
- Redundant Common Message Servers (CMS email servers) around the world
- Local and regional/national/international Radio Mail Server (RMS) Gateways supporting multiple bands and modes for end-station access
- With the latest software release, the capability to go radio end-to-end if the RMS Gateway Internet connection fails



<http://ntstalk.wikidot.com/resource:nts4ares>

WHAT IS WL2K GOOD FOR?

- Local ARES® and Served Agency traffic regardless of location
- Inbound and outbound health and welfare traffic
- Liaison with NTS/NTSD

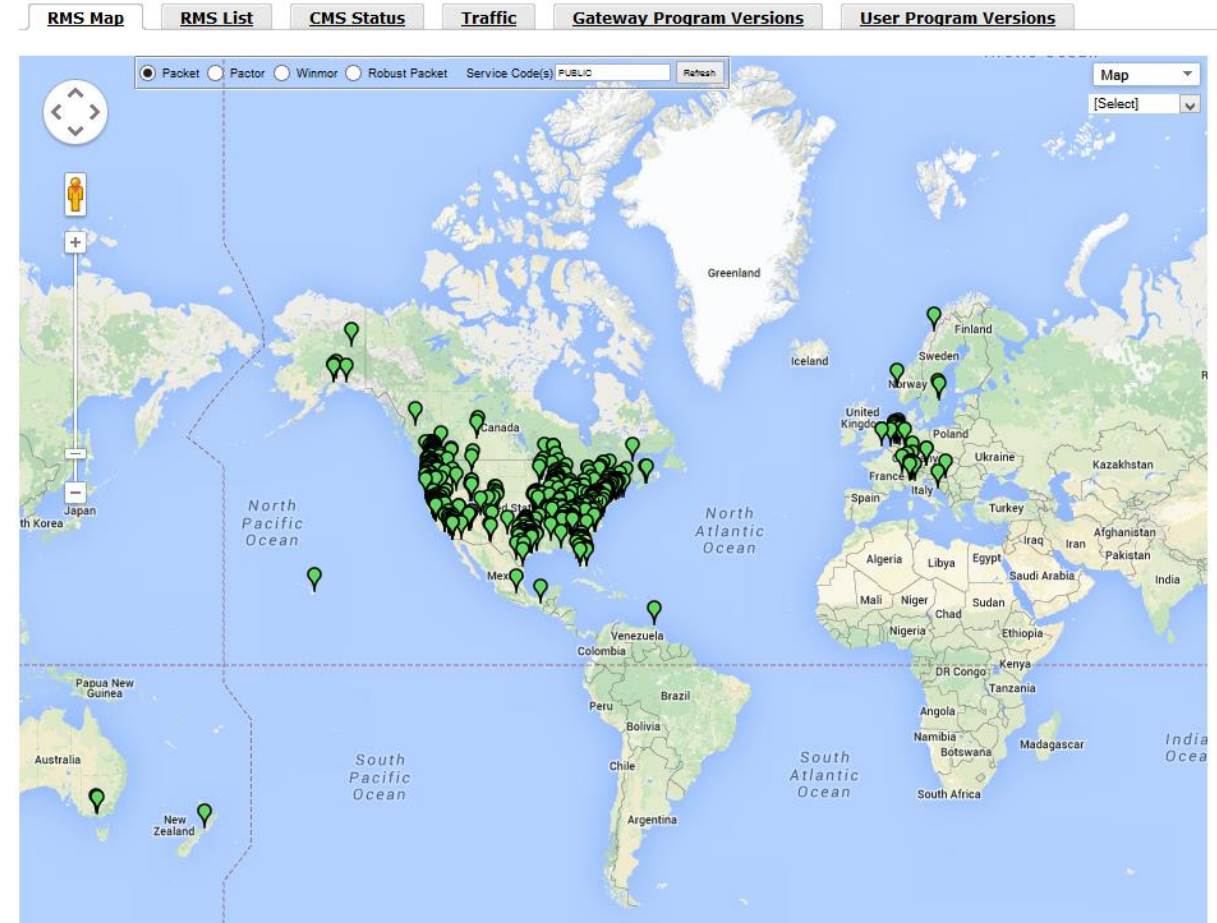


<http://wx4j.com/WL2KLayersWeb12.htm>

VHF/UHF RMS PACKET GATEWAYS

- RMS Packet Gateways typically support at least one VHF frequency and sometimes one or more UHF frequencies, as well.

Live System Information

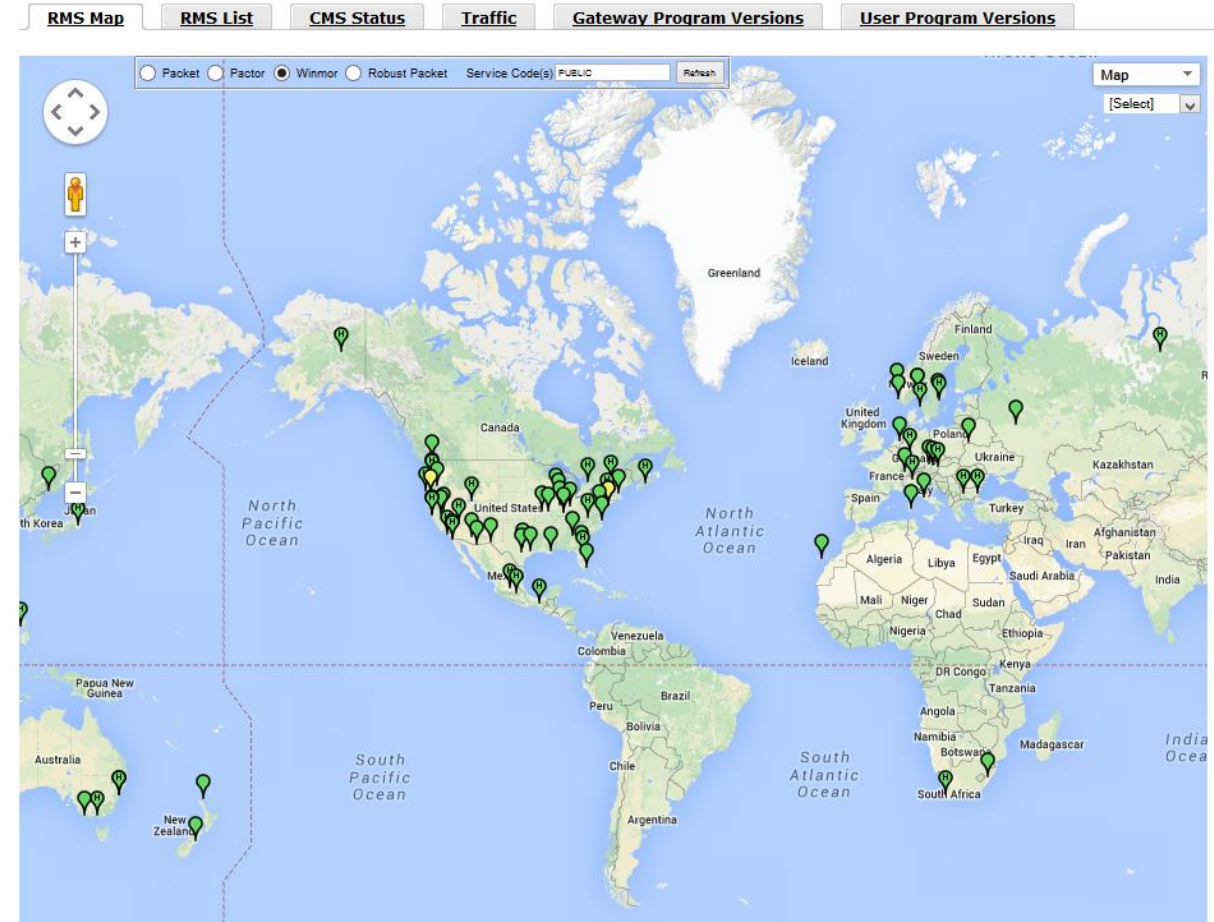


<http://www.winlink.org/RMSChannels>

HF RMS GATEWAYS

- HF RMS Gateways typically scan at least one frequency in each of 80/40/20/15/10m bands
- HF RMS Gateways typically support multiple modes, including WINMOR, PACTOR I/II/III, and Robust Packet
- Many HF RMS Gateways also have integrated VHF/UHF RMS Packet Gateways

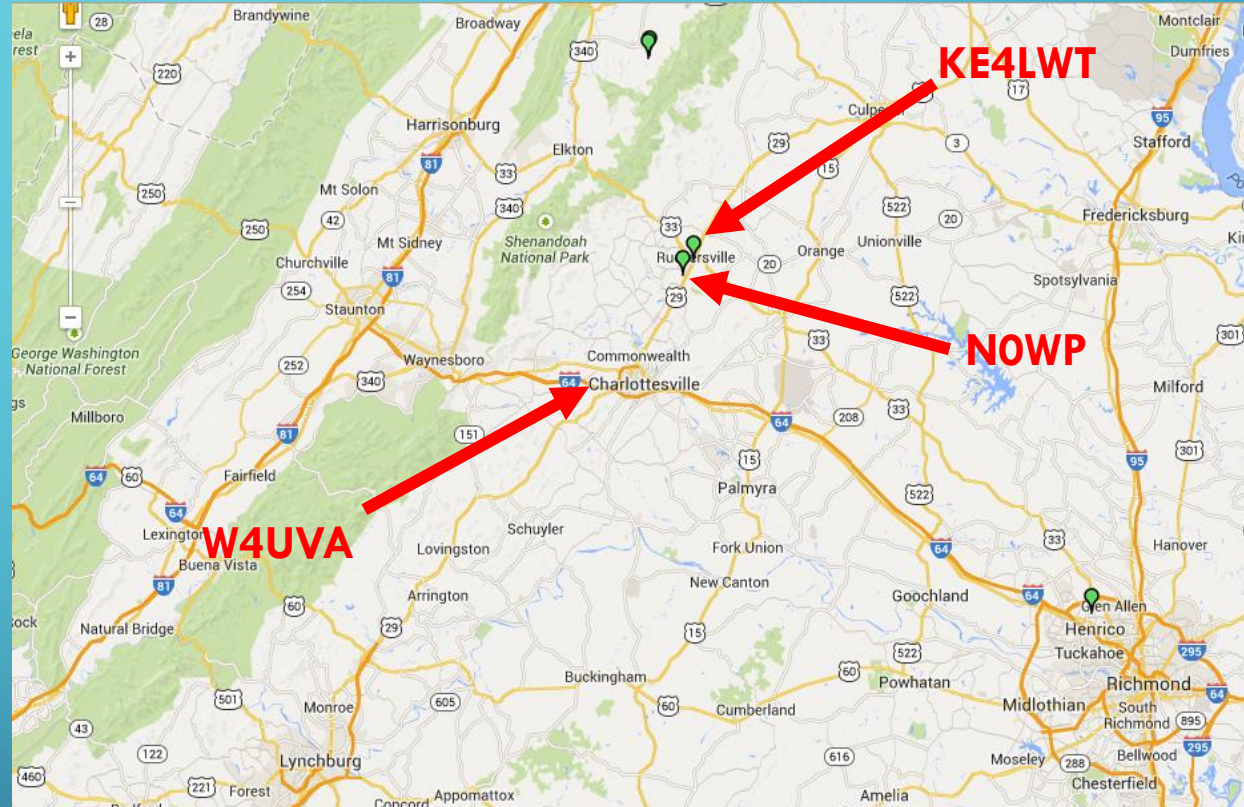
Live System Information



<http://www.winlink.org/RMSChannels>

LOCAL VHF/UHF RMS PACKET GATEWAYS

- KE4LWT – VHF RMS Packet Gateway
- NOWP – UHF RMS Packet Gateway
- W4UVA (coming soon) – HF/VHF/UHF RMS Gateway with RMS Relay (radio all-the-way)



<http://www.winlink.org/RMSChannels>

BUT CAN I DO THIS?

- ABSOLUTELY!
- If your station is equipped with a hardware or software packet TNC then all you need is a free software download to become active on WL2K on VHF/UHF
- If your station is equipped for sound card digital modes (i.e., PSK-31) on HF then all you need is a free software download to become active on WL2K on HF
- Or find yourself a Digital Elmer; there are a bunch in the Club



HF WINMOR SIGHTS AND SOUNDS

The screenshot displays a Windows desktop environment with a blue background. In the foreground, the WinMor Sound Card TNC Ver:1.5.7.0 Port:8500 window is open, showing connection status (DISCONNECTED), receive level, and a waterfall display. To the left, an email client window shows a message from k4cpg. In the bottom right, an HF Channel Selector window is open, displaying a table of HF channels with columns for Callsign, Frequency, Mode, Grid Square, Hours, Group, Distance, Bearing, Path Reliability, and Path Quality.

WINMOR Sound Card TNC Ver:1.5.7.0 Port:8500

Help Hide Send ID
Connection State: DISCONNECTED
TCP Capture OK
Receive: Rcv Level: Remote Station Offset: 11.9 Hz
Rcv Frame: Squelch: 5
Transmit: Avg ACK Percentage: 100
Xmt Frame: 0
Waterfall 2KHz 2500 4FSK / 21

HF Channel Selector

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W4CPG	7099.500	500	FM07BI	12-02	PUBLIC	92	238	84	58
WA3MEZ	7104.000	1600	FM19OJ	00-23	PUBLIC	129	044	85	58
W4CPG	7103.500	1600	FM07BI	12-02	PUBLIC	92	238	84	58
W2GSA-5	7090.500	500	FN20WG	00-23	PUBLIC	277	055	86	54
KB2MMR	7070.000	500	FN20XE	00-23	PUBLIC	278	057	86	54
KQ4ET	3589.000	1600	FM16XU	00-23	PUBLIC	157	121	81	52
WB2LMV	7103.500	500	FN21TS	00-23	PUBLIC	335	039	84	51
W6IDS	7097.000	500	EM79NV	00-23	PUBLIC	367	292	83	51
W6IDS	7061.500	500	EM79NV	00-23	PUBLIC	367	292	83	51
N0IA	14074.900	500	EL98JV	00-23	PUBLIC	652	195	66	48
N0IA	14098.700	500	EL98JV	00-23	PUBLIC	652	195	65	48
WB9FHP-5	7075.500	500	EM68SM	13-02	PUBLIC	434	277	76	47
AJ4GU	7089.500	500	EM83AL	00-23	PUBLIC	441	226	75	47
W6UVV	14117.500	500	EL99VW	00-23	PUBLIC	842	187	76	47
K9BBS-10	7061.000	500	EM68SR	00-23	PUBLIC	435	279	76	47
VA3LKI	10136.500	1600	FN04CR	00-23	PUBLIC	465	352	68	47
VA3LKI	7092.000	1600	FN04CR	00-23	PUBLIC	465	352	73	46

WHERE DO I LEARN MORE?

- www.winlink.org – the source for all things WL2K!
- Google “wl2k getting started” for lots of step-by-step instructions prepared by other ARES® units
- Good videos on the Travis County ARES® YouTube channel at www.youtube.com/user/TravisCountyARES
- Mike KQ9P (mike@kq9p.us)
- Bill N0WP (wdpond@mac.com)

The background is a solid blue gradient. In the corners, there are decorative white line art elements resembling circuit boards or signal paths, with small circles at the end of the lines.

THANKS FOR YOUR INTEREST!

QUESTIONS?

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