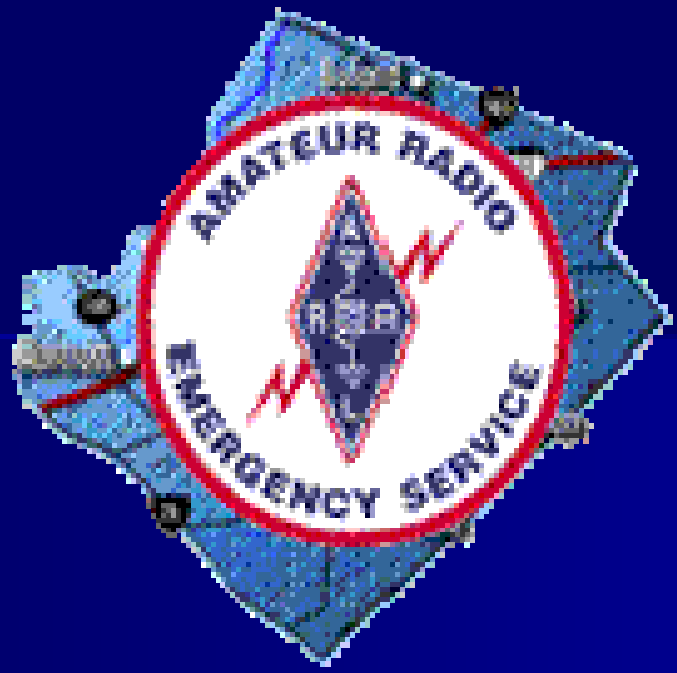


Winlink 2000

May 22, 2007

Gwinnett Amateur Radio Emergency Service

What is Winlink 2000?

Winlink 2000 is a full-featured radio digital message transfer system offering worldwide email transfer with attachments, position reporting, graphic or text-based weather bulletins, and supports emergency communications by linking amateur radio to the Internet.

What does Winlink do?

- Provides “last mile” email connectivity
- Limited file transfer capability
- Bypass of internet outages for messaging
- Utilizes packet modes over HF and VHF
- Uses encrypted, but open standard for more secure transmissions over radio
- In use daily by Amateurs at sea, in jungles and remote areas for email messaging, position reporting and weather reports
- Approved by ARRL for inclusion into ARES communications
- Provides standard email addressing – user@winlink.org

What Winlink is not?

- Winlink is not:
  - For instant message transfer (Winlink periodically polls for messages)
  - For transfer of large files (slow data rate, traffic considerations)
  - For point-to-point communications (requires connection to Winlink network)
  - Internet connectivity for all applications
  - Voice connectivity
  - Repeater linking

Brief History of Winlink

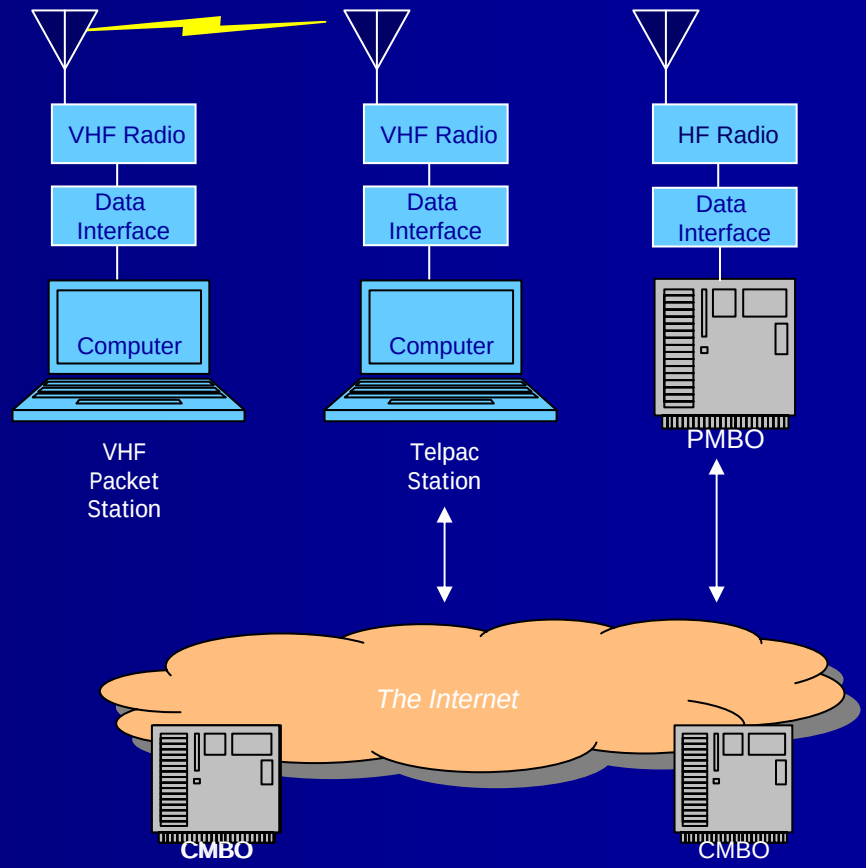
- 1986 – Began as Aplink (DOS) then Winlink Classic (Windows 3.1) for long-haul HF links to community Packet BBSs
- 1997 – Winlink Classic with Netlink and Airmail link HF digital radio with SMTP email
- 2000 – Worldwide Winlink network deployed using the Airmail client provides enhanced messaging over radio while integrating a total Internet interface
- 2006 - Army Military Affiliate Radio System (MARS) has launched the final phase of implementing Winlink 2000 with Airmail as a system-wide communication tool.
- Today – Mature, reliable working global messaging system

Winlink in Georgia

- Used statewide by ARES to support emergency communications
- Telpac nodes operational at Perimeter Mall area, Gwinnett County and Bellsouth Center
- HF test successfully conducted linking GEMA with various parts of state

How does Winlink work?

- Redundant CMBO/CMS (Detroit, San Diego) are common message servers
- PMBOs worldwide connect radio interfaces to Internet
- Local stations connect email programs via PC/radio



What do I need?

- HF Configuration
  - Pactor 1, 2 or 3 modem or 300 baud TNC (Pactor 1 @ 200 bps, Pactor II @ 800 bps. P3 @ 3600 bps.
  - HF Radio
  - Computer
  - Airmail software
- VHF Configuration
  - 1200 Baud TNC (Kantronics KPC-3 most desirable) or Sound Card interface
  - VHF radio with data port or sound card interface
  - Computer
  - Airmail or Paclink/AGW Packet Engine software

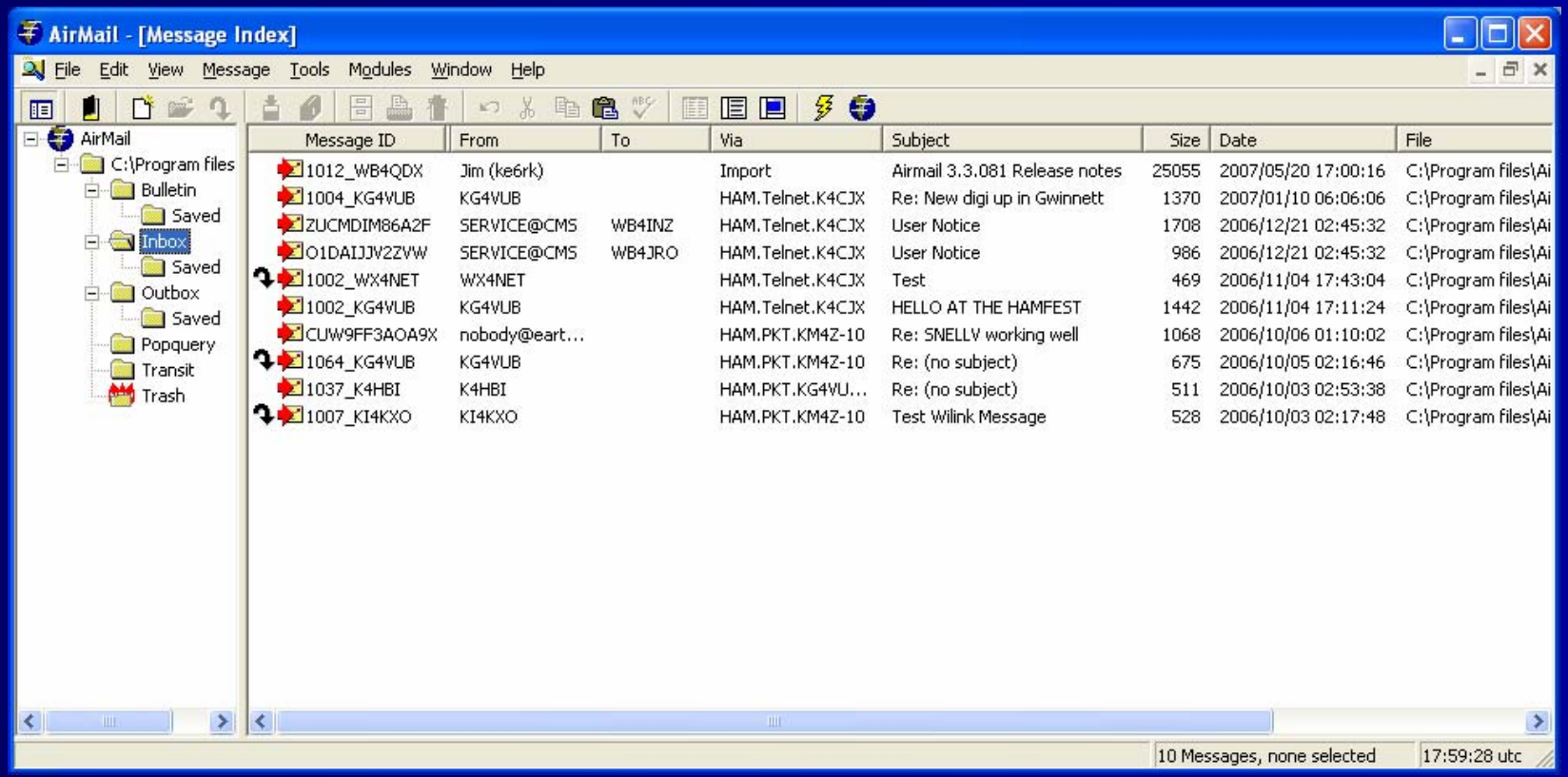
Setting Up Winlink Using Airlink on VHF

- Start with operating VHF Packet station
  - Compatible TNCs

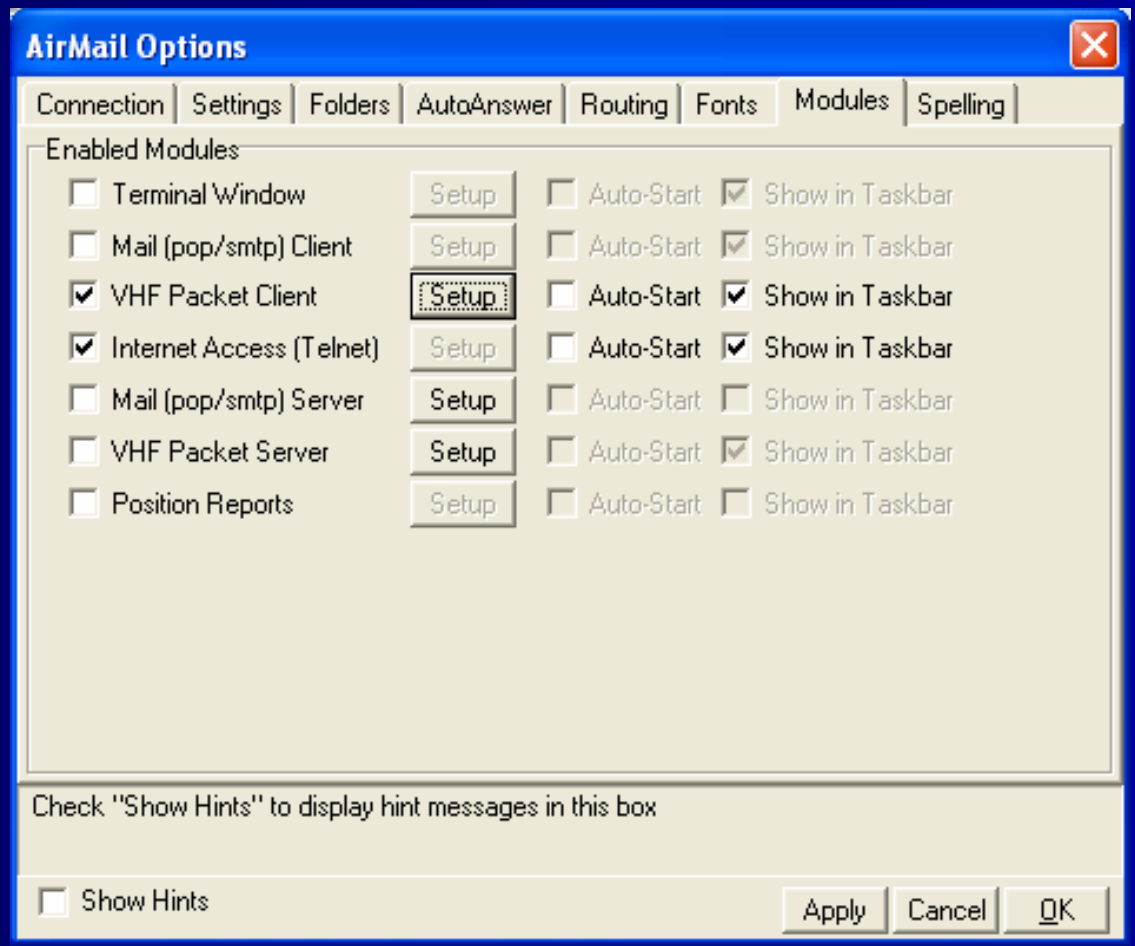
    KPC-3 Kam-98 KAM-XL KAM+ PK-232

    PK-900 DSP-1232 DSP-2232 AGWPE
- Download and install Airlink v3.3 software (http://www.siriuscyber.net/ham/)
- Configure VHF Packet Client
- Configure Telnet Client
- Send email to register your email address

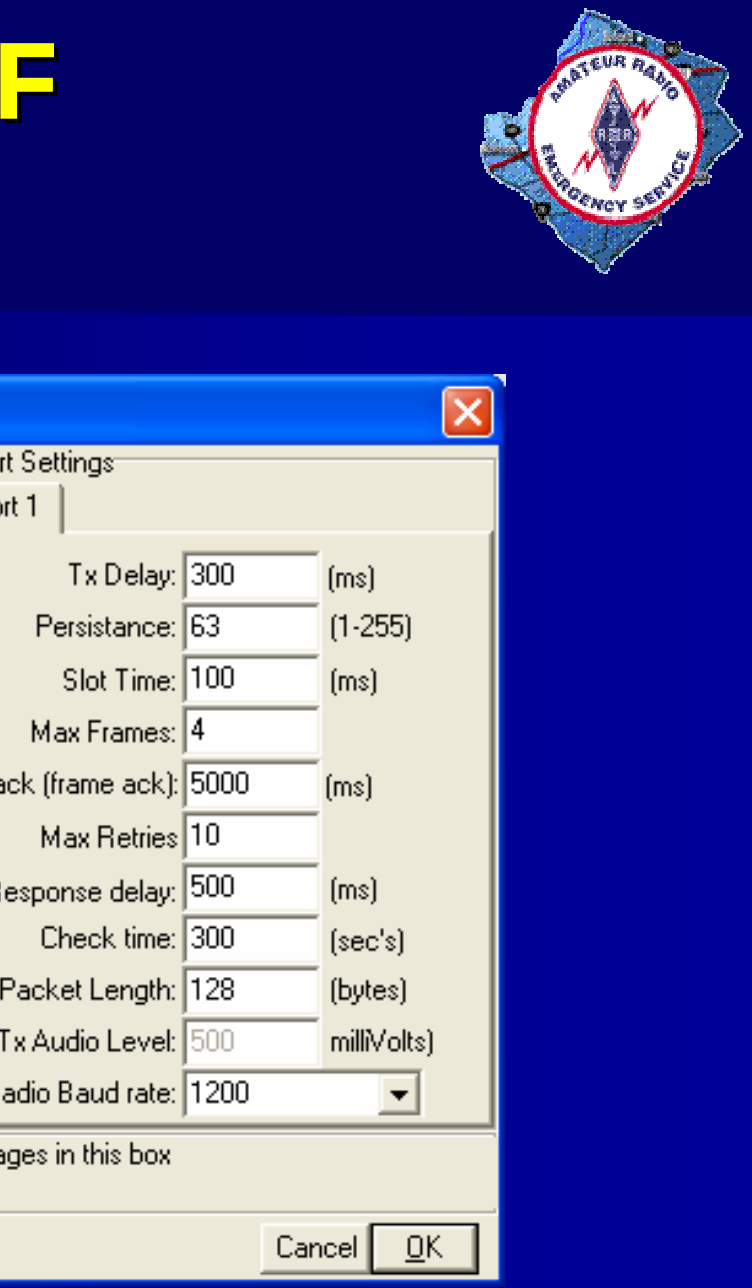
Airmail Main Screen



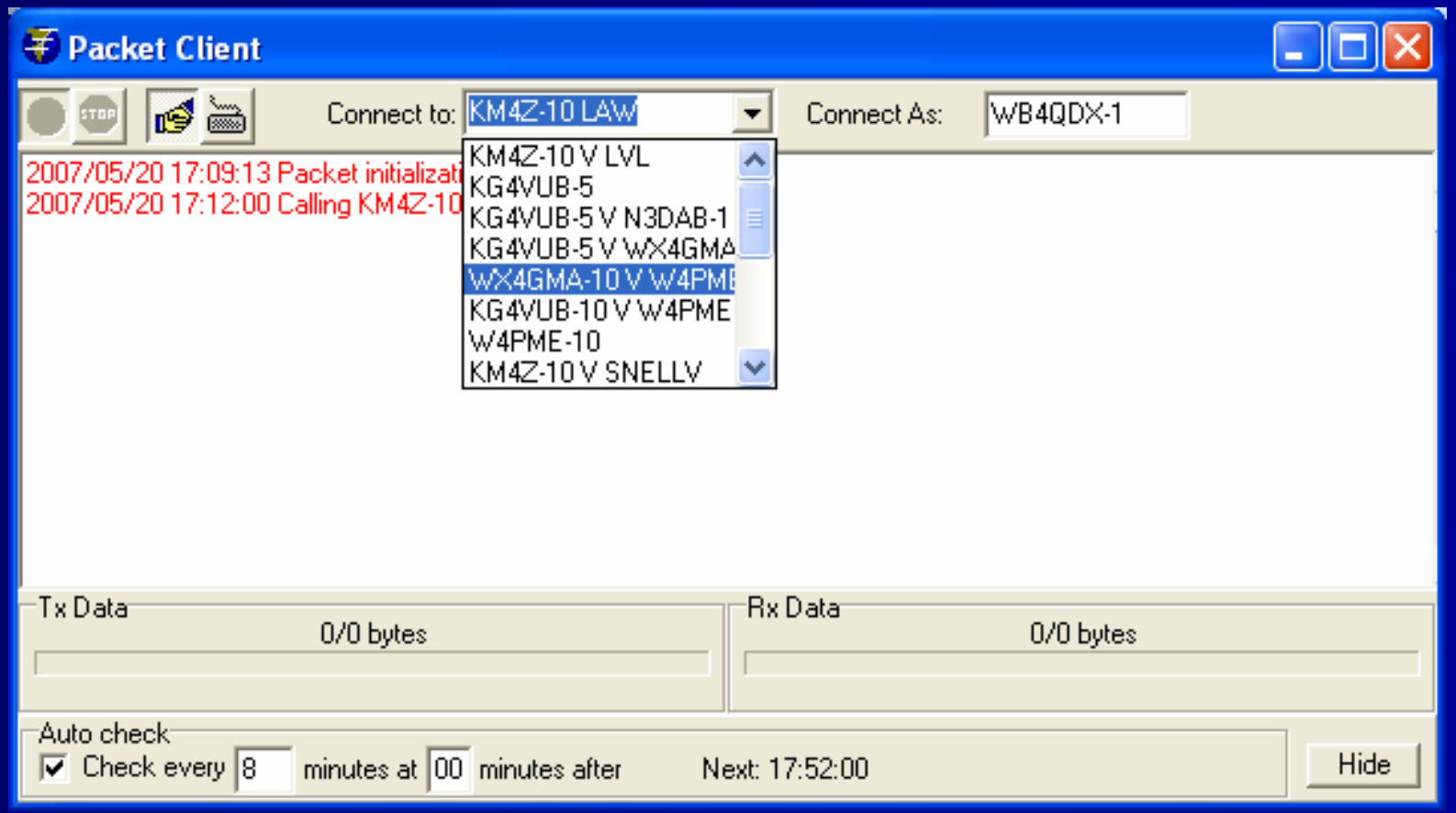
Configuring AirMail



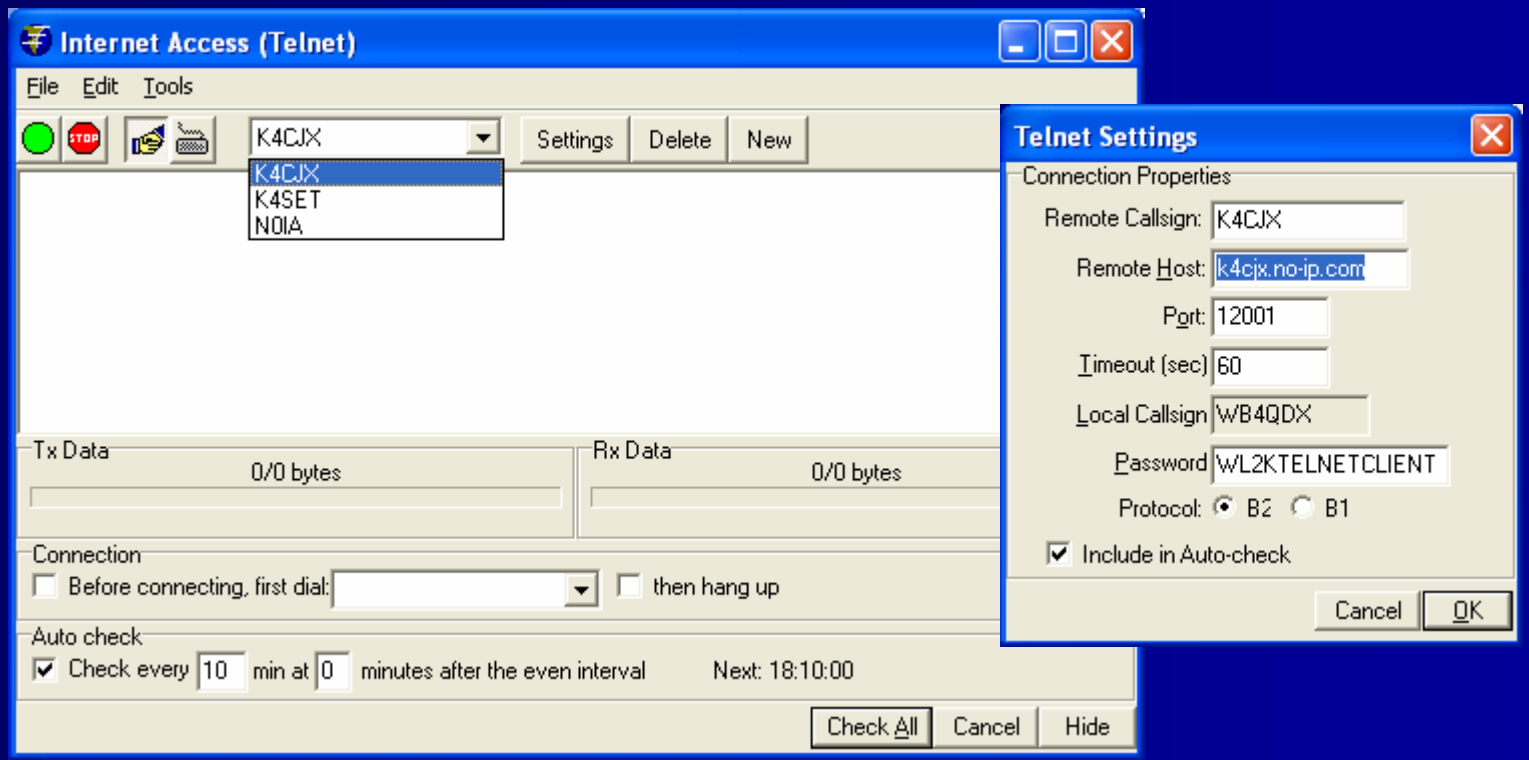
Configuring VHF Packet Client



Setting Packet Stations



Configuring Telnet



Telnet Stations

WL2K PMBO	Remote Host	Port	Password
K4CJX	k4cjx.no-ip.com	12001	WL2KTELNETCLIENT
AH6QK	ah6qk.no-ip.com	12001	WL2KTELNETCLIENT
IV3XHR	iv3n0ia.no-ip.com	12001	WL2KTELNETCLIENT
KA6IQA	6swan.dyndns.org	12001	WL2KTELNETCLIENT
KB6YNO	kb6yno.no-ip.com	12001	WL2KTELNETCLIENT
KN6KB	kn6kb.no-ip.com	12001	WL2KTELNETCLIENT
K4SET	k4set.no-ip.com	12001	WL2KTELNETCLIENT
K7AAE	k7aae.no-ip.com	12001	WL2KTELNETCLIENT
K6IXA	k6ixa.no-ip.com	12001	WL2KTELNETCLIENT
N0IA	n0ia.no-ip.com	12001	WL2KTELNETCLIENT
VE6KBS	ve6kbs.no-ip.com	12001	WL2KTELNETCLIENT
VE1YZ	ve1yz.no-ip.com	12001	WL2KTELNETCLIENT
WA2DXQ	wa2dxq.no-ip.com	12001	WL2KTELNETCLIENT
WB0TAX	208.254.214.102	12001	WL2KTELNETCLIENT
WD8DHF	wd8dhf.no-ip.com	12001	WL2KTELNETCLIENT
WG3G	wg3g.no-ip.com	12001	WL2KTELNETCLIENT
WX4J	wx4j.no-ip.com	12001	WL2KTELNETCLIENT
W7IJ	w7ij.no-ip.com	12001	WL2KTELNETCLIENT
W9GSS	w9gss.no-ip.com	12001	WL2KTELNETCLIENT
ZL1MA	zl1ma.no-ip.com	12001	WL2KTELNETCLIENT
ZL2UT	zl2ut.no-ip.com	12001	WL2KTELNETCLIENT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