



Winlink 2000 **Digital Messaging for ARES®**

Winlink Weekend

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DEC for Digital communications
GAARES

For more information try these websites

<http://winlink.org>

<http://kc4zgq.com>

If you would like to discuss and help develop the Georgia system using any digital modes please join my online forum at:

<http://www.kc4zgq.com/phpBB/>

There is a mailing list that supports Winlink deployment for Emergency communications at:

<http://groups.yahoo.com/group/wl2kemcomm/>

Goals of the Winlink Weekend classes.

By the conclusion of the class each person attending should be familiar with and able to define some basic concepts as they relate to the Winlink system in general and the Georgia statewide network that is under design. They will also be able to describe some of the key differences between Winlink and other packet systems and understand the system core and user client components of the Winlink system.

Key concepts:

1. The last mile
2. Interoperability
3. Robustness
4. Flexibility / Universality.

Differences and similarities between Winlink and other packet systems.

1. The cellular model
2. Addressing schemes
3. Various types of equipment that can work with Winlink
4. The role of non-winlink digital systems

Glossary of terms (system core)

CMS: Central message server.

- This is the main hub of the system. There are three with full-time redundant mirroring of each other and real-time failover. They are geographically dispersed. The PMBO's connect here.

PMBO: Participating Mail Box Operator/Office.

- This is the primary hub for user connections. Most support Telnet and many support VHF and HF connections.

EMCOMM PMBO: PMBO dedicated to Emergency Communications

- It has the same functions and capabilities but may not be a full time system or have all the modes of a full PMBO. Its primary function is to maintain local communications if the internet is down in a large local area. Some use the Icom D-Star radios to provide 30+ mile links that can keep two distant areas linked full time.

Glossary of terms (User clients)

Airmail:

- This is the primary single user client for both HF and VHF. All ARES members who expect to deploy at any time with a computer in their jump kit should at the download this program and TelPac. Airmail also has a built in Telnet client that functions much like the old offline mail reading programs like Juno™.

Telpac:

- The name means TEL net to PAC ket bridge. This is exactly what it does. It is the program that allows the ham operator to bridge the "Last Mile" on VHF. Quickly, easily, and cheaply.

Paclink:

- This is a more complex user client but it has considerably more flexibility. Paclink can have up to five predefined fail back modes. It can also function as a stand alone SMTP mail server for an entire EOC network. It can do this without requiring that it be installed behind the agency firewall. Messages are sent using the agencies own E-mail programs.

Goals of the Winlink Weekend classes

By the end of the class each attendee will have had an opportunity to use Airmail to send and receive a message via either a direct Telnet or RF based TelPac link.

When the user accesses the system with their callsign they will be registered with a callsign@winlink.org address that will allow them to send and receive email using the Airmail Program to and from the internet.

They will have had an opportunity to ask and have answered basic setup and configuration questions. Each attendee should, at a minimum, be able to setup and configure Airmail with their callsign, compose a message and post it for sending. They should be able to initiate and configure the telnet client using the information provided in this document.

Each attendee will be provided the links needed to download the latest version of the three main client programs. If they have a laptop they will be able to install the software but may not have time for through testing. This is more a function of available resources than for any other reason.

One key thing to keep in mind is that all the programs used in Winlink are free for Ham use. Furthermore, the source code, while not open source, has been escrowed so that in the event of a developers loss of interest or inability to continue development the program will not die.

AirMail Telnet Client setup.

Go to AirMail 3.x menu item: "Tools>Options>Modules" and check the Telnet Client. If you wish you can also set the module to initialize when bringing up Airmail by also checking "autostart." However, if you wish to start the module manually, then go to menu item: Module>Telnet client."

Below are the settings for Airmail 3.x Telnet module option for the PMBOs supporting a Telnet Server:		
Remote Call Sign	K4CJX	These are the same settings used to setup the TelPac gateway. A TelPac gateway allows an Airmail station to bridge the last mile in an area with an Internet outage. Below are several more to get you up and running. You can enter several by selecting new from within the telnet client.
Remote Host	k4cjsx.no-ip.com	
PORT	12001	
Timeout in seconds	30 - 120	
Password	WL2KTELNETCLIENT	

AH6QK
ah6qk.no-ip.com
12001
120
WL2KTELNETCLIENT

K6IXA
k6ixa.no-ip.com
12001
120
WL2KTELNETCLIENT

WG3G
wg3g.no-ip.com
12001
120
WL2KTELNETCLIENT

HS0ZER
Hs0zer.no-ip.com
12001
120
ANGELCITY

N0IA
n0ia.no-ip.com
12001
120
WL2KTELNETCLIENT

WX4J
wx4j.no-ip.com
12001
120
WL2KTELNETCLIENT

IV3XHR
iv3xhr.no-ip.com
12001
120
WL2KTELNETCLIENT

VE6KBS
ve6kbs.no-ip.com
12001
120
WL2KTELNETCLIENT

W7IJ
w7ij.no-ip.com
120001
120
WL2KTELNETCLIENT

KA6IQA
6swan.dyndns.org
12001
120
WL2KTELNETCLIENT

VE1YZ
ve1yz.no-ip.com
12001
120
WLK2KTELNETCLIENT

W9GSS
w9gss.no-ip.com
12001
120
WL2KTELNETCLIENT

KB6YNO
kb6yno.no-ip.com
12001
300
WL2KTELNETCLIENT

VK6KPS
vk6kps.no-ip.com
12001
120
WL2KTELNETCLIENT

ZL1MA
z11ma.no-ip.com
12001
120
WL2KTELNETCLIENT

KN6KB
kn6kb.no-ip.com
12001
120
WL2KTELNETCLIENT

WA2DXQ
wa2dxq.no-ip.com
12001
120
WL2KTELNETCLIENT

ZL2UT
z12ut.no-ip.ORG
12001
120
WL2KTELNETCLIENT

K4SET
k4set.no-ip.com
120001
120
WL2KTELNETCLIENT

WB0TAX
207.254.214.102
12001
120
WL2KTELNETCLIENT

k7aae
k7aae.n0-ip.com
12001
120
WL2KTELNETCLIENT

WD8DHF
wd8dhf.no-ip.com
12001
120
WL2KTELNETCLIENT

Information on this page was retrieved from the Winlink system using the catalog function in the Airmail client. It may be out of date please use the catalog function from within Airmail to retrieve any updated information.