

Testing of Winlink 2000 during the Simulated Emergency Test October 1 2005

Background:

A challenge was issued by Mike Boatwright KO4WX several years ago to develop a way to communicate with the Georgia coast using digital communications. The impetus behind this challenge was largely a result of GAARES experiences in preparing for Hurricane Floyd. With the installation of a Pactor III station in Brunswick during 2005 by Garry Harley KD4NUD this challenge has been met by this group. With the recent installation of Airmail at GEMA SOC using a Telnet link the path is half way completed. GEMA needs to have a RF link to an alternative set of ISP connections and this work is in progress. There is now a need to assess the best methodology for completing the initial phase of the roll-out and to begin planning the integration of other areas of the state.

Current situation:

GAARES is in the early stages of a planned rollout of the Winlink system state wide. The basic design concept utilizes the internet as the primary backbone to replace the traditional need for multiple preinstalled Digipeaters and Nodes. The Winlink system also includes predefined methods for multiple identified failover modes. During the initial rollout phase a key goal is to begin enhancing the number of amateurs who are familiar with Winlink. It is anticipated that by increasing the knowledge base of interested amateurs an increase in the actual installed user base will occur. To achieve this increased knowledge base a series of "Winlink Weekends" have been held at several locations around the state. Based on the response to these classes I am proposing that we assess the installed user base during the upcoming Simulated Emergency Test.

Test of Winlink 2000 during the Simulated Emergency Test October 1 2005

Proposal:

During the simulated Emergency Test scheduled for October 1 2005 GAARES should engage in a test and assessment of the installed user base of the Winlink Airmail user client. This test will include the issuing of messages from GEMA SOC to self deployed amateurs who have pre-identified themselves with GEMA as being Airmail capable. It is explicitly stated that direct telnet access to the internet using the Airmail client will be acceptable.

Rationale:

1. By identifying those individuals who have begun using the Airmail client and who have it operational in any manner, GAARES will be able to begin implementing a more structured roll out of the system.
2. Generating a list of stations with Airmail capability will help in assessing coverage potential and allow identification of those areas where Winlink classes could have the greatest impact.
3. By utilizing the system in an actual event it will help promote it and generate interest among hams who may have heard of Winlink but who have never attempted to use it.
4. The primary goal of this test is not to assess the RF capabilities of a currently non-existent network but rather to enhance awareness of and to test the viability of the Winlink Client programs, in particular, the Airmail client. To achieve this goal the use of internet only telnet connections is specifically stated as being both acceptable and desirable.
5. In reference to #4 it will also be completely acceptable for any station to use a pre-existing RF route if they have the capability. If an RF route is used this fact should be noted in each message sent so that the RF route can be noted and assessed for reliability.

Implementation:

Every Station with Winlink capability is encouraged to participate in the SET on October 1 2005. To help enable this to occur a list will be generated of all stations who have previously identified themselves as having Winlink capability. This document will be distributed to these stations and via the GAARES mailing lists.

Procedure:

1. On the morning of October 1 2005 all stations are requested to check in with kc4zgg@winlink.org and then standby on a modified alert status. In this status you are requested to check your Airmail inbox every 30 minutes for any incoming traffic. While on this status you may engage in any other activities related or unrelated to the SET.
 - At some point the GEMA SOC will begin sending requests for general check ins to those amateurs who are on the GAARES Winlink Roster. Please respond via your Airmail client using this format:
 - **SUBJECT LINE** { COUNTY, CALLSIGN, AGENCY *if appropriate* }
 - **BODY** { Short message detailing your setup. Please include a more specific location IE: North Bibb county. Also include your station capabilities to include emergency power options that you have available.}
 - **SIGNATURE** { FULL NAME, CALLSIGN@WINLINK.ORG }
2. Once you have done this you may return to modified alert status as detailed above.
 - GEMA will send more information to include some files that will arrive as attachments. When you receive these please read or view them then return them to me as an attachment. { To attach a file in Airmail create a new message and use the attach file option under the FILE menu.}
3. If conditions and time allow some stations may be asked to route a message sent from GEMA via Winlink back to GEMA via HF or VHF voice as an exercise in traffic handling.

Rationale for modified alert status:

Digital systems and modes should not normally be used for time critical communications that are better handled on voice modes. However, digital modes do provide a highly effective way for stations to monitor a developing situation while not being required to remain at a single location as is commonly the case when monitoring a voice net. Therefore a modified alert status is justified when no time critical communications are anticipated or when a given station must make a choice between no participation or limited participation. This type of situation might occur during sleeping hours or during setup and maintenance of equipment and hardware. The Airmail client provides access to a global store and forward network that enable the proposed modified alert status to work. Any station that is checked in to the GEMA SOC via Winlink needs to state their intention to operate on modified alert status including stating how often they will be checking for traffic. It is anticipated that the maximum interval between checks should be no more than 8 hours in the case of sleep time on extended deployments and 1 hour otherwise. For the purpose of the October 1 2005 SET the time interval is pre-set at 30 minutes to preclude excessive waits for responses.

Georgia Amateur Radio Emergency Service Winlink address roster

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Please send any NEW OR CORRECTED information to

kc4zgg@winlink.org

Enter your capabilities as: **TEL**net, **VHF**, **HF**, as shown below.

COUNTY	NAME, AGENCY	CALLSIGN	Winlink email address.	Capabilities
	GEMA SOC	WX4GMA	wx4gma@winlink.org	TEL
Houston CO	RED CROSS	KI4GCA	ki4gca@winlink.org	TEL
	GA BAPTIST HAMS	W4CBA	w4cba@winlink.org	TEL, VHF, HF
Cherokee	Cherokee County ARES®	WA4EOC	wa4eoc@winlink.org	
Bibb	JOHN	KC4ZGQ	kc4zgg@winlink.org	TEL, VHF
Camden	VINCE	KD4KOE	kd4koe@winlink.org	TEL
Camden	CHUCK	N4TIS	n4tis@winlink.org	TEL, VHF, HF
Camden	JOHN	WD8LQT	wd8lqt@winlink.org	TEL
Candler	LEON	W4TYM	w4tym@winlink.org?	VHF, HF
Cherokee	TOM	KG4VUB	kg4vub@winlink.org	TEL
Cobb	RONNY	K4RJJ	k4rjj@winlink.org	TEL
Cobb	Darragh	WA6IKS	wa6iks@winlink.org	TEL
Coweta	DAVID B.	AG4ZR	ag4zr@winlink.org	TEL
Dekalb	LARRY	K4LED	k4led@winlink.org	TEL, HF
Dekalb	TOM	KE4QCM	ke4qcm@winlink.org	TEL
Dekalb	MIKE	KO4WX	ko4wx@winlink.org	TEL
Dekalb	STEVE	N4SEG	n4seg@winlink.org	TEL
Dougherty	LEON	K4GCR	k4gcr@winlink.org	TEL
Fulton	DAVID Z.	KE4QLH	ke4qlh@winlink.org	TEL
Fulton	VICTOR	KI4HPX	ki4hpx@winlink.org	TEL
Gilmer	BILL	WB4HAT	Wb4hat@winlink.org	TEL
Glynn	GARRY	KD4NUD	kd4nud@winlink.org	TEL, VHF ,HF
Glynn	DAVID	KD4NUE	kd4nue@winlink.org	TEL
Glynn	CHARLES	WD5ECL	wd5ecl@winlink.org	TEL, VHF, HF
Gwinnett	BOBBY	KG4RBL	kg4rbl@winlink.org	TEL
Hall	ROBERT	WB4DHC	wb4dhc@winlink.org	TEL
Muscogee	BURCH	W4WY	w4wy@winlink.org	HF
Newton	CARL	AG4LS	ag4ls@winlink.org	TEL
Newton	JIM	K4DOI	k4doi@winlink.org	TEL, VHF
Newton	TOM	K4TDM	k4tdm@winlink.org	TEL
Newton	JAY	KD4QOV	kd4qov@winlink.org	TEL
Newton	BRIAN	KI4JIL	ki4jil@winlink.org	TEL, VHF
Newton	CHARLES	WA4UJC	wa4ujc@winlink.org	TEL
Oconee	ED	N4ZRA	n4zra@winlink.org	TEL
Peach	CHRIS	AE4XO	ae4xo@winlink.org	TEL, VHF
Wayne	GREG	N4VAD	n4vad@winlink.org	TEL