2005 Annual Meeting
ARRL Board of Directors

Report of the ARESCOM, Ad Hoc Committee on ARES$^{©}$ Communications

Committee Goal:

Develop a proposal for an improved national emergency digital communications network capable of moving served agency and public traffic anywhere in the country within an hour --- under autonomous ARRL control.

Objectives:

- To develop a digital emergency communications network that provides e-mail capability via amateur radio utilizing all available resources and tools.

- To establish a standard emergency communications protocol that embraces the entire ARRL Field Organization -- ARES$^{®}$ and related volunteer organizations.

- To provide a national plan that would better address the required emergency communications needs of government and public service agencies in today's dynamic environment.

- To make suggestions for optimization of the digital emergency communications network, such as the crucial need for proper bandwidth appropriations.

- To establish a working committee – under ARRL guidance -- for oversight and management of this network.

- To formulate follow-up guidelines for measuring successes and areas for improvement, with periodic reports to the ARRL.

January, 2005 Update:

Working together, the ARESCOM committee has developed a flat-layered national emergency communications digital network that fully integrates all existing ARRL Field Services Organization participating amateur radio station addresses and Internet addressees. Upon implementation of this plan, the Field Organization will complement its existing capabilities by adding the means to handle "real time" radio email message traffic anywhere in the U.S., or throughout the rest of the World, within minutes. Amateur Radio, digital emergency communications will provide our government and public service agencies the ability to survive infrastructure loss within the "last mile" as well as over long distances.

The details for Source Code protection for Winlink 2000 have been submitted by the Winlink Development Team to the ARRL CEO.

The foundation and basic plan has been proven through testing and a virtual "initiation by fire" via participation in the Southeast hurricanes, the hurricanes in South America, and more recently, in the Asian tsunami disaster aftermath, albeit on an international scale.

With all the wonderful successes, a critical underlying factor has surfaced. There is currently insufficient amateur spectrum available for wide-bandwidth, error-free ARQ modes on the HF bands. Whether using Digital Voice, Digital Image, or Digital messaging, adequate bandwidth is essential and crucial to their effective and efficient use and for the future of Amateur Radio.

W1AW Update
Currently, the Winlink Telpac Gateway at W1AW is operating 24/7 for local experimentation and demonstrations. The TNC is an MFJ-1278 (1200 Baud), transceiver is an Alinco DR-605 on 145.04 Mhz. and antenna is an AEA IsoPole for 2 Meters.

For HF, the ICOM-756 Pro is running Airmail via the SCS-Pro II Modem, with the latest versions of Telpac, Paclink and Post Office, on a PC Pentium 350 running Windows 98 (2nd Edition).

If the BoD would like a Winlink demonstration during their January visit, this will be possible.

Digital Survey Results
DCTI Reflector currently has 38 members. Survey questionnaires received included 172 entries.

Of interest are the following:
87% are not tied to Winlink Classic (predecessor to Winlink 2000).
56% are connected to systems using the Internet; 53% are not.
78% are connected to Winlink 2000.
41% use POP3 to receive packet messages; 47% do not.
55% use SMTP to send packet messages; 53% do not.
89% handle NTS messages through this site.
2 Meters and 20 Meters are the predominantly used bands.
Median power used is 65 watts.
PacCom and KAM Plus are the predominantly used TNCs.
Approximately 75% use omnidirectional antennas; 25% use yagis.

In the Winlink 2000 system there are over 500 Telpac Gateway stations, 37 public PMBOs and 14 ARES® PMBOs already registered in the US and Canada, with a total of 60 stations operational Worldwide.

Recommendations:

1. That the P&SC express appreciation to the ARESCOM Committee and all the volunteers who worked long and hard to develop an excellent basic plan, and managed the many existing ARES® implementations.

2. That the P&SC strongly urge the appropriate authorities to adopt statement number 4 in the FCC NPRN RM-10740, dated Wednesday, November 24, 2004: "Voluntary band planning allows amateur stations that desire to pursue different operating activities, to pursue these activities by dividing or segmenting the amateur service spectrum. Voluntary band planning also allows the amateur service community the flexibility to "reallocate" the amateur service spectrum among operating interests as new operating interests and technologies emerge or operating interests and technologies fall into disfavor."

3. That the P&SC urge the BoD to encourage the ARESCOM Committee to continue with their efforts by working out the final details for implementation of a workable plan with ultimate administration and final decision-making to remain the sole responsibility of ARRL.

4. That the P&SC encourage the BoD to establish the ARESCOM Committee as the permanent management tool to oversee the execution and implementation of this plan including providing of an ARRL Server to contain the Winlink 2000 Source Code.

5. That the P&SC recognize the need for additional spectrum for Digital Data Modes in the ARRL Voluntary Band Plan, and recommend to the BoD that their Proposal be modified to allow the required changes to preserve current Digital Modes as well as to allow for experimentation and development of future Digital Systems.

Respectfully Submitted by

Dick Mondro, W8FQT
Chair, ARESCOM
January 16, 2005