Operation Deep Freeze
After Action Review Summary

The stated goals for this exercise were to incorporate multiple agencies, jurisdictions and modes from across the Commonwealth of Virginia. We also wanted to move traffic within and between these various locations and groups.

The first part of our goal was accomplished as various agencies and jurisdictions choose to participate prior to the cut-off date for enrollment. A portion of the second part, the use of various modes, was helped along as jurisdictions with no Winlink capability worked many hours to setup Winlink stations and RMS gateways. Some of these were rushed to completion just prior to the exercise. The use of WXSpots as a tool for the Skywarn part of the exercise was a first that I am aware in the Commonwealth of Virginia. People came from outside their jurisdiction and in some cases from outside their state to support the Simulated Emergency Exercise and this illustrated the true meaning of Amateur Radio Mutual Assistance. Disaster knows no geographical boundaries and neither should we when it comes to providing assistance to those in need.

Problems Encountered

At least one Winlink TNC underwent a battery change right prior to the drill. This wiped out all the memory and settings in the TNC and there was no time to go back and reset these in the middle of the drill. The operator shifted to voice and handled all the traffic with voice. Battery changes should be executed and the TNC checked prior to the drill. With WXSpots it was discovered that the National Weather Service could have handled a much heavier volume of traffic if those in the field could have had dedicated operators to key in the information. This would have freed up additional voice capacity for the local collection of weather data.

The issue of forms surfaced again this year. This was most apparent with message forms. The opinions varied from “We should use Radiograms” to “No message forms are necessary. Of course all “canned messages” were sent out as ICS-213 General Message forms. This brings us back to the mission. Our mission is to get the information from point “A” to point “B” sometimes having to go through point “C” to get there. The message needs to be in clear language that is free from technical lingo and special codes that are understood perhaps only by those using the radios to pass these messages. With Part 90 radios, (public service) the use of “10” codes have been in standard use for years. It was discovered that the meaning of these codes varies from jurisdiction to jurisdiction. The ICS has stressed that communications are to be in plain language. For Hams this means no “Q” signals or ARL message numbers. Back to the question of do we need to use forms? My view is not always. If you are sending a Winlink message from one person to another person direct without any relay within the agency, it could be sent as Winlink e-mail and all the information that is needed to reply is within that message. If a bulletin is being sent and was designed to be read on the air or
disseminated to a group and requires no response, there is no need for it to be placed in an ICS-213 General Message form. If a message is being sent through NTS then the Radiogram should be considered.

Many government agencies use ICS-213 as their standard message form. In our drill this included the Virginia Department of the Emergency Management and the Virginia Defense Force. Many county agencies are now making use of WEB EOC which is emergency management software that is rapidly becoming the standard for emergency response across America. This also incorporates the ICS-213 message form and requires the use of the SALT system for ordering resources for a disaster response. As Amateur Radio operators, it is not our place to attempt to dictate the forms that we will use. We pass traffic and are not the decision makers as to why an agency wants things handled in a given way. About all stations complied with using the ICS-213 where it was needed.

Winlink Problem Areas

The exercise demonstrated the ability to handle large volumes of traffic with over 250 connects being recorded through a single RMS gateway. Most problems were found where a station was serving as a net control on two meters and was attempting to pass 2-meter Winlink traffic at that same location. When Winlink was located with a non-net control station there was plenty of space between voice transmissions to allow for the passing of Winlink. We were able to pass photo attachments with stations running both 2-meter voice and Winlink. In the future, net control stations should operate in separate locations from Winlink stations. You would have the same problem with if you tried to operate two voice stations on the same band at the same location. We had stations operating HF Winlink and these had problems with industrial noise in the area of their operation. This needed to be corrected by re-routing coaxial cable. Other HF Winlink stations worked flawlessly.

The Virginia Defense Force

The Virginia Defense Force operated all Winlink during the exercise. This was done by using MARS RMS HF gateways or Telnet. They had a few minor problems in the early going but were able to correct these on the fly and to send and receive all messages during the drill.

The Virginia EOC

The special service group Amateur Radio Communications Auxiliary (ARCA) provided the Amateur Radio staff for the Virginia Department of Emergency Management. They served as net control for the ODEN HF, monitored 147.33 for 2-meter traffic coming from SW Virginia, monitored, received and sent traffic on both Winlink and packet. They also provided technical assistance for the Virginia Baptist Mission Board in Richmond on Winlink noise problems.
Summary

There were 65 hams in addition to the VDF personnel and over 1000 pieces of traffic were passed. There was a wide distribution of agencies represented from Red Cross, fire, rescue, emergency management, hospitals, search and rescue, VDF, VDEM-EOC and National Weather Service. With Amateur Radio there was ARES, RACES, ARCA, and MARS involved with passing of traffic.