

Makani Pahili (Hawaii Hurricane Exercise) 2014

KH7CR/After Action Report (AAR)

What do we expect to happen?

This section is being written prior to the event to take place on May 31, 2014.

Our role, (KH7CR, WH6CR, KH6DQ and KH6GL) as assigned by Honolulu County DEM-RACES is to provide radio communications for the Manoa Valley Church, which is a designated congregate shelter by the American Red Cross for the purposes of this exercise. We are under the assumption that the grid is shut down, so other forms of communications that depend on the grid are, for the most part, unavailable to the shelter. The mission is to communicate shelter-related messages to the DEM EOC net and to the American Red Cross HQ on UHF, VHF and HF/SSB established frequencies, in phone and digital modes (FLDIGI-MT63-1KL). Repeaters with battery backup power and simplex options will be exercised.

Expectation is that the shelter manager/staff will be present when we arrive or shortly thereafter – exercise officially starts at 8 am, we will be there an hour or so earlier – and after introductions and a brief overview, we will be able to begin setting up the stations and antennas. Since we have visited the site on a couple of previous occasions, we hope that the shelter manager will accept our recommendations for room location and antenna placement.

Two stations will then be set up. One HF station, with either battery or generator backup, will feed into a multi-band dipole. A computer for digital communications will be dedicated to the HF station. This station will be manned by KH6DQ. A second station for VHF/UHF communications will be set up feeding into a J-pole antenna. A computer will be dedicated to this station as well for digital, with the station and computer running off deep cell batteries. This VHF/UHF station will be manned by KH7CR. KH6GL will monitor other VHF/UHF frequencies and nets using HTs and also act as a back-up operator to the two major stations. WH6GR will assist with logging, set up and monitoring. There will be back-up rigs for each station.

We expect the stations/antennas to be set up efficiently and that all equipment will work. We expect to have all critical exercise information, ICS 213 and other forms, at the ready. We expect to be able to establish communications with the DEM-RACES Exercise net and the American Red Cross repeater and participating stations using assigned simplex frequencies. Any problems that arise, we expect our tools, supplies, back-ups etc. will be sufficient to handle them.

The shelter manager should have at minimum two detailed shelter reports to send back to ARC HQ. These should be transmitted in digital format. HF digital communications will be attempted. Problems in the past with ARC HQ and DEM-EOC

HF communications may still affect the exercise. Other messages to, or from, DEM-EOC/ARC HQ will be communicated as required.

Fred Fortin
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District 1,6,7 ARES EC
5/22/14

AAR re Manoa Valley Church Shelter communications during Makani Pahili Hurricane Exercise. 5/31/14

What went well?

All of the Manoa radio communications team arrived on time (6:30 am) at the site. They were Fred (KH7CR), Betty (WH6GR), Jack (KH6DQ) and Gordon (KH6GL). The team quickly began to set up the external HF di-pole, coax feed line, generator and power line. This set up fed the HF radio communications, computer and portable printer.

Shelter Manager (SM), John Miller, arrived about 7:00 am as did the facility manager to open the building. The DEM-EOC letter of introduction was given to the SM and agreement was reached on the location of the radio room. The team then assembled the gear in the radio room. VHF/UHF antennas (j-pole, mag mount/whip) were deployed outside the building on a flat roof; HTs were used as secondary monitoring radios with one using a portable j-pole tape to a window.

By 8:00 am both HF and two (2) VHF/UHF stations were on the air at the Manoa Shelter. HF ran 100 watts. Given the multiple VHF/UHF frequencies in use, two radio stations were very necessary to monitor relevant communications. The primary transmitting VHF/UHF station ran on 10 watts low power. Two deep-cell batteries provided more than enough power for all VHF/UHF radio gear, computers for the 4-hour duration of the exercise. Access to the generator for recharging batteries was possible if needed.

KH7CR checked into the DEM-EOC VHF/UHF Net using tactical call sign "Manoa Shelter" at 9:16 am. Although the exercise scenario assumed the loss of commercial grid power, and indeed shelters communicated using emergency power, the critical repeaters used by the DEM-EOC and ARS were assumed to be operative given the other objectives of the exercise regarding proper message handling.

On HF, five (5) ICS 213 messages sent, four (4) received. All were on FLDIGI MT-63-1kl. On VHF, six (6) ICS 213 messages were sent, two by voice, the rest by FLDIGI MT-63-1kl including the one (1) new long form Shelter Manager's Report. Communications quality with DEM-EOC and ARC were excellent on both HF and VHF. The exercise did not include any simplex testing.

Relationships on the ground with the shelter leadership staff were very friendly and helpful. A number of official observers were present including two mass media news stations with video cameras. Two stories on the exercise subsequently appeared (KITV/KHON) on local TV news featuring the Manoa Church shelter and the role of Amateur Radio.

The team felt the exercise was a successful training event and enjoyed the challenging experience.

What needed improvement?

We understand that under a disaster event, some of the following comments may be irrelevant or impossible to achieve depending on the circumstances. We know we have to work with what is left in a real disaster. We just hope that our feedback will help in the design of effective future training exercises.

Shelter staff would approach radio operators with hand written notes that then took one of our operators to translate to ICS 213 forms that we provided. We also helped staff to re-write when necessary (with their encouragement and permission) to better communicate. Shelter staff should be trained in ICS 213 and have appropriate forms. At one point we were given an unclear message regarding an unaccompanied minor that contained sensitive protected information. We sent the staff person back to SM for proper authorization and then helped to craft a message (not containing the protected information) but securing the needed assistance from HPD (Police) through a priority message to DEM-EOC.

In setting up teams, the ARC need to think about a “message manager” to manage the message traffic to the radio room with the added task of ensuring that these messages are prioritized and effectively communicate their needs.

In hindsight we (radio operators) did not ask for runners to take traffic back and forth to the SM who was located elsewhere in the shelter building. This assistance would have been helpful. We did enlist several trusted observers with this task however.

We assumed that the mass media had permission by SM to come into the room. We did not verify this, thinking they were already approved upon entering the building. We should have requested verification.

One FLDIGI message was sent to ARC in error. Correct message was sent immediately after. Operator error. More careful vigilance required in hectic situations.

The only long form shelter manager’s report to be sent was delivered to radio room just before noon. Information then had to be entered into FLDIGI. This message was successfully sent and received but only after the net and the shelter shut down.

What other comments do you have?

There seemed to be a delay starting EOC net.

The 'ordering-of-the-number-of-lunches-for-the-shelter' message should have been labeled "real world".

Prior to the opening of the formal net, a number of stations were testing their radios. It might be helpful to have an informal net control to validate the testing stations so that they would be assured of connecting to the repeater(s) prior to the formal net.

It was difficult at times to establish contact with VHF net control given the number of messages going through the DEM-EOC command and control repeater. Had difficulty accessing net control for permission to exit the net in order to send message direct to ARC on alternate repeater. Consequently on occasion we felt locked into the net but not able to get our message out. Fortunately, having a working HF station was very useful as it gave us an alternative way to access the ARC, and send voice and FLDIGI messages, when the primary DEM-EOC VHF/UHF net control station was busy.

More messages should be sent on alternate repeaters to free up net control.

And Finally

Much Aloha goes out to Betty (WH6GR), Jack (KH6DQ), and Gordon (KH6GL) for all their hard work in making this exercise a training success for Manoa. And a very special Mahalo goes out to Clem, (KH7HO), for all his leadership training, organizing, prep work, and most of all for making our participation in Makani Pahili 2014 possible.

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6/01/14

