

Date: September 4, 2008

From: Bob Hollister, Cochise County RACES Officer

To: Mike Evans, Cochise County Emergency Services Coordinator

Info: Carol Capas, Cochise County SO Dispatch Supervisor,
Pablo Duarte, Cochise county Information Technology Department

Subject: Paradise 2008 Training - After Action Report

1. Purpose: The annual trek to Paradise over Labor Day Weekend is used as training event for members of the RACES/ARES team to practice a wide variety of operator skills as well as conduct an amateur radio "special event" by operating from a unique location, in this case the Ghost Town of Paradise. This was the 29th anniversary of this event.

2. Exercise Objectives:

- Familiarize operators with basic MCU capabilities
- Provide operating practice to radio operators.
- Test HF Antenna configurations
- Test Band-Pass Filters
- Send Satellite email to Cochise County SO Dispatch

3. Mission Summary:

a. The RACES team deployed from the Cochise Amateur Radio Association (CARA) club site at 07:30 on Saturday (8/30) morning. After an uneventful convoy to the Paradise training site we set up two HF antennas (Inverted V & 20 Meter Yagi). This was the first use of the 20 meter 2 element yagi on the MCU. A light-weight antenna rotor was connected to the top of the pneumatic mast and then the Yagi to it. Due to the inclement weather, we only put the antenna up about 30' rather than the full 42' of the mast capability. This combination was still very effective and a total of 435 radio contacts were made including 37 states, the District of Columbia, two Canadian provinces, the Cayman Islands, Ecuador and Mexico City over a total of approximately 23 hours of on-air operation.

b. Medical Emergency – The spouse of one of the members became stricken with heat exhaustion and possible dehydration on Saturday. We were able to contact CCSO dispatch by radio who subsequently contacted Portal Rescue. We reset one of the radios to ensure we could contact Portal Rescue directly. Portal Rescue responded and transported her to medical treatment. She was eventually transported to Tucson and treated and eventually released on

9/3. We should be sure that we always set one of the radios to Portal Rescue upon our deployment to reduce response time.

4. Lessons Learned: Despite a reduced deployment team there were several positive lessons learned from the mission.

a. Operator Training: We had some new operators and they were able to receive hands-on experience using the HF long range equipment as well as participate in the setup process.

b. 20 M Beam Antenna – The new configuration of antenna rotor and 20 meter yagi proved to be quite successful for long range communications. Although the HF whips continue to be the quicker deployment method, they do not provide the signal gain or directivity of the yagi for long range operations. This tool would be very useful in checking into the National Communications System (NCS) Shared Resources (SHARES) HF network and with the FEMA HF network during emergencies.

c. Inverted-V Antenna – This continues to be a tried and true broadband antenna system. It was the antenna used on both MARS and Amateur bands, and was the only antenna used for communications below 14 MHz. Participation in the daily Arizona Traffic and Emergency Net (ATEN) Saturday evening and the weekly Arizona RACES net Sunday morning provided voice connectivity to stations in several other Arizona counties as well as Southern California and Colorado.

d. Pneumatic Mast – We experienced some difficulties with the mast. After being fully extended for a while it dropped (lost air pressure) and would not go back up. We found a possible air-leak source and used a field expedient (carved wood plug) to get it back up in the air. We had to add air on a few occasions to maintain height. We suspect there may be a problem with one of the solenoid valves that may need cleaning or repair.

e. Band Pass Filters – In previous years we have experienced adjacent band interference while we operated more than one band simultaneously. This year two "band-pass" filters were employed (20 meters and 40 meters). They worked very well. In one instance, I forgot to remove the filter when changing from 40 meters to 80 meters and effectively silenced the radio on 80 meters while attempting to check into a local state net. Only after taking the filter off was I able to check in. The use of the filters was proven to be effective and recommended for future use.

f. Satellite Operations – This system worked appropriately and provided a backup link to CCSO via email. Additionally, the team used it to check frequently for live weather satellite feeds.

g. Four-Wheel Operations – We have not been required to use the Four-wheel capability of the MCU that often. We also frequently use different drivers on each mission and as a result remembering the proper procedure is not fresh in our minds. We will provide refresher training on this topic.

5. Recommendations – A couple recommendations were provided to improve operations next year:

a. Park MCU with side door facing North for afternoon shade. Didn't do it this year and were sorry.

b. Attach a line and pulley to the mast before raising it. This would allow hoisting a dipole, sloper or long-wire for performance comparisons with the inverted-V on 40 and 80 meters.

c. In the past three years, we have twice had hurricanes occurring some where during our annual Trek to Paradise. This has caused us to change from our advertised operating frequencies because of hurricane watch type activities going on. We will try to be more selective on future years to avoid known emergency operations frequencies.

6. Summary – As always, extended training missions such as this provide opportunities to work out procedures and discover problems in a relatively non stressful environment. This was such an event. My thanks to all who participated, radio operators and their family members, and those who assisted in the preparation phase, execution phase, and finally the post deployment phase.

Attachment 1 – Counties contact during AZ State RACES net Check-In

Coconino
Cochise
Gila
Graham
Maricopa
Mohave
Navajo
Pima
Pinal
San Diego, CA
Imperial, CA

Attachment 2 - Participants:

Mike Bales, KC7GTY

David Bly, K7DTB
Charles Campbell, K4AFN (MCU Driver)
Ken Carpenter, WA7UIM
Linda Carpenter, N7KAZ
Rob Cass, AC7XA
Dale Chidester, NJ7C
Nancy Chidester, KE7PCX
Bill Epperson, N7CVU
Jim Hazen, N0HLC
Bob Hollister, N7INK (RACES Officer)
Lee Ilse, KD7OED
Pete LaCount, W8UXD
Dennis Mcavoy, KE7KRE
Charles Morris, N7DQS
Peggy Morris, KC7LCE
RB Rice, K7HVV
Dave Schurian, KD7LSD

Bob

Robert L Hollister

Thought for the day:

"Only those who will risk going too far can possibly find out how far one can go."

T.S. Eliot