

CAREN Upgrades Phone Patch Repeater

Central Arkansas' Only Landline Connection Resumes Operation

by Danny Straessle (KE5WLR)

Continuing an established tradition of service to the statewide Amateur Radio community, the Central Arkansas Radio Emergency Net (CAREN Club) has recently completed upgrades to the organization's phone patch repeater in Little Rock.

Constructed years before the advent of cellular telephones, the phone patch repeater has been in operation since the late 1960s and located high above the historic Pulaski Heights neighborhood since 1980 on an elevated storage tank owned and operated by Central Arkansas Water. Upgrades including a new antenna and controller were made while the repeater was off-air as Central Arkansas Water sandblasted & re-painted its half-million-gallon tank. The antenna mount is at an elevation of approximately 740 feet above sea level.

The phone patch repeater consists of a typical 2-meter repeater with an on-demand connection to a phone line that is hardwired into the AT&T local exchange network. Through a series of DTMF commands, Amateur Radio operators are able to access the local exchange to make local toll calls only.

"Even with the proliferation of cellular phones, the FCC still requires us to observe local phone company toll areas," states CAREN President Mark Barnhard (KD5AIV). "The phone patch should not be used to simply avoid paying long-distance toll charges for making a call to Little Rock from an outlying area when normal telephone service is available."

Local calls can be made throughout the Little Rock metro area, Pulaski County and other areas including: Bauxite, Benton, Bryan-Collegeville, Ferndale, Jacksonville, Palarm, Pinnacle, Scott, Spring Lake, Sylvan Hills-Sherwood, and Wrightsville. Consult your AT&T local directory for additional information.

Phone patch calls are one-way only, which means they can only be made by Amateur Radio operators holding the equivalent of a valid U.S. Technician Class license or higher. Reverse phone patch services are not available. All stations must observe Part 97 regulations restricting calls involving pecuniary interest of the originator or on behalf of the originator's employer. In short, one cannot use the phone patch to check voice mail at the office. Additional phone patch etiquette can be found at www.arrl.org.

The CAREN phone patch is a 30-watt repeater operating on 147.060 MHz and requires a 114.8 Hz tone for access. Estimated range of coverage is about 50 miles. Although phone patch calls have priority, the repeater can be used (and is encouraged) for normal Amateur Radio traffic (rag chewing). When necessary and without prior notice, this repeater may be reassigned for use as part of an emergency net or a special event net. In either case, the phone patch would be temporarily disabled.

To access the phone patch, simply key the microphone, identify, and indicate the patch is about to be used. Key the microphone again and on the keypad press the star key (*) and follow it

with the number to be dialed. DTMF must be enabled to initiate the call. Operators should consult their individual radio user manual for information on how to enable this feature. When the party being called answers the phone, immediately inform them the call is being conducted through the phone patch and that only one person at a time should speak. It may help for both parties of the conversation to say "over" so the other person will know when to speak. While there is no time limit for the duration of phone patch calls, stations must remember to identify every 10 minutes. Once the call is completed, press the pound key (#) to disconnect the phone patch and sign off.

Emergency calls made to 911 through the phone patch repeater are routed to the City of Little Rock 911 Communications Center where caller ID displays "Amateur Radio." It is important for anyone using the phone patch to state the location as well as the nature of the emergency so operators can effectively route first responders to the correct location in a timely manner.

The CAREN phone patch is offered as a public service to the Amateur Radio community and all properly licensed operators are welcome to use the system regardless of club affiliation. "How many times have you been caught out and about and that cell phone of yours has died because you failed to charge it the night before?" asks Barnhard. "Occasionally you will hear stations request others monitoring to make a call for them because of a dead phone. The phone patch will enable these operators to make that call directly. And when it comes to saving life & property, that may make all the difference."

About CAREN

Established in the late 1950s, the Central Arkansas Radio Emergency Net (CAREN Club) is one of the oldest Amateur Radio clubs in Arkansas and remains a state leader in public service and emergency communications. CAREN is a non-profit 501(C) 3 membership organization of Amateur Radio operators organized for the promotion of amateur radio communication, education and experimentation. On average the club provides communications support to charitable and other non-profit organizations for 12 public service events annually. This provides Amateur Radio operators an opportunity to test and operate their equipment in a net-controlled field exercise while advancing the overall preparedness of these Amateurs to step forward as volunteers and provide emergency communications when all else fails.