

Mr. Don W. McAdams  
Director Of Fund Development  
Rogers State College

### Emergency Communications Repeater Proposal

An important part of disaster service in Claremore and Rogers County is emergency communications. The Radio Amateurs of this area would like to establish a communications system with Civil Defense, Red Cross, Law Enforcement Officers and local radio stations to provide dependable emergency communications locally and with the "outside" under various conditions, I.E., during an actual disaster and as warning communications during severe weather alerts, floods, etc.

To accomplish this communications system effectively, I am requesting permission to install an amateur band repeater on your tower. Space for two antennas would be required along with space for the transceiver in the building at the base of the tower. It would be understood that this installation would not cause any interference with existing services on the tower.

I would propose a receive only antenna on top of the tower and a transmit only antenna at the 300 foot level. The antennas would be less than ten feet long and parallel to the tower. Space in the building would not exceed four square feet of floor area by six feet tall. The transmit frequency would be 147.090 MHz and receive on 147.690 MHz. The local area amateurs will pay for the telephone line to the repeater to allow telephone communications to areas that are not amateur radio equipment such as police, fire, etc. Power requirements would not exceed one amp at 117 volts AC.

Preventive maintenance would require access approximately once each month during normal working hours or on weekends. Corrective maintenance, especially during the severe weather season could be at any time but is not common. Access would be limited to not more than three or four qualified individuals.

The amateurs of Tulsa and Bartlesville have these communications in place with the respective agencies and provide an excellent service to their community. The recent tornado in Bartlesville was an example in which the Bartlesville Police Department lost their communications center.

Permission to establish this repeater system on your tower will contribute much to the community needs for emergency communications and will support a large number of people engaged in vital community disaster services. This matter has been discussed with Mr. Tye Hayes, Director of Rogers County Civil Defense and he heartily concurs in this request. I have attached a copy of a proposed emergency communications plan which will be finalized with the appropriate Rogers County Officials. Please contact me if you have any further questions concerning the proposal.

Sincerely,

ROGERS COUNTY RADIO OPERATORS

(RCRO)

EMERGENCY COMMUNICATIONS

OBJECTIVES

AND

OPERATIONAL PLAN

PROPOSAL

## OBJECTIVES

The Emergency Communications objectives of the Rogers County Radio Operators shall be...

1. To provide emergency communications for, and in cooperation with, Rogers County and City of Claremore disaster officials and law enforcement agencies during times of disaster or threatened disaster.
2. To provide emergency communications for neighboring counties as called upon by local disaster officials.
3. To recommend amateur band emergency communications equipment to be provided by official agencies.
4. To provide licensed and trained amateur staffing for amateur band equipment used for emergency communications.
5. To maintain amateur band emergency equipment in "readiness" condition.
6. To maintain a functioning emergency communications amateur group which is flexible in capability, available for disaster service and willing to serve their community in the highest traditions of the Amateur Radio Service.

## @@@OPERATIONAL PLAN

Until an EOC in the County Courthouse is established and operational, emergency communications must be provided by present equipment in decentralized locations. All 2-meter equipped amateurs should have crystals (or synthesizers) for 147.09/.69, 147.09/.09, 146.88/.28, 146.52/.52 as a minimum.

### I. CALL-UP

Call-up of the local radio amateurs will be by the RCRO Emergency Coordinator, or one of his assistants, based on their own judgment or at the call of a proper County disaster official. Amateurs should monitor 140.09 MHz for call-up, assignments and instructions in case of pending or actual disaster. If none of the above are available and "action" is indicated, a responsible local amateur should take prompt and definite charge and activate the emergency operational plan.

### II. GENERAL

When the operational plan is activated, the 09/69 repeater will be closed to all traffic except that handled through net control for emergency purposes. Net control will be whatever station is handling 2 meter contact with 88/28 in Tulsa (or other Tulsa repeater frequency) and will normally be the E.C. or their designee. NO OTHER RCRO AMATEUR SHOULD CONTACT TULSA OR OTHER AREAS. Net control and backup net control will each have a second amateur assigned as a helper and will operate 2 transceivers, one on 09/69 (or his designated alternate frequency) and the other on 88/28 (or other as required).

It is premised that law enforcement radios will be required for their own important activities. Bell Telephone Company mobile phones will be fully utilized to expedite repair of phone communications. Amateur band 2 meter FM equipment will be the primary tactical communications link to the outside. No H&W traffic will be handled on 2 meters. A 75 meter link will be established, when appropriate, for handling H & W traffic.

### III. SEVERE WEATHER WATCH

A. All 2 meter amateurs should monitor 147.09 for call-up and other instructions.

B. 09/69 will be used for local communications, with 09/09 and 52/52 as alternate frequencies at the discretion of the net control station.

C. RCRO Emergency Coordinator or his assistants will call-up the amateur operators for assignment on call from County-City disaster officials or on their own authority.

D. Assignments will be made as follows:

5PM to 8AM weekdays, weekends and holidays.

1. Individual calling the net will make the necessary assignments, this would normally be the emergency coordinator or his designee.

2. Operator at Civil Defense Office.

3. A designee will be in contact with Tulsa weather.

4. At least 4 operators for mobile assignments S, W, and SW of Claremore for outer perimeter watch. Locate as follows:  
(to be determined later)

5. 1 operator to KWPR

6. 1 operator to KNGX

NOTE: This requires 11 assignments

net control and backup net control	4
CD HQ liaison with handi talkie	1
Mobile Units	4
Amateur operators with handi talkies	2
Total	11

8AM to 5PM --normal workdays

The emergency coordinator or his designee will mobilize all available amateur operators and assign on basis of need. as out lined above.

All amateur operators should stay close to their business phones to receive assignments.

#### IV. ACTUAL DISASTER

IN case of an actual tornado "hit" or other actual disaster, 2 meter will be the primary tactical communications link to the outside. NO H & W traffic will be handled on 2 meters. A 75 meter link (3900 KHz) will be set up, as required, for H & W traffic.

It is assumed that the emergency communications net has already been activated as shown in III. above.

All official reports or help requests sent out of the disaster area MUST be written for record purposes, MUST be signed by (or approved by) a proper City-County Disaster official. OUTGOING H & W messages should be written for record but need not be signed by a disaster official. Logs of all operations WILL BE KEPT!

Depending on the situation, outer perimeter watchers may or may not be called back. Additional amateur operators will be required as follows as a minimum.

- 1- Amateur operator at Police station
- 1- Amateur operator at Hospital
- 1- Amateur to handle H & W on 75 Meters

V. Study this Operational Plan. Be sure your personal and /or C.D. equipment is in top shape. Keep a flashlight handy in car WITH FRESH BATTERIES. Have a jacket and / or raincoat , water and even a little packaged food. Have a small first-aid kit.

BE READY to act--EFFECTIVELY!

~~~~~

### Repeater System Capabilities

- A. Provide car to car communications between any two points in Rogers County.
- B. Provide communications to cars and base stations in Rogers County and about a 40-90 mile radius of Claremore.
- C. Provide direct communications to the following public services during any bad weather or other disaster situations.
  - a. U.S. Weather Bureau
  - b. Oklahoma Highway Patrol
  - c. Tulsa Police
  - d. American Red Cross

These are already established and can be taken advantage of by linking into the Tulsa Repeater System. It would be necessary to establish the same ties with the Claremore Police and Rogers County Sheriff.

- D. Provide communications with hand-held units for at least a five mile radius of Claremore including the above mentioned communications with the Tulsa facilities.
- E. Provide continued communications automatically during power failures up to about two days.
- F. Provide equipment compatability with most other communities with similar systems. For example our mobiles could be used without change in the following communities in this area: Tulsa, Bartlesville, Oklahoma City, Enid, Durant, Wichita, and Ft. Smith. More important, their equipment could be used here if needed.

The following is a partial list of Amateur Radio Operators in this area:

|                                                  |                           |
|--------------------------------------------------|---------------------------|
| KA5PFP -- Martha Wilson                          | KA5PFO -- Derek Wilson    |
| WB5TFS -- Judy Bates                             | K5EZD -- Chuck Romick     |
| K5JME -- Herb Boyer                              | WA5NGY -- Tom Butler      |
| N5BYT -- Fred Daugherty                          | N5EDU -- Wayne Hamill     |
| KA5KLS -- John                                   | WA5NOQ -- Will Moheng     |
| KN5J -- Max Bunnell                              | KA5EDD -- Pete Metevelis  |
| N5EZK -- Bob Burchardt                           | W5OOZ -- George Ellis     |
| K5ZUF -- Phillis Ellis                           | N5AUD -- Ken Jones        |
| WA5BNZ -- Bob                                    | W5LEC -- Mel Wilks        |
| WA5LGQ -- Dan Robbins                            | N5FEE -- Dallas Shell     |
| K5HD -- Max Hunter                               | WA5OGM -- Nathan Axtom    |
| K5BRR -- Bill Burchette                          | WB5OSM -- Merlin Griffin  |
| K5TLB -- Fred Harmon                             | WN5IPO -- John Hewett     |
| WD5DGB -- Mary Higgins                           | WD5CGT -- Vincent Higgins |
| K5ENA -- John Campbell- Tulsa Emerg. Coordinator |                           |

For more information contact one of the following:

D. Bruce Wilson (WA5VPO)  
R.3 Box 793  
Claremore, Ok. 74017  
341-4231

or

Dan Bates (N5TM)  
R. 7 Box 310  
Claremore, Ok. 74017  
341-5245

The following is a brief outline of some of the events that transpired on March 15, 1982, the day Bartlesville was struck by a tornado.

1--Tulsa Weather Bureau (NOAA) issued a tornado watch for the N.E. Oklahoma area.

2--Washington County Emerg. Coordinator (WB5SZP) activated the Bartlesville Amateur Radio Club weather net due to threatening conditions.

3--By pre-set planning, 2 meter stations were assigned to: (A) Emergency operating center--located in basement of Washington County Court House.

(B) Look-out posts- located at vantage points at Ochelata, near Woolaroc, entrance to Osage Hills State Park, Copan and Radar Hill West of city.

(C) KWON Radio Station

(D) Both local hospitals

(E) Bartlesville Police Dept.

(F) Central Fire Station

(G) The club's trailer mounted emergency generator

(H) Other stations held in "stand-by" to be assigned as needed

(I) One station assigned to Civil Defense director

4-- The station at Woolaroc (KE5S) reported he had rotation in clouds--spawning of funnel--and touch down, in a short period of time.

5--Station at E.O.C. passed word to Bartlesville P.D. to sound city's warning sirens.

6-- Time from tornado touchdown till entry into city limits was approximately 12 minutes. As the tornado passed the area, it knocked out telephone service, radio stations, struck Bartlesville Police Station destroying all their communication system and several of their mobile units. This left amateur radio the only effective communication system available in the area.

Service performed by 2-meter amateurs after tornado struck included:

(1) Call for assistance for law enforcement to Tulsa. Within an hours time, Tulsa had nine of their marked units with uniformed officers enroute to Bartlesville.

(2) Furnished communications between water plant and public service workers as they restored power to the pumping stations which had been knocked out.

(3) Reported downed power lines.

(4) Furnished communications to and from hospitals.

(A) Called in additional hospital employees as needed.

(B) Passed "clear" signal when patients could be returned to their rooms.

(C) Report to officials the number and status of casualties.

(5) Report to Fire Dept. on fires at industrial sites.

(6) Report gas leaks.

(7) Furnished communication for local Red Cross units and also units coming into Bartlesville from outside areas.

(8) Handled requests for needed aid from outside areas.

(9) Called in National Guard when Civil authority requested.

(10) Units assigned to search and rescue groups in the stricken area.

(11) Handled traffic to amateur radio stations that were handling health and welfare traffic as time permitted.

(12) Furnished communications as needed by relief agencies at emergency shelters.

This is a very brief sketch of some of the services the local amateur group was able to provide over several days after the tornado.