

Many times an officer needs more men to help encircle or to isolate through road-blocks a particular area and this can be done quickly only through use of the radio.

At any time an officer is confronted with a situation or circumstances unfamiliar to him, he can obtain help and advice, as his radio gives him instant access to hundreds of years of law enforcement experience that he would otherwise have to obtain over a period of years.

The radio network insures a most closely knit statewide organization. All personnel within range hear traffic carried on with other units and keep abreast of what is going on in other parts of the State. This covers work being done by the engineering crews, trappers, fisheries and all other divisions, thus serving as a sort of departmental news service.

To you who do not have a radio system at present, I would like to offer some observations to consider when you do install one, or even before. First, hire the very best radio engineer possible and let the man who installs your radio system be working for you. If at all possible, secure two frequencies for your exclusive use, as the sharing of a frequency with another agency will not be at all satisfactory, and the second frequency will allow the carrying of more traffic and it can also be reserved for the use of stations and personnel in supervisory and administrative capacity.

Set up strict operating procedure and insist that all personnel rigidly follow these rules. Our operators are so thoroughly grounded in this that they will refuse to carry traffic for anyone if it does not conform to regulations. We once had a man instantly discharged, by radio, for saying one mild curse word over the radio late at night when he thought all stations were off the air. Our system is just too valuable to us to jeopardize it through improper use.

Insist that your people use the network once it is installed. You will find it viewed with suspicion by some, but this will gradually disappear with frequent use. Our operators are required to report any such infrequent checking, and our Enforcement personnel have been told that if they do not use their radios it will be removed, and they cannot work without one.

In closing I would like to say that it is my firm conviction that with a good network properly installed and operated in the best manner possible, you will find your Enforcement officer better informed, with higher morale, spending more time in the field, and at least 50% more efficient than he was before having available this radio system.

## **REPORT ON PANEL DISCUSSION OF PROBLEMS OF GAME AND FISH RADIO COMMUNICATIONS**

Committee Chairman was J. P. McRae, Chief Radio Engineer, Arkansas Game and Fish Commission, Little Rock, Arkansas, and the panel was composed of the following: Rhett McMillan, Chief Engineer, Florida Game and Fresh Water Fish Commission, Moderator; C. B. Spencer, Regional Communications Officer, FCDA Region 5, Denton, Texas; Dick Holt, Assistant Director State Civil Defense; J. T. Bradberry, National President of Forestry Conservation Communications Association, Arkansas Forestry Service, Little Rock, Arkansas; Curt Schultz, Chief Systems Design Engineer, Motorola C&E, Chicago, Illinois; John Weeks, Motorola Sales Engineer, Little Rock, Arkansas; T. W. Stevens, District Sales Manager, General Electric Company, Oklahoma City, Oklahoma; E. C. Littlejohn, District Sales Manager, General Electric Company, Nashville, Tennessee.

Considerable discussion was held on the possibility of applying microwave techniques to conservation communications. Resulting opinion is that the cost of microwave application could be prohibitive when used by a single state agency; however, if several agencies could combine their resources and needs, microwave would be feasible and desirable. The matter of such an application

being eligible under existing FCC rules is doubtful, but it is believed the rules may be altered in the near future.

It was pointed out that Civil Defense matching funds are available to those agencies desiring to install or expand their communications system. The steps necessary to apply for Civil Defense matching funds, in order of their necessity, are as follows:

1. Contact State Civil Defense Radio Officers at State Civil Defense Headquarters.
2. Justify application by becoming a part of State Civil Defense. Support plans (this is worked out with Civil Defense Radio Officer).
3. Equipment must be bought on bid basis, and this information furnished Civil Defense.
4. Purchase radio equipment, and then furnish State Civil Defense Office copies of paid invoices.
5. Civil Defense then reimburses State agency fifty percent of paid invoice amount.

The average cost of a mobile unit is approximately \$500.00. The approximate cost of a 60-watt base station is \$1,000.00. Approximate cost of a 250-watt station \$2,500.00. It is suggested that the State agency employ its own communications personnel. Not more than 60 mobile units nor more than five base stations should be assigned per communications maintenance technician. The average cost of maintenance per mobile unit is \$5.50 each, and the average cost of maintenance per base station is \$19.00 each.

It is highly recommended that vehicle bid specifications include 40-amp., 12-volt generators with coax generator filter, resistor spark plugs and/or suppressor ignition harness and 70 ampere-hour batteries.

Agencies considering the installation of a communications system are urged to employ their own communications engineer or the services of a consultant to assist in the planning of a system. Agencies now employing communications technicians are urged to allow such personnel to attend the Game and Fish conventions for the purpose of augmenting the Communications Committee, which is now being set up by the International Association of Game and Fish Commissioners.

## **SESSION ON WATER MANAGEMENT**

### **WATER USE AND THE FUTURE OF FISH AND WILDLIFE CONSERVATION**

*By Roy Wood*

*Chairman, U. S. Fish and Wildlife Service*

**ROY GRIZELL**

*Soil Conservation Service*

**CHARLES K. RAWLS**

*Tennessee Game and Fish Commission*

#### **INTRODUCTION**

In appointing this Committee, James Jenkins, President, Southeastern Section of The Wildlife Society, requested that we prepare a paper on water use with particular reference to a discussion of fish and wildlife management practices which have been found to be particularly effective or promising.

Having reviewed available data and analyzed the situation, this Committee was impressed by the urgency of the need for sound practices and information concerning their application. We were equally moved, however, by the realization that to be effective, many of the practices must be integrated with other land and water uses. We are not in this business by ourselves. Wildlife conservation is inextricably a part of the over-all problem.