

Public Safety Communications Beat



by Bob Brooking
Communications Consultant

For several years, many of those with responsibilities to governmental entities for Public Safety communications have been aware of the growing problems within the Special Emergency Radio Service, both to the users of that Radio Service and also, in some cases, to systems operated by the governmental entities. Recently the growing use of two-way radio by Emergency Medical Care Services and the Comprehensive Health Services has further increased the use of the frequencies in this Service. Agreements and plans have been drawn up by various city and county governments for use by these Emergency Medical Care functions in order to provide better and more rapid medical aid in emergencies.

In their efforts to accomplish these results, the communicators involved have become aware of the problems being caused by one-way radio paging operations being conducted on the same frequencies as the base/mobile radio operations of hospitals. It should be noted here that there are two different types of systems which are being operated as hospital radio paging systems at present. One type is the low-powered system which provides paging within the facilities of a medical care center. The second type, though licensed as a hospital paging system, operates with high

power, and an antenna at some point of high elevation, to provide paging of doctors over a wide area. It is these high powered systems that are creating the most serious problems and interference for both the users of the Special Emergency Radio Service and those communicators who are involved with these users. In addition, there have been resulting cases of interference to other Public Safety users.

The Commission has become aware of this problem; in fact, it has become so acute that on November 22, 1972 the Commission announced a proposed rule making (Docket No. 19643) which would allocate the frequency of 157.450 MHz to the special Emergency Radio Service for exclusive use by hospital medical paging systems.

The Commission stated that the frequency should be set aside "for in-hospital paging to correct severe interference caused by the use of the same frequencies for paging and two-way radio systems in hospitals." In addition, the Commission proposal "would limit the maximum effective radiated power (ERP) of paging operations on 157.450 MHz to 30 watts in order to minimize adjacent channel interference. New hospital paging systems would be required to operate on 157.450 MHz and existing paging systems which are interfering with two-way radio operations would be required to switch to this frequency."

The adoption of the proposal would provide a solution to the problems created by "in-house" hospital medical paging systems but there remains the wide area systems which create much larger problems of interference than do the "in-house" systems.

On October 16, 1972 the Northern California Chapter of APCO filed a petition with the Federal Communications Commission requesting that the Commission act to, "Prohibit

One-Way Paging Systems in General Except as a Secondary and Minor System Application Incidental to Two-Way Systems Operating On Regular Base/Mobile Frequencies". The petition states, in paragraph 4, "A one-way paging application makes it very difficult to conform to and is actually inconsistent with the FCC operating requirements i.e., (1) that each licensee must prevent unnecessary interference with transmissions in progress"; . . . "(5) that one-way paging systems traditionally employ high transmitted power and use locations that general destructive interference far beyond the range of any associated monitor."

NCAPCO states in paragraph 5: "Over 20 additional counties in this area currently have plans in progress for new EMS (Emergency Medical Care) Systems. In many cases, applications are under consideration for federal grants to create new medical networks. Any one-way paging, in virtually any area, will result in destructive interference to existing licensees, will make implementation of the new networks almost impossible and may jeopardize federal grants."

The petition adds: "We recognize the vital need for one-way paging to provide contact with physicians and others indispensable to medical care. It is not the intent of this petition to deny or infringe on this service. Quite the contrary, we request, as part of this petition, that appropriate attention be given to this problem."

"We also respectfully request the Commission to consider with favor any application for Medical Services one-way paging on frequencies established for this purpose in the Business and Special Industrial Radio Services."

It is to be hoped that the Commission will soon resolve this problem.

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