

IN HOUSE MEMO

TO: The Executive Secretary

FROM: The Project Director

SUBJECT: COMMENTS ON THE NATIONWIDE EMERGENCY FREQUENCY DOCKET

DATE: October 2, 1975

The following discussion is based upon comments reported in the September 26th issue of Industrial Communications regarding Docket 20560.

A general comment should be made that none of the respondents opposed the concept of a Common Emergency Frequency. All urged varying degrees of enthusiasm and support. The comments made were only directed toward the mechanism's implementation. This fact lends heavy support to the urgent need for establishing such a frequency in the UHF and 900 MHz bands. I do not believe, however, that the implementation of 20560 should be delayed pending selection of specific UHF and 900 MHz frequencies.

The Project 13 survey has shown that approximately 61% of Law Enforcement agencies operate on VHF hi-band, 30% on VHF low-band and 9% on UHF. There is only one known license issued to date in the 900 MHz band.

The implication of the figures are as follows:

- a. Selection of a 900 MHz frequency will have little affect on present 900 MHz users.
- b. Designation of UHF frequencies will affect only 9% of the agencies in the country.
This provides us with a golden opportunity for using good engineering judgement to choose a frequency that will provide the most service with the least disruption.
- c. The 30% of agencies now using VHF low-band can be expected, over the coming years to be moving to VHF hi-band or UHF, as their requirements dictate. The establishment of the unanimously agreed to emergency frequency on VHF hi-band and UHF, at this time, will greatly ease the engineering problem for this 30%

Of the existing 61% of the agencies now employing VHF hi-bands, only a few will be affected. Those such as the Ft. Lauderdale Florida Police Department, the Ohio State Highway Patrol, the Washington State Patrol, and the CLEMARS of California illustrate the soundness of APCO's proposal of a 9 year grace period. Because of the lateness in the identification of a VHF frequency, this urgent requirement cannot be accomplished without some readjustment, regardless of the frequency chosen. The 9 year grace period is designed to minimize the pain of these readjustments.

The position of the Washington State Patrol, recommending duplex operation on the emergency frequency cannot be sustained by projected operational usage. While the value of a common emergency channel is immeasurable when it is required, its loading does not demand the double spectrum usage necessary for duplex operation.

Both Florida and California show concern that the frequency chosen, 155.475 MHZ, is a "splinter frequency". They comment that this would cause adjacent channel interference. In view of the technical capabilities of modern equipment, and frequency of expected usage of this channel, it is inconceivable that adjacent channel interference or receiver desensitizing would occur with statistically significant frequency.

Florida has suggested that emergency communications services be provided by a regional approach. This is unsatisfactory in the light of modern law enforcement requirements. A recent public statement by the sheriff of a Florida county observed that his department makes frequent trips to escort prisoners back to his county from detention points throughout the U.S.. His department accomplishes all prisoner pickups by automobile within a radius of 1,000 miles. The area encompasses 24 Eastern states. At the present time, police cars are making these trips, carrying often dangerous prisoners, through many different jurisdictions with no form of communications from the vehicles.

Clearly a "regional approach" could not satisfy these needs.

Complete utilization of the emergency frequencies, once they have been designated, may require fixed-station, cross-banding equipment. Such equipment can be installed on an as-required basis by agencies needing the capability. Without the designation of such frequencies, there is no possibility of serving this need, even by those agencies who desperately require it.

DDK/mr