Public Safety Communications Beat

by Bob Brooking
Communications Engineer
City of Burbank, Calif.

Last month the statement of APCO presented to the Federal Communications Commission in the Oral Argument of January 22-23, 1970 was published in this column. Several important points were made during cross examination in that argument and that portion is presented here for your added information:

COMMISSIONER COX: I may be anticipating Commissioner Johnson, because he asked this question earlier. Would it be possible for the police and other public safety agencies in Burbank to use the frequencies that are allocated for local government, that are allocated to county agencies, to the state police in California, on some kind of shared basis without impairing either your functions or those of the other users?

MR. BROOKING: Well, Commissioner Cox, we are doing some of that already in some cases. For example, our local government channel is made available to the police department particularly at night in connection with work on stakeouts and with our park people.

In addition, in California, we are using a state frequency, state wide, for what is known as Clamars whereby all cities have access to this channel, and can intercommunicate for chases, and so on, so we have thought of that one.

Beyond that, one of the things in the study that has been done is the idea of the system, where a net is set up for the most effective means of using the frequencies.

Now, we are going into the research done by Dr. Kelly, again, in which he has said we have all got to quit living in our own world, so we are looking at that.

Beyond that, no police department other than a very large one today enjoys a channel by itself. Our very frequency allocation processes, the frequency coordination, required, just by the number of frequencies that we have, and the number of departments that we must fit in, to make several departments, use the same frequency. We have cases in Illinois, for example, where we have 32 base stations and over 300 mobile units in the south of Chicago sharing a single police channel. We are trying to break out of that box that has been created, and I will admit that some of it is our fault.

We are trying to redesign the networks using geographical spacing to get more use out of frequencies. We realize frequencies are a valuable property today, even though we don't make a profit on them.

We are doing these things now, and intend to do more in the future.

COMMISSIONER COX: But you don't see that as an adequate answer to your needs?

MR. BROOKING: No, we don't, and to back that up I have the work of IITRI to prove that even with the improved networks and sharing of frequencies, we are going to need more than we have today.

COMMISSIONER COX: Based on your experience in the Los Angeles area, or in the Lake Michigan study, are you moving in the direction of joint systems which cover an entire area to which you have some access through trunks, or are you moving to continued use of independent systems, but with better spacing of the frequency usage?

MR. BROOKING: Your question actually comes in with three parts.

COMMISSIONER COX: Yesterday, I only had two.

MR. BROOKING: When you get into the area of trunking, we have heard a lot of talk about multiple access and trunked systems, and why don't we use them. I can give you two good examples, or three.

The day that President Kennedy was assassinated, what happened to your telephone system? It stopped.

In March, 1957, I was in the city of San Francisco when we had a mild earthquake. Nobody was killed, but for two hours, the mayor couldn't contact the chief of police on a Bell telephone, because he couldn't get a dial tone.

The load was just too heavy. Then finally, I am sure that some time in the evening you have gone to the phone and started to dial and discovered you didn't even have a dial tone, which again indicated that your trunking system simply didn't have capacity to handle all the calls that had come in.

I don't want to be the communications engineer that designs a system that when a police officer's life is in jeopardy he reaches for that system and he finds that he has access to no trunk because they are all busy.

Now, to answer the other two parts. We are using today in Lake County, Illinois, and Orange County, California—those are two examples of working coordinated law enforcement networks where all cities in that county use a coordinated joint system.

They are in existence, and they are working. I would like to point one thing out in connection with the Lake County, Illinois system, which is substantiated in the findings of IITRI, and that is in the evening hours there is a standing order that no officer will request a record check on a police — by a police officer on a car license number, or on a person.

Now, gentlemen, think what this means. An officer is following a car, and he decides to make a stop. He doesn't know whether that is a stolen car, he doesn't know whether the man in it is armed,

(*Continued on Page 20*)