PUBLIC HEARING

before

EMERGENCY RESPONSE SYSTEM STUDY COMMISSION

Public Safety Communications Problems and
the Availability of Radio Frequencies.

May 20, 1987
Career Building, Room 105
Camden County County College
Camden, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Assemblyman D. Bennett Mazur, Chairman
Robert Miller, Vice Chairman
Chester Cohen
Alan L. Armitage
Domenick Cotroneo
Fred D. D'Alessio
Winnie Hartvigsen
Howard A. Kirkwood, Jr.
Captain Joseph Saiia
Thomas P. Reilly
William C. Faust, Jr.

ALSO PRESENT:

Anne M. Stefane
Office of Legislative Services
Aide, Emergency Response System
Study Commission

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Hearing Recorded and Transcribed by
Office of Legislative Services
Public Information Office
Hearing Unit
State House Annex
CN 068
Trenton, New Jersey

P U B L I C H E A R I N G

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New Jersey State Legislature
EMERGENCY RESPONSE SYSTEM STUDY COMMISSION
STATE HOUSE ANNEX, CN-068
TRENTON, NEW JERSEY 08625
TELEPHONE: (609) 984-0231

NOTICE OF PUBLIC HEARINGS

The EMERGENCY RESPONSE SYSTEM STUDY COMMISSION will hold four public hearings as follows:

Wednesday, April 1, 1987 at 7:30 p.m. in the second floor courtroom, Monmouth County Hall of Records, Main Street, Freehold, New Jersey.

Wednesday, April 22, 1987 at 7:30 p.m. in the Student Center Auditorium, Morris County Community College, Route 10 and Center Grove Road, Randolph, New Jersey.

Wednesday, May 20, 1987 at 7:30 p.m., in Room 105 of the Career Building, Camden County College, College Drive, Blackwood, New Jersey.

Wednesday, June 3, 1987 at 2:00 p.m. in Room 424 of the State House Annex, Trenton, New Jersey.

The hearings will consider public safety communications problems and the availability of radio frequencies.

Anyone wishing to testify should contact Anne M. Stefane, Commission Staff, at (609) 984-0231 and should submit 20 written copies of testimony to Ms. Stefane on the day of the hearing.

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ASSEMBLYMAN D. BENNETT MAZUR (Chairman): I apologize for my tardiness as Chairman of the Commission. I'm a little disoriented this afternoon. This campus is very beautiful, but it's a little disorienting too. I got a little lost.

This is the next to the last of a series of hearings. We originally turned our attention to finding ways to provide an enhanced 911 emergency response system to the State. That was the first three months of our task and that has been done in the form of two bills which have been submitted to the Legislature which are in the process of working their way through committees, through the usual agonies of committee deliberations and lack of deliberations. They are A-3641 and ACR-132 -- that's a concurrent resolution.

The second half of our task was to turn ourselves to exploring ways to overcome and really determine the amount of difficulties that are being encountered by the various response units; and overcrowded frequencies; and the inability of major emergencies of response units from different jurisdictions being unable to communicate one with another -- as happened in Passaic; and where firefighting units from different municipalities are all in the same response to the same emergency sat at opposite ends of blocks and could not communicate because they were not properly coordinated frequency-wise.

All of these deliberations will be put into the form of a Committee report, although we have a recorder down here who wishes to record all the words of wisdom that are uttered here. If you wish to testify, if you do wish to add your thoughts in any way into the record, we would appreciate you stating you name and coming down to use these microphones so that it can be recorded. Do any of the other members of the Commission wish to add anything? (negative response) If not, then we will proceed with our first witness, who is Craig Reiner, Camden County Ambulance Association from Lindenwold. Craig?

C R A I G R E I N E R: Thank you. As is stated on the card there, I am presently the President of the Camden County Ambulance Association. My feelings that I would like to express to you this evening are the feelings of most of the ambulance squads in Camden County. I've been a member of the local fire department and the EMS service for about 15 years now, and also involved with MICU service in Camden County for 10 years. I've seen communications systems go from the local dispatch centers evolving to the county communications center we presently have in Lindenwold. So, our feelings are that centralized communications such as we have in our county, work well.

We do have problems with communications in our county. These problems with the EMS communications involve primarily non-emergency services utilizing our EMS channels. Primarily, we have bus drivers operating on our EMS frequency. This causes interference, mostly during the daytime hours. We can monitor these channels and hear that the traffic on it is definitely coming from non-emergency services, clearly being abused by bus drivers -- apparently, school bus drivers from the sounds of the radio traffic.

Again, the communication that involves this channel does cut-out from time to time our emergency traffic that needs to be relayed to our dispatcher. It also cuts-out communications from the northern part of our county down to the southern part -- cutting-out some of our units that are operating on the same frequency. Quite often, these units are being cut-out. The other problem that we are having in our particular location is when we use the ambulance to hospital frequency and also the EMS III frequency -- the 155.280 band.

It's very apparent that this frequency is overcrowded by security services and services again that are not in any way related to an emergency service. The equipment utilized by these services is so overpowering, that probably in excess of

80% to 90% of the time when an ambulance needs to make communication with the hospital, his transmission needs to be either repeated entirely, or parts of it need to be repeated because it's being so overpowering and cut-out.

The amount of traffic on these frequencies from time to time makes it impossible to even get communications with the hospital. We find that after several attempts of trying to reach the hospital, the unit may usually give up making attempts and go into the hospital without notifying them.

Other areas of concern that I'd like to address are related to MIC service. MICU departments operate on mid-channel frequencies. It doesn't need as much as on a one through ten. At the present time, we utilize the mid-channel nine and ten as a MICU dispatch frequency. We find similar instances where non-emergency traffic is used on these particular channels causing similar problems with units being cut-out and unable to make communications with their dispatchers.

The hospital frequency that I spoke of also earlier, is a frequency which is used by the paramedics in the field as a secondary means of communications. With this channel being so overcrowded and so misused, we find that this is almost an impossible means of communicating with the hospital relay of any patient information or to receive any orders to help treat the patient. Also, we find that of the mid-channels that are assigned for MICU service, there are only eight of which that could be used for communications with their hospital.

With increasing numbers of MIC vehicles in the field, we find quite often that we run out of mid-channels to assign for patients to be treated. In our particular area, where we're run by MICU vehicles and surrounding counties operating two and three next to us with only eight channels, we find quite often that we run out of channels. We also find that the channels are not being coordinated, with the exception of the efforts that are put on by us and a MIC consortium. We have no

control over mid-channels that are being used in other states and other parts of the State. So, this is also a problem that we see in our service.

Again, just to recap, we have problems on our operating EMS frequency. Those problems being buses operating on our ambulance frequency and the amount of time that we get cut-out and interfered with is probably a good part of the time during the day, and of course, when the school buses are not operating during the evening, this is cut down dramatically. The problems that we find on our hospital frequency is 24 hours a day. It appears to be security services that are operating on the frequency and they are overpowering our frequency so much that that particular channel is almost useless to us.

That's the testimony that I'd like to give to you folks for tonight. I'll be glad to answer any questions if anybody has any.

ASSEMBLYMAN MAZUR: Does any member of the Commission wish to ask Mr. Reiner any questions?

MR. ARMITAGE: Mr. Chairman?

ASSEMBLYMAN MAZUR: Yes.

MR. ARMITAGE: Mr. Reiner, when you're saying that the interference that you're receiving from the hospital channels, are you referring to the HEAR system 340 or to the statewide 280 channel, or both?

MR. REINER: On both.

MR. ARMITAGE: Security systems on both?

MR. REINER: Yes. The 340 is the biggest problem that we have. Our 280 band is basically not used by our county very much at all. But we do know that there is interference on there or that other parties are using these frequencies.

MR. ARMITAGE: A related problem, you're saying, is that on nine and ten, paramedics are using this for non emergency communications back to hospital facilities?

MR. REINER: Well, the mid-channel nine and ten have been basically designated as dispatch channels. When the paramedic unit is out in the field and not assigned to a call, he will either maintain his radio on mid-channel nine or ten. If he gets a call, he'll go back to his dispatcher and the dispatcher will assign him one of the eight channels that are used by MIC services.

MR. ARMITAGE: I understand that. You're saying lack of coordination between the communication centers that are assigning the eight mid-channels?

MR. REINER: The communications center that we utilize in our MIC consortium, we have combined with our local neighboring counties. We coordinate the frequencies among ourselves. However, we had no control over the same eight mid-channels that are being used in Pennsylvania's communities.

MR. ARMITAGE: That was the last point of the question. There was really a three point lead coming down to the last point. Is the interference created within the State of New Jersey or is it primarily from out-of-state i.e. Pennsylvania because you're as close to the western border?

MR. REINER: Primarily out-of-state interference.

MR. ARMITAGE: Intra-service coordination is a very serious problem.

MR. REINER: Yes, the interference that we are receiving is on legitimate MICU patients being treated. But, most of the time it's interference coming from Pennsylvania. The interference that we're receiving from one through eight is not security services or transport services. They're legitimate MICU operations being performed. But again, with only the eight channels that are available within our locality, we run nine. On a busy night if everybody goes out, somebody doesn't get a channel.

MR. ARMITAGE: I recognize that point that you're coming to. I just wanted to, for the Commission's benefit, to

recognize that it is not only a New Jersey problem of coordination, it is a total coordination problem that does extend beyond the Delaware River in your case.

MR. REINER: That's correct.

MR. ARMITAGE: Thank you, sir.

ASSEMBLYMAN MAZUR: You have a question?

MS. HARTVIGSEN: Yes I do. Mr. Reiner, the school bus interference, is that Camden County school buses or is that also out-of-state?

MR. REINER: I'm not sure where they are coming from. I would say that they are coming from out-of-state. Although, I have no mechanism to track them.

MS. HARTVIGSEN: Right. Is the communication, such as, "pick up this youngster or pick up that youngster, or don't pick up this one," as much as it is the personal chitchat?

MR. REINER: I hear a lot of the "don't pick up this one, don't pick up that one." Although, it's not uncommon to hear the personal chitchat. The biggest majority is, "don't pick up Johnny or somebody is going to be late," or whatever. But it's all annoying, all of it.

MS. HARTVIGSEN: Of course.

MR. KIRKWOOD: Mr. Chairman, if I could inject just an antidote about the mid-channel intra-service user problems. As you know, I'm also a paramedic. One night about two weeks ago, I was in the middle of treating a patient who was in a life threatening situation. In the middle of this call on the same channel from somewhere else, came coincidentally, a voice of another physician treating another patient somewhere else with a similar foreign accent, believe it or not. Now, the odds of this are staggering. The physician gave an order that actually fit into the scheme of the treatment that was being rendered. It was only by good fortune that my fellow paramedic verbally confirmed that order back, because it did seem a bit aggressive to move from where we were to where this order said to go.

Then our physician came back out on the radio band and said, "No. I didn't order that." Yet, we were able to go back and review the tape, and everybody who listened to it thought that the same physician had given the next order in the sequence of orders. Now the odds of the same channels, the same gender physician, and the same type of patient coming together are probably astronomical. But at least it has happened with the same accent. Where they found two Israelis on duty at the same time, I will never know.

MR. REINER: And quite often you will find with the mid-channels, a hospital cannot hear what another hospital is saying. So, they may not be aware of the fact that you're interfering.

MR. KIRKWOOD: That is true also, because--

MR. REINER: Because of different operating frequencies.

ASSEMBLYMAN MAZUR: Thank you. Any other questions? (no response) Do you have any suggestions yourself?

MR. FAUST: Truthfully.

MR. REINER: It would be our wish to get the bus drivers off of the channel. Get security services off of the channel. Maybe with all of the people who shouldn't be there maybe the channel would operate satisfactory.

MR. KIRKWOOD: I guess unfortunately, they say the same thing about us. They say, "if we can get those EMS people off our channels, we could do business fine."

MR. COHEN: Mr. Chairman, I just wondered if the questions could be, if the bus people were more disciplined in their transmission, whether that discipline would bring about a shorter transmission or possibly a shorter transmission and possibility the absence of a lot of transmissions, and that's not really so bad? I presume that's what you were saying, because you did say chitchat. I don't know if you were attempted because--

MR. REINER: The interference that we receive on our operating EMS frequency I would guess we get interference maybe 10% to 20% of the time. On our 340 band, the hospital frequency, that's almost 90% to 100%. It's a tremendous amount of times if you get cut-out. Listening to that and the very active security services, what it appears to be-- It doesn't appear to be a chitchat on our frequency, it appears to be--

ASSEMBLYMAN MAZUR: Just overcrowded.

MR. REINER: Normal security business is being conducted on it.

MR. COHEN: You can't cut it down if it's real business.

ASSEMBLYMAN MAZUR: No. However, we'll put our heads together after the last hearing as to what we can do. But, I want to thank you very much.

MR. REINER: Thank you.

ASSEMBLYMAN MAZUR: We have Mr. Arthur Mercurio, New Jersey State Volunteer Firemen Association. Right?

A R T H U R M E R C U R I O: Right. I basically came here this evening to try to get my feet wet to understand what the situation is about the hearings. Because, I also belong to the New Jersey State Advisory Council. When we have these meetings we have 150 to 200 guys get up and say, "they said this, that Senator said, that Assemblyman is going to get this." So, I got so fed up that I turned around and said, "You have facts on paper?" "Well, no," that guy told me. I said, "Then don't say it anymore." I said that the best way to say it is to go down and talk to the people. Find out what they have to say. If they tell you something that you don't like, tell them right then and now. Don't wait two years and then tell them, because then a bill is put into legislation and then you cry that you didn't want that. Tell them what you want, explain to them what areas you want some help in, and I'm sure they'll be happy to help you.

Now, I happen to be lucky that back in '74 when Sullivan was head of the EPA (sic) and Goodenough was his assistant, they had quite a problem with sirens and horns throughout the State. So, naturally a couple of Assemblymen and Senators which I'd rather not mention, turned around and said, "We're going to cut them things off. We don't need them. They all got radios." Well I took the stand and I said, "I'll prove to you people that you couldn't do that because it's not safe. Let's sit down and talk." And we did and we came to a happy medium. We were the spearhead. The firemen were the spearhead that went back to the firemen and said, "Now look, you guys have a problem? Tell us. We will help you. We'll go back to the legislators. Let's work where we have a means of communication. Don't let 'that guy said, this guy said, and he said and she said--' Let's get all together on paper." And we did, and we resolved the problem.

Everyday I get a call from the State Office of Environmental Noise Control -- the new Commissioner. He calls me and says, "Art, could you do me a favor? There's a fire company down the road over there and they are blowing their siren. People are raising hell; they just moved in there. It's a new complex and they are all bent out of shape. Could you help us?" I said, "Certainly." So, what do I do? I do it diplomatically. I don't go over to the fire company and tell them, "Hey. You've got to cut that out." I go over and analyze the situation myself. And I come to a happy medium and we resolve the problem and there are no problems.

But the thing that I could see today, is like the reason why I'm here: The public is not being informed properly. Now, I talked to Mr. Miller just before the meeting. He told me that all the fire companies got a copy of the hearing that's going to be this evening. Well, I have to disagree with that, not that what Mr. Miller said that they are not getting it, the point is today the mail is not going to the

right people. In other words, a lot of municipalities don't have an office where the mail should go here. It's going to the clerk. The clerk puts it aside while the firemen have a meeting once month. Then when it comes to that time of the meeting, "Oh, gee, I forgot they had their meeting earlier," and it's too late.

What I'm trying to express is that I think if we all sat down and talked and tried to help one another, we wouldn't have no problem. I know the biggest problem is the money part. We understand that -- to get appropriations for money. But no one brought across this evening a problem that we've had when we went to the City of Camden. We went to try to help to put a fire out. And so help me God, I don't mean to throw stones at any nationality or religion. There was a bunch of fellows that were speaking the Spanish language and we're trying to speak to them in English and they won't answer us. Now what do you do? You go back in and get an ax and chop his head off and say, "Yo comprenda?" I mean, now there are guys' lives at stake, you need the water, and they ain't giving you the water. Now what do you do?

So, the point is we've got to let everybody in the State-- You want to work? You get paid to do a job. If you don't want to follow the rules, go. But nobody's got the guts to tell them. But you have to be a man and stand over there and tell them. Now the other thing that I was trying to say was the gentleman spoke about people talking on the radio.

Mr. Kirkwood brought out a good point about they had an emergency and the doctor was giving some directions on what to do. I happen to be fortunate to go to a convention in Massachusetts. In Holyoke, Massachusetts one day, they had a 14 story apartment house. As they went to the response, they happened to have quite a fire in this high-rise building. As they were proceeding to take care of their problem, they called for heavy rescue. Heavy rescue came from East Hampton and

suburban towns. When these guys were coming in, I heard the tapes myself too. The guy said something and he said, "Ten-Four." Well the man who was coming in with the heavy rescue understood it to be the 10th floor. Instead he meant Ten-Four, you understand, and it was in the basement. Six people got killed because them guys went to the 10th floor and didn't go to the basement to help them out because they went around to the other side of the building.

So, what I'm trying to say is that we can talk all day; we could say that we're going to do this. The point is that we've got to set some hard fact rules. If the guys don't speak up that that's what they want, buddy, the cards were dealt and it's your fault for not speaking up. But, I'm here to say that any problem that you people have with the fire services, I can help you. I'll be only too glad to cooperate with you.

ASSEMBLYMAN MAZUR: You've simply added another dimension to the problems that we've had, and that's the language problem, but certainly when you said Ten-Four, that was a code for a type of an emergency.

MR. MERCURIO: That's right.

ASSEMBLYMAN MAZUR: Those, I gather, are not universal around the State?

MR. KIRKWOOD: Yes.

ASSEMBLYMAN MAZUR: They are not universal?

MR. MERCURIO: Lots of times the guys will say okay or I hear you, or will you repeat that thing. But when a guy says Ten-Four, if he doesn't say it-- You know, when you're responding to something, as Mr. Kirkwood can tell you, sometimes you're really hepped up and you're going and you're thinking what you are going to do. And a guy calls you up and you talk fast and maybe you cut off some words. And the proper response is that you have to keep a cool head -- as cool as possible. And I think some type of rules have to be set up so

that you can work things out. As far as the gentleman talking about the bus guys cutting them out, there's a couple of ways of fixing that. Get all the bus guys off the frequencies, and it will be closer to any of the bands. Put them 50 megahertz away or either take them and put them on a lower channel where they can't interfere, or either give them some repeaters where you'll blast them right off and they won't ever stay on that channel anymore.

MR. MILLER: That's not quite our option.

ASSEMBLYMAN MAZUR: Much of this is determined by the Federal government, you know, by the FCC.

MR. MERCURIO: Well, that's understood.

ASSEMBLYMAN MAZUR: But certainly, these are all things that we certainly want to turn our attention to. Anybody have any questions for Mr. Mercurio? Nobody? Chief?

MR. COTRONEO: No. It's very interesting what he said that he is a good contact with the overall State Firemen's Association. We probably could use your card to get in--

MR. MERCURIO: It would be no problem. I gave Anne my telephone and everything, and I'll be glad to. Whenever you have any problems, get in touch with me. I'll show you. I'll help you.

MR. COTRONEO: Well, notification seems to be a big problem. If you can help us with that--

MR. MERCURIO: Well, I would like to ask if there's a possibility of somebody to come to the State Advisory Council which we have all groups there. As Dominick can tell you, we have paid volunteers, insurance underwriters, we have every phase of rescue and fire police. Someone could come there and enlighten everybody to what's going on and let them hear it the way it's suppose to be heard -- not the guy hears this much and he goes out there and he adds to it a little bit because he wants it to be his way. You always hear a story a little

different than the other. I'm sure if we've heard it from the direct-- It would help a great deal.

ASSEMBLYMAN MAZUR: Well, can you arrange an opportunity when the Commission can come to you?

MR. MERCURIO: Sure can. Well, we wouldn't need the whole Commission. I think it would be--

ASSEMBLYMAN MAZUR: All right, a delegation from the Commission.

MR. MERCURIO: Fine. And incidentally, the way we operate, we don't all go to the State House and try to get bills put through. We have a lobby group of our State Advisory Council who approach certain legislators and say to them, "We have this proposal, will you assist us or help us?" You'd be surprised at the help we get. It's tremendous. We have no problem. In fact, I'm the guy, when Bill Cahill was the Governor and he happened to be a neighbor of mine, designed the firefighter's tag. It says firefighter on your automobile. And at the time that we were putting them in there, oh there was a few hotheads who wanted it to be volunteer firemen instead of firefighters. And that's what held it up. Finally, we got it through. That's it. That's through the help of the legislators.

The only thing that I could say is if there's any way that I can help you, please call on me. I think it's nice to communicate to the people. I think we've got to get like The Newark Star-Ledger does; they hop on things. And they always hop on the things that hurt people instead of helping the people, as far as I'm concerned; and get the local papers down in Camden County and Burlington County. Let them put something in the paper, but don't let them put a little page -- a good spread so that everybody understands the story. Because I came here cold tonight. I didn't really know what to expect.

ASSEMBLYMAN MAZUR: Well, this is our second meeting.

MR. MERCURIO: I understand. But you see what I was trying to say to you, if you don't get correspondence properly, you go there and you wonder, "What do I say, what do we do?"

ASSEMBLYMAN MAZUR: It's very hard to get the press to write about Commission hearings. It's just not sexy enough . If this was a commission that was investigating surrogate motherhood, they'd be hanging out of the rafters. You know, that's a sexy issue.

MR. MERCURIO: Oh, I understand what you mean.

ASSEMBLYMAN MAZUR: A double play on the word.

MR. MERCURIO: I understand, but the only thing that I was saying now, was if you would send whatever you want to me, I'll see that it gets through. We have our meetings four times a year on Sundays and we have quite a gathering. I'll get the word out to the guys.

ASSEMBLYMAN MAZUR: Well, we certainly will have a delegation at your next meeting if you will get in touch with Anne Stefane here.

MR. MERCURIO: Sure. And any problems that you have in communications, I'll try to help you because I work for RCA in Moorestown on quite a few big systems, and I'm quite inclined to help.

ASSEMBLYMAN MAZUR: Very good.

MR. MERCURIO: Thank you.

ASSEMBLYMAN MAZUR: There's nobody else who wants to--

H A R R Y W I L L I A M B I C K I N G: I'd like to come down and say something.

ASSEMBLYMAN MAZUR: Come on.

MR. BICKING: I won't be too long to interfere with the Flyers' game tonight.

MS. STEFANE: Could you state your name for the record, please?

MR. BICKING: My name is Harry William Bicking, Captain of Audubon Ambulance. With two ambulances in our squad, we ran approximately 900 calls last year.

Basically, Craig stated everything that I would have stated. One addition that the Commission might want to understand is that he was talking about the interference with the hospital HEAR system, the band that we refer to as E2. Another look at that is the hospitals we have in Camden, particularly, Cooper Hospital which runs our Regional Trauma Center, has been having so much interference that they have been shutting off their HEAR radio system. In other words, their base that sits in their E.R. is being turned off because of the amount of chitchat or whatever that is coming across the radio.

So, in the event the ambulance that is coming into the hospital even attempts to code four, five, or six times-- And even our dispatcher, with their very powerful base radio on a big antenna, we know the signal can get to the hospital, even if the interference is not there at that particular two-second spot while they are doing their encoding to the hospital, due to the fact that the hospital has to put up with this. Now during an eight-hour shift, a nurse or whoever is sitting there, has to listen to this on and on and on. They eventually get tired. You know, they've had enough so they turn it down or they turn it off. So, even if we're two blocks from the hospital and we try it, we're still not going to get through. That's the amount of interference that the hospital has to hear.

Now, we hear it for whatever time we're out in the ambulance -- on our regular frequency, maybe 20 minutes on a run; on a HEAR frequency, maybe five minutes while we're trying to call the hospital. The hospital, however, they have to listen to that. If they are on an eight-hour shift, they have to listen to that for eight hours. This breeds a lot of discontent with the system with the people working in the E.R.s. So, if we have to call the hospital, they've turned it down, they've turned it off, they don't pay any attention to it, because all they are hearing is garbage all the time. I don't know what the percentage of the calls that are theirs on

that frequency, but they have to listen to the security people and the bus companies, and whoever else might be on that frequency. This is another phase, you know, that's from the other end of the system when we're trying to call the hospital. So, maybe that could enter into your--

MR. KIRKWOOD: Can anyone tell me sir, if anyone has checked the radio at that particular institution for proper operation of its decoder block and its PL system, and so on?

MR. BICKING: Yes. I have sent personally, three letters about that. What we've done is we've gone to a hospital. I won't name it. We've gone in and their encoder has been off -- their base station. So, what we do is we turn it off. Go out and pack out their four-digit number, and I have a crew member stand next to the radio and it opens up and they answer us and we answer them, and there's no problem. Most of the time it's not a problem physically with the radio, but a problem with the person who has to listen to the stuff.

MR. KIRKWOOD: That was where I was trying to get with this question. Is this an equipment radio problem, or is this a people problem?

MR. BICKING: It's mostly a personnel problem, as far as I could detect.

MR. KIRKWOOD: Not knowing how to close it back down and then turning it off.

MR. BICKING: If the radio has a physical defect, we're usually told by our county dispatcher that their encoder is down, give us the information, and we'll relay it by phone. They usually know when there's a specific electronic problem, or whatever.

MR. KIRKWOOD: So, this is a human error? Or a training problem?

MR. BICKING: Well, not an error. They've reached their level of tolerance to the garbage that's going across the air.

MR. KIRKWOOD: Let me go back to where I started the question then. If those things are working -- the channel guard, CTCSS, and their DTMF decoder -- they should hear no garbage.

MR. BICKING: Okay, some of the time, they don't. Other times, because of the interference, they have to leave them open to hear, because what will happen is during the course of hitting the four-digits, if you hit two-digits, somebody, like the bus company or whoever, starts talking in the middle, what will happen is-- Say you hit out the four-digit number, it opens their radio. But as you are trying to transmit to them your information, the people in Philadelphia, they won't hear the ambulance with the 30 watt radio, they'll hear the base station in Philly with 100 watt radio. So, all they get is that it opens it up and then -- garbage. Then they shut it off because they've had enough of it.

ASSEMBLYMAN MAZUR: Bob.

MR. MILLER: Yeah, I'm glad you made that clarification, because you obviously do understand how it works.

MR. BICKING: I've been running calls for five years.

MR. MILLER: Yeah, because these radios are protected with touch tone. I understand what you are saying. In other words, they are not sitting there carrying a squelch. They shouldn't hear anyone unless they dial. I understand what you're saying, now. You're saying you open it and in fact, open up the squelch, and then all that other noise is there which obliterates--

MR. BICKING: Yeah, well see, what can happen is that in the event that we can't open them up, we will call our dispatcher. They'll go to the HEAR system frequency, they'll tap out the four numbers. They'll contact the hospital. They'll say standby for Audubon Ambulance. As we go to talk,

we're now a little 30 watt mobile radio, and we're being totally stepped on by the other units. Whereas base to base they might hear, but when it comes down for us getting the information out of the ambulance, they can't hear us.

MR. MILLER: Do you know what action, if any, the hospitals take? Do they talk to the FCC? Have they asked for any assistance?

MR. BICKING: I really don't know. All I know is from my end, I have written complaint letters both to Ken Koeniter and to the hospitals about the problem. I'm not an employee of a hospital. I don't really know what their administration is doing about it.

MR. MILLER: How about the other hospitals in Camden County? Do you witness much the same problems?

MR. BICKING: Most of the problems have been in the three hospitals that we have in Camden that are close to Philadelphia. That seems to be the majority of the interference that I've personally come in contact with. However, the interference seems to be all over. We have a better chance of talking to hospitals that are south of Camden or away from Philadelphia. However, there is still interference at the distance.

MR. MILLER: Thank you.

ASSEMBLYMAN MAZUR: Mrs. Hartvigsen. Winnie, you had a question?

MS. HARTVIGSEN: No. I can relate to what he is saying.

ASSEMBLYMAN MAZUR: Would anybody else like to add any thoughts? (negative response) No. Well thank you very much for your testimony.

MR. BICKING: Thank you.

ASSEMBLYMAN MAZUR: Would anybody else like to add anything to this?

I R V I N G G I V I N: My name is Irving Givin. I happen to be a technician here at the college. But in my prior lives, I've also been in communications. I hold a FCC first class license. I was also a professional pilot.

I have always have wondered why in the various fields of communications, everybody uses codes, whereas in aviation, we never did. It was always the spoken word. No code numbers, no code letters. There's too much chance for confusion. I hear here Ten-Fours, Ten-Twentys. What is Ten-Twenty? A person will say. "What is your twenty?" Well Ten-Twenty means what is you location? So it's really redundant. And even when you use words, you can have a mistake which happened most people might remember in the Tenerife accident when the two 747s collided on the runway. The pilot was told, "You're cleared into position for takeoff." The correct terminology should have been that, "You're cleared into position," period, or "You're cleared into position whole." Well that captain didn't hear the word, "for." So, see even with clear language, he heard, "You're cleared into position. Takeoff," as if he was clear to takeoff. It was the controller's fault.

So, if you can have an error with clear language, I feel that you have more errors, when you use all of these codes, especially when many times they are not standard. I have never understood the reason.

ASSEMBLYMAN MAZUR: I think it started in the military during World War II.

MR. GIVIN: I don't know. I was in World War II and I didn't hear much of it. I think it really started even before that with the police.

ASSEMBLYMAN MAZUR: With the police?

MR. GIVIN: Yes, in the early days, in fact in northern New Jersey when the early police cars were equipped. They started using codes. I guess they didn't want other

people to know what they were saying. And the "Ten" really meant nothing. It was noticed by the person who set it up that there's a tendency when you speak to press the microphone down at the wrong time. They cut off the beginning of their word. They speak first before they press the mike button. So he tacked the "Ten" on.

In aviation what you hear a lot of is, "Ah, this is--" You get the "ah." No, (indiscernible). But that I think is the problem which the gentleman over there mentioned on how someone mistook the code Ten-Four for tenth floor, and this can happen in communicaticns. This is just my comment.

ASSEMBLYMAN MAZUR: Well, it's certainly an interesting one. One of the things that we are going to have to address ourselves to is this question of codes or methods of communication. What we can do legislatively on that, I don't know, but certainly some effort to at least standardize codes throughout the State-- That may be one solution. The other may be to use only the terminology. However, I'm sure in police work, Captain Saiia, it enormously abbreviates the time of the transmission, if that is correct.

CAPT. SAIIA: We're moving back in that direction towards plain language.

ASSEMBLYMAN MAZUR: Plain language?

CAPT. SAIIA: Instead of codes. I think Mr. Armitage instructs in that area, and I think he'd probably tell us that that's the direction they are moving in police dispatching.

MR. GIVIN: You see, in the aviation field there is a manual of terminology -- a traffic control manual and all pilots are supposed to be familiar with it. This is the basic terminology all controllers are supposed to use. I'm not saying they don't make mistakes. Maybe that's what we need -- other forms of communication.

ASSEMBLYMAN MAZUR: Well, it's certainly very interesting. Mr. Armitage?

MR. ARMITAGE: Senator (sic) Mazur, I'm going to give you a little bit of the history of the Ten code, if you will. The "Ten" of the Ten code is a signal or a subconscious trigger to allow you that there is a coded message to follow as opposed to a telephone number or a street address, or other such digits. There is a nationally adopted standardized Ten code, although many of the Departments have a definite reluctance to utilize this. Whether you are using an abbreviated form of speech such as codes or plain English as Mr. Givin was pointing out, you're still using a form of coded communications -- canned phrases, canned words. Standardized words are coded communications.

If a person does not know these standard phrases, there is still room for misinterpretation, not to the degree that a number would be misinterpreted as a name, but I think, from a personal opinion and what Mr. Givin pointed out and Mr. Mercurio as well, that there is a need for the Commission, in their deliberations, to file a report to consider something that was recommended in the 911 Enhanced Report and that is to consider the possibility of standardization and certification training for police operators, or in this case, telecommunicators, or telecommunications operators, or formally more commonly called, the dispatchers. And this form of training should be standardized throughout the State for the benefit of accuracy and simplicity and enhancement of that profession within its own right. I think that could go a very important way in this Commission's consideration as well.

MR. GIVIN: The only other comment that I have is in the aviation world it is recognized that English is the standard language, even if you fly in Europe, you're suppose to know English, all pilots and controllers. They may have an accent, but it's--

ASSEMBLYMAN MAZUR: That may confuse matters, too.

MR. GIVIN: But you have to have something standardized. That's all I have to say. Thank you.

ASSEMBLYMAN MAZUR: Okay. We thank you very much. Does anybody else wish to add something? I see a gentleman headed towards us.

C U R T H U D S O N: My name is Curt Hudson. I'm the Deputy Chief for the Oaklyn Fire Department here in Camden County. Just to further comment on the outside interference on operating frequencies, we use four frequencies for fire fighting here in the county -- one, the primary dispatch frequency which the ambulances are also dispatched on.

We occasionally receive outside interference on that, both from Mercer County and from the southern parts of the State. But they are not as strong as on the F3 frequency -- 154.16 -- which the northern half of Camden County operates fire graph frequency. Montgomery County in Maryland has a very strong base which quite often is, or seems as strong as our dispatchers in Lindenwold. There are times when we are operating on the fire ground where it might seem that just in paying attention to the radio traffic just when you're waiting for a clear channel for transmission from truck to truck, that you may not be able to make the distinction of who is transmitting whether it's somebody on your fire ground, or even another company in another surrounding town that may have something going on at the same time, who naturally you wouldn't transmit against or over.

But if we didn't have the Maryland traffic, we would be able to just proceed with it. The plan is for October of 1988, I believe it is, to have private lines installed here in the county for us talking to our dispatcher. That's a subtone encoder which would only open up the dispatcher's radio when we were transmitting, which would eliminate them from receiving a lot of the Maryland traffic and other outside interference.

Nevertheless, truck to truck communications are still interfered with by them. It also involves us in using portables. There are times when they are so strong that you

would be hard-pressed to think that they were coming over that far of a distance. And when you might be using a portable to talk to the alarm room, that does present a problem in that case. I don't know the technical end of it, but I would assume that there might be some kind of shield that could be directed for their transmission antenna, at least as far as this direction goes. The county, as far as I understand, is working on correcting that problem. I think it might only be treating a symptom and not the cure for the cause of what we are receiving here.

There is also a fourth frequency used, more or less, a command frequency. It's actually called the F4 band. I don't know who had the rights to that frequency first. But there are other transmissions going on that that are non-fire or ambulance service transmissions. In our case, primarily from Ancora State Hospital, it's being used for paging doctors. It's a pain in the neck having that going on. That frequency is used primarily for working fires in side discussions with the dispatchers for administrative reasons.

Nevertheless, that traffic is going on all the time. It's not real, real busy, but it's 24-hour traffic. We just wonder if it's a fire band or, you know, an emergency band, then why is a hospital dispatching on that frequency? It's just that much more traffic going on this. I think that's it as far as that goes.

Just as a follow-up, the fire service in Camden County does not use the Ten code. Everything is in plain English. That has worked out. If there is one thing I could say, I've been in the fire service for 15 years now. The county dispatching system started shortly after I became involved. I was still around long enough to see the difference that having a central county dispatcher has provided in terms of creating a more professional atmosphere among the volunteer fire fighters in this county. More so discriminating, Gloucester County came

along with a similar system in the past few years. You can hear the difference in how radio traffic works. There's less truck to truck discussion which I noticed immediately when we got onto the county dispatching system, and the other conference that came from that was, we were talking to fire fighters and other emergency people as opposed to what's going through our town's police dispatcher. We were, more or less, just an add-on from what they were doing. I know that's one of the questions here. Having that service provided to us has, I think, provided a secondary asset in addition to coordinated dispatching -- but just a more professional atmosphere in the fire service.

ASSEMBLYMAN MAZUR: Are there any questions? (negative response) Is there anyone else who wishes to testify? (negative response) I'm going to take the liberty and ask the gentleman from Motorola if we can ask him some questions. Are you from Motorola?

B R I A N H U G H E S: Yes I am.

ASSEMBLYMAN MAZUR: Well, I thought maybe we could ask you some questions about what Motorola may or may not be doing, if anything. I know that you've been at all of our hearings, but you've never said anything. I just wanted to know--

MR. HUGHES: I'll be very happy to answer questions, but I will have to answer them as a citizen of New Jersey, because I believe that our corporation has a policy that if as an Assembly member, that only a corporate officer could offer official testimony. However, I do live in New Jersey, I have lived in New Jersey all my life, and I do have some experience in radio. So, obviously, you know, I would certainly be happy to answer some questions.

MS. STEFANE: Would you state your name for the record.

MR. HUGHES: My name is Brian Hughes and I'm a resident of Morris County.

ASSEMBLYMAN MAZUR: My question is that you've heard all of this information. Would you be at liberty to indicate to us what kind of research that you know -- not necessarily just your company, but in the field -- what manufacturers may perhaps be doing to try to overcome some of these particular difficulties? Is anything happening?

MR. HUGHES: In listening, one of the obvious, you know, difficulties is here in New Jersey we're sandwiched in between New York and Philadelphia and there's a definite scarcity of frequencies. Therefore, as New Jersey has developed, and we have over the past-- I've been in the business for 12 years. New Jersey certainly is a State which is having the population reallocated; areas that were once densely populated are not as densely populated, areas that were partially populated are now somewhat densely populated. Therefore the resources that were allocated in terms of frequencies may be, in somewhat of the wrong places -- like when we were in Monmouth County. At one time, Monmouth was rather sleepy and the frequencies may have been enough. Now we have a heavy concentration of people in Monmouth County. The same thing may be true here. I live in Morris. The population has moved into Morris; the frequencies have not moved into Morris.

At the same time, the equipment that is available is far more sophisticated. Receivers are far more sophisticated than they ever were. We're receiving transmissions from the far reaches of the solar system that are being generated by very low powered transmitters. It's only possible because of some very sophisticated receivers. Manufacturers have generally tried to reallocate how the power of the radio-- We now see lower power. For example in the New Jersey State Police system, the criteria is to use a three watt transmitter anywhere in the State of New Jersey and have access to the system. This is only possible because of the fact that the receivers have become more sophisticated.

So as we've literally cleaned our ears out and we are able to hear better. Tthere are situations where people are talking louder. So you have on one end that it's aggravated by the fact that quite possibly there was a time when the receivers here may not have been sophisticated enough to hear Montgomery County in Maryland. We have situations where from Gloucester County we can talk to Roseland certainly, up in Essex County. I'd love to know how to do that. I'd love to know that propagation study -- a lot of it may be the fact that the receivers are more sensitive. The antennas are more sophisticated.

So that what we have is a situation where the frequencies which at one time the allocation may have been proper, are just maybe not in the right places. We had a tremendous coordination effort. The New Jersey State Police Officers of Frequency Coordination does an outstanding job of policing how the frequencies are used in this State. But you just have so much resource that's there. It is a very limited one, it's a very precious one, and it's one that is just not made-- It's almost like land; they're not making any more of it, so what you have becomes valuable. Unlike land, however, where you have ownership of it, you have people trying to share it. Land in Morris County has become very expensive. People aren't sharing that land in Morris County, however. They are owning it. You don't have that luxury with frequencies.

So, we have more people trying to use the same resource. So, what we need is more resource. There is obviously resource available in the 800 megahertz range, which is almost like a frontier. Like any frontier, it is one which needs to be explored and expanded. Right now, certainly here in New Jersey we are using 800. We could use more 800 megahertz, because as the 800 megahertz is developed, we can get involved in trunking. As we heard in Morris County, the concept of trunking which is a pool of frequencies-- And if

the goal of the rescue squad is to pick up the microphone and talk and be received clearly, regularly, and reliably at the other end, it doesn't really matter what frequency they were on. It doesn't really matter where the transmitter is, as long as when you press it to talk, you get somebody at the other end.

This, of course, is one of the prime and important features of trunking. Of course, there are a lot of other things involved: One, there are no frequencies at this particular point. More frequencies are required. Once their frequencies are gathered, then there will have to be resources; that is, equipment has to be purchased. There even has to be a certain amount of home rule that will no longer-- I mean, you may have to have not only county sharing systems, but maybe many counties, maybe two or three counties sharing the system.

When this 800 megahertz, which we hear opens up, it is going to be like the Oklahoma land rush. There are going to be people climbing over other people to get this resource. The public safety community needs some of this resource, and should be guaranteed some of it so that they can develop further. Of course as this resource is developed, quite possibly, some of the other resources will be freed up. And when they're freed up, other agencies, such as we heard in Sussex County, where Sussex at one time may have had 75,000 people-- When I was a kid in Morris County, there were two high schools in Sussex County. Now are must be 12 high schools in Sussex County. There are 152,000 people in Sussex County. Hunterdon County at one time, not too long ago, there were maybe 75,000 to 80,000 people out there. Interstate 78 has brought all sorts of people to Hunterdon County, but Interstate 78 hasn't brought frequencies to Hunterdon County. I think what we need to do is we need to bring frequencies and we need to bring 800 types of frequencies which permit trunking which could permit a greater utilization of the spectrum.

ASSEMBLYMAN MAZUR: Do any members of the Commission have question? Mr. Armitage, any thoughts?

MR. ARMITAGE: Mr. Hughes, not as a representative of any one specific vendor, but to take advantage of the new technology which you do speak of very sincerely and very honestly, that you and your competition is taking care of-- Having dealt with the public safety environment for a great number of years. does it still not, in some sense, come back to the issue that the growth of public safety is much longer than that of private enterprise, because of the basis of the economic issues that come up with systems designed to sell the concepts and then to integrate and be able to do this, that the spectrum that's needed and when allocated is used up before we can get the money as public safety entities, and to be able to buy this, regardless of what manufactures are putting it in and putting it out, we need money?

MR. HUGHES: Essentially, you're correct. The time between going to a municipality and proposing something and actually seeing it come through fruition, could be a cycle of 2.5 to 4 years, so that one spectrum opens up. You know, quite obviously for economic reasons, you go to the business community where it doesn't take that long. However, the development of product tends to go the same way. If you have a group of private entrepreneurs, who can immediately begin to, you know, generate sales, and they will do that with mobile radios. You'll develop mobile radios first.

The last thing that may be developed would be a portable radio. Well a portable radio may be one of the prime things that a public safety agency needs to get into the last thing that's developed. Therefore, by the time you get around to having what is required for the public safety agency, the valuable spectrum is gone. Or, there is so little of it left, that it requires using that spectrum in a way that it may not

have been used in other services. That is, reuse of 800 frequencies in a 35 mile radius rather than a 70 mile radius or something akin to that. So, you're trying to get maybe two pounds of stuff into the proverbial one pound bag where had it had all product been available at the time that all frequencies were opened up and if the funding cycles were somewhat different--

MR. KIRKWOOD: I have a question, if I may. Citizen Hughes, I appreciate your private effort to educate us on behalf of the citizens of New Jersey. To follow up on your comment about product development and serving the need of the industry, I'd like to talk a second about specifically biomedical communications that are used in the mobile intensive care system.

At this point, we work with a piece of equipment that is large. It would appear to me that probably industry in general has the capacity to get that particular radio into something much smaller. Yet, it appears to me, possibly because we're such a small segment of the market that that lags behind. We've been talking about an EMS trunk 800 system. I'm wondering if the capacity exists to have something of a reasonable size compatible with the system that can also send biomedical telemetry as our tight medical control paramedic system requires?

MR. HUGHES: Product development is not my strong suit, however, I know that we are exploring a product. I mean we recognize the fact that where all of this is leading, not necessarily here in New Jersey, but nationwide. The fact is that we will definitely require a product to meet that need, and certainly size, right now, is a prime consideration. But it is something that we are looking at.

MR. KIRKWOOD: Do those channels and that type of network have the capacity to handle multiplex communication that was presently used in the 450 band?

MR. HUGHES: That I couldn't answer. I wouldn't be in a position to.

CAPT. SAIIA: Mr. Chairman?

ASSEMBLYMAN MAZUR: Yes.

CAPT. SAIIA: Mr. Hughes, I feel somewhat relieved now when you talk about all this capability at 800 megahertz. It sounded like that may be the answer to our frequency congestion problems and that there are sufficient frequencies available there?

MR. HUGHES: I would hope that they are. I mean, certainly, I know that there is something moving through that would open up frequencies.

CAPT. SAIIA: Actually, it's my understanding that the allocations that are going to be available are pretty much accounted for. Probably, let's say, if there's 120 channels available, there's 300 request-in forms, right?

MR. HUGHES: Yes, at least.

CAPT. SAIIA: So, that's really not the answer either?

MR. HUGHES: Again, I think the answer is we need more 800. Now how do we make more 800? Are there ways of making more 800s because even the Commission -- it's hard to say, but maybe the Commission ought to take a look at the allocations that have already been made. Maybe all of the frequencies aren't being used the way they are intended to be used. Maybe all of the taxi fleets that were represented to be fleets of a hundred may only be fleets of two or three. There may be part of the spectrum that is not being constructed properly.

CAPT. SAIIA: I feel somewhat like the ancient mariner because I brought it up a couple of times about the frequency repacking as a possible solution. I personally don't see 800 megahertz or any single band being the answer to our problems, but I do see that repacking has a definite possibility. Does Motorola take a stand on that issue, or does the communications industry at large take a stand to your knowledge?

MR. HUGHES: I don't really think-- It would be hard for me to say. It's hard for me to speak for the industry.

CAPT. SAIIA: It just seems that we're being forced to continuously break new ground for the public safety service. There were bands available where good equipment has been made for a number of years -- good dependable equipment that could, with the right direction, be made for the public safety community, not only in New Jersey, but nationwide so that we don't run into those problems like we have found across the border in Pennsylvania with Pennsylvania people interfering. Things could be allocated probably federally and eliminate those types of problems without going into technology at the public's expense all the time.

MR. HUGHES: But, I mean by repacking--

CAPT. SAIIA: The TV broadcast spectrum.

MR. HUGHES: Well, of course, that would be of an enormous amount of help. That would certainly be, in as far as, you know, it's far from a-- If there's a spectrum, and if it is going to be available, or if there is a chance that it is available, certainly, there's going to be product developed in that spectrum.

CAPT. SAIIA: Yeah, but something like this is not going to start-- Our children are going to be faced with the same problems we're faced with today unless somebody takes a stand, gets a contiguous block of spectrum, makes it available for the public's safety, and says, "Yes, this is a need that has to be responded to." It's not being responded to by jumping all over the frequency band, making the public safety service development equipment a huge expense in all different segments. Somebody has to start somewhere and say, "Let's start planning 15 years from now. Don't license anybody new on these frequencies. Let's start a common public safety band."

MR. HUGHES: No question. I think the broadcast industry many years ago foresaw where it was going and made

provisions. But I would think that certainly from a manufacturing point of view, we can trunk 800 or we might be able to trunk UHF. Trunking, as you know, offers enormous opportunities. Maybe as technology changes and the frequencies-- They're just not making any more of them. I think that, you know, we have to look for either places to find more, or ways to use the ones that we have, more judiciously.

CAPT. SAIIA: But what I was looking at was to see if your company did have a long range plan that included this kind of thinking -- at least conceptually talked about this kind of a play for the future? And you're saying no.

MR. HUGHES: No, I'm not saying no. I'm saying that it's just difficult for me to say in the position that I'm in. But certainly, we are looking at staying in business and we are looking at the future sales opportunities, and the public safety community has always been one of our strongest and greatest sources of sales. So, certainly we're going to do what it is we have to, to continue that as a viable marketplace.

CAPT. SAIIA: Thank you.

ASSEMBLYMAN MAZUR: A little student dissidence out there. Shut up. (laughs while referring to commotion outside the hearing room)

MR. KIRKWOOD: Mr. Chairman, I have a question for perhaps Bob, or Mr. Armitage -- just following on the heels of this discussion. It sounds like the industry can solve the technological problems, but some of us have to solve the political problems and the dealing with spectrum allocation and the FCC. Through the course of these last three hearings, it's also sounded like the broadcast industry does a heck of a job lobbying the FCC, and perhaps the public safety industry doesn't have the resources to do that or something. Perhaps that's a role that this Commission ought to see where an opportunity presents itself for us to step in and open the pathway here for the technology to follow.

ASSEMBLYMAN MAZUR: Yes.

MR. MILLER: Yeah, I'd like to address that. I'd say that probably the largest organization that deals with communications in public safety is APCO. I'm sure you are all familiar with APCO. They lobby extensively on every bill when it comes to frequency allocation. They have a full-time attorney and staff in Washington. They've been there and they've done many, many battles. We probably have what we have because of them. So, I would like to suggest to you that the only way that the only way anything could probably done is through the legislative routine. We've all stood there, we wrote letters, and we've been at hearings, and not only APCO, but another state health department was there on many occasions fighting for a cause, and other health departments. I said this before, and I'll say it again that when we have our final discussion, that I think that if there are any changes at all to be made by the FCC, it is going to be because of the legislative process. ABC, NBC, CBS, and everyone else, they are just too big for us.

MR. COHEN: When you say the legislative process, you mean, well, you are involved in the legislative process, too--

MR. MILLER: I mean we need Senator Bradley and other State legislators to go down and tell the FCC: "You know, we don't appoint -- the President does for so many years, but we do control your budget." That's what they need to tell them. "You have to listen to public safety." What they've done on 800 megs is they've given us lip service. They've taken a little bit of spectrum, and said, "Okay, you guys, you've been fighting a lot with Kean, the FCC's not taken care of your needs. I'll tell you what, before we give out any frequencies on FCC, we're going to have this national planning committee that which Captain Saiia and both of us are on. We want you to tell how us to give out these frequencies."

And we tried to tell them nicely. That's about all we can tell you. The best way to maybe give out these frequencies-- But these are not going to solve these the problems of the country with frequencies, because there is just simply not enough around. As you heard said here today, of the 800 megahertz frequencies that may be released when this final report is finished, there are already two to three requests for every frequency. It's just a further delineation of what we have -- you know, a low band, high band, UHF, 800 megs, which Captain Saiia was also alluding to. So, it's now going to give not common channels. It's not going to do the kinds of things that we really need to do. They've thrown us that bone.

I think, hopefully, we have to get our New Jersey legislators or Federal legislators -- because it's not a State issue. And hopefully, if we can get them aboard, and they can fight for our cause along with people in other states that have fought. I think it's probably our best hope if not our only hope.

ASSEMBLYMAN MAZUR: In other words, dealing simply with the Administration seems to be somewhat frivolous and that it would have to be some Federal Congressional or Senatorial imperative that directs the Administration to respond. In other words, the Federal legislation is going to have to exercise legislative oversight over the FCC, and those who appoint FCC Commissioners to respond to this growing emergency, because I'm sure that the problems that we see here in this location -- in New Jersey -- are not dissimilar from the problems that have probably heard in the Washington area, or I can imagine northern Rhode Island -- problems between Providence and Boston in southern Massachusetts, problems in Connecticut, and elsewhere in that growing urban band from Washington to Boston.

These densities of population are certainly growing in the Chicago area and in the San Francisco Bay areas. I can

imagine all kinds of difficulties between Oakland and San Francisco and Berkley out there. And as the urban population increases, we're going to have more and more kinds of this problems. Alan.

MR. ARMITAGE: Mr. Chairman, I strongly support the comments of Captain Saiia and Mr. Miller and yourself along these lines. I think that this has been proven to us that this is an avenue that must be pursued with the California issue where the sheriff's office took a strong political stand to get reallocation of TV sharing and was, in fact, successful after hundreds and hundreds of thousands of dollars and expenditures, and considerable lobbying and so forth that they got a small chunk of the spectrum.

A comment was made a little earlier that the broadcasters got their act together for the future a long time ago. I don't know if that's totally true, except that it is in fact that they have been allocated the spectrum by the Commission. Now, public safety is trying to say, the Commission must change this because it's partially a possession being the nine-ten factor. But it's given to them, it's allocated to them, and all they have to got to do is sit back and defend that we are still going to need it. What we're trying to say is that we need it. Basically what it's going to come down to in the legislative aspect is, which is more important, the saving of public health lives and public property, or the entertainment of the public? That's something that has to be addressed at the Federal level.

CAPT. SAIIA: They don't have to be mutually exclusive. I don't thing you made that point, Alan. They don't have to be mutually exclusive.

MR. ARMITAGE: That correct, but it has to be addressed.

ASSEMBLYMAN MAZUR: I think the FCC's mind, public entertainment in those large corporations have a lot more to say than the public safety sector of the economy.

CAPT. SAIIA: Yes sir, except we've gone into this to some extent. There are 65 TV channels available out there. No market, that I'm aware of, has over 15 -- or maybe in New York City, 25 of them -- that are being fully utilized.

ASSEMBLYMAN MAZUR: And they are just being reserved.

CAPT. SAIIA: Yes. There's no reason why we couldn't take a segment out of the center there without harming anyone. The broadcast industry has a receiver. We can stick a TV or radio anywhere in the country and receive communications. You can't do that with police communications.

MR. MILLER: Yeah, I might add to support what Captain Saiia said. We have a new TV station in South Jersey that didn't do too well. Now, they're doing fine with one of these home shopping services. Every one of those UHF channels are 120 pairs or 240 frequencies -- just one channel. So you could imagine what would happen if we could convince the FCC to just take five or six TV channels in a row. Okay? One hundred and twenty times five. And have all of these channels be adjacent so that we can have one public service or one public safety radio, whether it be Motorola, GE, or whatever. Then we could go both trunking and non trunking type, but we could basically have a radio that could be used anywhere -- just program whatever frequencies you need in the radio for the job. It would certainly do a lot to keep the cost down as well.

ASSEMBLYMAN MAZUR: Well, is there anybody else who wishes to add anything? (negative response) I want to thank you very much. Did you bring anyone else with you from Motorola? You're usually not alone, I know.

MR. HUGHES: Well, I am alone today, which I may find to be a blessing when I go to the office tomorrow. (laughter)

ASSEMBLYMAN MAZUR: What is you position with Motorola?

MR. HUGHES: I'm a district sales manager to do business with the State of New Jersey dealing exclusively with State government, you know, if you're in New Jersey.

ASSEMBLYMAN MAZUR: Well, we thank you very much.

MR. HUGHES: Thank you.

ASSEMBLYMAN MAZUR: If there's nobody else who wishes to be heard, then at our Trenton -- our next meeting -- I suggest we discuss possible alternatives and courses of action. The expiration date of this Commission is--

MS. STEFANE: August 12th.

ASSEMBLYMAN MAZUR: August 12th. So, we're rather pressed for time before we disappear -- we evaporate. But hopefully we want to leave something behind us. Now, at the meeting after the next hearing, I would suggest that we invite representatives of Senator Bradley and Senator Lautenberg, and the various Congressmen. I doubt if any of them would be able to attend, because of their schedules, although some of the Congressmen may be able to. Senator Lautenberg may come. And discuss with them the problems with the FAA -- FCC. I'm getting them all mixed up here. All these acronyms, codes, and numbers.

MR. ARMITAGE: And that was in plain English, sir.

ASSEMBLYMAN MAZUR: Somebody said that the greatest lines are, "I gave at the office today," "the check is in the mail," and "we're the Feds and we're here to help you." However, does that meet everybody's approval? Because I think we'll have to set that second meeting date now and we'll have to get our invitations out now to these people. Is that okay? We can do that to see how many responses we get. And we'll still need two more meetings. We'll have the next hearing, the meeting after that, and there will be one final meeting in August. Okay? So, why don't we pick a date now for that second meeting. We have a date for our next hearing, that's--

MS. STEFANE: June 3rd at 2:00 p.m. That's two weeks from today.

ASSEMBLYMAN MAZUR: Right, two weeks from today. I want to thank you all for coming. The next meeting will be June 3rd in Trenton at 2:00 p.m., in room what?

MS. STEFANE: Room 424.

ASSEMBLYMAN MAZUR: Room 424 in the Annex. And two weeks from that date would be June 17th. Would that meet with everybody's approval? So we will be inviting people for the June 17th from the various Congressional and Senatorial offices to come and meet with us on possible Federal solutions.

MR. KIRKWOOD: Daytime also?

ASSEMBLYMAN MAZUR: What meets your political--

MR. COHEN Check on what's going to get the best response.

ASSEMBLYMAN MAZUR: All right. We'll settle the time by our next meeting. It's a month from today, in essence. So, we'll have to get on the horn on that. Now, let me bring you up-to-date on what's happened on 911. I thank you all for your participation and the public hearing is officially closed. You're always to free to stay because we're a public body and the public has the right to know. And you can listen to what is going on.

(HEARING CONCLUDED)