# **Bob Brooking's**

### PUBLIC SAFETY COMMUNICATION

# Beat

United States a rapid, efficient, Na-

tion-wide and world-wide wire and

radio communication service with ade-

quate facilities at reasonable charges,

for the purpose of the national de-

fense, and for the purpose of securing

a more effective execution of this

policy by centralizing authority here-

tofore granted by law to several agen-

cies and by granting additional auth-

ority with respect to interstate and

foreign commerce in wire and radio

communication, there is hereby cre-

ated a commission to be known as the

Federal Communications Commis-

sion', which shall be constituted as

hereinafter provided, and which shall

execute and enforce the provisions

(k) "Radio station", (1) "Mobile Sta-

tion", (m) "Land station", (n) "Mo-

bile service", and (o)"Broadcasting".

It thus becomes apparent that Con-

gress was talking about communica-

tion service by wire and radio in the

finition, "means the dissemination

of radio communications intended to

be received by the public, directly or

by the intermediary of relay stations."

Nothing in Section 1 of Title I says

anything about "the dissemination of

radio communications intended to be

received by the public." Certain Sec-

tions under Title III do regulate radio

broadcasting and in each case the

term "radio broadcasting" is used.

However, under Section 303 Title III:

"Except as otherwise provided in

this Act, the Commission from time

to time, as public convenience, in-

terest, or necessity require shall ....

(g) Study new uses for radio, provide

for experimental uses of frequencies,

and generally encourage the larger

and more effective use of radio in the

public interest."

"Broadcasting", according to de-

sense of transacting business.

Among definitions in Section 3 are:

of this Act."

### A REVIEW OF THE YEAR 1964 by Robert Brooking

A very active year - 1964 - efforts to find a solution to frequency shortages in land mobile radio. Significant steps were taken which may eventually solve this most serious problem. To make a beginning, it was first necessary to "get the ear" of the Commission. This had been done at Los Angeles visitation of the Commissioners.

To start 1964 off, a special meeting of the Commission was held in January. Chairman Henry asked the staff people to present something more useful to land mobile services than the proposed negative answer on Docket 11997. One position offered was that under the existing political situation the land mobile services should be told that their frequency shortage problems could not be solved. Among staff comments were some from Broadcast Bureau people to the effect that there actually was no shortage of frequencies in the nonbroadcast services, and the Commission could, by proper use of the present allocations, provide not only for the present users but also for all prospective users without any reallocation of spectrum space.

These statements had been heard before. One broadcast group had proposed that land mobile radio should be restricted to emergency services and other users should go back to the telephone. Because of this attitude, some research was done by the writer on the Communications Act of 1934.

Under Title I-General Provisions, Section 1 states: "For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far possible, to all the people of the

Just how the attitude of the broadcast interest could be reconciled with these words remained unclear, but the filing against the EIA petition asking reallocation of TV channels 14 & 15 by broadcast interests stated: "the assignment of frequencies for land mobile operations to individual applicants is an inherently wasteful process. Just as it is impractical for everyone to have his own private land line, we submit, it is equally impossible for each person to have his own radio circuit." They continued by explaining that the Commission, "has established, on a regular basis, seven different services in the public safety category, ten in the industrial category, four in the land transportation group, a citizens radio service and a domestic public radio service." The broadcasters contended this is "not in the best interest of frequency conservation".

At this point the question should be asked: For what purpose are we conserving these frequencies? The broadcast interests answer that one, too, indirectly: "An analysis of the traffic carried over most of these private systems would show that the primary purpose is to foster more efficient administration of the industry with which they are associated. "We do, however, believe that just as the common carrier telephone exchange service has proven adequate to meet the needs of the average American business over the years; so too, will a common carrier radio exchange service if given the opportunity. In other words, we believe there should be a re-examination by the Commission of a policy that permits the almost endless development of land mobile use on a private, unintegrated basis."

A second question: "What about Section 303 (g) quoted above? How do we reconcile these comments with "and generally encourage the larger and more effective use of radio in the public interest"? Apparently the Commission thought so too, because they rejected this position.

Results of the visit by the seven Commissioners to Los Angeles area is that they agreed that something

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must be done for the land mobile services, and further that high-level staff should visit Los Angeles.

Chairman Henry stated that solving the land mobile problem was "of utmost priority" and instructed the staff people to offer land mobile something. It was pretty well agreed, however, that additional frequencies were not in the plan.

Two weeks later the Commission received a filing from the California Public Safety Radio Association, a chapter of APCO, in connection with the Commission's Further Notice of Proposed Rule Making in Docket 14229, titled: "In the Matter of Fostering Expanded Use of UHF Television Channels."

Quoting from this filing: "CPRA is of the opinion that the Commission more than amply provided for the orderly future growth of UHF television in its proposed Table of Assignments. ... CPRA wishes to commend the Commission for its long-range planning towards an orderly expansion of UHF television. However, CPRA is of the opinion that the Commission's Proposed Table of Assignments, which would allow for more than triple the number of television stations now authorized, is unrealistic. We base this opinion on the Market Research Study conducted by the Columbia Broadcasting System in 1957, which concluded that the Country could not support over 600 television stations. It appears to us that the number of commercial stations now authorized proved the validity of Columbia's conclusion.

"CPRA is concerned because a table of specific channel assignments, such as that proposed, will imply that there is a proven need for these chan-This will greatly hinder the nels. chances for any future reallocation of the only remaining sizeable vacant portion of the usable radio frequency spectrum to VHF television broadcasting and to those services, such as the Public Safety Radio Services, that have demonstrated a need for additional spectrum space.

"CPRA finds it difficult to reconcile why, on one hand, the Commis-February, 1965



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  Omnidirectional—3 and 6 db Gain
  Offset—7.6 db Gain
  Cardioid—Unipole 3 db Gain
  Omnidirectional—Unipole
  Directional Corner Reflector—7.5, 10.0 and 12.5 db Gain
- 450-470 Mc Antennas
- Omnidirectional —7 and 10 db Gain
  Directional Yagi—10 and 12.5 db Gain
  Offset—9.3 db Gain
- Offset—9.3 db Gain Directional Corner Reflectors—8.5, 11.0, and 13.5 db Gain



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sion's policy has been in the past to foster the use of a major portion of the radio spectrum which has remained fallow for many years; while on the other hand, Emergency Services which have demonstrated a current need for additional spectrum have been denied the opportunity to utilize service allocated, but unused, portions of the spectrum in the over-all public interest.

"CPRA respectfully suggests that the Commission review the total requirements for spectrum space for television broadcasting with the

thought in mind than an all UHF allocation of a maximum of 50 channels should provide for any future requirements both for commercial and educational television.

"A study of the Commission's proposed Table of Assignments for the State of California, with an area of over 5% and a population of nearly 10% of the conterminous United States, discloses that 17 of the UHF channels are unassigned, 23 are assigned only once, and the balance, with the

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exception of four channels, are each assigned only twice in the entire State. By contrast, 32 stations within the State are operating on the 12 VHF channels.

"In light of the above statements, and in consideration of the fact that the present Table of Assignments does provide for approximately an eight-fold increase in the number of UHF channel assignments, CPRA is of the opinion that the present Table of Assignments is adequate for the foreseeable future.

"CPRA, therefore, urges the Commission to adopt a long-range program requiring the future reassignment of VHF channels to the UHF band in only those few densely populated metropolitan areas of the Country where there is a definite need for additional radio frequency spectrum. The Commission could then reassign the VHF band in these areas to the services requiring additional spectrum that would confine their operations entirely within those metropolitan areas together with the necessary technical standards to safeguard all remaining VHF broadcasting.

"CPRA recognizes that the rural, more thinly populated areas of the Country can best be served through VHF television broadcasting which provides a necessary service to the citizens of our Country residing in these areas."

On January 26, 1964, the Annual Report of the FCC was released for the period ending June 30, 1963. Chairman Henry's letter of transmittal to Congress expressed concern in the areas of space and national defense communications; assistance to UHF television and to educational TV in particular; continued stress by the Commission on public-service obligations of broadcasters.

Quoting from the summary of the report, we get the impression that broadcasting is not the most important activity of the Commission: "Today's widespread and varied usage of radio extends from contributing to the national defense and safeguarding life and property in time of peace to serving other public, commercial, and individual needs. Radio provides ships and planes with safety and navigational aids. It is employed for police and fire protection, highway maintenance, forest conservation, and other state, county and municipal operations. Radio serves land transportation by directing the movement of trains, buses, trucks and taxicabs. Industry utilizes radio in the manufacturing process and to speed the delivery of goods. Telephone and telegraph companies are depending more and more on radio for carrying public and business correspondence. Radio brings broadcasts into the home. It furnishes a testing ground for new equipment and techniques. Personalized use of radio is reflected in the Amateur and Citizens Radio Services."

In February the National Association of Manufacturers' Communications Committee petitioned the Commission for shared use of TV channels 14 and 15 in the Los Angeles area.

This extremely well documented petition represented yet another effort of the land mobile users to find a solution to their problem short of an allout allocations battle. On March 23, 1964, the Association of Maximum Service Telecasters filed comments in opposition to the NAM Proposal.

This filing claimed that not only would channels 14 & 15 be adversely affected but also channels 16, 17, 18, 19, 20, 21, 22, 23, 28, 29 and 30.

Quoting from this filing: "6. NAM's proposal to disrupt television broadcasting and threaten UHF educational and commercial development is contrary to the public interest, in the face of the express will of the Congress, and is wholly inconsistent with established Commission policies. The fact is that all 82 VHF and UHF television channels are intended by Congress and the Commission alike to be developed to the maximum extent for educational and commercial television broadcasting. The repeated and emphatic declarations to this effect, both by the Congress and by the Commission, are wholly inconsistent with NAM's mistaken notion that a portion -- and the most desirable portion at that -- of the present UHF television channels could be, or should be dispensed with."

Paragraph 8 states: "If NAM and other land mobile users continue to clamor for frequencies and to covet essential television channels for their own uses, perhaps the time has come for the Commission to examine whether it is any longer consistent with public interest to assign frequencies upon request to business users merely to serve as convenient adjuncts to their main business activities. Certainly the use of radio frequencies in connection with "doing laundry", "cleaning clothes", "digging graves" or "digging cesspools" -- as NAM has put it -- cannot begin to compare with the importance of providing full educational and commercial broadcasting services to the public. Perhaps the answer to the demand for land mobile radio frequencies is to limit eligibility to essential--as distinguished for convenience--users. In any event, the answer is not diversion of television frequencies."

The filing then goes into a discussion of "engineering defects" in the NAM petition and "evidence" to show that Congress has given the Commission a mandate for an 82 channel TV system.

In other words, gentlemen, AMST says that business use of land mobile radio is not nearly as important as TV, even if the channels assigned are not being used.

The next day the Spring meeting of the Public Safety Communications Council was held in Arlington, Va. Plans under which applicants for frequency advisory requests would be asked to share in the expense through payment of a fee were discussed. It had been hoped that the decision of Docket 11997 would be made public in time for the meeting but it was not.

March 26th the Commission met and on the next day announcement was made that Docket 11997 had been terminated with no new spectrum space for the land mobile radio services. The petition of EIA requesting allocation of TV channels 14 & 15 was denied as was the APCO petition for a Statutory Inquiry into the Present and Future Requirements of the Pub-

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lic Safety Radio Services for the Allocation of Radio Frequencies.

The Commission then offered 'three general avenues of approach'. The first was a Notice of Inquiry, Docket 15398 which is designed to gather technical data looking toward optimum spacing between assignable channels in the land mobile services (15 kc, 20 kc, 25 kc, or 30 kc) and to study the feasibility of the land mobile service sharing channels 2 through 13 with television broadcasting. The second was Docket 15399 to permit certain categories of licensees in the State of California to apply for and receive secondary rights to operate on a channel not used in the area by the primary service.

Finally, an Advisory Committee for the Land Mobile Radio Service was created and announced by the Commission in Public Notice 48884. Commissioner Cox was named Chairman and James Barr, Chief Safety and Special Radio Services Bureau was named Vice Chairman.

The following week James Barr, his assistant Irving Brownstein, and William Watkins, Chief of the Frequency Allocation and Treaty Division visited Los Angeles for a personal inspection of the number one problem area for land mobile radio. They had with them copies of the just-announced decisions of the Commission.

At a banquet held on April 1, in Los Angeles, Victor Reis pointed out that "the basic problem is simply stated -- the non-broadcast services need a larger share of the spectrum."

The same week, A.T.&T. filed comments calling the Commission's attention to the "desperate needs of the mobile services." Signed by A.T. & T. Vice President R. R. Hough, the filing stated: "The mobile service needs of this country must be met. These services, important to the economy and development of this country can not be provided within the confines of the present frequency allocations. ... The compelling need for more adequate allocations to serve mobile users was again brought to the Commission's attention by a petition submitted in 1962 by EIA, RM-370, February, 1965

and the recent NAM petition, RM566, for reallocation of a portion of the UHF band. The EIA and NAM proposals offer some hope of immediate relief but both fall short of providing adequate frequency space to meet the overall requirements of the mobile services."

Also, the same week, APCO commented on the Commission's proposals for "Fostering Expanded Use of UHF Television Channels." APCO again indicated, "its serious doubt concerning the need for so many channel assignments for the television service, or even the availability of funds to build and operate such facilities. ... If there were no shortage of radio spectrum space the proposals herein for the television service would engender no comment from APCO. However, we are faced today with the situation of attempting to provide necessary communication by radio for police, fire and other public safety services on already overloaded channels in the larger metropolitan areas."

These comments were most encouraging because they proved that the broadcasters bait suggesting that land mobile radio be restricted to safety uses with other users being required to use common carrier facilities, either wire or radio, had failed to lure either Public Safety or A.T.& T. into the trap; the land mobile field stood solidly together against this argument. The International Association of Chiefs of Police supported this position in reply comments to the AMST filing. Executive Director Quinn Tamm stated: "The demands on law enforcement in metropolitan areas such as Los Angeles have resulted in extremely critical frequency allocation problems, as has been demonstrated to the Commission", adding that police licensees share in the concern by other land mobile licensees.

On May 26, 1964, about 150 people from all parts of the country and almost all services gathered at the first meeting of the Advisory Committee. As the names of those present were read along with the organizations they represented, the land mobile people became aware that there was a sizeable broadcast group present; furthermore they expected to have a member on the Executive Committee. In response to a direct question from the floor as to why, the representative from AMST stated that one of the items to be discussed was the possible shared use of VHF-TV channels; remove this item and they would leave.

This was the picture as of June 1964. Then some rather surprising developments began. The rest of year 1964 will be discussed next month.

- The End -



## NORTHERN CALIFORNIA APCO AT MARTINEZ

Regular monthly meeting of NCAPCO was held Dec. 10, 1964, in Martinez, with George Burton, Contra Costa County, as host. Forty-three attended the luncheon meeting at Paul's Restaurant. The Frequency and Engineering Committee met during the morning, considered frequency clearances printed in the announcements.

The regular meeting was called to order by President John Maybee at 1:00 p.m. for reading of the minutes. Engineering report accepted. The Operations Committee discussed need for an additional code indicating a warrant check of the data processing center. This matter was held over until the next meeting for more information.

The joint CPRA-Northern California APCO meeting in Santa Cruz will be held March 25th-26th; committee to be named by the next meeting.

Two new members were voted in. James Eakin of Farinon Electric and Stanley Rad of Motorola. The Nominating Committee reported candidates: Hardy Williams, President; Henry Crutcher, V-P; and George Burton, Secretary-Treasurer. Board of Directors: James Angliss, Benton Hom, Jack Turner, Marcus Leh and Thomas Bayley.

Moved, seconded nominations be closed and the Secretary instructed to cast a unanimous vote. Carried.

A letter of commendation is to be sent to Solano County Board of Supervisors commending past President John Maybee for his fine efforts.

The January meeting will be held in San Jose; the February in Oakland; and Joint Conference to be in March.

- George K. Burton, Secretary

