

## NATIONAL SAND AND GRAVEL ASSOCIATION

MUNSEY BUILDING

WASHINGTON 4, D. C.

Telephone NAtional 8-1143

Federal Communications Commission Establishes New Mobile
Radio Services, with Expanded Eligibility for Ready Mixed
Concrete and Sand and Gravel Producers\*

by
Kenneth E. Tobin, Jr.
Associate Executive Secretary

In a series of major decisions, all issued since our mobile radio session at the 1958 convention in Chicago, the Federal Communications Commission has made a sweeping reorganization of the mobile radio services. These decisions vitally affect the ready mixed concrete and sand and gravel industries. The use of mobile radio has become so widespread and so important in our industries that many operations are dependent on its continued availability for economic and efficient operation. Mr. Hicklin will discuss the use of mobile radio in our two industries in detail later on this program, but I can say now that the sudden unavailability of mobile radio to many operations in our industries would necessitate a substantial increase in capital investment as well as seriously impair efficient operation.

Last spring the Associations decided to develop detailed information on the extent to which the sand and gravel and ready mixed concrete industries are using mobile radio. The results of that survey dramatically emphasize the vital role which mobile radio now plays for the two industries. We received completed questionnaires from 680 member companies. This represents a return of 71 per cent of the total active memberships of the two Associations in the continental United States. Of the 680 companies returning the questionnaire, 415 reported present use of mobile radio in either the old Special Industrial Radio Service, the former Citizens Radio Service, the Low Power Industrial Radio Service, or the Marine Radio Service. This means that 61 per cent of the companies returning the questionnaire currently use mobile radio. Expressed in another way, we now know that an absolute minimum of 43 per cent of the active memberships in the continental United States were using mobile radio last spring.

To further emphasize the extent of interest in mobile radio by these two industries, it should be pointed out that of the companies not using mobile radio at the time the survey was conducted, a majority were located in the so-called Standard Metropolitan Area - local areas of more than 500,000 population.

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It was not possible to obtain a license in the original Special Industrial Radio Service except under very limited circumstances if the radio was to be used in a Standard Metropolitan Area.

This rule was not changed until the FCC's order in Docket 11991 was issued last June. It is reasonable to asume that, with the Standard Metropolitan Area limitation now removed in the revised Special Industrial Radio Service, there will be a substantial increase in the number of mobile radio licenses in the sand and gravel and ready mixed concrete industries before the end of 1959. This assumption is already being validated by a substantial step-up in the number of applications for Special Industrial Radio Service Licenses which have been filed by members of our two industries during the past six months.

It seems entirely reasonable to predict that the next few years will see a continued rapid growth in the use of mobile radio in these two industries to the point where nearly 100 per cent of the companies in our two industries will eventually be using mobile radio communications in some phase of their operations. Our survey indicated that the vast majority of the companies using mobile radio hold licenses in the Special Industrial Radio Service. Most of the remaining companies were licensed in the old Citizens Radio Service. A relatively small number of member companies are licensed in the Low Power Industrial Radio Service or the Marine Radio Service, most of the latter being sand and gravel marine operations.

At the time of our survey, the 338 companies licensed in the Special Industrial Radio Service were operating 612 base stations and more than 6,000 mobile units. The 67 companies in the Citizens Service were operating 187 base stations and 2,200 mobile units. In addition, the 8 companies licensed in the Low Power Industrial Radio Service were operating 14 base stations and 183 mobile units and the 7 companies in the Marine Radio Service were operating 8 base stations and 33 mobile units.

Our survey also revealed the dramatic growth in the use of mobile radio in the past four years. Only five member companies held licenses in any of the mobile radio services prior to 1950. At the end of 1954, there were still only 100 companies using mobile radio. Between January 1, 1955, and August 1, 1958, however, more than 300 member companies obtained licenses in one of the mobile radio services.

Our survey also developed specific information as to the radio frequencies on which members are currently operating. In the Special Industrial Radio Service, 217 licensees were operating on the 25 - 50 megacycle band; 105 licensees were operating on the 150 - 155 megacycle band. In the Citizens Radio Service, 67 licensees were operating on the band from 450 - 470 megacycles.

I referred previously to a "series" of major decisions by the FCC during 1958. The most important of these was the Commission's decision in Docket 11991, the so-called Business Radio Service Rule Making Proceeding. The Associations, acting through their radio counsel, Mr. Ernest Jennes and Mr. Stephen Pollak of the law firm of Covington & Burling, filed statements in each of the Commission's rule making proceedings affecting our two industries, including Docket 11991. I am happy to say that our requests were substantially accepted by the Commission in its final order, including continued eligibility

for both industries in the revised Special Industrial Radio Service and the elimination of the Standard Metropolitan Area limitation, which we have vigorously opposed for many years. The Associations also supported the establishment of the proposed new Business Radio Service.

The Commission's order in Docket 11991 made such comprehensive and important revisions in the rules that it would be impossible for me to discuss all aspects of the new rules in detail. We have urged each member company interested in mobile radio to study carefully the Commission's order and the provisions of the new Special Industrial Radio and the Business Radio Service rules which were attached to the order. Complete copy of the order, as well as a detailed analysis of the order by Association counsel, was sent to all member companies on July 2, 1958.

Briefly, the order in Docket 11991 included the following major changes:

- (1) Retained the existing Special Industrial Radio Service with continued eligibility for ready mixed concrete and virtually all sand and gravel companies previously eligible.
- (2) Established the new Business Radio Service substantially as proposed, which means that all members of both Associations are eligible for licensing in this Service. The only eligibility requirements for licensing in the Business Radio Service are that the licensee must be a citizen of the United States and the proposed use of radio must be in conjunction with a lawful business activity.
- (3) Eliminated the Standard Metropolitan Area limitation from the Special Industrial Radio Service, except for a very few frequencies shared with the Taxicab Radio Service. Except for the same taxicab frequencies, there is no Standard Metropolitan Area limitation in the new Business Radio Service.
- (4) Established a five-year equipment amortization period for licensees operating on frequencies which, as a result of the order, will no longer be available in the Services involved.
- (5) Established a similar five-year equipment amortization period for licensees required to change frequencies because they would no longer be eligible in the Service in which they were previously licensed.
- (6) Reduced channel spacing in the 27.23 27.88 megacycle band to 10 kilocycles and in the 162 - 174 megacycle band to 25 kilocycles. The Commission also established channel spacing in the 450 - 470 megacycle band at 50 kilocycles. Channels in the 35 - 36 megacycle, 42 - 50 megacycle and 150.8 - 162 megacycle bands were "split" by previous orders of the Commission.
- (7) Made the new frequencies allocated by the order in Docket 11991 available for assignment, commencing August 1, 1958.

- (8) Established mandatory frequency coordination for new applications in the Special Industrial Radio Service.
- (9) Retained 2.45 megacycles of space in the 460 470 megacycle Citizens Radio band, of which 1.9 megacycles are designated for temporary use within the Citizens Radio Service pending further allocation to mobile radio services which expect extensive need for additional space.

The Commission's order in Docket 11991 retained the Special Industrial Radio Service in modified form with eligibility restricted to fewer industries. Further, the Commission restricted the number of activities within those eligible industries which will continue to be eligible. The most important features of the new Special Industrial Service, as regards member companies, are:

- (1) Eligibility for "persons regularly engaged in the operation of mines for the recovery of solid fuels, minerals or metals from the earth or the sea, including the exploration for and the development of mining properties."
- (2) Eligibility for "persons operating a commercial business regularly rendering certain specialized services essential either to industrial operations or public health, including the delivering and pouring of ready mixed concrete or hot asphalt mix."

I mentioned earlier that one of the Commission's requirements for the new Special Industrial Radio Service is mandatory frequency coordination. There isn't anyone in the United States more qualified to discuss this subject than Ray Doyle, who will follow me on the program, so I will limit my remarks on this subject to a recitation of the developments which have led up to the establishment of a new Frequency Coordination System.

Following the issuance of the Commission's order in Docket 11991, the Associations recognized that it was essential that a Joint Committee on Mobile Radio be appointed to determine Association policy in the establishment of a frequency coordination system and to handle future mobile radio developments. We were fortunate in that Bill Hicklin, your presiding officer, accepted the Chairmanship of this new Joint Committee, composed of 30 producers from the two industries. This Committee is representative of all parts of the United States and all types of operations in the sand and gravel and ready mixed concrete industries. Licensees in each of the five mobile radio services are on this Joint Committee.

Concurrently with the appointment of the Joint Committee on Mobile Radio, a conference was held in Washington on July 25 under the auspices of the Federal Communications Commission of representatives of several industries eligible for licensing in the Special Industrial Radio Service. An Organization Committee was appointed with Vincent P. Ahearn, your Executive Secretary, as Chairman. This Organization Committee was authorized to work out a nation-

wide frequency coordination system in which all industries eligible in the Special Industrial Radio Service would participate.

On August 19, 1958, a second meeting was held in Washington to which were invited representatives of all organizations of record representing industries eligible for licensing in the Special Industrial Radio Service. An agreement was reached at this meeting on basic policy which should guide the operations of one organization to handle the problem of frequency coordination. A smaller committee of eight members, including Mr. Ahearn and me, was appointed to complete this work and carry out the program agreed upon by the Organization Committee.

Following several conferences between the members of the Committee and the Board of Directors of the Special Industrial Radio Service Association, full agreement was reached on the revision of SIRSA's activities to conform with agreements reached earlier at the Organization Committee meeting. SIRSA had previously performed a valuable service in voluntary frequency coordination and perhaps its principal asset was a group of dedicated men who had voluntarily, and without reimbursement of any kind, devoted considerable time to administering a voluntary frequency coordination system under the auspices of SIRSA. Ray Doyle is one of these dedicated men to whom I refer.

In a series of conferences with representatives of the original SIRSA last fall, a complete reorganization and incorporation of SIRSA as a non-profit organization with the principal objective of fulfilling the Commission's requirements for frequency coordination in the Special Industrial Radio Service was accomplished. The reorganized SIRSA has now been recognized by the FCC as the authorized frequency coordination agency for the Service.

At their semi-annual meeting in October, the Boards of Directors of the two Associations authorized membership of both Associations in the new SIRSA. Mr. Ahearn was designated as the representative of the National Sand and Gravel Association on the SIRSA Board of Directors. I was designated as the representative of the National Ready Mixed Concrete Association on that same Board. The Boards of Directors of the two Associations further authorized the Associations' staff to recommend to all members with an interest in mobile radio that they join SIRSA as individual company members. Pursuant to this authorization, we sent membership application forms to all member companies on December 3Q 1958. I am happy to say that Carroll White, Executive Secretary of SIRSA, has advised us that there has been a fine response from the memberships of these two Associations as a result of our letter of December 3O. Many members have now joined SIRSA and I would like to take this opportunity to urge all member companies with an interest in the Special Industrial Radio Service to join SIRSA as individual company members as soon as possible.

Among the prominent national associations also represented on the SIRSA Board of Directors are the Associated General Contractors of America, the National Canners Association, the American Mining Congress and the American Iron Ore Association. These organizations have likewise urged their members to take the individual company memberships in SIRSA. Each of these organizations, as well as our own two industries, has an important interest in making SIRSA a success. The FCC is not equipped to handle frequency coordination. Private

industry, working through SIRSA, must do the job. If we fail, the FCC might conceivably cancel out the Special Industrial Radio Service, which would be a disaster for our two industries.

It should be emphasized that the two National Associations' activity in SIRSA will be primarily limited to participation in the overall operation of SIRSA at the national level. Individual members wishing to keep posted on developments in mobile radio matters and wishing to take advantage of other SIRSA services, including the essential question of frequency coordination, should become actively identified with SIRSA. The primary function of SIRSA, as I said before, will be frequency coordination and this task will be administered exclusively on a regional basis. Representation of our industries on the regional level is essential and can come only through participation of individual members.

The Joint Committee on Mobile Radio held its inaugural meeting last Monday. Members of the Committee have already attended meetings of SIRSA in their regions and are prepared to participate in the administration of the Frequency Coordination System. The Committee needs the help of all members interested in industrial radio, however, to make this undertaking a success.

The two National Associations will continue to represent these industries in eligibility proceedings before the Federal Communications Commission, and will participate in FCC dockets in which the interests of our two industries are involved. We do not rule out, however, the possibility that in the case of certain proceedings before the Commission, the eligible industries in the Special Industrial Radio Service, may find it wise, under the auspices of SIRSA, to join forces, but questions in this area will be decided by the Associations on the basis of the facts in the individual case.

The decision in Docket 11991 basically affected licensees in the former Citizens Radio Service as I previously indicated. The Commission's order reallocated 6.55 megacycles of space from the Citizens Radio Service to the Industrial Radio Services, leaving 2.45 megacycles for continued use by licensees in the Citizens Radio Service. Of the portion which remains allocated to the Citizens Radio Service, 1.9 megacycles of space are only temporarily withheld from the Industrial Radio Services. According to the Commission, this space will be reallocated at some future date when the over-all picture of the needs and demands of the various special industrial radio service agencies emerge in the light of the new frequency allocations established for such services by this order.

Member companies authorized to operate within the Citizens Radio Service on frequencies which are reallocated to another service may continue to use these frequencies until June 15, 1963, although they may shift to another service and frequency sooner if they wish. These companies have a choice of:

- Continuing operation in the Citizens Radio Service on another available frequency;
- (2) Changing to the Business Radio Service, either to a new frequency or, if their present frequency is allocated to the Business Radio

Service by this order, continue on the same frequency; or

(3) Changing to a Special Industrial Radio Service frequency if they are eligible under the new rules.

Whatever course such companies choose to follow - and they still have more than four years in which to make a decision - they will have to file an application with the FCC for an authorization to change services or frequencies.

Those Citizens Radio Service licensees whose frequencies remain allocated to that Service may continue operating under their present licenses without filing any new applications. They may, of course, file immediately for authorization in the Business Radio Service or, if eligible, in the Special Industrial Radio Service. One thing is clear, the maximum amount of protection from objectionable interference will be enjoyed by those companies which operate on Special Industrial frequencies.

The Citizens Radio Service rules were further revised in an independent rule making proceeding in Docket 11994. In this proceeding, the Commission reallocated frequency space from 26.965 to 27.225 megacycles for use by mobile stations in the Citizens Radio Service on a shared basis with other stations in the Citizens Radio Service. The new 26 - 27 megacycle space is in part a replacement for 460 - 470 megacycle space reallocated to other services. Previously, eligibility for authorization in the Citizens Radio Service was limited to persons and companies not eligible for radio authorization in any other service. Under this provision, member companies eligible for radio within the Special Industrial Radio Service have been precluded from authorization to operate radio within the Citizens Radio Service. Ineligibility elsewhere has been a prerequisite to eligibility in the Citizens Radio Service.

This eligibility limitation has been deleted by the Commission. Thus, provided the citizenship requirements of the rule can be met, all member companies are now eligible for authorization to operate radio within the Citizens Radio Service. With this amendment of the rules and the establishment of the Business Radio Service, companies eligible for radio within the Special Industrial Radio Service have a choice of operation within three Services; Special Industrial, Business, or Citizens. Members may, if they wish, hold authorization for operations in all three Services. Companies ineligible for Special Industrial Service authorization still have a choice of seeking an authorization in either Business or Citizens, or both.

On September 15, 1958, we advised member companies of adoption by the FCC of Rules governing the use of "narrow-band" transmitting equipment as part of the plan for making the new "split channel" immediately available for use in the Special Industrial Radio Service. Originally, the new Rules provided that mobile radio systems licensed prior to August 1, 1958, would be permitted to use narrow-band equipment beyond February 1, 1959, "only if the frequency deviation is reduced to the point where it does not exceed the deviation specified in the 'narrow-band' technical standards."

The February 1, 1959, deadline for reduction of frequency deviation was postponed by the Commission in January in order to avoid unnecessary enforced

obsolescence of equipment. Under the revised decision, wide-band licensees authorized in the Special Industrial Radio Service prior to August 1, 1958, for operations on frequencies between 25 and 42 megacycles may continue using wide-band equipment without reduction of transmitter frequency deviation until November 1, 1963, provided they are removed by at least 40 kilocycles from the nearest regularly available frequency listed in Parts 10, 11 or 16 of the Commission's Rules. There was no change in the conversion schedule for licensees operating in the 42 - 46 megacycle and the 47 - 49 megacycle bands. They must still reduce frequency deviation by February 1, 1959. The Commission's action does not alter the additional Rule which requires all licensees to utilize equipment meeting full narrow-band technical standards by November 1, 1963.

Let me stress again, since the terms involved are most complicated, that the Commission's action in January postpones only the deadline for reduction of transmitter frequency deviation and then only for licensees in certain frequency bands. It does not alter the November 1, 1963 deadline for compliance by all systems in the Special Industrial Radio Service with full narrowband technical standards.

Within the last three weeks the Commission has taken one additional step to relieve hardships that might result from the February 1 deadline for reduction of frequency deviation. This step was to authorize the Safety and Special Radio Services Bureau of the Commission to waive for periods of more than three months, but not more than 12 months, the Rule requirements which call for a reduction in transmitter modulation deviation to plus or minus 5 kilocycles by February 1. This step was taken because the necessary equipment in many areas of the country was not available by February 1. There was another consideration and that was the fact that many companies have equipment of such an age that investment of somewhere between \$115 and \$120 per unit would be required to make even the minor revisions necessary to reduce deviation to plus or minus 5 kilocycles. In such cases, and it applies primarily to equipment manufactured more than 5 years ago, a waiver can be obtained for up to 12 months on the basis that the equipment will be obsolete at the end of that period and replaced by new equipment conforming to the Rules.

In summary of the developments in mobile radio during the past 12 months, it is fair to state that the sand and gravel and ready mixed concrete industries are now eligible to use the various mobile radio services to the extent requested by the Associations in many proceedings over the past several years. There is a responsibility imposed on these industries as a result of the accomplishment of our objectives: the responsibility of making our contribution to the establishment and maintenance of a successful frequency coordination system for the Special Industrial Radio Service. The Associations will do their part at the national level in cooperation with the new Special Industrial Radio Service Association and the national trade associations representing other eligible user industries. This is only part of the answer, however, because the individual users in the Special Industrial Radio Service must accept the responsibility to actually do their share in administering the Frequency Coordination System at the local and regional level. This task must be handled efficiently, objectively and with due regard for the public interest.

The FCC has made it clear that it is not equipped with either the manpower or the funds to administer the Frequency Coordination System. To

some extent, therefore, the Commission has entrusted the eligible user industries themselves with the responsibility for carrying out frequency coordination in the public interest. If the eligible user industries do not do the job entrusted to them, the Commission may decide to eliminate the Special Industrial Radio Service, a decision which would be disastrous for the sand and gravel and ready mixed concrete industries as well as the other eligible user industries.

We have previously urged member companies with an interest in mobile radio to join the new SIRSA and indicate their willingness to do their part in administration of the Frequency Coordination System. People like Ray Doyle here, who voluntarily devote far more time than any one should reasonably be asked to give without compensation, should have assistance from all users in each of the eligible industries. I hope the members of the sand and gravel and ready mixed concrete industries are prepared and willing to do their part to retain the invaluable asset of the Special Industrial Radio Service.