

Before the
Federal Communications Commission
Washington, D.C. 20554

PR Docket No. 91-72

In the Matter of

Amendment of Part 90 of the
Commission's Rules to Create
the Emergency Medical Radio
Service

MEMORANDUM OPINION AND ORDER

Adopted: January 18, 1996; Released: February 8, 1996

By the Commission:

I. INTRODUCTION AND BACKGROUND

1. Before us are two petitions for reconsideration¹ of the *Report and Order* in PR Docket No. 91-72,² and a related request for rule waiver.³ In the *Report and Order*, issued February 12, 1993, we established the Emergency Medical Radio Service (EMRS) as a new Public Safety Radio Service (PSRS) under Subpart B of Part 90 of the Commission's Rules.⁴ The EMRS was created to improve the communications capabilities of entities engaged in providing life support activities.⁵ We reallocated 39 VHF, UHF and 220-222 MHz frequencies for EMRS use,⁶ and limited eligibility to persons or entities who provide basic or advanced life support services on an ongoing basis.⁷ We also designated the International Municipal Signal Association and the International Association of Fire Chiefs, Inc. (IMSA/IAFC or Respondent) as the certified coordinator for the EMRS because of its previous experience coordinating emergency medical communications.⁸

2. Of the frequencies reallocated for EMRS use, four were in the 453 MHz band. These frequencies had been previously assigned for one-way paging operations by entities eligible in the Special Emergency Radio Service (SERS).⁹ The *Report and Order* provided a waiver process

for grandfathering existing one-way medical paging systems on these frequencies.¹⁰ Pursuant to this approach, if a licensee currently operating on a one-way paging channel demonstrates that there is adequate spectrum for EMS transmissions in its area of operation, or that relocation of its medical paging system would not serve the public interest, or relocation would cause significant disruption of public safety communications, its system would be grandfathered by waiver.¹¹ Otherwise, licensees operating on these 453 MHz frequencies are required to cease operations after January 14, 1998.¹²

II. DISCUSSION AND DECISION

Reassignment of the 453 MHz frequencies to the EMRS

3. *ProNet Petition for Reconsideration*. ProNet alleges that the reassignment of the four 453 MHz frequencies from the SERS to the EMRS was both procedurally and substantively defective. Specifically, ProNet asserts that (i) the reallocation deprives ProNet and others of their licenses without notice and opportunity to be heard in violation of Section 316 of the Communications Act, 47 U.S.C. § 316,¹³ (ii) the allocation relies on obsolete data, ignores current information and, therefore, is arbitrary and capricious,¹⁴ and (iii) the Commission wrongly failed to review ProNet's request for a limited exemption from the rule.¹⁵

4. ProNet submits that the reassignment decision was based on erroneous conclusions that (i) the spectrum allocated for emergency medical services (EMS) is overburdened, (ii) the remaining SERS spectrum can accommodate the paging systems that operated on the frequencies reallocated to EMRS, (iii) SERS communications are not life-saving, and (iv) the reassignment would result in minimal disruption to the non-EMRS SERS entities.¹⁶ To support its arguments, ProNet again offers its previously submitted 1991 data on the use of SERS paging and emergency medical service channels in the Chicago metropolitan area.¹⁷ Alternatively, ProNet suggests that the 453 MHz reallocations should be addressed either on a case-by-case or region-by-region basis with the burden on EMRS applicants to prove that (i) its emergency medical communications require additional spectrum, (ii) the SERS paging-only channels in the region are underutilized, and (iii) sufficient paging-only spectrum in the SERS exists to accommodate the displaced systems.¹⁸

¹ Petition for Reconsideration filed by ProNet, Inc. (ProNet) on April 2, 1993 and Petition for Reconsideration filed by Dr. Michael C. Trahos (Trahos) on April 2, 1993. See Public Notice, Report No. 1936, April 27, 1993.

² *Report and Order*, PR Docket No. 91-72, 8 FCC Rcd 1454 (1993).

³ Petition for Permanent Waiver (Waiver Petition) filed by ProNet on July 16, 1993.

⁴ *Report and Order* at para. 6. The effective date of the rules adopted in the *Report and Order* was April 2, 1993.

⁵ *Id.*

⁶ *Report and Order* at paras. 23-30.

⁷ *Report and Order* at para. 12.

⁸ *Report and Order* at para. 33.

⁹ The four frequencies reallocated are: 453.025/.075/.125/.175 MHz. *Report and Order* at para. 16.

¹⁰ *Report and Order* at para. 25. We indicated that each situation would be addressed upon request by existing licensees on a case-by-case basis. *Report and Order* at note 68.

¹¹ *Report and Order* at para. 25.

¹² Licensees on these 453 MHz frequencies (as well as on the corresponding 458 MHz frequencies) were provided a period of five years from adoption of the *Report and Order* (January 14, 1993) to cease operations. *Report and Order* at para. 25.

¹³ ProNet Petition for Reconsideration at 8.

¹⁴ ProNet Petition for Reconsideration at 4.

¹⁵ ProNet Petition for Reconsideration at 3-4.

¹⁶ ProNet Petition for Reconsideration at i.

¹⁷ ProNet Petition for Reconsideration at 5. The data was previously submitted in response to the *Notice of Proposed Rule Making* (6 FCC Rcd 2017 (1991)), adopted in the instant proceeding. See ProNet Comments at Exhibits 2-4.

¹⁸ ProNet Petition for Reconsideration at 13.

5. *Comments.* In opposing ProNet's request, IMSA/IAFC¹⁹ submits that the reallocation scheme responds to the continual need among emergency medical communications services for additional spectrum and that the record reflects a rational basis for the channel plan.²⁰ Respondent contends that ProNet's position in objecting to the reallocation of the 453 MHz frequencies is narrow and self-serving.²¹ IMSA/IAFC notes that the Commission specifically addressed ProNet's concerns and provided a waiver procedure to accommodate displaced licensees unable to find alternative spectrum within the five-year grandfather period.²²

6. In regard to the procedural question, IMSA/IAFC asserts that the reallocation of SERS frequencies is not a license modification and does not require an evidentiary hearing.²³ The reallocation decision, IMSA/IAFC notes, was made pursuant to a rule making proceeding and was not aimed at any particular licensee.²⁴ Additionally, Respondent submits that ProNet's waiver request is premature because, by establishing evaluation criteria for waivers, the Commission implied that a waiver would be appropriate towards the end of the five year grandfathering period.²⁵

7. In reply, ProNet largely repeats allegations made in its Petition for Reconsideration.²⁶ It submits that the Commission overlooked the importance of the 453 MHz SERS paging service,²⁷ and "brushed aside" the question of where in the crowded radio spectrum displaced SERS licensees could relocate.²⁸ ProNet again recommends its alternative proposals,²⁹ and asserts that our waiver remedy may, contrary to IMSA/IAFC's supposition, prove inadequate. In this regard, ProNet asserts that "the indifference accorded ProNet's frequency utilization data bodes ill for any request for permanent waiver . . . [as] such request will be predicated on essentially the same data as that already submitted by ProNet."³⁰ ProNet also argues that the legal burden on a petitioner seeking a rule waiver is too high a hurdle to overcome.³¹ Finally, ProNet submits that its earlier request for permanent grandfathering could have been evaluated and decided as early as 1991.³² ProNet takes issue with IMSA/IAFC and submits that the question of "ripeness" is not relevant to this issue.³³

8. *Discussion.* We reaffirm our decision to establish the Emergency Medical Radio Service and reassign for its use those SERS frequencies primarily used for emergency medical communications. The record substantiates the need for this new radio service to ensure the reliability of emergency medical communications. The record also supports the need for additional spectrum for emergency medical use because the substantial increase in the demand for EMS frequencies nationwide has significantly overburdened existing frequencies.³⁴ To meet this increased demand numerous frequencies, besides the 453 MHz channels, were reassigned for EMRS use. These include ten paired UHF channels in the 460 MHz range known as the MED channels, five VHF simplex frequencies in the 155 MHz range, two low power SERS frequencies, two pairs of 460 MHz band channels and five pairs of 220 MHz narrowband frequencies also were reassigned to the EMRS.³⁵

9. In addressing the frequency reallocation issue in the *Report and Order*, we carefully balanced competing interests of the various parties involved. We concluded that the needs of emergency medical service providers warranted priority. As indicated by the comments to the *Notice of Proposed Rule Making*,³⁶ most interested parties supported the proposed reassignment -- including the 453 MHz reassignment proposal.³⁷ The 453 MHz channels are particularly appropriate for EMRS use because -- paired with the corresponding 458 MHz channels -- they create four full capacity UHF paired channels. Furthermore, the 453 and 458 MHz frequencies were chosen to minimize disruption to the remaining non-EMRS SERS entities.³⁸ Additionally, these channel pairs are in the same band as the 460 MHz MED channels, making them compatible with existing multi-channel mobile equipment already used for emergency medical communications. This compatibility will promote system expansion and enable existing mutual aid assignments to be retained.³⁹

10. We further concluded that ProNet's concerns were adequately addressed by our establishment of a waiver procedure for SERS systems that request permanent grandfathering because of unique circumstances. ProNet is concerned that the waiver process sets too high a hurdle to

¹⁹ Reply filed by IMSA/IAFC (IMSA Reply) on June 4, 1993. In opposition to ProNet's Petition for Reconsideration as well as the Trahos Petition for Reconsideration. On May 7, 1993, IMSA/IAFC requested an extension of time until June 4, 1993 to respond to both Petitions of Reconsideration. Telephone grant of extension request on May 11, 1993, by Freda Lippert Thyden, Attorney-Advisor, Land Mobile and Microwave, Private Radio Bureau.

²⁰ IMSA Reply at 4 and 7.

²¹ IMSA Reply at 4.

²² IMSA Reply at 7-8.

²³ IMSA Reply at 9.

²⁴ IMSA Reply at 10-11.

²⁵ IMSA Reply at 12-13. Respondent notes that although ProNet appears to be making two separate requests -- one for a waiver on all 453 MHz channels and another for a waiver in the Chicago market, the evidence cited in support is only applicable to the Chicago market. IMSA Reply at 14.

²⁶ Reply Of ProNet (ProNet Reply) was filed on June 23, 1993. ProNet's request for an extension of time until June 23, 1993, in which to reply to IMSA/IAFC's opposition comments was granted. Telephone grant of extension request on June 18, 1993 by Edward Jacobs, Deputy Chief, Land Mobile and Microwave

Division, Private Radio Bureau.

²⁷ ProNet Reply at 5.

²⁸ ProNet Reply at 7.

²⁹ ProNet Reply at 11.

³⁰ ProNet Reply at 11.

³¹ ProNet Reply at 12.

³² ProNet Reply at 14.

³³ *Id.*

³⁴ According to IMSA/IAFC in its Comments in response to the *Notice of Proposed Rule Making* in the instant docket, there has been a 245 percent increase in the demand for EMS channels nationwide. See IMSA/IAFC Comments at 4, and the *Report and Order* at para. 5.

³⁵ *Report and Order* at paras. 23-30.

³⁶ 6 FCC Rcd 2017 (1991).

³⁷ *Report and Order* at para. 19.

³⁸ *Report and Order* at para. 16.

³⁹ Certain Part 90 licensees are authorized pursuant to 47 C.F.R. § 90.720 to use mobile and/or portable units on Mutual Aid Channels 161-170 throughout the United States, its territories, and possessions to transmit: (1) communications relating to the immediate safety of life, or (2) communications to facilitate interoperability between public safety entities. See paras. 19-23, *infra*, for a discussion of which SERS eligibles will now be permitted to operate on Mutual Aid Channels 161-170.

enable any system to be grandfathered.⁴⁰ However, had we not seriously contemplated waivers for current one-way paging systems operating on 453 MHz frequencies, we would not have established the standards in the *Report and Order*.⁴¹ As the *Report and Order* addressed the need for available spectrum to accommodate critical emergency medical communications in a general sense, it is appropriate to resolve ProNet's specific concerns through the waiver process. Placing the burden on all emergency medical providers individually to prove that they require additional spectrum for their communications and that the SERS paging-only channels in their region are underutilized, as suggested by ProNet, would fail to ensure, on a timely basis, provision of spectrum assignments for emergency medical communications throughout the nation. We conclude that the waiver process for affected paging systems is a more efficient and effective method in those unique situations warranting relief.

11. ProNet mistakenly believes it should be accorded a hearing pursuant to Section 316 of the Communications Act, before its radio license is modified. Under this statutory provision, a license is not considered modified when the Commission -- acting by rule making -- affects the rights of all licensees of a particular class.⁴² Our reallocation scheme for the EMRS affected all currently licensed SERS users. Furthermore, we have not singled out ProNet for treatment different from other licensees operating on 453 MHz. Rather, we have devised a plan to meet the radio communication needs of the emergency medical community. Moreover, we provided a lengthy transition period for these licensees to locate spectrum alternatives and also provided grandfathering on a permanent basis for those cases warranting such an accommodation.⁴³

Grandfathering the Use of 453.125 MHz

12. *ProNet Petition for Permanent Waiver*. ProNet requests that we permanently grandfather its medical paging system operating on 453.125 MHz in the Chicago metropolitan area.⁴⁴ ProNet's wide-area, medical paging system provides vital emergency communications to hospitals, clinics and other health care facilities, as well as to the doctors, nurses, and technicians who staff these institutions.⁴⁵ ProNet currently has 14,643 users,⁴⁶ and is adding 2,000 net subscribers per year to its Chicago system.⁴⁷ To accommodate its system's growth and expansion, ProNet also requests authority to license transmitting facilities on 453.125 MHz anywhere in Wisconsin, Illinois, and Indiana within a 100 mile radius of its existing site at the Standard Oil Building in Chicago.⁴⁸ It asserts that its current operation meets the criteria established by the Commission for granting a permanent waiver.

13. ProNet submits that its 453 MHz medical paging channel is heavily used and that compulsory migration to another channel will entail serious logistical challenges and substantial expenditures of time, effort and dollars.⁴⁹ Additionally, ProNet alleges that in Chicago remaining SERS medical paging frequencies, as well as Business Radio Service (BRS) frequencies, demonstrate substantial congestion thus making relocation to a different shared frequency an impractical option for an existing medical paging system with thousands of users.⁵⁰ ProNet also asserts that existing emergency medical service channels in the Chicago area display virtually no congestion.⁵¹

14. In support of its assertions, ProNet offers the results of a study conducted by Raymond C. Trott Consulting Engineers which provides an independent examination of frequency utilization on ProNet's medical paging channel, as well as on Business Radio Service (BRS) and Emergency Medical Service frequencies in the Chicago metropolitan area (Trott Study).⁵² This study indicates that the 453.125 MHz frequency is transmitting paging messages 95 percent

⁴⁰ ProNet Reply at 12.

⁴¹ For a discussion of ProNet's Petition for Permanent Waiver see paras. 12-18 *infra*.

⁴² See *California Citizens Band Association v. United States*, 375 F.2d 43, 50-52 (9th Cir. 1967), cert. denied 389 U.S. 844 (1967). See also *Upjohn Co. v. F.D.A.*, 811 F.2d 1583 (D.C. Cir. 1987).

⁴³ *Report and Order* at para. 25.

⁴⁴ ProNet specifically requests waiver of 47 C.F.R. §§ 90.27(c)(19), 90.53(b)(26) and 90.55 for its stations KNGJ 788, WNKP 955, WNKR 796/800, WNQD 424, WNUJ 459, and WPBK 978 -- which constitute its existing Chicago system. Waiver Petition at 1.

⁴⁵ ProNet's 453.125 MHz network in Chicago employs state-of-the-art transmitting facilities throughout the metropolitan area. By simulcasting over these facilities, paging messages can be received throughout a wide geographic footprint, as well as in the interior of solidly-constructed buildings, such as hospitals. ProNet's Chicago system serves approximately 51 hospitals, clinics, and Health Maintenance organizations, in addition to smaller medical institutions and private practice physicians. The doctors, nurses, technicians, and other health professionals associated with these institutions are ProNet subscribers. These emergency personnel are alerted -- by hospitals -- about crisis situations such as ambulance and medi-vac arrivals. When emergencies occur, such as cardiac arrests, within hospital premises, ProNet's system is the primary means of communicating with essential medical personnel (e.g. code

teams and trauma teams) needed to resolve the crisis. Waiver Petition at 3 and Appendix 1.

⁴⁶ Waiver Petition at 15.

⁴⁷ Waiver Petition at 18. ProNet's Chicago system users generate over 40,000 paging messages daily over the 453.125 MHz network, including 3500 pages per hour during the system's peak usage period. Declaration of Jeff Owens, ProNet's Vice President of Engineering (Owens Declaration) at 3.

⁴⁸ Waiver Petition at 1-2.

⁴⁹ According to ProNet, replacing transmitter equipment will cost an estimated \$25,000 per site. Thus, to replicate a system comparable in coverage and quality to ProNet's existing 453.125 MHz network in Chicago will entail base station equipment costs totaling \$750,000 to \$1,000,000. In addition, assuming per pager costs of \$100 to \$200, subscriber equipment costs associated with the reassignment will range from \$1.46 to \$2.93 million. If the replacement occurs in 1998, and net subscribers continue to grow at a rate of 2,000 per year, asserts ProNet, the costs for new paging equipment will range from approximately \$2.46 to \$4.92 million. ProNet also submits that the five-year transition period provided in the *Report and Order* is inadequate to amortize the costs of existing 453 MHz transmission and subscriber equipment. Waiver Petition at 5-6, note 11, and Owens' Declaration at 7.

⁵⁰ Waiver Petition at 6.

⁵¹ Waiver Petition at 5.

⁵² The Trott Study was commissioned by ProNet. Waiver Petition at 7-8 and Appendix 2. The results of the Trott Study are not in dispute. See *ISMA Reply* at 14.

of the time from 7:00 a.m. to 9:00 p.m., its daily usage peak.⁵³ Also, of 31 individual frequencies sampled in the greater metropolitan Chicago area, the Trott Study indicates that the 453.125 MHz SERS wide-area paging channel is by far the most intensely utilized.

15. In regard to alternative spectrum, the Trott Study demonstrates that 152.0075 and 163.250 MHz, allegedly the only frequencies designated for SERS medical paging that can accommodate a wide-area simulcast system like ProNet's Chicago system, were intensively used.⁵⁴ Additionally, seven of eight monitored channels exhibit peak usage ranging from 55 percent to 95 percent demonstrating, according to ProNet, that most paging channels in metropolitan Chicago are severely constricted by existing traffic.⁵⁵ Finally, the Trott Study indicates that the ten EMS channel pairs in the UHF band, referred to as MED channels, are essentially unused from 70 to 90 percent of the time in the Chicago metropolitan area.⁵⁶ In view of the above, ProNet concludes that relocating 453.125 MHz in the Chicago area to the EMRS will risk public safety and thus disserve the public interest.⁵⁷

16. *Discussion.* ProNet has substantiated its request for permanently waiving mandatory reassignment of 453.125 MHz in the greater Chicago metropolitan area to EMRS.⁵⁸ It commissioned a study of spectrum usage in the Chicago area as well as submitted relevant affidavits. Although only required to meet one criterion, ProNet met all the established criteria to justify grant of their waiver request. First, it appears from the above-mentioned data that ProNet's system is intensely utilized. The Trott Study indicates that 453.125 MHz is in use transmitting paging messages 95 percent of the available time from 7:00 a.m. to 9:00 p.m. on a daily basis. Further, according to the Trott Study, more than 40,000 paging messages are transmitted on a daily basis on this channel in Chicago. Migration to a channel other than 453.125 MHz would involve significant cost and disruption to ProNet's current medical paging operations. Such disruption could well impair ProNet's medical alert operations -- such as summoning attending physicians and other "on-call" staff to the bedsides of acute and critical patients -- thus unnecessarily endangering the health and welfare of the public. Permanently grandfathering ProNet's paging system on 453.125 MHz would avoid a considerable expenditure of resources on the part of ProNet, and would prevent interruption of these important public safety communications.

17. Second, relocation of ProNet's medical paging system would not serve the public interest because no reasonable alternative for its paging system is available in the Chicago

area. Alternative Business Radio Service channels in the Chicago area appear to be severely congested and, thus, unavailable. Third, the Trott Study illustrates the continued availability of MED channel capacity in metropolitan Chicago and, therefore, there appears to be adequate spectrum for EMS transmissions in the Chicago area. ProNet has successfully demonstrated that unique circumstances are involved in its case, and that there is no reasonable alternative solution within our existing rules.⁵⁹ Thus, we conclude that ProNet has met the requirements established in the *Report and Order* for a waiver of Section 90.53(b)(26) as well as the requirements established by 47 C.F.R. § 90.151 for more general waiver requests.⁶⁰

18. ProNet's request for authority to be licensed to operate transmitting facilities on 453.125 MHz anywhere in Wisconsin, Illinois and Indiana within a one hundred mile radius of its existing site is denied. This request involves future operations and was not contemplated by the waiver provisions contained in the *Report and Order*. The waiver criteria was established to grandfather operations where significant conversion costs are involved, not proposed facilities.

Use of Channels 161-170 by Certain SERS eligibles

19. *Trahos Petition for Reconsideration* (Trahos Petition). In the 1992 *Memorandum Opinion and Order* addressing narrowband operations in the 220-222 MHz band,⁶¹ we delayed addressing the spectrum needs of SERS eligibles regularly engaged in safety-of-life services to the EMRS *Report and Order*.⁶² In the EMRS proceeding we assigned narrowband Channels 181-185 to the EMRS for use by entities providing life support services,⁶³ however, we inadvertently failed to address the needs of those SERS eligibles providing safety-of-life, but not life support, services. In view of this, Dr. Trahos requests that we now address the question of spectrum sufficiency for SERS eligibles. Specifically, Dr. Trahos asks that those licensees eligible under 47 C.F.R. §§ 90.35 (medical services), 90.37 (rescue organizations), 90.41 (disaster relief organizations)⁶⁴ and 90.45 (beach patrols) be included as eligibles for 220-222 MHz Mutual Aid Channels 161-170 under 47 C.F.R. § 90.720. Dr. Trahos argues that this change is

⁵³ Waiver Petition at 17.

⁵⁴ Trott Exhibits RCT-5 and RCT-6.

⁵⁵ Waiver Petition at 11.

⁵⁶ Waiver Petition at 16-17. MED Channels 1-8 comprise frequency pairs 463.000/468.000, 463.025/468.025, 463.050/468.050, 463.075/468.075, 463.100/468.100, 463.125/468.125, 463.150/468.150, and 463.175/468.175. MED channels 9 and 10 are the channel pairs 462.950/467.950 and 462.975/467.975 MHz.

⁵⁷ Waiver Petition at 19.

⁵⁸ *Report and Order* at para. 25.

⁵⁹ For the criteria justifying a waiver, see *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969). The function of a waiver is to justify an *ad hoc* exception to a general standard. *Storer Broadcasting Co.*, 14 RR 742 (1956); *VHF Drop-In Proceeding*, 90 FCC 2d 160, 166 (1982), *aff'd sub nom. Springfield Television of Utah, Inc. v. FCC*, 710 F.2d 620 (10th Cir. 1983).

⁶⁰ 47 C.F.R. § 90.151 provides that waiver requests are to state the nature of the waiver or exception desired, and set forth reasons supporting the request including a showing that unique circumstances are involved and that there is no reasonable alternative solution within existing rules.

⁶¹ *Memorandum Opinion and Order*, PR Docket No. 89-552, 7 FCC Rcd 4484 (1992).

⁶² *Id.* at para. 38.

⁶³ *Report and Order* at paras. 28-30.

⁶⁴ The American National Red Cross requests that the Commission broaden the categories of users permitted to apply for Channels 161-170 to include disaster relief organizations as defined by 47 C.F.R. § 90.41. Letter from Christopher D. Imlay, Counsel, American National Red Cross, to Edward R. Jacobs, Deputy Chief, Land Mobile and Microwave Division, Private Radio Bureau (February 3, 1994).

necessary to enable these entities, which conduct communications relating to safety-of-life, to communicate with one another.⁶⁵

20. *Comments.* IMSA/IAFC opposes the Trahos request, arguing that the purpose of the EMRS proceeding was to "disentangle" emergency medical communications from other SERS eligibles and to provide "Public Safety" recognition to this user community.⁶⁶ IMSA/IAFC further asserts that to confer "Public Safety" co-equal status on other SERS eligibles would undermine the primary purpose of the EMRS proceeding.⁶⁷ In IMSA/IAFC's view, interoperability is available for SERS entities through continued EMRS eligibility.⁶⁸

21. In reply,⁶⁹ Dr. Trahos asserts that the Commission's primary intent for Channels 161-170 were for National Mutual Aid use, whereas Channels 181-185 were intended for general pool use.⁷⁰ Therefore, only the latter should remain restricted to EMRS eligibles.⁷¹ Dr. Trahos submits that National Mutual Aid frequencies are needed by SERS licensees for interoperability,⁷² and cites Hurricane Andrew as a case in point. According to Dr. Trahos, in the immediate aftermath of this hurricane, numerous non-EMRS eligible SERS entities performed hundreds of hours of basic and advanced life support.⁷³ Dr. Trahos contends that during emergency/disasters, SERS need for interoperable communications becomes equal to their EMRS counterparts.⁷⁴ In response to IMSA/IAFC's comments, Dr. Trahos argues that the reallocation of 155.340 MHz⁷⁵ (the intersystem mutual assistance channel) from SERS to EMRS prevents SERS entities from communicating with EMRS entities via SERS frequencies.⁷⁶

22. *Discussion.* As we deferred questions concerning the sufficiency of the amount of spectrum available to EMRS and SERS eligibles to the EMRS rule making proceeding, we believe it appropriate to now resolve this issue. While SERS eligibles may not be involved in ongoing basic or advanced life support, we agree with Dr. Trahos' assertion that the four SERS service categories specified are engaged in safety-of-life services and need frequencies for Mutual Aid purposes. We also find merit in Dr. Trahos's analogy to our prior assignment of Mutual Aid channels to both Public Safety and SERS eligibles.⁷⁷ In that action, we noted that the Public Safety Radio Service and SERS are both involved in public safety activities.⁷⁸

23. Pursuant to the EMRS *Report and Order*, Channels 181-185 will be available not only to EMRS eligibles, but to other Subpart B Public Safety Radio Service eligibles as well.⁷⁹ Public Safety (including EMRS) eligibles will thus have access to Channels 181-185 in addition to Channels 161-170. In view of this, permitting SERS eligibles in the four specified categories access to Channels 161-170 should not negatively affect the use of narrowband systems by

public safety eligibles. We conclude from the above that inclusion of entities eligible under Sections 90.35, 90.37, 90.41 and 90.45 in the provisions of Section 90.720 will likely serve the public interest by enhancing interoperability between many types of emergency providers in safety-of-life situations.

Resolution of Additional Matters

24. A few minor matters relating to the new Emergency Medical Radio Service require clarification. First, pursuant to 47 C.F.R. § 90.243(a)(1) and (2), all eligibles in the Public Safety Radio Services -- Subpart B of Part 90 of the Commission's Rules -- are permitted to operate mobile relay stations on frequencies below 450 MHz.⁸⁰ We inadvertently failed to include the EMRS in Section 90.243(a).⁸¹ Because we considered EMRS communications to be of a critical, safety-of-life nature, we placed the service in Subpart B. In choosing this placement, we intended to treat EMRS eligibles in the same manner as all other Subpart B eligibles -- including permitting them to operate mobile relay stations. Therefore, we amend Section 90.243(a)(1) and (2) to reflect this intention.

25. Additionally, a number of other Commission rule sections require clarification or correction due to minor errors in the *Report and Order*. In this regard, 47 C.F.R. § 90.17(c)(11) is amended to reflect the action taken in the *Report and Order* permanently grandfathering Local Government radio call box operations on certain 453 and 458 MHz frequencies.⁸² 47 C.F.R. § 90.27(a) is amended to reflect that applications submitted by any person or organization (governmental or otherwise) other than the governmental body having jurisdiction over the state's emergency medical services plan must be accompanied by a statement prepared by the governmental body having jurisdiction over the state's emergency medical services plan supporting the application. 47 C.F.R. § 90.27(b) is amended to reflect that the class of station for Channels 453.025, 453.075, 453.125 and 453.175 MHz is "base or mobile." 47 C.F.R. § 90.421 is amended to provide that mobile units in the EMRS, as in the medical services category of the SERS, may be used by any person with whom cooperation or coordination is required for medical services activities. 47 C.F.R. §§ 90.19(c)(17), 90.21(c)(8), and 90.238(h) are revised to reflect the reallocation of specific frequencies from the Special Emergency Radio Service to the Emergency Medical Radio Service. 47 C.F.R. §§ 90.273(b), 90.477(d)(3), 90.483(d), 90.617(a), 90.619(a)(1), and 90.619(b)(7)(iii) are revised to indicate the distinction between the Public Safety and Special Emergency Radio Services and to define radio services included in the Public Safety Category.

⁶⁵ Trahos Petition at 3.

⁶⁶ IMSA Reply at 16.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ Reply Comments were filed by Dr. Michael C. Trahos (Trahos Reply) on June 14, 1993.

⁷⁰ Trahos Reply at 4.

⁷¹ Trahos Reply at 5.

⁷² Trahos Reply at 6.

⁷³ Trahos Reply at 5-6.

⁷⁴ Trahos Reply at 6.

⁷⁵ *Report and Order* at para. 15 and note 35.

⁷⁶ Trahos Reply at 6.

⁷⁷ Trahos Petition at 8. See *Report and Order*, Gen. Docket No. 87-112, 3 FCC Rcd 905, para. 13 (1987), for the establishment of the National Plan for the Public Radio Safety Services.

⁷⁸ *Id.*

⁷⁹ *Report and Order* at para. 6.

⁸⁰ Eligibles in some services under Subpart D and E also under this rule section may operate mobile relay stations.

⁸¹ With the exception of a special provision in 47 C.F.R. § 90.243(b)(1) for medical services, eligibles in SERS (Subpart C of Part 90 of the Commission's Rules) are not permitted to operate mobile relay stations.

⁸² These frequencies are: 453.025/.075/.125 and .175 MHz and 458.025/.075/.125 and .175 MHz. See *Report and Order* at note 38.

III. ORDERING CLAUSES

26. Accordingly, IT IS ORDERED, pursuant to the authority of Sections 4(i), 303(r), and 332(a)(2) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 332(a), that Part 90 of the Commission's Rules, 47 C.F.R. Part 90, IS AMENDED as set forth in the Appendix below, effective [thirty days after publication in the Federal Register].

27. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Section 1.429(i) of the Commission's Rules, 47 C.F.R. § 1.429(i), that the Petition for Reconsideration filed by Dr. Michael C. Trahos IS GRANTED and the Petition for Reconsideration filed by ProNet, Inc. IS DENIED.

28. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Section 90.151 of the Commission's Rules, 47 C.F.R. § 90.151, that the Petition for Permanent Waiver filed by ProNet, Inc. IS GRANTED in part and in all other respects IS DENIED.

29. IT IS FURTHER ORDERED that this proceeding IS TERMINATED.

30. For further information concerning this *Memorandum Opinion and Order* contact Freda Lippert Thyden, Wireless Telecommunications Bureau, (202) 418-0680.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

APPENDIX

Part 90 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

Part 90 - Private land mobile radio services

1. The authority citation for Part 90 continues to read as follows:

AUTHORITY: Sections 4, 303, 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. §§ 154, 303, and 332, unless otherwise noted.

2. Section 90.17 is amended by revising paragraph (c)(11) to read as follows:

§ 90.17 Local Government Radio Service.

(c) ***

(11) This frequency is available for systems first licensed prior to March 31, 1980, for radio call box communications related to safety on highways in accordance with the provisions of § 90.241(c). No new systems will be authorized of this nature, but systems authorized prior to March 31, 1980 may be modified, expanded, and renewed. Also, effective April 2, 1993, this frequency is shared with EMRS systems in accordance with § 90.27.

3. Section 90.19 is amended by revising paragraph (e)(17) to read as follows:

§ 90.19 Police Radio Service.

(e) ***

(17) This frequency is shared with the Fire and Emergency Medical Radio Services.

4. Section 90.21 is amended by revising paragraph (c)(8) to read as follows:

§ 90.21 Fire Radio Service.

(c) ***

(8) This frequency is shared with the Police and Emergency Medical Radio Services.

5. Section 90.27 is amended by revising the second sentence of paragraph (a), and by adding the words "or mobile" to the Class of station(s) for Frequencies 453.025, 453.075, 453.125 and 453.175 MHz in paragraph (b), to read as follows:

§ 90.27 Emergency Medical Radio Service.

(a) *** Applications submitted by persons or organizations (governmental or otherwise) other than the governmental body having jurisdiction over the state's emergency medical service plans must be accompanied by a statement prepared by the governmental body having jurisdiction over the state's emergency medical services plan indicating that the applicant is included in the state's emergency plan or otherwise supporting the application.

6. Section 90.238 is amended by revising paragraph (h) to read as follows:

§ 90.238 Telemetry operations.

(h) 458-468 MHz band (as available in the Emergency Medical Radio Service for bio-medical telemetry operations).

7. Section 90.243 is amended by revising paragraphs (a)(1), (a)(2), and (b)(1) to read as follows:

§ 90.243 Mobile relay stations.

(a) ***

(1) On frequencies below 450 MHz, except for the 220-222 MHz band, mobile relay stations may be authorized within the contiguous 48 states to operate only in the Police, Fire, Local Government, Highway Maintenance, Forestry-Conservation, Emergency Medical, Power, Petroleum, Forest Products, Manufacturers, Telephone Maintenance, and Railroad Radio Services.

(2) On frequencies below 450 MHz, except for the 220-222 MHz band, mobile relay stations may be authorized outside the contiguous 48 states to operate only in the

Police, Fire, Local Government, Highway Maintenance, Forestry-Conservation, Emergency Medical, Power, Petroleum, Forest Products, Manufacturers, Telephone Maintenance, Railroad, Business, and Special Industrial Radio Services.

(b) ***

(1) In the Emergency Medical and Special Emergency Radio Services, medical services systems in the 150-160 MHz band are permitted to be cross banded for mobile and control station operations with mobile relay stations authorized to operate in the 450-470 MHz band.

8. Section 90.273 is amended by revising the first sentence of paragraph (b) to read as follows:

§ 90.273 Availability and use of frequencies in the 421-430 MHz band.

(b) Channels in the public safety pool are available for assignment to eligibles in the Public Safety and Special Emergency Radio Services. ***

9. Section 90.421 is amended by redesignating paragraph (k) as paragraph (l) and adding new paragraph (k) to read as follows:

§ 90.421 Operation of mobile units in vehicles not under the control of the licensee.

(k) Mobile units licensed in the Emergency Medical Radio Service may be installed in a vehicle or be hand-carried for use by any person with whom cooperation or coordination is required for medical services activities.

10. Section 90.477 is amended by revising the first sentence of paragraph (d)(3) to read as follows:

§ 90.477 Interconnected systems.

(d) ***

(3) In the Special Emergency, Business, Special Industrial, Automobile, and Taxicab Radio Services, interconnection will be permitted only where the base station site or sites of proposed stations are located 120 km (75 mi) or more from the designated centers of the urbanized areas listed below. ***

11. Section 90.483 is amended by revising the third sentence of paragraph (d) to read as follows:

§ 90.483 Permissible methods and requirements of interconnecting private and public systems of communications.

(d) * * * This provision does not apply to systems licensed in the Police, Fire, Local Government, Emergency Medical, Special Emergency, Power, Petroleum and Railroad Radio Services, or above 800 MHz. * * *

12. Section 90.617 is amended by revising the first sentence of paragraph (a) to read as follows:

§ 90.617 Frequencies in the 809.750-824/854.750-869 MHz and 896-901/935-940 MHz bands available for trunked or conventional system use in non-border areas.

(a) The channels listed in Table 1 and paragraph (a)(1) of this section for the Public Safety Category are available to applicants eligible in the Public Safety and Special Emergency Radio Services. ***

13. Section 90.619 is amended by revising the first sentence of paragraph (a)(1) and the first sentence of paragraph (b)(7)(iii) to read as follows:

§ 90.619 Frequencies available for use in the U.S./Mexico and U.S./Canada border areas.

(a) ***

(1) Table 1A lists the channels in the 806-821/851-866 MHz band Public Safety Category that are available for assignment to applicants eligible in the Public Safety and Special Emergency Radio Services. ***

(b) ***

(7) ***

(iii) The Public Safety Category consists of the Public Safety and the Special Emergency Radio Services. ***

14. Section 90.631 is amended by revising the second sentence of paragraph (g) to read as follows:

§ 90.631 Trunked systems loading, construction, and authorization requirements.

(g) * * * Remote or satellite stations of wide area systems in the Public Safety, Special Emergency, Telephone Maintenance, and Power Radio Services may be authorized on a primary basis if such stations are the first to be authorized in their area of operation on the frequency or group of frequencies. ***

15. Section 90.720 is revised to read as follows:

§ 90.720 Channels available for public safety/mutual aid.

(a) Part 90 licensees whose licenses reflect a two-letter radio service code beginning with the letter "P" are authorized by this rule to use mobile and/or portable units on Channels 161-170 throughout the United States, its territories, and possessions to transmit:

(1) Communications relating to the immediate safety of life or

(2) Communications to facilitate interoperability among public safety entities, and public safety entities and Special Emergency Radio Service eligibles in §§ 90.35, 90.37, 90.41 and 90.45.

(b) Any entity eligible to obtain a license under subpart B of this part or eligible to obtain a license under Sections 90.35, 90.37, 90.41 and 90.45 of subpart C of this part is also eligible to obtain a license for base/mobile operations

on Channels 161-170. Base/mobile or base/portable communications on these channels that do not relate to the immediate safety of life or to communications interoperability among public safety entities, and public safety and the above specified special emergency entities may only be conducted on a secondary non-interference basis to such communications.