Background and Qualifications

1. I, William T. Gerrard, declare under penalty of perjury that the following testimony is true and correct to the best of my knowledge. I understand that I am being called as an expert witness with respect to the operation of a land mobile communications company, the records required to run such a company, the records necessary to demonstrate loading to the Commission when asked, and some of the technical aspects of the equipment used to operate such a company.

2. I am the President and the sole owner of Advanced Radio Communications Services of Florida, Inc. (Advanced) which, until recently, was primarily engaged in providing SMR service to subscribers. In the last five years, I have also owned another company called Air Space Radio Systems, which was a Motorola radio equipment dealership. My mailing address is P.O. Box 10, Boca Raton, Florida.

3. I began working with telecommunications equipment to meet the internal communication needs of construction businesses I was operating in the 1970's. Prior to founding Advanced Radio, I had a crane rental company and I was a fifty percent owner and president of general contracting corporation. In order to efficiently operate these construction companies, I became involved with land mobile communications in order to meet the companies' dispatch communication needs. In conjunction with the crane rental

Federal Communications Commission

Docket No. 94-147

Presented by WTB

Exhibit No. 346

Disposition

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Rejected

Reporter Shuron Bellamy

Date 7-14-94

business, we operated a very large internal private land mobile system providing coverage to approximately one third of Florida. In 1979, we sold the business to a buyer who shipped the equipment to Saudi Arabia. The buyer did not have a use for the communications system because the system could not be licensed in Saudi Arabia. I bought back the radio equipment and, acting on the advice of an equipment supplier, traded it in for SMR equipment. I recognized the opportunity to provide telecommunications service commercially and as a result founded Advanced.

4. In 1996, my company, Advanced, was the eleventh largest (measured by number of subscribers) provider of SMR services in the United States. Advanced offered trunked SMR communication services to the public for profit in the states of Florida, New York and Illinois. In 1996, Advanced sold 95% of its assets consisting of all of its 800 MHz trunked SMR operations to Dial Call, Inc. Since then, Advanced has sold its 900 MHz operations to other buyers. I started Advanced in 1979 and my primary occupation during the following seventeen years was to build the company.

5. In the course of running these businesses, I have found it necessary to learn about the equipment and operating formats available to my companies and those used by my competitors. I have particular knowledge of trunking formats and trunking equipment. I have run conventional stations for fifteen years and understand the basics of conventional station operation.

6. I also worked with a contractor to develop a proprietary SMR provider management and billing system designed for our use and marketed it for the use of other SMR providers. In the course of developing this system, I gained a familiarity with how a wide variety of SMR providers bill their subscribers and their record keeping practices.

7. Since 1979, I have been very involved in the SMR industry. I am a member of the American Mobile Telecommunications Association (AMTA), the national SMR trade association. I was the founding chairman of that organization and served as its chairman for seven or eight years.[1] I was also a director of AMTA for ten years starting in 1985. As chairman/director of AMTA, I have attended seminars, meetings, conferences and training sessions relating to the FCC regulations and relating to various aspects of running SMR companies. These included sessions relating to equipment and record keeping. I have also been involved in many formal and informal discussions with a wide variety of SMR providers from around the nation regarding the operation of various types of equipment, various billing systems and the impact of FCC rules governing the operation of SMR communications companies.

8. I have had no other formal training in the operation of radio equipment. My expertise is largely from my experience in operating my companies and taking an active role in industry activities.

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[1] Until 1991, AMTA was known as American SMR Network Association (ASNA).

9. As far as I know, I have never been a competitor of James A. Kay, Jr. I have not held licenses in Los Angeles, CA. While I expect that Mr. Kay and I have attended industry meetings together, I do not recall ever having spoken with him.

Conventional, Trunked and Quasi-Trunked Private Land Mobile Systems

a) Conventional systems

10. Private Land Mobile stations range from very simple analog systems to very complex, efficient digital systems. The simplest form of Private Land Mobile station is a single channel shared system. An example familiar to many people is a taxi cab channel. Many taxi cab companies use conventional (single channel) Private Land Mobile stations to perform their dispatch communications. All of the users (cab drivers) listen to all of the messages. Technically this is accomplished using a "channel" which consists of two frequencies. One of the frequencies is used by the mobiles (in the cabs) to communicate to a "repeater." This frequency is referred to as the repeater input frequency. The other frequency is used by the repeater to extend the mobile's range to all of the mobiles in the station's service area, typically a circle approximately twenty miles in diameter. This second frequency is referred to as the repeater output frequency. The use of a repeater, usually located on a tall building, a tower or a hill top, greatly enhances the range of the radios. For example, a cab at one end of the service area might transmit twenty miles to the repeater to communicate with a cab twenty miles beyond the repeater.

11. A conventional channel is analogous to a two lane road. Users have a high likelihood of interfering with each other by talking at the same time just as a two lane road is very susceptible to traffic jams. The FCC rules license additional users on the same channel until the channel is "fully loaded." A channel is fully loaded when it is serving a certain number of end users (for example 70 mobile units for 800 MHz SMR channels). To the extent that a conventional channel is not fully loaded to levels indicated in the FCC rules, the FCC rules provide for sharing the channel with other users.

b) Trunked systems

12. A trunked SMR station also provides service to subscribers who operate mobile radios. The range of these mobile units is enhanced by the SMR provider's radio transmitters and, in many cases, the mobiles are interconnected with the wireline phone network. In a trunked system, the equipment automatically selects among several available channels to provide a clear channel for communication. Conversations on trunked systems are more private than conversations on conventional channels. An SMR provider's station consists of a repeater or repeaters, power supply or supplies, an antenna and other ancillary equipment such as signal combiners, and/or splitters. It is usually located at a relatively high location in a service area approximately 20-25 miles in diameter. In the Los Angeles area, the service areas tend to be larger due to the extraordinary height above average terrain

where stations are located.[2] The mobile users (also called end users) can select who they desire to communicate with and then engage in a private conversation.

13. A trunked system differs from a conventional station in that it uses a monitor to select an inactive channel from the channels assigned to the system. Typical trunked systems combine up to twenty channels together. (Advanced operated one trunked system with twenty seven channels linked together at one site). Users do not know or care which of the channels they are using. The monitoring can be accomplished either with a monitor operating at the repeater, or by a monitor operating in the mobile unit.

14. There are various trunking formats that different radio equipment manufacturers utilize to perform this channel selection process . Trunking formats are comparable to accounting programs in that they perform basically the same function with differing levels of sophistication. The formats include Uniden, Zetron, LTR, General Electric Mark V, General Electric EDAX, Motorola, Aertron etc.

15. My systems primarily operated on the Motorola format. The Motorola format uses a dedicated control channel for all initial communications. This channel is referred to as the trunk. On the channel, the station uses subaudible tones to tell the mobile unit which

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[2] SMR stations in Los Angeles tend to be located on mountain peaks thousands of feet above their respective service areas. The FCC rules recognize this anomaly and provide extra protection for the Los Angeles stations.

channel to use. The channels linked together are called a trunk group. The logic functions are at the providers station, as opposed to some other systems where the logic may be in the mobile units. Our systems were message trunked; each time the microphone button was depressed, a frequency assignment was made. This type of trunking makes eaves dropping harder and it more efficiently uses the airtime available on the system.

16. While we operated exclusively Motorola systems, we managed systems that used other formats. For example, one system that we managed in New York used Uniden equipment and LTR format for trunking. The LTR format does not use a dedicated control channel. The mobiles are each assigned a home channel. If the home channel is not busy, the mobile uses that channel. If it is busy, either the repeater tells the mobile where to go or the system can be adapted so that the mobile scans for an available channel.

17. This type of trunking is used both on systems authorized as trunked systems and on systems which are made up of conventional channels. The Commission issued a letter from Rosalind Allen, the former Branch Chief, Land Mobile and Microwave Division, Private Radio Bureau, to Jack A. Spillman dated June 21, 1993, that indicated that the adaptation of LTR where the mobile automatically monitors the channels and selects a clear channel would be a permissible enhancement for SMR-conventional stations. This type of system is frequently marketed as a trunked system, but is actually a quasi-trunking system in that no dedicated trunk channel is used.

Loading Records

18. When I first started providing SMR service, all of my customers had to be licensed. For example, when a construction company would come to me to provide service for a fleet of ten trucks, they had to file an application with the FCC to obtain a license to use my system. Their license indicated how many mobiles they were operating and which SMR stations they were authorized to use. The number of mobiles operating on a station determined whether a licensee could obtain more channels for a trunked station, whether a licensee would have to return channels to the Commission, or a licensee could obtain another trunked station within forty miles. Similar limitations applied to acquiring additional conventional stations.

19. Prior to the end of end user licensing in 1992, there was a general awareness in the industry that the FCC could challenge at any time your information or records as to loading. My company obtained many of the frequencies we used when they were taken back from other licensees who did not have sufficient customers when the FCC reviewed their loading. As a result, we generally in the SMR community maintained very extensive records, expecting some day that we might be challenged. Prior to the end of end user licensing in 1992, this involved keeping copies of our licenses and tracking all end user licenses. At Advanced, we developed software to fill out end user license applications and to

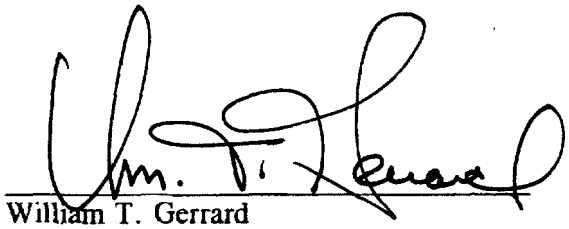
track end user license renewal applications . We also regularly tracked how many users were actually activated as compared to how many users appeared on service agreements.

20. In 1992, the Commission decided that end users could operate under the umbrella of the SMR providers license, and that the provider could certify the number of mobiles operating on the system. Because some operators were upset that their customer lists were public documents, the FCC stopped requiring providers to identify in public filings who their customers were. The FCC decided it could simply get the information it needed on a case by case basis when loading questions arose. After end user licensing ended, members of the land mobile industry still understood that the FCC could challenge our loading counts. Land mobile licensees had to maintain sufficient records to demonstrate that our loading certifications were accurate if the FCC were to challenge the certification. This implicitly required the keeping of historical loading records. In order to substantiate the number of users operating on our system at any time, we tracked who the customers were, how many mobiles they had on our system on their contract, how many were turned on by serial number and code plug, and how many units they were operating on each of our systems. We had a company policy of maintaining all records for ten years.

21. I do not know how else an operator could provide sufficient evidence to substantiate the number of mobiles on their system(s). The FCC indicated it would accept business records sufficient to establish the number of mobiles using the system. The records

necessary would have to include the number of mobiles each customer is operating on each station.

22. On one occasion the FCC questioned my loading and as a result of the records I provided to the FCC, the FCC Field Office Bureau had to admit that their conclusion, that my channels were under utilized, was flawed. I ultimately retained all of my channels.



William T. Gerrard

12/10/98

Date