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March 8, 2001

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
The Portals, Room TW-A325
445 Twelfth Street, S. W.
Washington, D. C. 20554

Re: ET Docket No. 00-221
Comments of MRFAC, Inc.
Computer Diskette

Dear Ms. Salas:

Submitted herewith on behalf of MRFAC, Inc. ("MRFAC") is a computer diskette containing a copy of MRFAC's comments in response to the Commission's Notice of Proposed Rule Making in ET Docket No. 00-221, *Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, FCC 00-395, released November 20, 2000. We are concurrently providing a copy of the diskette to the Commission's copy contractor, International Transcription Service, Inc.

Should any question arise concerning this matter please contact Ken Keane of this office (202-775-7123) or undersigned counsel.

Sincerely,

Mark Van Bergh

cc (w/encl.): ITS

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

In the Matter of	)	
	)	
Reallocation of the 216-220 MHz,	)	ET Docket No. 00-221
1390-1395 MHz, 1427-1429 MHz,	)	RM-9267
1429-1432 MHz, 1432-1435 MHz,	)	RM-9692
1670-1675 MHz, and 2385-2390 MHz	)	RM-9797
Government Transfer Bands	)	RM-9854

To: The Commission

COMMENTS OF MRFAC, INC.

MRFAC, Inc., by its counsel, hereby submits its comments on the Notice of Proposed Rulemaking in the above-captioned proceeding (FCC 00-395, released November 20, 2000; hereinafter cited as the "Notice"). By means of the Notice, the Commission proposes a number of new allocations derived from spectrum transferred by the Federal Government. The issue of principal concern to MRFAC is the proposed Land Mobile Communications Service ("LMCS"). MRFAC urges adoption of the LMCS as discussed herein.

INTRODUCTION

As the Commission is aware, MRFAC and its predecessor-in-interest have been private land mobile coordinators for nearly 50 years. Starting with its roots in the National Association of Manufacturers, and continuing with its creation as an independent, non-profit corporation in 1976, MRFAC has coordinated applications for many thousands of manufacturers and industrial applicants.

Besides its coordination functions MRFAC serves as an advocate for the spectrum needs of private, internal use system operators. These entities are typically large industrial firms which

own and operate radio facilities as an integral part of their operations. Their radio facilities are used in all manner of specialized applications in order to enhance employee productivity and safety. Moreover, many large manufacturers utilize their communications facilities to provide emergency public health and safety services to neighboring communities.

DISCUSSION

The proposed LMCS represents the culmination of five years' effort by the Land Mobile Communications Council ("LMCC"). Based on LMCC's suggestions, the Commission has proposed an allocation of ten (10) MHz and, specifically, the bands 1390-1395 MHz, 1427-1429 MHz, and 1432-1435 MHz. The Notice further references LMCC's recommendation that:

> "the 1390-1392 MHz segment be paired with the 1427-1429 MHz band, and licensed on a site-specific basis in the same manner as existing PMRS services. Under this licensing method, eligible applicants would be licensed to use one or more channels in a location or area and for a specific frequency or set of frequencies. LMCC recommends that the 1392-1395 MHz segment be paired with the 1432-1435 MHz band, and licensed to band managers by competitive bidding."

Id. at para. 26.

LMCC has repeatedly stressed to the Commission the critical need for additional spectrum to support the productivity and safety requirements of American industry. As a member of LMCC, MRFAC is especially gratified to see the LMCC proposal endorsed by the Commission, even if in tentative form.

LMCC is filing comments on behalf of its membership. Those comments will address the allocation options set forth in the Notice and demonstrate why the agency should adopt Option 1 with four (4) MHz set aside "for traditional site licensing" and six (6) MHz for licensing "through competitive bidding," Id. at para. 31. MRFAC fully supports the LMCC Comments and looks forward to the opportunity to submit comments in reply to those parties

with other ideas for the spectrum. MRFAC writes separately at this point to underscore the pressing need for a new allocation for American industry.

U.S. manufacturing has almost literally re-invented itself in the past fifteen years. Productivity, which used to lag that of Germany and Japan, now outranks both and is second in the world.[1] From 1996 through 1999, the gross domestic product (GDP) in manufacturing grew by 5.1 percent annually, compared to 4.3 percent for the economy overall.[2] Indeed, improvements in manufacturing productivity have contributed to 29 percent of U.S. economic growth between 1992 and 1999, the greatest of any sector of our economy.[3] Manufacturing is the single greatest contributor to the GDP.

Directly related to manufacturing productivity is the improvement of the United States' position in the global economy. For example, in 1986, the United States' share of world exports was 11 percent; in 1999, the U.S. share had increased to 12.2 percent.[4] Indeed, for the period 1994 to 1999, the United States' industrial growth rate is almost twice that of the entire European Union (35% for the United States versus 18% for the European Union), and more than four times Japan's (35% versus 8%).[5]

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1 *See GNP Per Capita 1999*, World Development Indicators Database, World Bank, August 2, 2000 (based on purchasing power parity). Luxembourg is the only country ranked ahead of the United States.

2 *Survey of Current Business*, U.S. Department of Commerce, Bureau of Economic Analysis, December 2000, at 31, Table 6.

3 *Survey of Current Business*, U.S. Department of Commerce, Bureau of Economic Analysis, June 2000, at 46, Table 6. Manufacturing is also the single largest employer of the American workforce: Approximately 18 million people. *The Facts About Modern Manufacturing*, The Manufacturing Institute, at 31.

4 *Direction of Trade Statistics*, International Monetary Fund (December 2000) at pages 2 and 263.

5 *Economic Report of the President,* 2001, p. 398, Table B-108.

The dramatic turn-around referenced above is due in no small measure to American adoption of more efficient manufacturing techniques including, in particular, just-in-time processes. These processes depend critically on the availability of an adequate supply of wireless communications channels. These channels are used in highly specialized applications which commercial carriers with their one-size-fits-all, wide-ar1111ea coverage approach are not able to meet.

For example, automobile manufacturers like Toyota and Honda make heavy use of private radio facilities for the just-in-time delivery of parts and components to the assembly line, for production control, and for fire, medical and security purposes.

Caterpillar, Inc., manufacturer of heavy earth moving and material handling equipment, makes extensive use of radio. Among its many time-critical and safety-related applications are the control of self-guided vehicles that deliver components on a just-in-time basis to the assembly line.

Logan Aluminum, which operates a rolling mill, makes extensive use of wireless facilities for voice and data purposes to support its plant fire department and emergency medical technicians/ambulance service. In addition, Logan utilizes wireless facilities for real-time materials handling purposes and for the remote control of automated vehicles capable of moving 60,000 pound ingots of white-hot aluminum and 20,000 pound vats of molten aluminum.

The Boeing Company utilizes extensive repeater systems for a variety of functions including facilities maintenance, transportation dispatch and materials handling, overhead crane operations, and fire and security for its emergency Operation Centers.[6]

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[6] Overhead cranes are a good example of the benefits which radio provides. With older technology overhead cranes were controlled by an operator in an overhead cab, working with one or sometimes two persons on the factory floor. With radio remote control units, the same

Commission approval of the LMCS will do much to help ensure that American manufacturing remains the world leader. Most of the new applications envisioned for LMCS are of the broadband type and promise even greater productivity gains than those referenced above. These include mobile facsimile services, data transfer systems, assembly line video transmission, and wireless access devices for corporate LANs, intranets and the internet.

Thus, American manufacturers will be able to make excellent use of the LMCS allocation. And the Commission can make a meaningful contribution to the preeminence of U.S. manufacturing and to the millions of American workers employed therein. Accordingly, for the reasons set forth here and in LMCC's filings, MRFAC urges the Commission to follow through with its proposal and provide this measure of spectrum relief for U.S. industry.

Respectfully submitted,

MRFAC, Inc.

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March 8, 2001

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amount of work can be performed by one operator, resulting in a labor savings on the order of $40,000-$80,000 per crane annually. In one automobile manufacturer's plant with numerous cranes, the annual savings exceeds $3 million.

At the same time, radio-controlled cranes contribute greatly to improved worker safety. The operator on the floor, who is closest to the load, is in the best position to observe obstacles or hazards; he does to need to rely on hand signals to an operator located high overhead.