

submitted by a licensee through the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC). We proposed a procedure whereby licensees proposing to construct a facility²²⁸ within a protected zone, would submit an application through the Universal Licensing System which contains the technical information for the site. This information would then be forwarded to the FAS. Licensees would be prohibited from constructing the facility until receiving a response from the Commission that the coordination with NTIA was successful.²²⁹ We sought comment on this proposal and asked for suggestions on alternative procedures that might be less cumbersome. The only comment received on this issue was from The National Academy of Sciences, which suggests coordination procedures for the GOES earth stations that will continue to operate with co-primary status in the 1670-1675 MHz band.²³⁰ As described above, we are adopting rules to implement this suggestion.²³¹ For all other frequency bands, we adopt the procedures as proposed. Under these procedures, Commission licensees may construct facilities under the terms of their license and in accordance with the relevant service rules so long as the facility is not within one of the protected zones as defined by NTIA, unless the facility has been coordinated with NTIA. This does not exempt licensees from any other required filings or coordination requirements, such as those that may be required under the National Environmental Policy Act of 1969²³² or for international coordination.

V. CONCLUSION

74. By the decisions above, we reallocate twenty-seven megahertz of spectrum from Federal to non-Federal Government use. These actions fulfil our obligations to implement various provisions of OBRA-93 and BBA-97 and they also continue implementation of the 1999 *Spectrum Policy Statement*. We believe that through these actions, manufacturers, service providers and consumers will reap the benefits of new technologies and services.

VI. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Act

75. A Final Regulatory Flexibility analysis, pursuant to the Regulatory Flexibility Act, 5 U.S.C. § 604, is contained in Appendix B.

B. Paperwork Reduction Act

76. This Report and Order contains either new or modified information collection(s) subject to the PRA of 1995, Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment. Public and agency comments are due **[60 days after date of publication in the Federal Register.]** Comments should address: (a) whether the new or modified

²²⁸ This would include either fixed or mobile operations.

²²⁹ *Id.* at 53. We note that similar procedures were adopted in for the 3650-3700 MHz band. See Amendment of the Commission's Rules with Regard to the 3650-3700 MHz Government Transfer Band, ET Docket No. 98-237, *Notice of Proposed Rulemaking and Order*, 14 FCC Rcd 1295 (1999).

²³⁰ See CORF Comments at 6-7.

²³¹ See para. 64, *supra*.

²³² See 47 C.F.R. Part 1, Subpart I.

collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

VII. ORDERING CLAUSES

77. Accordingly, IT IS ORDERED that pursuant to the authority contained in Sections 4(i), 257, 303(b), 303(f), 303(g), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 257, 303(b), 303(f), 303(g), 303(r), and 309(j) this *Report and Order and Memorandum Opinion and Order* is ADOPTED.

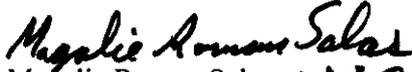
78. IT IS FURTHER ORDERED that Parts 1, 2, 90, and 95 of the Commission's Rules ARE AMENDED as specified in Appendix C, effective 60 days after publication in the Federal Register. Information collections contained in these rules will be effective upon OMB approval.

79. IT IS FURTHER ORDERED that the proceeding in WT Docket No. 97-153 IS TERMINATED.

80. IT IS FURTHER ORDERED that the Petitions for Reconsideration filed in ET Docket No. 92-255 ARE DENIED.

81. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order and Memorandum Opinion and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATION COMMISSION


Magalie Roman Salas *wrc*
Secretary

APPENDIX A: List of Commenters

ET Docket No. 00-221Comments

Acoustical Society of America	Brian and Michaela Henderson
Adrienne Haugen	California State Automobile Association.
AeroAstro, Inc.	Candace Lindow-Davies
Aerospace and Flight Test Radio Coordinating Council	Carl and Jacquelyn Gustafson
Alan Woods	Carol A. Fawcett
Alec Stone	Carol Barber
Alexander Graham Bell Association for the Deaf and Hard of Hearing	Carol Burns
Alison Stroud	Carol M. Granaldi
Amanda Jaffe	Carol Le Borgtreger
American Academy of Audiology	Carolyn M. Trautmann
American Council of the Blind	Carolyn Rossick
American Hospital Association Task Force on Medical Technology	Carolyn Wilson
American Public Power Association	Carrie Cleary
American Society for Deaf Children	Charmity Welter
Amy Beckett	Cary Walsh
Anastasia Heckendorf	Cathy Freeman Wice
Ann Gazinski	Celtronix Telemetry, Inc.
Ann Louise Bednar	Center for Independent Living of Mid-Michigan
Ann Rooney	Charlotte N. Roth
Anna Dresner	Cheryl A. Heppner
Anne Harrison	Children's Hospital of Wisconsin
Arlene Romoff	Chris Witt
Arlie J. Adam, MS, CCC-A	Christine Buzard
Arraycomm, Inc.	Christine Eubanks
ARRL, The National Association for Amateur Radio	Christopher Hunter
Association of Public-Safety Communications Officials International	Christopher Koston
AT&T Wireless Services, Inc.	Chrystal Frailing
Auditory-Verbal International, Inc.	Clayton Simon
Audrey Kraus	Comtek-Communications Technology Inc.
Audrey Weekes	Council of Organizational Representatives on National Issues
Automobile Club of Hartford, Inc.	Crawfordsville Electric Light & Power
Avista Corporation	Cristina Campos
Barbara A. Johnson	Cuquita Wilson De Briano
Barbara Mellert	Cynthia Coupe
Bay State Gas Company	D. Fariss
Becky Waegell	Dale Hermsen
Ben W. Gilbert	Dan Heeb
Betty A. Proctor	Dan Julie & Sophia Schlager
Betty Coombs	Dana Mulvany
Betty Lim	Dana Zuller
Betty Stueber	Daniel & Claudia Plato
Beverly Nichols	Daniel Joe Broek
Blade Chamery	Daniel Schlager
Bradley B. Ingrao, MEd CCC-A	Danny Finnen
	Daphne Potter
	DataCom Information Systems, LLC

Datex Spectrum, L.L.C.
 Dave & Kathy Pearson
 David Berrian
 David Glenn Hoffman
 Dawn E. Wilcox
 Deaf-Hearing Communication Centre, Inc.
 Debbie Mohney
 Debby McDowall
 Deborah K. Hardegree
 Debra Rowland
 Denise Jones
 Desiree W. Whipple
 Diane M. Badua
 Diane Phelps
 Diane R. Finnerty
 Dianna Attaway
 Donald Dunow
 Dorothy Holland-Kanpp
 Dorothy Kerr
 Dorothy Minert
 Dorothy Wormser
 Doug Kloss
 Dr. Judy C. Smith
 Dr. Waltraut M. Knoll
 Dudley J. Sondeno
 Educational Audiology Association
 Efrat A. Schorr
 Eileen Conlow
 Electronic Tracking Systems, L.L.C.
 Elizabeth J. Wilson
 Ellen Semel
 Emily Mandelbaum
 Emily Whiteside
 Enid Gilham
 Esther S. Weinberger
 Eva D'Agostino
 Evelyn Cypert
 Evelyn N. Rossick
 Fairfield Industries, Inc.
 Final Analysis Communication Services, Inc.
 Flo Kiewel
 Florence M. Cone
 Frances G. Parks
 Francis Buchinger
 Francis P. Lepine
 Francis T. Bromley
 Frank Digiovanni
 Frank Iglehart, Ph.D.
 Fredericka Bell-Berti
 Gainesville Regional Utilities
 Gene W. Pankey
 George DeVbiss
 Glenda Smith-Fowler
 Glenn & Stacey Pinke
 Glenna S. Descy
 Grace Tiessen
 Grove City Area Self Help for Hard of Hearing
 Gwen E.P. Smith
 Harold McPherson
 Harriet Adams
 Head and Neck Medicine and Surgery of Southwest Virginia
 Hearing Industries Association
 Helen Conuelse
 Henry J. Kehe
 Hermine Willey
 Hometown Connections, International, LLC
 Ina Colleen Rozmaryn
 Industrial Telecommunications Association, Inc.
 Ingham Intermediate School District
 InstanTel, Inc.
 In-Sync Interactive Corporation
 Ira and Pam Dooley
 Irina Booth
 Itron, Inc.
 Jack O'Keeffe
 James C. Dillon
 James E. Cook
 James Greco
 James M. Berry
 James R. Edwards
 Jamie Taylor
 Jane Smith
 Janet Haines
 Janie Samuel
 Jay Wyant
 Jean Camberg
 Jeanne Glass
 Jennifer M. Bold
 Jennifer M. Hulme
 Jennifer Spencer
 Joan Andrews
 Joan Celebi
 Joan Forney
 Joan Kornbluh
 Joan Marcoux
 Joan P. Ireland
 Joann BeBettencourt
 JoAnn Ploetz
 Joanne Colombo
 John A. Hayden

John B. (Bern) Klein
John Flanders
John J Schlager
John Lambrecht
John M. Flanders
John R. Rossick
Jon Monsarrat
Jon Taylor
Jonathan Sondergeld
Joseph Carbone
Joseph Gordon
Joyce Borgerding
Joyce McDaniel
Judith A. Schmidt
Judith L Rogers
Judith S. Dick
Judy Ginsberg
Judy Schwarzmeier
Julia Elizabeth Fitzer
Julia M. Olson
Julie Sapp, Ph.D.
June A. Romano
June McBride
Karen A. Biernat
Karen A. Keil
Karen Finnen
Karen L. Utter
Karen Lindberg
Karen London
Karen M. Gross
Karen Manning
Kathleen Boate
Kathleen M. Splitek
Kathryn Mazzocam
Kathryn Wexler
Kathy Scanlan
Kay Ringelstetter
Keith Ploetz
KeySpan Energy Delivery
Kiersten A. Tomchik
Kim Schafer
Kimberly J. Niday, MA, CCC/A
Kromeklia Bryant
Lana B. Alsobrook
Land Mobile Communications Council
Late Liautaud Liska
Laura Knoke
Leo One Worldwide, Inc.
Lila McKee, MA, CCC-A
Lina Reiss
Linda Boylan, M.A., CCC-A
Linda C. Zarro
Linda Erb
Linda J. Ray
Linda M. Peshek
Linda Peshek
Linda S. Taylor, Ed.D.
Lindsey Rentmeester
Linnda Thibodeau, Ph.D.
Lisa Kennedy
Lisa Sutehrland
Liz Kobylak
Lois O'Neill
Lori Buseck
Lori Wheat
Lou Ann Jones
Louise Colodzin
Lucinda F. Swearingen
Lynda G. Coxé
Malisa W. Janes, Rh.D.
Margaret C. Thompson
Margaret D. Waegell
Maridee F. Garvey
Marie C. Nordling
Marie Ruys
Marilyn M. Mahaffey
Marilyn Voorhies
Mark Johnson
Mark Reeve
Martha Rais
Martina Avalina
Mary Crock
Mary Jo Harvey
Mary Jo Melbourne
Mary L. B. Pendergraft
Mary Lee Nelson
Mary M Honomichl
Mary M. Whitaker
Mary McGinnis
Mary Pribich
Mary Slattery
Mary T. Lucchesi
Massachusetts Commission for the Deaf and Hard of Hearing
Max K. Kennedy
Melanie C. Magruder
Melissa K. Chaikof
Melissa Vinik
Melody James
Michael J. Arleth
Michael J. Barrett

Michael P. Shuman	Peggy Lupton
Michele Hatfield	Persons with Disabilities Caucus
Michelle Sarnese	The Greens/Green Party US
MicroTrax	Philip H. Kaplan
Mike and Pat Feltman	Phonic Ear, Inc.
Millennium Networks, Inc.	Priscilla Bade, MD
Mobex Communications, Inc.	Puay Ng
Moneca Price	R.C. March
Motorola, Inc.	Rachel Esserman
Mr. and Mrs. Harrison Bubb	Rae Carter
MRFAC, Inc.	Rebecca DeGrave
Mrs. Kargol	Reliant Energy, Incorporated
Mrs. Kathy Dragel	Revelation L.L.C.
Mrs. Raye Fairchild	Rich Diedrichsen
Myron W. Yoder	Richard and Paula Laughlin
Nan Asher	Richard S. Neely
Nancy A. Dietrich	Richard T. McGeorge
Nancy A. Dolberg	Robert LuVisi
Nancy Blazek	Robert S. Ghent
Nancy Fink	Roberta Schneider
Nancy J. Rennert	Ronald H. Vickery
Nancy Kingsley	Rosemarie Kasper
Nancy Landrum	Ruth Anne Parsons
Naomi K. Smith	Ryan W. Gale
Nate Flanders	Sandi Streeter
National Academy of Sciences	Sandra Kowalczyk
National Association For Law Enforcement Technology	Sara B Wilson
National Association of Broadcasters	Sara M Maher
National Association of the Deaf	Sarah Chatterton
Newport Utilities Board	Sarah G. Smith
Nghi Lu	Sarah Gretchen Smith
Norman W. Larson	Sarah Nelson
Northern Virginia United for Deaf and Hard of Hearing	Scott A. Under
Noryn Letcavage	Securicor Wireless Holdings, Inc.
Orbital Communications Corporation	Self Help for Hard of Hearing People
Pacific Crest Corporation	Shanita Zinn
Pamela Casey	Sheila Rose
Pamela J. Foody	Shera M. Katz
Patricia F. Schmiege	Shirley Jaskier
Patricia Gonzales	Sonda LaDeaux
Patricia Krueger	Southern Company Services, Inc.
Patricia Stelmachowicz	Southern Connecticut Gas Company
Patrick Thomas Ryan	Stacy Ridgway
Paul Lagace	Stephanie E. Angelini
Paul M. Lurie	Stephen W. Lemon
Paul Matecki	Steve Barber
Paula Brown Glick	Steven Tramposch
Paula Humphreys	Sue Spangenberg
Paula Rosenthal	Sue Toth, M.A., Audiologist
Peg Singleton	Susan A. Cook

Susan B. Matt
Susan Boswell
Susan Buchinger
Susan Buseck
Susan Chorost
Susan Evans Peterson
Susan Hargett
Susan Niemiec
Susan Nittrouer Ph.D
Suzanne J. Bressler, MS, CCC-A
Sylvia Van Asten
Tanya Giovacchini
Terri Charles
The American Petroleum Institute
The Satellite Industry Association
Theresa Conradson
Thomas E. McCormick
Thomas G Russel
Tim Gale
Tommie G. Wells
Toni Barrient
Trimble Navigation Limited
Trina Girard
Trish Freeman
United Telecom Council
University of Connecticut
Van D. Westervelt
Verna S. Neidigh
Vernon Thayer
Veryl E. White
Vicki Castro
Viki Nygaard
Virginia Carr
Wallace Mooney
Warren C. Havens
Wayne Benson
Wendy Samuelson
William D'Agostino
William M. Hartmann
William R. Hickman
Winnie M. Hargis
Woodley O. Butler, Jr.

Datex Spectrum, L.L.C.
Fairfield Industries, Inc.
Final Analysis Inc. and Orbital Communications Corporation
Genevieve J. Schulz Electronic Tracking Systems, L.L.C.
In-Sync Interactive Corporation
Karen E. Jorgensen
Mert Schulz
MicroTrax
Mobex Communications, Inc.
MRFAC, Inc.
National Association of Broadcasters
Rocky Mountain Motorists, Inc.
U.S. Telemetry Corporation
Warren C. Havens

Reply Comments

AeroAstro, Inc.
Alarm Industry Communications Committee
American Hospital Association Task Force on Medical Telemetry
Clyda H. Anderson

ET Docket No. 99-255, PR Docket No. 92-235**Petitions for Reconsideration**

Joint Petition of Final Analysis Services, Inc.,
Leo One Worldwide Inc., and Orbital
Communications Corporation
Satellite Industry Association

WT Docket No. 97-153**Comments**

Cumberland Gap Tunnel Authority
Cybortech, Inc.
Dale T. Smith
Department Of Transportation
Gene Snyder
Giffen B. Nickol
Industrial Telecommunications Association
International Association of Chiefs of Police
International Municipal Signal Association
John Tomerlin
MPH Industries Inc
National Association of Governors' Highway
Safety Representatives
Personal Communications Industry Association
Phonic Ear, Inc.
Radio Association Defending Airwave Rights
Representative Koller
Representative Schiavone
Safety Warning Systems
Sanyo Tecnica USA, Inc.
Senator Kristensen
Sunkyong America Inc
Teligent
Vermont Agency Of Transportation
Vermont Railway, Inc.

Reply Comments

Anthony Otis

APPENDIX B: FINAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act (RFA)²³³ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rule Making (Notice)*.²³⁴ The Commission sought written public comments on the proposals in the Notice, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.²³⁵

Need for, and Objectives of, the Report and Order.

2. This *Report and Order (R&O)* allocates 27 megahertz of spectrum from the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz bands for non-Government use, thereby effectuating the transfer of this spectrum from the Federal Government, pursuant to the provisions of the Omnibus Budget Reconciliation Act of 1993 (OBRA-93) and the Balanced Budget Act of 1997 (BBA-97). The bands 1390-1395 MHz, 1427-1429 MHz, and 2385-2390 MHz are being allocated for exclusive non-Federal Government use, while the bands 216-220 MHz, 1432-1435 MHz, and 1670-1675 MHz, are being allocated for mixed use. Mixed use is a type of shared use whereby Federal Government use is limited by geographic area, by time, or by other means so as to guarantee that the potential use to be made by Federal Government stations is substantially less than the potential use to be made by non-Federal Government stations. All primary Government allocations are being deleted from the transfer bands except in the mixed-use bands, where a limited number of stations will be grandfathered indefinitely. Federal agencies will not add new primary stations in any of the transfer bands. In the bands 1432-1435 MHz and 2385-2390 MHz, non-grandfathered Federal Government stations will retain their primary status until relocated in accordance with the Strom Thurmond National Defense Authorization Act of Fiscal Year 1999 (NDAA-99).

3. These seven bands have a variety of continuing Government protection requirements and incumbent Government and non-Government uses. Despite these constraints and the relatively narrow bandwidth contained in each of the bands, we believe that the *R&O* will foster a variety of potential applications in both new and existing services. The transfer of these bands to non-Government use should enable the development of new technologies and services, provide additional spectrum relief for congested private land mobile frequencies, and fulfill our obligations as mandated by Congress to assign this spectrum for non-Government use.

Summary of Significant Issues Raised by Public Comments in Response to the IRFA.

4. There were no comments received in response to the IRFA.

Description and Estimate of the Number of Small Entities to Which the Rules Will Apply.

5. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.²³⁶ The RFA defines the

²³³ See 5 U.S.C. § 603, The RFA, *see* 5 U.S.C. 601 *et seq.*, has been amended by the Contract With America Advancement Act of 1996, Public Law 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

²³⁴ See 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, ET Docket No. 00-221, 15 FCC Rcd 22,657, 22,697 (2000).

²³⁵ See 5 U.S.C. § 604.

²³⁶ 5 U.S.C. § 603(b)(3).

term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."²³⁷ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.²³⁸ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).²³⁹ A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."²⁴⁰ Nationwide, as of 1992, there were approximately 275,801 small organizations.²⁴¹ "Small governmental jurisdiction"²⁴² generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."²⁴³ As of 1992, there were approximately 85,006 governmental entities in the United States.²⁴⁴ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96%, have populations of fewer than 50,000.²⁴⁵ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (96%) are small entities.

6. Licenses in some of the spectrum being allocated in the *R&O* will be assigned by auction, and licenses in some of the spectrum may be assigned by auction. The Commission has not yet determined how many licenses will be awarded, nor will it know how many licensees will be small businesses, until auctions are planned and held. We therefore assume that, for purposes of our evaluations and conclusions in the FRFA, all of the prospective licensees in the bands addressed in the *Notice* are small entities, as that term is defined by the SBA.

7. Incumbent services in the 216-220 MHz band, which the *R&O* allocates on a primary basis to the Fixed and Mobile Services, include the Automated Maritime Telecommunications Service (AMTS), telemetry users and Low Power Radio Service (LPRS) users. The Commission has defined small businesses in the AMTS as those businesses which, together with their affiliates and controlling interests, have not more than fifteen million dollars (\$15 million) in the preceding three years.²⁴⁶ There are only

²³⁷ 5 U.S.C. § 601(6).

²³⁸ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

²³⁹ Small Business Act, 15 U.S.C. § 632 (1996).

²⁴⁰ 5 U.S.C. § 601(4).

²⁴¹ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

²⁴² 47 C.F.R. § 1.1162.

²⁴³ 5 U.S.C. § 601(5).

²⁴⁴ U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

²⁴⁵ *Id.*

²⁴⁶ Letter from Aida Alvarez, Administrator, Small Business Administration to Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (June 4, 1999).

three AMTS licensees, none of whom are small businesses. However, potential licensees in AMTS include all public coast stations, which fall within the Small Business Administration classification as Radiotelephone Service Providers, Standard Industrial Classification Code 33422.²⁴⁷ The small business size standard for this category is an entity that employs no more than 1500 persons.²⁴⁸ According to the 1992 Census of Transportation, Communications, and Utilities, there are a total of 1178 radiotelephone service providers, of whom only 12 had more than 1000 employees. Therefore, we estimate that at least 1166 small entities may be affected by these rules.

8. Users of telemetry are generally large corporate entities, such as utility companies, and it is unlikely that any of the users would be small businesses. LPRS permits licensees to use the 216-217 MHz segment for auditory assistance, medical devices, and law enforcement tracking devices. Users are likely to be theaters, auditoriums, churches, schools, banks, hospitals, and medical care facilities. The primary manufacturer of auditory assistance estimates that it has sold 25,000 pieces of auditory assistance equipment. Many if not most LPRS licensees are likely to be small businesses or individuals. However, because the LPRS is licensed by rule, with no requirement for individual license applications or documents, the Commission is unable to estimate how many small businesses make use of LPRS equipment.

9. The incumbent service in the 1427-1429 MHz band is telemetry. The incumbent services in the 1429-1432 MHz band include general telemetry and medical telemetry. The Commission has issued only a small number of licenses in these bands. The primary user of this band is Itron, Inc., which with an investment of \$100 million in equipment development, is not likely to be a small business. Other licensees include utility companies, such as Pueblo Service Company of Colorado and E Prime, Inc., and large manufacturers such as Deere and Company, Caterpillar, and General Dynamics. None of these licensees are likely to be small businesses. One licensee, Zytex, a manufacturer of high-speed telemetry systems may be a small business. Users of medical telemetry are hospitals and medical care facilities, some of which are likely to be small businesses.

10. The Commission has not developed a definition of small entities specifically applicable to Radio Frequency Equipment Manufacturers (RF Manufacturers). Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to manufacturers of "Radio and Television Broadcasting and Communications Equipment." According to the SBA's regulation, an RF manufacturer must have 750 or fewer employees in order to qualify as a small business.²⁴⁹ Census Bureau data indicates that there are 858 companies in the United States that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.²⁵⁰ We believe that many of the companies that manufacture RF equipment may qualify as small entities.

11. According to the SBA's regulations, nursing homes and hospitals must have annual gross receipts of \$5 million or less in order to qualify as a small business concern. There are approximately

²⁴⁷ See 13 CFR § 121.201, North American Industrial Classification System (NAICS) Code 33422.

²⁴⁸ See *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

²⁴⁹ See 13 CFR 121.201, North American Industrial Classification System (NAICS) Code 33422.

²⁵⁰ See U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities (issued May 1995), NAICS Code 33422.

11,471 nursing care firms in the nation, of which 7,953 have annual gross receipts of \$5 million or less.²⁵¹ There are approximately 3,856 hospital firms in the nation, of which 294 have gross receipts of \$5 million or less. Thus, the approximate number of small confined setting entities to which the Commission's new rules will apply is 8,247.

Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements.

12. Entities interested in acquiring spectrum in the bands where license assignment will be made through an auction will need to submit a high bid and then submit a license application for the spectrum of interest. In other bands, entities will be required only to submit license applications to obtain the use of spectrum. Additionally, licensees will be required to file applications for license renewals and make certain other filings as required by the Communications Act.

Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered.

13. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives among others: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. As in all of the bands where incumbent licensees exist, we have inquired whether we should elevate the status of the services in which the incumbents are licensed to primary. 5 U.S.C. § 603.

14. Although the scope of this *R&O* is spectrum allocation, and not license assignment and compliance requirements, several steps have been taken to minimize any possible significant economic impact on small entities. For example, the allocation decision not to auction the 216-217 MHz band and also to elevate LPRS to primary status in that band will protect the investment made by small entities in LPRS devices. Similarly, the decision to relocate the Wireless Medical Telemetry Service (WMTS) to the 1427-1429.5 MHz band from the 1429-1432 MHz band will allow licensees to more efficiently use the spectrum because the spectrum sharing environment will be more favorable at the lower end of the band. Because, the original allocation decision for WMTS was only made recently, devices are not yet on the market. Thus, there is no economic impact on licensees to retune equipment. Likewise, the impact on manufacturers will be minimal.

Report to Small Business Administration:

15. The Commission will send a copy of this Report and Order, including a copy of the FRFA to the Chief Counsel for Advocacy of the Small Business Administration. The Report and Order and FRFA will also be published in the Federal Register.

²⁵¹ See Small Business Administration Tabulation File, SBA Size Standards Table 2C, January 23, 1996, SBA, Standard Industrial Code (SIC) categories 8050 (Nursing and Personal Care Facilities) and 8060 (Hospitals). (SBA Tabulation File).

Report to Congress:

16. The Commission will send a copy of this Final Regulatory Flexibility Analysis, along with the Report and Order, in a report to Congress pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

APPENDIX C: FINAL RULES

For the reasons set forth in the preamble, the Federal Communications Commission amends Parts 1, 2, 90, and 95 of title 47 of the Code of Federal Regulations as follows:

PART 1 – PRACTICE AND PROCEDURE

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

AUTHORITY: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309, and 325(e).

2. Section 1.924 is amended by adding new paragraph (f) to read as follows:

§ 1.924 Quiet zones.

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(f) GOES. The requirements of this paragraph are intended to minimize harmful interference to Geostationary Operational Environmental Satellite earth stations receiving in the band 1670-1675 MHz, which are located at Wallops Island, Virginia and Fairbanks, Alaska and Greenbelt Maryland.

(1) Applicants and licensees planning to construct and operate a new or modified station within the area bounded by a circle with a radius of 100 kilometers (62.1 miles) that is centered on 37° 56' 47" N, 75° 27' 37" W (Wallops Island) or 64° 58' 36" N, 147° 31' 03" W (Fairbanks) must notify the National Oceanic and Atmospheric Administration (NOAA) of the proposed operation. For this purpose, NOAA maintains the GOES coordination web page at <http://www.osd.noaa.gov/radio/frequency.htm>, which provides the technical parameters of the earth stations and the point-of-contact for the notification. The notification shall include the following information: requested frequency, geographical coordinates of the antenna location, antenna height above mean sea level, antenna directivity, emission type, equivalent isotropically radiated power, antenna make and model, and transmitter make and model.

(2) When an application for authority to operate a station is filed with the FCC, the notification required in paragraph (f)(1) of this section should be sent at the same time. The application must state the date that notification in accordance with paragraph (f)(1) of this section was made. After receipt of such an application, the FCC will allow a period of 20 days for comments or objections in response to the notification.

(3) If an objection is received during the 20-day period from NOAA, the FCC will, after consideration of the record, take whatever action is deemed appropriate.

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**PART 2 -- FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS;
GENERAL RULES AND REGULATIONS**

3. The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

4. Amend Section 2.106, the Table of Frequency Allocations, as follows:

- a. Revise pages 23, 31, 41, 42, 43, 47, 50, and 51.

b. Revise footnotes US210, US229, US276, US311, US350, and US352; remove footnote US317; and add footnotes US361, US362, US363, and US368.

c. Add footnotes NG173 and NG174.

d. Revise footnotes G2, G27, G30, G120, and G114 and remove footnote G123.

The additions and revisions read as follows:

§ 2.106 Table of Frequency Allocations.

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International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
See previous page for 30.01-37.5 MHz			33-34	33-34 FIXED LAND MOBILE NG124	Private Land Mobile (90)
			34-35 FIXED MOBILE	34-35	
			35-36	35-36 FIXED LAND MOBILE	Public Mobile (22) Private Land Mobile (90)
			36-37 FIXED MOBILE US220	36-37 US220	
			37-37.5	37-37.5 LAND MOBILE NG124	Private Land Mobile (90)
			37.5-38.25 FIXED MOBILE Radio astronomy	37.5-38 Radio astronomy S5.149	37.5-38 LAND MOBILE Radio astronomy S5.149 NG59 NG124
S5.149	38-38.25 FIXED MOBILE RADIO ASTRONOMY S5.149 US81	38-38.25 RADIO ASTRONOMY S5.149 US81			
38.25-39.986 FIXED MOBILE	38.25-39 FIXED MOBILE	38.25-39			
39.986-40.02 FIXED MOBILE Space research	39-40 40-42 FIXED MOBILE	39-40 LAND MOBILE NG124 40-40.98	Private Land Mobile (90) ISM Equipment (18) Private Land Mobile (90)		

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
See previous page for 156.8375-174 MHz			162.0125-173.2 FIXED MOBILE	162.0125-173.2	Auxiliary Broadcasting (74) Private Land Mobile (90)
			S5.226 US8 US11 US13 US216 US223 US300 US312 G5	S5.226 US8 US11 US13 US216 US223 US300 US312	
			173.2-173.4	173.2-173.4 FIXED Land mobile	Private Land Mobile (90)
			173.4-174 FIXED MOBILE G5	173.4-174	
174-223 BROADCASTING	174-216 BROADCASTING Fixed Mobile S5.234	174-223 FIXED MOBILE BROADCASTING	174-216	174-216 BROADCASTING NG115 NG128 NG149	Broadcast Radio (TV) (73) Auxiliary Broadcasting (74)
	216-220 FIXED MARITIME MOBILE Radiolocation S5.241 S5.242		216-220 Fixed Mobile Radiolocation S5.241 G2	216-220 FIXED MOBILE Aeronautical mobile US210 US229 US274 NG152 NG173	Maritime (80) Private Land Mobile (90) Personal Radio (95) Amateur (97)
	220-225 AMATEUR FIXED MOBILE Radiolocation S5.241		220-222 FIXED LAND MOBILE Radiolocation S5.241 G2 US335	220-222 FIXED LAND MOBILE	Private Land Mobile (90)
S5.235 S5.237 S5.243		S5.233 S5.238 S5.240 S5.245	222-225 Radiolocation S5.241 G2	222-225 AMATEUR	Amateur (97)

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
See previous page for 890-942 MHz	See previous page for 928-942 MHz	See previous page for 890-942 MHz	941-944 FIXED	941-944 FIXED	Public Mobile (22) Fixed Microwave (101)
942-960 FIXED MOBILE except aeronautical Mobile BROADCASTING S5.322	942-960 FIXED MOBILE	942-960 FIXED MOBILE BROADCASTING	US268 US301 US302 G2	US268 US301 US302 NG120	
S5.323		S5.320	944-960	944-960 FIXED NG120	Public Mobile (22) Auxiliary Broadcast. (74) Fixed Microwave (101)
960-1215 AERONAUTICAL RADIONAVIGATION S5.328			960-1215 AERONAUTICAL RADIONAVIGATION S5.328 US224		Aviation (87)
1215-1240 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329 SPACE RESEARCH (active) S5.330 S5.331 S5.332			1215-1240 RADIOLOCATION S5.333 G56 RADIONAVIGATION- SATELLITE (space-to- Earth)	1215-1240 S5.333	
1240-1260 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329 SPACE RESEARCH (active) Amateur S5.330 S5.331 S5.332 S5.334 S5.335			1240-1300 RADIOLOCATION S5.333 G56	1240-1300 Amateur	Amateur (97)
1260-1300 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Amateur S5.282 S5.330 S5.331 S5.332 S5.334 S5.335			S5.334	S5.282 S5.333 S5.334	
1300-1350 AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.149			1300-1350 AERONAUTICAL RADIO- NAVIGATION S5.337 Radiolocation G2 S5.149	1300-1350 AERONAUTICAL RADIO- NAVIGATION S5.337 S5.149	Aviation (87)

1350-1400 FIXED MOBILE RADIOLOCATION	1350-1400 RADIOLOCATION	1350-1390 FIXED MOBILE RADIOLOCATION G2 S5.149 S5.334 S5.339 US311 G27 G114	1350-1390 S5.149 S5.334 S5.339 US311	
		1390-1395	1390-1392 FIXED MOBILE except aeronautical mobile FIXED-SATELLITE (Earth-to-space) US368 S5.149 S5.339 US311 US351	
			1392-1395 FIXED MOBILE except aeronautical mobile S5.149 S5.339 US311 US351	
		1395-1400 LAND MOBILE US350 S5.149 S5.339 US311 US351		Personal (95)
S5.149 S5.338 S5.339	S5.149 S5.334 S5.339			
1400-1427 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341		1400-1427 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) S5.341 US246		
1427-1429 SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile S5.341		1427-1429.5 LAND MOBILE US350	1427-1429.5 LAND MOBILE US350 Fixed (telemetry)	Private Land Mobile (90) Personal (95)
See next page for 1429-1452 MHz		S5.341 US352 See next page for 1429.5-1432	S5.341 US352 1429.5-1430 FIXED (telemetry) LAND MOBILE (telemetry) S5.341 US352	Private Land Mobile (90)

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
1429-1452 FIXED MOBILE except aeronautical mobile	1429-1452 FIXED MOBILE S5.343		1429.5-1432	See previous page 1430-1432 FIXED (telemetry) LAND MOBILE (telemetry) FIXED-SATELLITE (space-to-Earth) US368	See previous page Private Land Mobile (90)
S5.341 S5.342	S5.341		S5.341 US352	S5.341 US352	
			1432-1435	1432-1435 FIXED MOBILE except aeronautical mobile	
			S5.341 US361	S5.341 US361	
1452-1492 FIXED MOBILE except aeronautical mobile BROADCASTING S5.345 S5.347 BROADCASTING-SATELLITE S5.345 S5.347	1452-1492 FIXED MOBILE S5.343 BROADCASTING S5.345 S5.347 BROADCASTING-SATELLITE S5.345 S5.347		1435-1525 MOBILE (aeronautical telemetry)		Aviation (87)
S5.341 S5.342	S5.341 S5.344				
1492-1525 FIXED MOBILE except aeronautical mobile	1492-1525 FIXED MOBILE S5.343 MOBILE-SATELLITE (space-to-Earth) S5.348A	1492-1525 FIXED MOBILE			
S5.341 S5.342	S5.341 S5.344 S5.348	S5.341 S5.348A	S5.341 US78		
1525-1530 SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite Mobile except aeronautical mobile S5.349	1525-1530 SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite Fixed Mobile S5.343	1525-1530 SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite Mobile S5.349	1525-1530 MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)		Satellite Communications (25) Aviation (87)
S5.341 S5.342 S5.350 S5.351 S5.352A S5.354	S5.341 S5.351 S5.354	S5.341 S5.351 S5.352A S5.354	S5.341 S5.351 US78		

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
1670-1675 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE S5.380 S5.341			1670-1675 S5.341 US211 US362	1670-1675 FIXED MOBILE except aeronautical mobile S5.341 US211 US362	
1675-1690 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.341	1675-1690 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) S5.341 S5.377	1675-1690 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.341	1675-1700 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SATELLITE (space-to-Earth)		
1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile S5.289 S5.341 S5.382	1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (Earth-to-space) S5.289 S5.341 S5.377 S5.381	1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) S5.289 S5.341 S5.381	S5.289 S5.341 US211		
1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.289 S5.341	1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-To-space) S5.289 S5.341 S5.377	1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.289 S5.341 S5.384	1700-1710 FIXED G118 METEOROLOGICAL-SATELLITE (space-to-Earth) S5.289 S5.341	1700-1710 METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed S5.289 S5.341	
1710-1930 FIXED MOBILE S5.380			1710-1755 FIXED MOBILE S5.341 US256	1710-1755 S5.341 US256	Note: Proceeds from the auction of the 1710-1755 MHz mixed-use band are to be deposited not later than September 30, 2002.

			MOBILE (line-of-sight only including aeronautical telemetry, but excluding flight testing of manned aircraft) SPACE RESEARCH (space-to-Earth) (space-to-space)	
S5.392		S5.392 US303	US303	
2290-2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)		2290-2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)	2290-2300 SPACE RESEARCH (deep space) (space-to-Earth)	
2300-2450 FIXED MOBILE Amateur Radiolocation	2300-2450 FIXED MOBILE RADIOLOCATION Amateur	2300-2305	2300-2305 Amateur	Amateur (97) Note: 2300-2305 MHz became non-Federal Government exclusive spectrum in August 1995
		2305-2310	2305-2310 FIXED MOBILE except aeronautical mobile RADIOLOCATION Amateur	Wireless Communications (27) Amateur (97)
		US338	US338	
		2310-2360 Fixed Mobile US339 Radiolocation G2 G120	2310-2320 FIXED MOBILE US339 RADIOLOCATION BROADCASTING-SATELLITE US327 S5.396 US338	Wireless Communications (27)
			2320-2345 BROADCASTING-SATELLITE US327 Mobile US276 US328 S5.396	Satellite Communications (25)
S5.150 S5.282 S5.395	S5.150 S5.282 S5.393 S5.394 S5.396	S5.396 US327 US328	See next page for 2345-2450 MHz	See next page for 2345-2450 MHz
		See next page		

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
See previous page for 2300-2450 MHz			See previous page for 2310-2360 MHz	2345-2360 FIXED MOBILE US339 RADIOLOCATION BROADCASTING- SATELLITE US327 S5.396	Wireless Communications (27)
			2360-2385 MOBILE US276 RADIOLOCATION G2 Fixed G120	2360-2385 MOBILE US276	
			2385-2390 US363	2385-2390 FIXED MOBILE NG174 US363	
			2390-2400 G122	2390-2400 AMATEUR	RF Devices (15) Amateur (97)
			2400-2402 S5.150	2400-2402 Amateur S5.150 S5.282	ISM Equipment (18) Amateur (97)
			2402-2417 S5.150 G122	2402-2417 AMATEUR S5.150 S5.282	RF Devices (15) ISM Equipment (18) Amateur (97)
			2417-2450 Radiolocation G2 S5.150 G124	2417-2450 Amateur S5.150 S5.282	ISM Equipment (18) Amateur (97)
2450-2483.5 FIXED MOBILE Radiolocation S5.150 S5.397	2450-2483.5 FIXED MOBILE RADIOLOCATION S5.150 S5.394		2450-2483.5 S5.150 US41	2450-2483.5 FIXED MOBILE Radiolocation S5.150 US41	ISM Equipment (18) Private Land Mobile (90) Fixed Microwave (101)

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UNITED STATES (US) FOOTNOTES

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US210 In the sub-band 40.66-40.7 MHz, frequencies may be authorized to Government and non-Government stations on a secondary basis for the tracking of, and telemetering of scientific data from, ocean buoys and wildlife. Operation in this sub-band is subject to the technical standards specified in: (a) Section 8.2.42 of the NTIA Manual for Government use, or (b) 47 C.F.R. § 90.248 for non-Government use.

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US229 In the band 216-220 MHz, the fixed, aeronautical mobile, land mobile, and radiolocation services are allocated on a secondary basis for Government operations. The use of the fixed, aeronautical mobile, and land mobile services shall be limited to telemetering and associated telecommand operations. After January 1, 2002, no new assignments shall be authorized in the band 216-217 MHz. Further, Government and non-Government assignments in the sub-band 216.88-217.08 MHz shall protect the Navy's SPASUR system, which operates on a primary basis at the following sites:

Transmit Frequency of 216.98 MHz			Receive Frequencies of 216.965-216.995 MHz		
Location	North Latitude/ West Longitude	Protection Radius	Location	North Latitude/ West Longitude	Protection Radius
Lake Kickapoo, TX	33° 32' / 098° 45'	250 km	San Diego, CA	32° 34' / 116° 58'	50 km
Jordan Lake, AL	32° 39' / 086° 15'	150 km	Elephant Butte, NM	33° 26' / 106° 59'	50 km
Gila River, AZ	33° 06' / 112° 01'	150 km	Red River, AR	33° 19' / 093° 33'	50 km
			Silver Lake, MO	33° 08' / 091° 01'	50 km
			Hawkinsville, GA	32° 17' / 083° 32'	50 km
			Fort Stewart, GA	31° 58' / 081° 30'	50 km

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US276 Except as otherwise provided for herein, use of the bands 2320-2345 MHz and 2360-2385 MHz by the mobile service is limited to aeronautical telemetering and associated telecommand operations for flight testing of manned or unmanned aircraft, missiles or major components thereof. The following four frequencies are shared on a co-equal basis by Government and non-Government stations for telemetering and associated telecommand operations of expendable and reusable launch vehicles whether or not such operations involve flight testing: 2332.5 MHz, 2364.5 MHz, 2370.5 MHz, and 2382.5 MHz. All other mobile telemetering uses shall be secondary to the above uses.

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US311 Radio astronomy observations may be made in the band 1350-1400 MHz on an unprotected basis at the following radio astronomy observatories:

Allen Telescope Array, Hat Creek, California	80 kilometers (50 mile) radius centered on latitude 40° 49' W, longitude 121° 28' N.	
Hat Creek Observatory, Hat Creek, California	Rectangle between latitudes 40° 00' N and 42° 00' N and between longitudes 120° 15' W and 122° 15' W.	
NASA Facilities, Goldstone, California	80 kilometers (50 mile) radius centered on latitude 35° 18' W, longitude 116° 54' N.	
National Astronomy and Ionosphere Center, Arecibo, Puerto Rico	Rectangle between latitudes 17° 30' N and 19° 00' N and between longitudes 65° 10' W and 68° 00' W.	
National Radio Astronomy Observatory, Socorro, New Mexico	Rectangle between latitudes 32° 30' N and 35° 30' N and between longitudes 106° 00' W and 109° 00' W.	
National Radio Astronomy Observatory, Green Bank, West Virginia	Rectangle between latitudes 37° 30' N and 39° 15' N and between longitudes 78° 30' W and 80° 30' W.	
National Radio Astronomy Observatory, Very Long Baseline Array Stations	80 kilometers (50 mile) radius centered on:	
	Latitude (North)	Longitude (West)
Brewster, WA	48° 08'	119° 41'
Fort Davis, TX	30° 38'	103° 57'
Hancock, NH	42° 56'	71° 59'
Kitt Peak, AZ	31° 57'	111° 37'
Los Alamos, NM	35° 47'	106° 15'
Mauna Kea, HI	19° 48'	155° 27'
North Liberty, IA	41° 46'	91° 34'
Owens Valley, CA	37° 14'	118° 17'
Pie Town, NM	34° 18'	108° 07'
Saint Croix, VI	17° 46'	64° 35'
Owens Valley Radio Observatory, Big Pine, California	Two contiguous rectangles, one between latitudes 36° 00' N and 37° 00' N and between longitudes 117° 40' W and 118° 30' W and the second between latitudes 37° 00' N and 38° 00' N and between longitudes 118° 00' W and 118° 50' W.	

Every practicable effort will be made to avoid the assignment of frequencies in the band 1350-1400 MHz to stations in the fixed and mobile services that could interfere with radio astronomy observations within the geographic areas given above. In addition, every practicable effort will be made to avoid assignment of frequencies in these bands to stations in the aeronautical mobile service which operate outside of those geographic areas, but which may cause harmful interference to the listed observatories. Should such assignments result in harmful interference to these observatories, the situation will be remedied to the extent practicable.

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US350 The use of the bands 608-614 MHz, 1395-1400 MHz, and 1427-1429.5 MHz by the Government and non-Government land mobile service is limited to medical telemetry and medical telecommand operations, except that non-Government land mobile use is permitted for non-medical telemetry and telecommand operations on a secondary basis in the band 1427-1429.5 MHz.

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US352 In the band 1427-1432 MHz, Government operations, except for medical telemetry and medical telecommand operations, are on a non-interference basis to authorized non-Government operations and shall not hinder the implementation of any non-Government operations. However, Government operations authorized as of March 22, 1995 at the 14 sites identified below may continue on a fully protected basis until January 1, 2004:

Location	North Latitude/ West Longitude	Operating Radius	Location	North Latitude/ West Longitude	Operating Radius
Patuxent River, MD	38° 17' / 076° 25'	70 km	Mountain Home AFB, ID	43° 01' / 115° 50'	160 km
NAS Oceana, VA	36° 49' / 076° 02'	100 km	NAS Fallon, NV	39° 24' / 118° 43'	100 km
MCAS Cherry Point, NC	34° 54' / 076° 52'	100 km	Nellis AFB, NV	36° 14' / 115° 02'	100 km
Beaufort MCAS, SC	32° 26' / 080° 40'	160 km	NAS Lemoore, CA	36° 18' / 119° 47'	120 km
NAS Cecil Field, FL	30° 13' / 081° 52'	160 km	Yuma MCAS, AZ	32° 39' / 114° 35'	160 km
NAS Whidbey IS., WA	48° 19' / 122° 24'	70 km	China Lake, CA	35° 29' / 117° 16'	80 km
Yakima Firing Ctr AAF, WA	46° 40' / 120° 15'	70 km	MCAS Twenty Nine Palms, CA	34° 15' / 116° 03'	80 km

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US361 In the band 1432-1435 MHz, Government stations in the fixed and mobile services may operate indefinitely on a primary basis at the 23 sites listed below. All other Government stations in the fixed and mobile services shall operate in the band 1432-1435 MHz on a primary basis until re-accommodated in accordance with the National Defense Authorization Act of 1999.

Location	North Latitude/ West Longitude	Operating Radius	Location	North Latitude/ West Longitude	Operating Radius
China Lake/ Edwards AFB, CA	35° 29' / 117° 16'	100 km	AUTEC	24° 30' / 078° 00'	80 km
White Sands Missile Range/Holloman AFB, NM	32° 11' / 106° 20'	160 km	Beaufort MCAS, SC	32° 26' / 080° 40'	160 km
Utah Test and Training Range/ Dugway Proving Ground, Hill AFB, UT	40° 57' / 113° 05'	160 km	MCAS Cherry Point, NC	34° 54' / 076° 53'	100 km
Patuxent River, MD	38° 17' / 076° 24'	70 km	NAS Cecil Field, FL	30° 13' / 081° 52'	160 km
Nellis AFB, NV	37° 29' / 114° 14'	130 km	NAS Fallon, NV	39° 30' / 118° 46'	100 km
Fort Huachuca, AZ	31° 33' / 110° 18'	80 km	NAS Oceana, VA	36° 49' / 076° 01'	100 km
Eglin AFB/Gulfport ANG Range, MS/Fort Rucker, AL	30° 28' / 086° 31'	140 km	NAS Whidbey Island, WA	48° 21' / 122° 39'	70 km
Yuma Proving Ground, AZ	32° 29' / 114° 20'	160 km	NCTAMS, GUM (East)	13° 35' / 144° 51'	80 km
Fort Greely, AK	63° 47' / 145° 52'	80 km	Lemoore, CA	36° 20' / 119° 57'	120 km
Redstone Arsenal, AL	34° 35' / 086° 35'	80 km	Savannah River, SC	33° 15' / 081° 39'	3 km
Alpena Range, MI	44° 23' / 083° 20'	80 km	Naval Space Operations Center, ME	44° 24' / 068° 01'	80 km
Camp Shelby, MS	31° 20' / 089° 18'	80 km			

US362 The band 1670-1675 MHz is allocated to the meteorological-satellite service (space-to-Earth) on a primary basis for Government use. Earth station use of this allocation is limited to Wallops Island, VA (37° 56' 47" N, 75° 27' 37" W), Fairbanks, AK (64° 58' 36" N, 147° 31' 03" W), and Greenbelt, MD (39° 00' 02" N, 76° 50' 31" W). Applicants for non-Government stations within 100 kilometers of the Wallops Island or Fairbanks coordinates shall notify NOAA in accordance with the procedures specified in 47 C.F.R. § 1.924.

US363 Until January 1, 2005, the band 2385-2390 MHz is allocated to the Government mobile and radiolocation services on a primary basis and to the Government fixed service on a secondary basis. Use of the mobile service is limited to aeronautical telemetry and associated telecommand operations for flight testing of manned or unmanned aircraft, missiles or major components thereof. Use of the radiolocation service is limited to the military services.

After January 1, 2005, Government stations in the mobile and radiolocation services shall continue to operate on a primary basis until re-accommodated in accordance with the National Defense Authorization Act of 1999, except at the sites identified below where Government stations may not be re-accommodated until January 1, 2007:

Protection Radius for Each of the Following Sites is 160 km:			
Location	North Latitude/ West Longitude	Location	North Latitude/ West Longitude
Barking Sands, HI	22° 07' / 159° 40'	Roswell, NM	33° 18' / 104° 32'
Cape Canaveral, FL	28° 33' / 080° 34'	Seattle, WA	47° 32' / 122° 18'
China Lake, CA	35° 40' / 117° 41'	St. Louis, MO	38° 45' / 090° 22'
Eglin AFB, FL	30° 30' / 086° 30'	Utah Test Range, UT	40° 12' / 112° 54'
Glasgow, MT	48° 25' / 106° 32'	White Sands Missile Range, NM	32° 58' / 106° 23'
Nellis AFB, NV	37° 48' / 116° 28'	Wichita, KS	37° 40' / 097° 26'
Palm Beach County, FL	26° 54' / 080° 19'	Yuma Proving Ground, AZ	32° 54' / 114° 20'
Poosevelt Roads, PR	18° 14' / 065° 38'		
Protection Radius for Each of the Following Sites is 100 km:			
Edwards AFB, CA	34° 54' / 117° 53'	Patuxent River, MD	38° 17' / 076° 25'

In addition, non-Government flight test operations may continue at the sites identified below on a primary basis until January 1, 2007:

Protection Radius for Each of the Following Sites is 160 km:			
Location	North Latitude/ West Longitude	Location	North Latitude/ West Longitude
Alamosa, CO	37° 26' 04" / 105° 52' 03"	Thermal, CA	33° 37' 35" / 116° 09' 36"
Albuquerque, NM	35° 11' 03" / 106° 34' 30"	Phoenix, AZ	33° 18' 28" / 111° 39' 19"
Amarillo, TX	35° 12' 49" / 101° 42' 31"	Marietta, GA	33° 54' 24" / 084° 31' 09"
Arlington, TX	32° 40' 00" / 097° 05' 53"	Greenville, TX	33° 04' 01" / 096° 03' 09"
Leadville, CO	39° 13' 13" / 106° 19' 03"		

US368 The band 1390-1392 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis and the band 1430-1432 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis, limited to feeder links for the Non-Voice Non-Geostationary Mobile-Satellite Service, and contingent on (1) the completion of sharing studies including the measurement of emissions from equipment that would be employed in operational systems and demonstrations to validate the studies as called for in Resolution 127 (WRC-2000), (2) the adoption of worldwide feeder link

allocations at the 2003 World Radiocommunication Conference (WRC-03), and (3) compliance with any technical and operational requirements that may be imposed at WRC-03 to protect passive services in the 1400-1427 MHz band from unwanted emissions associated with such allocations. These allocations become effective upon adoption of worldwide allocations at WRC-03. If no such allocations are adopted by WRC-03, these allocations shall be considered null and void, with no grandfathering of rights. Individual assignments shall be coordinated with the Interdepartmental Radio Advisory Committee's (IRAC) Frequency Assignment Subcommittee (FAS) (see, for example, Recommendations ITU-R RA.769-1 and ITU R SA.1029-1) to ensure the protection of passive services in the 1400-1427 MHz band. Coordination shall not be completed until the feeder downlink system is tested and certified to be in conformance with the technical and operational requirements for the protection of passive services in the 1400-1427 MHz band. Certification and all supporting documentation shall be submitted to the Commission and FAS prior to launch.

* * * * *

NON-GOVERNMENT (NG) FOOTNOTES

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NG173 In the band 216-217 MHz, telemetry operations are permitted subject to the requirements of §90.259 of this chapter. After January 1, 2002, no new assignments shall be authorized in the band 216-217 MHz.

NG174 In Puerto Rico, frequencies within the band 2385-2390 MHz are not available for assignment to stations in the aeronautical mobile service.

GOVERNMENT (G) FOOTNOTES

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G2 In the bands 220-225 MHz, 420-450 MHz (except as provided by US217), 890-902 MHz, 928-942 MHz, 1300-1390 MHz, 2310-2385 MHz, 2417-2450 MHz, 2700-2900 MHz, 5650-5925 MHz, and 9000-9200 MHz, the Government radiolocation service is limited to the military services.

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G27 In the bands 255-328.6 MHz, 335.4-399.9 MHz, and 1350-1390 MHz, the fixed and mobile services are limited to the military services.

* * * * *

G30 In the bands 138-144 MHz, 148-149.9 MHz, and 150.05-150.8 MHz, the fixed and mobile services are limited primarily to operations by the military services.

* * * * *

G114 The band 1369.05-1390 MHz is also allocated to the fixed-satellite service (space-to-Earth) and to the mobile-satellite service (space-to-Earth) on a primary basis for the relay of nuclear burst data.

* * * * *

G120 Development of airborne primary radars in the band 2310-2385 MHz with peak

transmitter power in excess of 250 watts for use in the United States is not permitted.

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PART 90--PRIVATE LAND MOBILE RADIO SERVICES

5. The authority citation for part 90 continues to read as follows:

AUTHORITY: Sections 4(i), 11, 303(g), 303(r), and 302(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

6. Section 90.259 is revised to read as follows:

§ 90.259 Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.

7. Section 90.259 is revised to read as follows:

§ 90.259 Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.

(a) 216-220 MHz band.

(1) Frequencies in the 216-220 MHz band may be assigned to applicants that establish eligibility in the Industrial/Business Pool.

(2) All operation is secondary to the fixed and mobile services, including the Low Power Radio Service.

(3) In the 216-217 MHz band, no new assignments will be made after January 1, 2002.

(b) 1427-1432 MHz band.

(1) Frequencies in the 1427-1432 MHz band may be assigned to applicants that establish eligibility in the Public Safety Pool or the Industrial/Business Pool.

(2) All operations in the 1427-1429.5 MHz band are secondary to the Wireless Medical Telemetry Service.

(3) All operations in the 1429.5-1432 MHz band authorized prior to [Effective date of the Rules] are on a secondary basis.

(c) Authorized uses.

(1) Use of these bands is limited to telemetering purposes.

(2) Base stations authorized in these bands shall be used to perform telecommand functions with associated mobile telemetering stations. Base stations may also command actions by the vehicle itself, but will not be authorized solely to perform this function.

(3) Airborne use is prohibited.

PART 95 – PERSONAL RADIO SERVICES

8. The authority citation for Part 95 continues to read:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303.

9. Section 95.630 is revised to read as follows:

§ 95.630 WMTS transmitter frequencies.

WMTS transmitters may operate in the frequency bands specified below:

608-614 MHz
1395-1400 MHz
1427-1429.5 MHz

10. Section 95.639(g) is revised to read as follows:

§ 95.639 Maximum transmitter power.

* * * * *

(g) The maximum field strength authorized for WMTS stations in the 608-614 MHz band is 200 mV/m, measured at 3 meters. For stations in the 1395-1400 MHz and 1427-1429.5 MHz bands, the maximum field strength is 740 mV/m, measured at 3 meters.

11. Section 95.1017 is amended by revising paragraph (a) to read as follows:

§ 95.1017 Labeling requirements.

(a) Each LPRS transmitting device shall bear the following statement in a conspicuous location on the device: "This device may not interfere with TV reception or Federal Government radar."

* * * * *

12. Section 95.1101 is revised to read as follows:

§ 95.1101 Scope.

This part sets out the regulations governing the operation of Wireless Medical Telemetry Devices in the 608-614 MHz, 1395-1400 MHz and 1427-1429.5 MHz frequency bands.

13. Section 95.1103(c) is revised to read as follows:

§ 95.1103 Definitions.

* * * * *

(c) Wireless medical telemetry. The measurement and recording of physiological parameters and other patient-related information via radiated bi- or unidirectional electromagnetic signals in the 608-614 MHz, 1395-1400 MHz, and 1427-1429.5 MHz frequency bands.

14. Sections 95.1115(a)(2) and 95.1115(d)(1) are revised to read as follows:

§ 95.1115 General technical requirements.

(a) * * *

(2) In the 1395-1400 MHz and 1427-1429.5 MHz bands, the maximum allowable field strength is 740 mV/m, as measured at a distance of 3 meters, using measuring equipment with an averaging detector and a 1 MHz measurement bandwidth.

* * * * *

(d) Channel use. (1) In the 1395-1400 MHz and 1427-1429.5 MHz bands, no specific channels are specified. Wireless medical telemetry devices may operate on any channel within the bands authorized for wireless medical telemetry use in this part.

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15. Section 95.1121, including the section heading, is revised to read as follows:

§ 95.1121 Specific requirements for wireless medical telemetry devices operating in the 1395-1400 MHz and 1427-1429.5 MHz bands.

Due to the critical nature of communications transmitted under this part, the frequency coordinator in consultation with the National Telecommunications and Information Administration shall determine whether there are any Federal Government systems whose operations could affect, or could be affected by, proposed wireless medical telemetry operations in the 1395-1400 MHz and 1427-1429.5 MHz bands. The locations of government systems in these bands are specified in footnotes US351 and US352 of § 2.106 of this chapter.