APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended, (RFA)[1] an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rule Making*[2] in WT Docket 06-142. The Commission sought written public comment on the proposals in the *Notice of Proposed Rule Making*, including comment on the IRFA. We received no comments on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.[3]

I. Reason for, and Objectives of, the Report and Order

2. This *Report and Order* adopts amendments to our rules governing the use of frequency 173.075 MHz for stolen vehicle recovery systems (SVRS). In this *Report and Order*, we increase the effective radiated power limit for narrowband (12.5 kHz bandwidth or less) base stations from 300 watts to 500 watts; increase the power output limit for narrowband (12.5 kHz bandwidth or less) mobile transceivers from 2.5 watts to five watts; modify the duty cycle for base stations from one second every minute to five seconds every minute; increase the tracking duty cycle for mobile transceivers from 200 milliseconds every ten seconds to 400 milliseconds every ten seconds; increase the tracking duty cycle for mobile transceivers that are being tracked actively from 200 milliseconds every second to 400 milliseconds every second; increase the uplink duty cycle for mobile transceivers from 1800 milliseconds every 300 seconds to 7200 milliseconds every 300 seconds; require applicants to serve a copy of any TV Channel 7 interference analysis to the licensee of the affected TV Channel 7 transmitter upon filing the application with the Commission; permit the licensing of mobile transceivers by rule; expand the scope of Section 90.20(e)(6) to permit the tracking and location of lost or stolen cargo and hazardous materials, lost or missing persons, and locating individuals at risk when established boundaries are violated; and ease the limitation on emissions to permit flexibility in modulation as well as analog and digital signals. These rule changes enhance SVRS operations by assisting SVRS facilities in their migration to narrowband technology, and by aiding in the expeditious and efficient implementation of SVRS operations, thus serving the public interest.

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

3. No comments or reply comments were filed in direct response to the IRFA.

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

4. 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 rules adopted herein.[4] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small

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[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2] Amendment of Section 90.20(e)(6) of the Commission's Rules, *Notice of Proposed Rule Making*, WT Docket No. 06-142, RM-11135, 21 FCC Rcd 8870 (2006) (*Notice of Proposed Rule Making*). The *Notice of Proposed Rule Making* was published in the Federal Register on August 23, 2006. 71 FR 49401 (2006).

[3] *See* 5 U.S.C. § 604.

[4] 5 U.S.C. § 604(a)(3).

organization," and "small governmental jurisdiction."[5] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[6] 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).[7]

5. *Small Business Entities and Small Organizations using Technologies Affected by Rules Adopted in this Report and Order*. Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.[8] A "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[9] Nationwide, as of 2002, there were approximately 1.6 million small organizations.[10] The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[11] Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.[12] We estimate that, of this total, 84,377 entities were "small governmental jurisdictions."[13] Thus, we estimate that most governmental jurisdictions are small.

6. The rule changes effectuated by this *Report and Order* apply to users of Public Safety Radio Pool services, which are a subset of private radio licensees that are regulated under Part 90 of the Commission's Rules. These users are also governmental entities. The rule changes may also provide marketing opportunities for radio manufacturers, some of which may be small businesses. Finally, as noted and discussed below, the rule changes may affect broadcasters of television channel 7 stations, some of which may be small businesses.

7. *Public safety radio services and governmental entities*. Public safety radio services include police, fire, local governments, forestry conservation, highway maintenance, and emergency medical services. With the exception of the special emergency service, these services are governed by Subpart B of Part 90 of the Commission's rules.[14] There are twenty-eight public safety radio service

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[5] *See* 5 U.S.C. § 601(6).

[6] 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 which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.

[7] Small Business Act, 5 U.S.C. § 632 (1996).

[8] *See* SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

[9] 5 U.S.C. § 601(4).

[10] Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

[11] 5 U.S.C. § 601(5).

[12] U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, page 272, Table 415.

[13] We assume that the villages, school districts, and special districts are small, and total 48,558. *See* U.S. Census Bureau, Statistical Abstract of the United States: 2006, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

[14] 47 C.F.R. §§ 90.15 through 90.27.

licensees operating SVRS that will be affected by our actions in this proceeding.[15] The affected licensees are also classified as governmental entities. The RFA includes small governmental entities as a part of the regulatory flexibility analysis.[16] As noted, under the RFA, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[17] Neither the Commission nor the SBA has developed a definition of small business directed specifically toward public safety service licensees or governmental entities. Therefore, the applicable definition of small business is the definition under the SBA rules applicable to Wireless Telecommunications Carriers (except Satellite). This provides that a small business is a radiotelephone company employing no more that 1,500 persons.[18] We estimate that nearly all affected public safety radio service licensees/governmental entities would be classified as small businesses under the SBA's definition.

8. *Equipment Manufacturers.* We anticipate that equipment manufacturers may be affected by our decisions in this proceeding. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."[19] The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.[20] According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.[21] Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.[22] Thus, under this size standard, the majority of firms can be considered small.

9. *Television Broadcasting.* The SBA has developed a small business sized standard for television broadcasting, which consists of all such firms having $13 million or less in annual receipts.[23] Business concerns included in this industry are those "primarily engaged in broadcasting images together

[15] *See* http://wireless.fcc.gov/uls (last searched June 23, 2008).

[16] *See* 5 U.S.C. § 601(5) (including cities, counties, towns, townships, villages, school districts, or special districts).

[17] 5 U.S.C. § 601(5).

[18] *See* 13 C.F.R. § 121.201, NAICS Code 517110.

[19] U.S. Census Bureau, 2002 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing"; http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342.

[20] 13 C.F.R. § 121.201, NAICS code 334220.

[21] U.S. Census Bureau, American FactFinder, 2007 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220; http://factfinder.census.gov. The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

[22] *Id.* An additional 18 establishments had employment of 1,000 or more.

[23] 13 C.F.R. § 121.201, NAICS code 515120 (changed from 513120 in October 2002).

with sound."[24] According to Commission staff review of BIA Publications, Inc. Master Access Television Analyzer Database as of May 16, 2003, about 814 of the 1,220 commercial television stations (approximately two-thirds) in the United States had revenues of $13 million or less. Because SVRS operations are adjacent to TV Channel 7, we provide an estimate on the number of small Channel 7 stations that may be affected by our actions in this proceeding. Nationwide, there are sixty-one full power analog TV stations operating on Channel 7, and there will be sixty-nine digital TV (DTV) stations operating on Channel 7 after the DTV transition.[25] Therefore, based on the proportion that approximately two-thirds of all commercial television stations are considered small, we estimate that forty Channel 7 full power analog TV stations are small, and forty-six Channel 7 DTV stations are small. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[26] must be included.[27] Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. As of 2002, there were 2,127 low power television stations (LPTV).[28] According to Commission records for TV Channel 7, while there are no LPTV stations, there are 231 TV translator stations and eleven Class A stations nationwide.[29] Given the nature of these services, we will presume that all LPTV, TV translator, and Class A licensees on Channel 7 qualify as small entities under the SBA size standard.

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

10. This *Report and Order* imposes a modified reporting, recordkeeping or other compliance measure. Specifically, in cases where the applicant is required to perform an analysis of TV Channel 7 potential interference, we now require applicants to serve a copy of the analysis to the licensee of the affected TV Channel 7 transmitter upon filing the application with the Commission.

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[24] OMB, North American Industry Classification System: United States, 1997, at 509 (1997). This category description continues, "These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studios, from an affiliated network, or from external sources." Separate census categories pertain to businesses primarily engaged in producing programming. See id. at 502-05, NAICS code 512120, Motion Picture and Video Production; code 512120, Motion Picture and Video Distribution; code 512191, Teleproduction and Other Post-Production Services; and code 512199, Other Motion Picture and Video Industries.

[25] *See* Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, *Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order*, MB Docket No. 87-268, 23 FCC Rcd 4220 (2008).

[26] "Concerns are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both." 13 C.F.R. § 121.103(a)(1).

[27] "SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic concern's size." 13 C.F.R. § 121.103(a)(4).

[28] FCC News Release, "Broadcast Station Totals as of September 30, 2002" (Nov. 6, 2002).

[29] *See* http://www.fcc.gov/mb/video/tvq.html (last searched May 22, 2008).

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

11. The RFA requires an agency to describe any significant alternatives that it has considered in developing 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 and reporting requirements under the rule for such 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 such small entities."[30]

12. Certain rules adopted in this *Report and Order* reduce the impact of the requirement to migrate to 12.5 kHz technology on SVRS licensees. LoJack states that the mandatory migration to 12.5 kHz technology will reduce the range of transmissions. The technical rules adopted herein reduce this impact. Specifically, the power limit increases confer a benefit by helping to maintain the licensees present coverage and SVRS system performance during the migration to narrowband operation. Since LoJack must operate existing wideband and new narrowband SVRS systems in parallel during the transition to 12.5 kHz technology, the duty cycle limit increases confer a benefit by allowing sufficient transmission times for both systems. These two rule changes may have a small affect on small broadcasters operating on TV Channel 7, particularly those operating analog low power TV and TV translator stations. Specifically, viewers of these broadcast stations may experience a *de minimis* increase in adjacent channel interference. We are minimizing the effects by retaining the current power limits of wideband SVRS transmitters. Also, rather than eliminating duty cycles completely as the Petition for Rulemaking[31] originally requested, we are only making limited increases. Therefore, we believe that economic impact on small entities is being held to an acceptable minimum by the rules adopted in this *Report and Order*.

13. We investigated alternatives such as maintaining the status quo of these technical rules. Maintaining the status quo would be adverse to SVRS users because efforts to comply with the narrowbanding requirement (which we cannot change) would reduce the effectiveness of SVRS systems. According to LoJack, using a narrower bandwidth reduces the range of transmissions, and SVRS users would be impacted by reduced coverage areas. The status quo would also result in insufficient transmit duty cycles for parallel wideband and narrowband systems, and thus would have an adverse impact on small entities in the public safety field. Toward the other extreme, we investigated more liberal power limit and duty cycle increases to further ensure SVRS systems are not hampered by the narrowbanding requirement. We rejected these alternatives because they increased the potential for interference to reception of TV Channel 7, which would have an adverse economic impact on small broadcasting entities.

14. At the same time as we ease technical restrictions for SVRS licensees, we must ensure that TV Channel 7 stations and their viewers are not adversely impacted by the rules adopted herein. The SVRS rules already contains a requirement for applicants to perform an analysis for each base station located within 169 kilometers (105 miles) of a TV Channel 7 transmitter of potential interference to TV Channel 7 viewers. In this *Report and Order*, we are requiring applicants to serve a copy of a TV Channel 7 interference analysis to the licensee of the affected TV Channel 7 transmitter so that such licensee is notified and has the opportunity to object to the SVRS base station application. This

[30] 5 U.S.C. § 603(c)(1) – (c)(4).

[31] LoJack Corporation Petition for Rulemaking, RM-11135 (filed Oct. 25, 2004).

requirement would provide a mechanism for the affected licensee to ensure that over-the-air TV Channel 7 reception is not adversely affected by SVRS operations. On the balance, we believe that this consideration to TV Channel 7 reception outweighs the SVRS base station applicant's relatively minor paperwork burden associated with serving a copy of an interference analysis to the affected TV Channel 7 licensee.

15. We investigated an alternative to this particular new requirement, such as not imposing it. Although SVRS base station applicants would not be subject to an additional paperwork burden, we rejected this alternative because we believe that TV Channel 7 licensees deserve to be notified if they would be affected by SVRS base station operations.

16. Other rules adopted in this *Report and Order* reduce burdens of previous SVRS rules on SVRS users and equipment manufacturers. First, licensing mobile transceivers by rule means that SVRS operators would no longer be required to apply for a license to use mobile transceivers.[32] This rule change reduces administrative and regulatory burdens on small entities that operate SVRS systems. This rule change would also enable public safety entities to activate mobile transceivers by way of cellular transmissions in areas where base stations have not been licensed and constructed, thereby enhancing system potential, functionality, flexibility, and utility. Next, increasing the types of services permitted would also reduce a restriction on small entities that operate SVRS systems. Permitting the tracking of cargo, hazardous materials, and missing persons would enhance system functionality, and flexibility, and utility. Finally, removing emission designator limitations would reduce restrictions on small entities that design and manufacture SVRS systems. Freedom to implement any emission would allow manufacturers to employ new technologies, and thus, would enhance system potential and flexibility.

17. We investigated maintaining the status quo as an alternative to adopting three rule changes discussed in the paragraph above: licensing mobile transceivers by rule, increasing the types of services permitted, and removing emission designator limitations. Maintaining the status quo would have continued to subject SVRS users and equipment manufacturers to unnecessary restrictions and would have withheld the potential of SVRS systems. Accordingly, we rejected this alternative.

VI. Report to Congress

18. The Commission will send a copy of this *Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.[33] In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register.[34]

[32] Licenses would still be required for entities seeking to use base stations as part of their SVRS operations.

[33] *See* 5 U.S.C. § 801(a)(1)(A).

[34] *See* 5 U.S.C. § 604(b).