

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

In the Matter of)
LoJack Corporation)
Request for Waiver of Section 90.20(e)(6))
of the Commission's Rules)

ORDER

Adopted: August 28, 2000

Released: August 31, 2000

By the Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau.

I INTRODUCTION

1. LoJack Corporation (LoJack) seeks a waiver¹ (*Waiver Request*) to allow it to use a duty cycle that is not permitted under Section 90.20(e)(6) of the Commission's Rules.² Contemporaneous with the submission of the *Waiver Request*, LoJack filed a petition for rulemaking (*Petition for Rulemaking*) seeking to change the duty cycle limit set forth in Section 90.20(e)(6) of the Commission's Rules.³ The *Waiver Request* was placed on public notice on February 29, 2000.⁴ LoJack states that grant of its requested waiver would be subject to the Commission's disposition of the pending *Petition for Rulemaking* to revise the duty cycle limits.⁵ For the reasons set forth below, we grant the *Waiver Request* subject to the Commission's decision regarding the *Petition for Rulemaking* and any proceeding that the Commission commences thereunder.

II BACKGROUND

2. LoJack operates a stolen vehicle recovery system (SVRS) with state and local police departments across the nation.⁶ The system aids in the tracking and recovery of stolen vehicles.⁷ Section

¹ Request for Waiver filed by LoJack Corp. on December 20, 1999 (*Waiver Request*).

² 47 C.F.R. § 90.20(e)(6).

³ Petition for Rulemaking filed by LoJack Corp. on December 20, 1999, RM-9798 (*Petition for Rulemaking*).

⁴ Wireless Telecommunications Bureau Seeks Comment on Request For Waiver by LoJack Corporation to Permit Stolen Vehicle Recovery System Operation With Different Duty Cycle, *Public Notice*, DA 00-402 (WTB PSPWD rel. Feb. 29, 2000). Cosmos Broadcasting Corp. filed comments and supplemental comments. LoJack filed reply comments. In addition, the Commission gave public notice of the *Petition for Rulemaking* on January 7, 2000. *Petition for Rulemaking Filed, Public Notice*, Report No. 2376 (rel. Jan. 7, 2000). No comments were received.

⁵ *Waiver Request* at 1.

⁶ *Id.*

⁷ See, e.g., *Petition for Rulemaking* at 1-2. LoJack states that its units are installed in approximately 1.25 million vehicles. *Id.*

90.20(e)(6) of the Commission's Rules designates frequency 173.075 MHz for SVRS use, and sets forth certain technical parameters.⁹ For example, mobile units are restricted to a duty cycle of no more than 200 milliseconds every ten seconds, or 200 milliseconds every second when a vehicle is being tracked actively.¹⁰ The *Waiver Request* seeks a waiver of Section 90.20(e)(6), to permit LoJack to utilize a duty cycle of 1800 milliseconds every 300 seconds when the system is activated by unauthorized movement, with a maximum of six messages per mobile unit in any thirty-minute period.

3. LoJack states that this change is needed to enable it to incorporate an "uplink" (i.e., mobile unit to base station) transmission path.¹¹ This path would be used to incorporate an early warning feature to minimize the lag time between a vehicle's theft and the time that the theft is discovered and reported to the police.¹² The uplink transmission would also be used to acknowledge base station instruction messages, which would reduce the number of base station transmissions.¹³

III. DISCUSSION

4. Section 1.925 of the Commission's Rules requires a party seeking waiver of specific rule requirements to demonstrate either that (a) the underlying purpose of the rule will not be served or would be frustrated by application to the instant case, and that a grant of the waiver is in the public interest; or (b) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or otherwise contrary to the public interest, or the applicant has no reasonable alternative.¹⁴ As discussed below, we conclude that LoJack has made a sufficient showing that grant of the waiver is warranted under the circumstances presented.

5. The underlying purpose of Section 90.20(e)(6) is to protect the public safety through enhanced police performance in recovering stolen vehicles,¹⁵ while minimizing the potential for harmful interference to broadcasting operations on television (TV) Channel 7.¹⁶ When the Commission authorized use of 173.075 MHz for stolen vehicle recovery systems in 1988, it recognized the need for such a system due to the general instances of vehicle theft and the danger which such theft posed to police and the general public.¹⁷ With respect to the potential interference to Channel 7 broadcasters, the Commission

⁹ 47 C.F.R. § 90.20(e)(6).

¹⁰ See *id.*

¹¹ *Waiver Request* at 1.

¹² *Id.*

¹³ *Id.* at 2.

¹⁴ 47 C.F.R. § 1.925(b)(3) (formerly 47 C.F.R. § 90.151). See also *WAT Radio v FCC*, 418 F.2d 1153 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972) (waiver of Commission Rules is appropriate if special circumstances warrant a deviation from the general rule, the deviation will serve the public interest, and a waiver is consistent with the underlying purpose of the rule).

¹⁵ See Amendment of Parts 2 and 90 of the Commission's Rules to Provide for Stolen Vehicle Recovery Systems, *Report and Order*, GN Docket No. 88-566, 4 FCC Rcd 7558, 7559-60 ¶ 17 (1988).

¹⁶ *Id.* at 7560 ¶¶ 27, 32. TV Channel 7 is located at 174-180 MHz, which is adjacent to 173.075 MHz.

¹⁷ *Id.* at 7558 ¶ 1.

noted the short duration of the SVRS transmissions¹⁷ and that the risk of interference to Channel 7 operations could be made minimal.¹⁸ The Commission found that the key to "the prevention of interference with broadcast operations requires careful planning of the location of the stolen vehicle recovery system, base station transmitters" and, thus, required the applicant to perform an analysis of potential interference to Channel 7 viewers.¹⁹

6. Based on the information before us, we conclude that the underlying purpose of Section 90.20(e)(6) of the Commission's Rules would be frustrated by application to the instant case. LoJack's proposed alternative duty cycle reflects technological and market developments since the duty cycle limits were established in 1988.²⁰ The new technology requires a duty cycle of 1800 milliseconds every 300 seconds in order to create an uplink transmission from the mobile unit to the base station when the system is activated by unauthorized movement.²¹ Compared with LoJack's existing operation, the new technology facilitates more efficient police performance, a greater stolen vehicle recovery rate, and a greater rate of apprehension of criminals.²² The waiver sought by LoJack is for the mobile unit duty cycle only and does not affect either the frequency (173.075 MHz) or the power limits (2.5 watts for mobile transmission and 300 watts for base station transmission).²³ Under the proposed operation, mobile unit transmissions would be significantly fewer in number (from a maximum of once every ten seconds – and once every second while a vehicle is being tracked actively – to a maximum of six messages in any thirty-minute period), albeit greater in length.²⁴ In addition, fewer base station transmissions will be needed. Thus, the new technology actually furthers the underlying purpose of the rule by enhancing police performance in the recovery of stolen vehicles without increasing the risk of interference to TV Channel 7 broadcast operations.

7. Cosmos Broadcasting Corp. (Cosmos), a TV Channel 7 broadcaster, initially opposed the *Waiver Request* on the grounds that the information provided was insufficient to draw a reasonable conclusion about the impact of LoJack's proposal on digital television (DTV) stations.²⁵ LoJack subsequently provided Cosmos with an engineering analysis,²⁶ which concludes that harm to DTV operations is unlikely to result from LoJack's proposed operation and that the interference potential of the

¹⁷ *Id.* at 7558 ¶ 5.

¹⁸ *Id.* at 7560-61 ¶ 27.

¹⁹ *Id.* (emphasis added). See also *id.* at 7565 n.20.

²⁰ *Waiver Request* at 6.

²¹ *Id.* at 1.

²² *Petition for Rulemaking* at 1-2.

²³ See 47 C.F.R. § 90.20(e)(6).

²⁴ *Waiver Request* at 1-2.

²⁵ Cosmos Broadcasting Corp. Comments filed on March 29, 2000, at 2.

²⁶ See Cosmos Broadcasting Corp. Further Comments filed on May 30, 2000, at 2 (Cosmos Further Comments). Cosmos filed the engineering analysis as an attachment to its Further Comments. See *id.*, Attachment, *Potential for Interference to DTV Reception from LoJack Transmissions*, May 9, 2000 (Engineering Analysis).

LoJack signal to Channel 7 reception will be greatly reduced when DTV transmission replaces the current NTSC transmission standard.²⁷ Based on the engineering analysis, Cosmos withdrew its objection, provided that the waiver is granted subject to the following conditions: a prohibition on interference with broadcast television reception; a notification to each potentially affected broadcaster (within an affected region) and the Commission fifteen days prior to modified operation; and an agreement by LoJack that the costs of implementation for such modified operation, and any impact of termination of the waiver on LoJack or its subscribers, will not be factors considered in any future proceeding to amend the Commission's Rules.²⁸ We are persuaded by LoJack's engineering analysis that use of the new technology will not increase, and in fact may possibly lower, potential for interference to broadcasting operations on TV Channel 7 or otherwise adversely affect such operations.²⁹ Thus, we believe that allowing LoJack to employ an uplink transmission path in its network will further enhance law enforcement efforts in recovering stolen vehicles and further minimize the interference potential to TV Channel 7 broadcasting operations resulting from SVRS communications.

8. In addition, LoJack states that the proposed operation would serve the public interest because it would improve stolen vehicle recovery time and increase the chances of apprehending car thieves by minimizing the lag time between a vehicle's theft and a report to the police that the vehicle has been stolen.³⁰ LoJack also states that such operation would make more efficient use of radio spectrum and reduce the potential for interference with television reception, because it would reduce the number of transmissions by its base stations, which operate at much higher power than mobile units.³¹ Finally, LoJack asserts that there is no reasonable alternative solution because the proposed uplink system must operate on the same frequency as the remainder of the LoJack network and the uplink cannot operate within the duty cycle limits of Section 90.20(e)(6) of the Commission's Rules.³² On the record before us, we agree that grant of the waiver would enhance police response and apprehension of criminals due to use of the early warning system regarding stolen vehicles, without increasing the likelihood of harmful interference. Accordingly, we conclude that grant of the waiver is in the public interest.

9. Finally, with respect to Cosmos's request that we impose conditions on the issuance of this waiver, we find no compelling reason to attach such conditions. First, we find Cosmos's condition of no interference to be unnecessary because it would duplicate the requirement set forth in Section 90.20(e)(6) of the Commission's Rules that LoJack correct any interference promptly or discontinue the operations causing interference.³³ Similarly, we find no reason to impose the fifteen-day notice requirement requested by Cosmos. We do believe, however, that potentially affected Channel 7 broadcasters should receive notice of the waiver. Therefore, we will require LoJack to send a copy of this Order to every TV Channel 7 station with respect to which Section 90.20(e)(6) requires an engineering analysis. Finally, we reject Cosmos's request that LoJack agree that its costs of implementation or

²⁷ Engineering Analysis at 3-4.

²⁸ Cosmos Further Comments at 2-3.

²⁹ Engineering Analysis at 3-4.

³⁰ Waiver Request at 2, 5.

³¹ *Id.*

³² *Id.* at 5.

³³ See 47 C.F.R. § 90.20(e)(6)(iii).

inconvenience will not be considered in any future proceeding. LoJack has expressly indicated its recognition that grant of the instant waiver would be subject to the outcome of a related rulemaking proceeding.³⁸ Thus, we believe that Cosmos's concerns will be addressed by the condition that we impose herein. Therefore, we will grant the *Waiver Request* without the conditions specifically requested by Cosmos, but conditioned on the resolution of the *Petition for Rulemaking*.

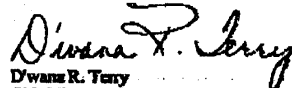
IV. ORDERING CLAUSES

10. Accordingly, IT IS ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, the *Waiver Request* filed by LoJack Corporation on December 20, 1999 is GRANTED, subject to the resolution of the *Petition for Rulemaking* to amend Section 90.20(e)(6) of the Commission's Rules, RM-9798.

11. IT IS FURTHER ORDERED that, within fifteen business days of the release date of this *Order*, LoJack Corporation SHALL SEND a copy of this *Order* to the licensee of every TV Channel 7 transmitter located within 169 kilometers (105 miles) of a LoJack Corporation base station.

12. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION



Dwane R. Terry
Chief, Public Safety and Private Wireless Division
Wireless Telecommunications Bureau

³⁸ *Waiver Request* at 1.