

REQUEST FOR EXPERIMENTAL SPECIAL TEMPORARY AUTHORITY

LoJack Corporation (“LoJack”) seeks experimental special temporary authority (“STA”) to conduct testing and experimentation of equipment associated with its Stolen Vehicle Recovery System (“SVRS”) in the Commonwealth of Massachusetts for a period of up to one hundred and eighty (180) days. LoJack seeks authority to test and assess operation of ten (10) fixed-base transmitters around the state consistent with narrowband requirements that must be implemented before May 19, 2019. As explained below, the results of this testing will inform operation of these systems licensed to LoJack’s public safety eligible licensee partners throughout the country.

Background

LoJack is the designer of specialized units that are used in its nationwide network operating under the Commission’s Stolen Vehicle Recovery System (“SVRS”) rules.¹ The LoJack SVRS consists of radio receiver-transmitters installed in a hidden location in motor vehicles, tracking devices mounted in public safety vehicles, and a computerized network of radio transmitters. The units are licensed, in accordance with the Commission’s SVRS rule, to public safety eligibles using the Wireless Telecommunications Bureau’s (WTB) Universal Licensing System. Presently, LoJack units are authorized to LoJack’s public safety eligible partners on a statewide basis for use in at least thirty (30) jurisdictions nationwide.

In March 2005, the Commission’s Office of Engineering and Technology (“OET”) concluded a proceeding establishing requirements for the transition of most public safety and private operators to narrowband operations.² That proceeding culminated in the issuance of a Report and Order stating that “[t]he existing SVRS system operated by the LoJack Corporation (LoJack) and police licensees may continue wideband operations until 14 years after the effective date of this Report and Order, at which time wideband transmissions must cease.”³ Licensees must cease wideband operations by May 27, 2019⁴ and LoJack has requested the Commission adopt a streamlined process to modify all SVRS licenses for narrowbanding including a necessary power increase.⁵

¹ 47 CFR §90.20(e)(6)

² ET Docket No. 04-243

³ *In the Matter of Amendment of Parts 2 and 90 of the Commission's Rules to Provide for Narrowband Private Land Mobile Radio Channels in the 150.05-150.8 MHz, 162-174 MHz, and 406.1-420 MHz Bands that are Allocated for Federal Government Use*, Report and Order, FCC 05-69 (rel. Mar. 11, 2005), ¶5.

⁴ *Id.*, See also 70 FR 29959 (rel. May 25, 2005).

⁵ See Letter of April 2, 2018 from Henry Goldberg, Attorney for LoJack to Terry Simmons, FCC, regarding a Request to Modify 53 Licenses on behalf of 32 Licensees in the SVRS to Comply with FCC Narrowband Requirements.

Proposed Operating Parameters

In anticipation of converting the system to use reduced bandwidth, LoJack seeks to test operation in real-time on transmitters installed throughout Massachusetts under the narrowband technical requirements pursuant to 47 C.F.R. 90.20(e)(6). LoJack seeks to operate the 10 fixed-based transmitters currently authorized to the Commonwealth of Massachusetts under Part 90⁶ under an experimental authorization at the increased power level and narrower bandwidth. Those narrowband provisions allow licensees using 12kHz of bandwidth or less to operate at up to 500 watts ERP for fixed-based transmitters⁷ and 5.0 watts of power for associated mobiles.⁸ The transmitters currently installed and operating under Part 90 licenses can be easily and temporarily modified. Thus they would operate in such a manner at exactly the same location and height and operate at the same frequency of 173.075 MHz as those already authorized to the Commonwealth of Massachusetts. Instead of operating within 20K0F2D at a power of 300 watts ERP, however, for purposes of this experiment, LoJack would operate the transmitters at the narrower bandwidth of 11K2F2D at 500 watts ERP.

Part 90 of the Commission's Rules requires that an interference analysis be conducted if there is a television Channel 7 transmitter within 105 miles of a proposed transmitter. Attached hereto are two interference reports completed by LoJack that show that the transmitters proposed at Locations 4 and 7 below will not interfere with a Channel 7 transmitter located with the prescribed radius.

Public Interest

Although LoJack coordinates the nationwide network of SVRS licensees through its public safety eligible partners, LoJack is not itself an eligible licensee under Part 90. Accordingly, LoJack seeks temporary experimental authorization to conduct testing under Part 5 of the Rules for the benefit of its Part 90 licensee partners. Allowing LoJack to test the proposed system throughout Massachusetts will provide valuable information for LoJack and its public safety partners on how to configure and operate a new narrow-band SVRS system throughout the country. Moreover, allowing LoJack control as licensee under STA will allow LoJack to conduct its experimentation in a practical and efficient manner.

Site Locations

The transmitters will be co-located with authorized transmitters at the following locations and heights:

⁶ See Commonwealth of Massachusetts, Dept. of State Police, FCC Call signs WNWG807 and WPUL255.

⁷ 47 CFR §90.20(e)(6)(iii).

⁸ 47 CFR §90.20(e)(6)(iv). For purposes of this experiment, the power and bandwidth of the 90,000 mobiles associated with the SVRS do not need to be modified. See WPUL255, location 5

Loc. 1 Address: 1010 COMMONWEALTH AVE **City:** BOSTON **County:** SUFFOLK **State:** MA
Lat (NAD83): 42-21-04.4 N **Long (NAD83):** 071-07-16.2 W **ASR No.:** **Ground Elev:** 15.0
Antenna Height to Tip: 40.0

Loc. 2 Address: OFF RICCIUTI DR
City: QUINCY **County:** NORFOLK **State:** MA
Lat (NAD83): 42-14-49.0 N **Long (NAD83):** 071-02-54.0 W **ASR No.:** 1002115
Ground Elev: 58.0 **Antenna Height to Tip:** 215.0

Loc. 3 Address: MOUNT WACHUSETTS
City: PRINCETON **County:** WORCESTER **State:** MA
Lat (NAD83): 42-29-19.3 N **Long (NAD83):** 071-53-12.3 W **ASR No.:**
Ground Elev: 605.0 **Antenna Height to Tip:** 24.0

***Loc. 4 Address:** MOUNT GREYLOCK
City: ADAMS **County:** BERKSHIRE **State:** MA
Lat (NAD83): 42-38-12.3 N **Long (NAD83):** 073-09-57.4 W **ASR No.:**
Ground Elev: 1064.0 **Antenna Height to Tip:** 6.0

Loc. 5 Address: COPICUT HILL
City: FALL RIVER **County:** BRISTOL **State:** MA
Lat (NAD83): 41-43-08.4 N **Long (NAD83):** 071-03-33.2 W **ASR No.:**
Ground Elev: 108.0 **Antenna Height to Tip:** 31.0

Loc. 6 Address: HOLT HILL
City: ANDOVER **County:** ESSEX **State:** MA
Lat (NAD83): 42-38-28.3 N **Long (NAD83):** 071-06-23.2 W **ASR No.:**
Ground Elev: 125.0 **Antenna Height to Tip:** 55.0

***Loc. 7 Address:** MOUNT TOM SKI ROAD
City: HOLYOKE **County:** HAMPDEN **State:** MA
Lat (NAD83): 42-14-39.6 N **Long (NAD83):** 072-38-50.4 W **ASR No.:**
Ground Elev: 330.4 **Antenna Height to Tip:** 51.8

Loc. 8 Address: WHITES PATH
City: S YARMOUTH **County:** BARNSTABLE **State:** MA
Lat (NAD83): 41-41-26.0 N **Long (NAD83):** 070-11-19.0 W **ASR No.:** 1004090
Ground Elev: 9.1 **Antenna Height to Tip:** 97.8

Loc. 9 Address: BRIMESTONE LANE
City: FRAMINGHAM **County:** MIDDLESEX **State:** MA
Lat (NAD83): 42-20-48.0 N **Long (NAD83):** 071-26-56.0 W **ASR No.:** 1028106
Ground Elev: 177.0 **Antenna Height to Tip:** 40.8

Loc. 10 Address: 31 Monks Hill Road
City: Kingston **County:** PLYMOUTH **State:** MA
Lat (NAD83): 41-57-44.2 N **Long (NAD83):** 070-42-56.5 W **ASR No.:** 1002113
Ground Elev: 77.1 **Antenna Height to Tip:** 151.1