

NARRATIVE STATEMENT

I. INTRODUCTION AND BACKGROUND

Pursuant to Section 5.51 of the Commission's rules, 47 C.F.R. § 5.51 (2005), Sirius Satellite Radio Inc. ("Sirius") requests an experimental license commencing on the date of grant of this application to research, design and demonstrate prototype satellite radio equipment for use in its satellite digital audio radio services ("SDARS") system and to research, design and demonstrate new services or enhancements to its existing services. These operations will take place in Sirius' licensed frequency band (2320-2332.5 MHz). The following information is provided in support of this request.

II. PURPOSE OF EXPERIMENTATION

Sirius is the sole licensee in the 2320.0-2332.5 MHz band. Sirius delivers its service to over 8.3 million subscribers' receivers primarily through the use of three non-geostationary satellites. In addition to these satellites, and as contemplated by the international and domestic table of frequencies,¹ Sirius also uses a network of approximately 139 terrestrial repeaters to ensure consistent service throughout the United States. Currently, those repeaters are operated under Special Temporary Authority issued by the International Bureau.

Sirius continuously seeks to update its technology that it uses and the services that it offers to consumers. Thus, Sirius needs the capability to test new and prototype equipment or service enhancements to ensure that they function correctly before commercial production or deployment. The production of SDARS equipment and the introduction of new services are both expensive undertakings, and Sirius needs the capability to test its technology before expending these resources.

Sirius proposes to conduct experimental operations of new equipment and new services by operating transmitting equipment at two locations centered at its engineering labs in Vernon, NJ, and Lawrenceville, NJ (coordinates: 74-29-37.2W, 41-12-46.7N and 74-42-33.5W; 40-17-17.0N respectively). These experiments will collect data on the operation of Sirius equipment and services to ensure that equipment is operating properly and that new services are functioning as Sirius anticipates. The equipment would be operated using the technical parameters outlined below and in the Form 442 application. As noted on the Form 442, the Lawrenceville site will have two configurations, which will allow Sirius flexibility in carrying out these tests.

Sirius submits that the public interest, necessity and convenience are served by grant of this experimental license. Allowing Sirius to test its new equipment and service

¹ See 47 C.F.R. §2.106 n. 5.396, n. US327.

technology before production or deployment will allow Sirius to more efficiently ensure that its system will work correctly. Sirius will be able to confirm that its system will not cause harmful interference and that Sirius will be able to offer the continuous, high level of service that customers have come to expect.

III. TECHNICAL SPECIFICATIONS

Application Type/Classification:	XD (Experimental Demonstration)
Frequency Band:	2320-2332.5 MHz
Modulation:	COFDM (Coded Orthogonal Frequency Division Multiplexing)
Bandwidth/Emission Designator:	4M01G7W

Transmitting Equipment:

Lawrenceville Site:	Alcatel Model 53419-01 Repeater
Vernon Site:	Alcatel Model 53419-01 Repeater IZT SCOR 235718 Mini Repeater IZT SMPR 236100 Medium Repeater

Additional technical specifications, including location, antenna height, and other technical parameters are attached as Exhibit A.

IV. INTERFERENCE SAFEGUARDS & COORDINATION

Sirius recognizes that the operation of this equipment must not cause harmful interference to authorized facilities. Sirius does not anticipate any in-band interference because Sirius is the only entity authorized to operate in this spectrum. In addition, out-of-band interference is unlikely since the equipment will operate at a power lower than 2000 Watts, a power level at which WCS licensees have recognized interference is unlikely to occur, and will operate in compliance with the $75+10\log P$ out of band emissions mask.² Should interference occur, however, Sirius will resolve the interference, including, if necessary, discontinuing operation.

With regard to AFTRCC, Sirius has confirmed that neither of the requested locations is within a line of sight to any AFTRCC facility. Therefore, under the

² See, e.g., Petition to Dismiss or Deny of BellSouth Mobile Data, Inc. and BellSouth Wireless Cable, Inc., File No. SAT-STA-20060623-00067 (filed September 18, 2006) at 6 (“BellSouth believes that terrestrial repeaters operating below 2 kW peak EIRP will not cause undue interference to its WCS operations”).

coordination agreement between Sirius and AFTRCC, there is no coordination requirement.³

V. CONCLUSION

The authorization of this experimental license would serve the public interest, convenience, and necessity by allowing Sirius to test its new equipment prototypes and proposed new services or service enhancements before production or deployment in order to ensure that they will function correctly. This will allow the company to continue to provide innovative, quality service nationwide.

³ See Coordination Agreement Between Sirius Satellite Radio Inc. and AFTRCC, attached to Letter from Jennifer Hindin to Magalie Roman-Salas, Secretary, FCC, Oct. 12, 2000.

EXHIBIT A

Sirius Satellite Radio Site# 27-87

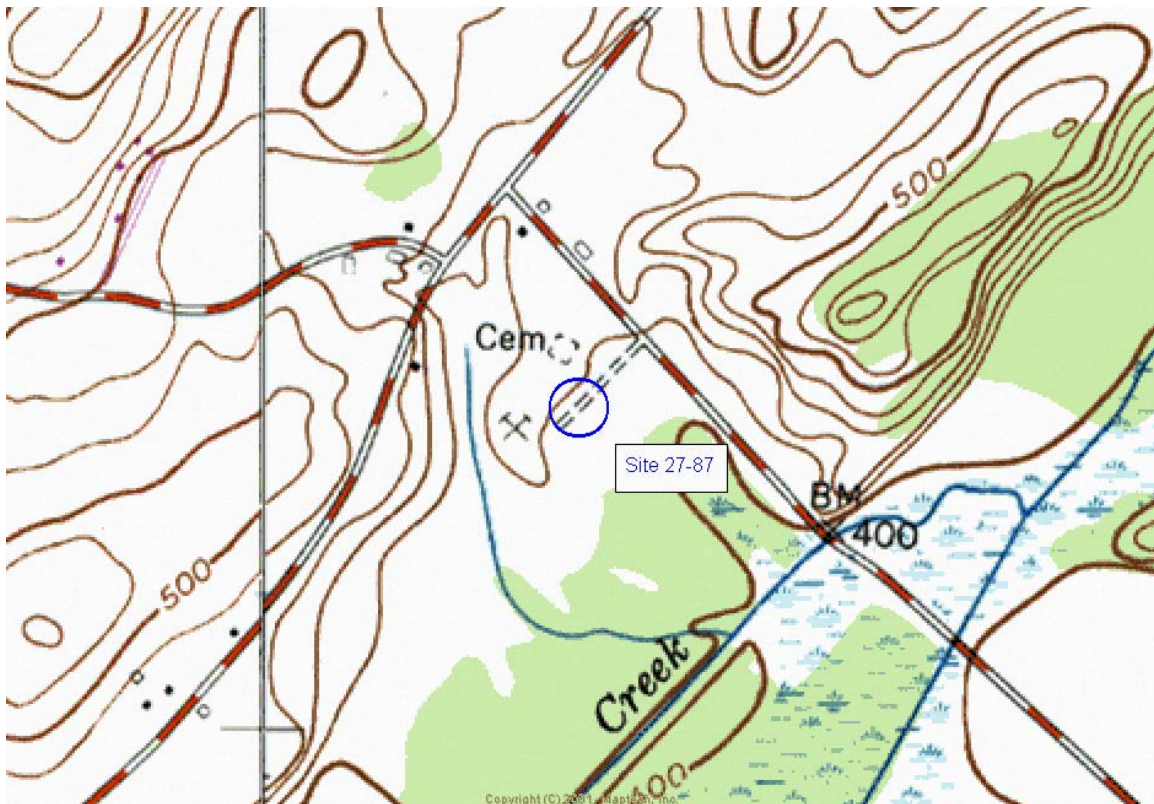
Table 1. Site Information

Site#	Address	Coordinates (NAD 83)		Antenna Height (feet)
		Longitude (W)	Latitude (N)	
27-87	24 Vernon Crossing Road, Vernon, NJ 07462	74-29-37.2	41-12-46.7	90

Table 2. Technical Parameters

No Of Setors	Antenna Type	Sector 1			
		Antenna Beamwidth	Orientation	Downtilt	EiRP (Watts)
1	TA-2350-DAB	360	0	0	1000

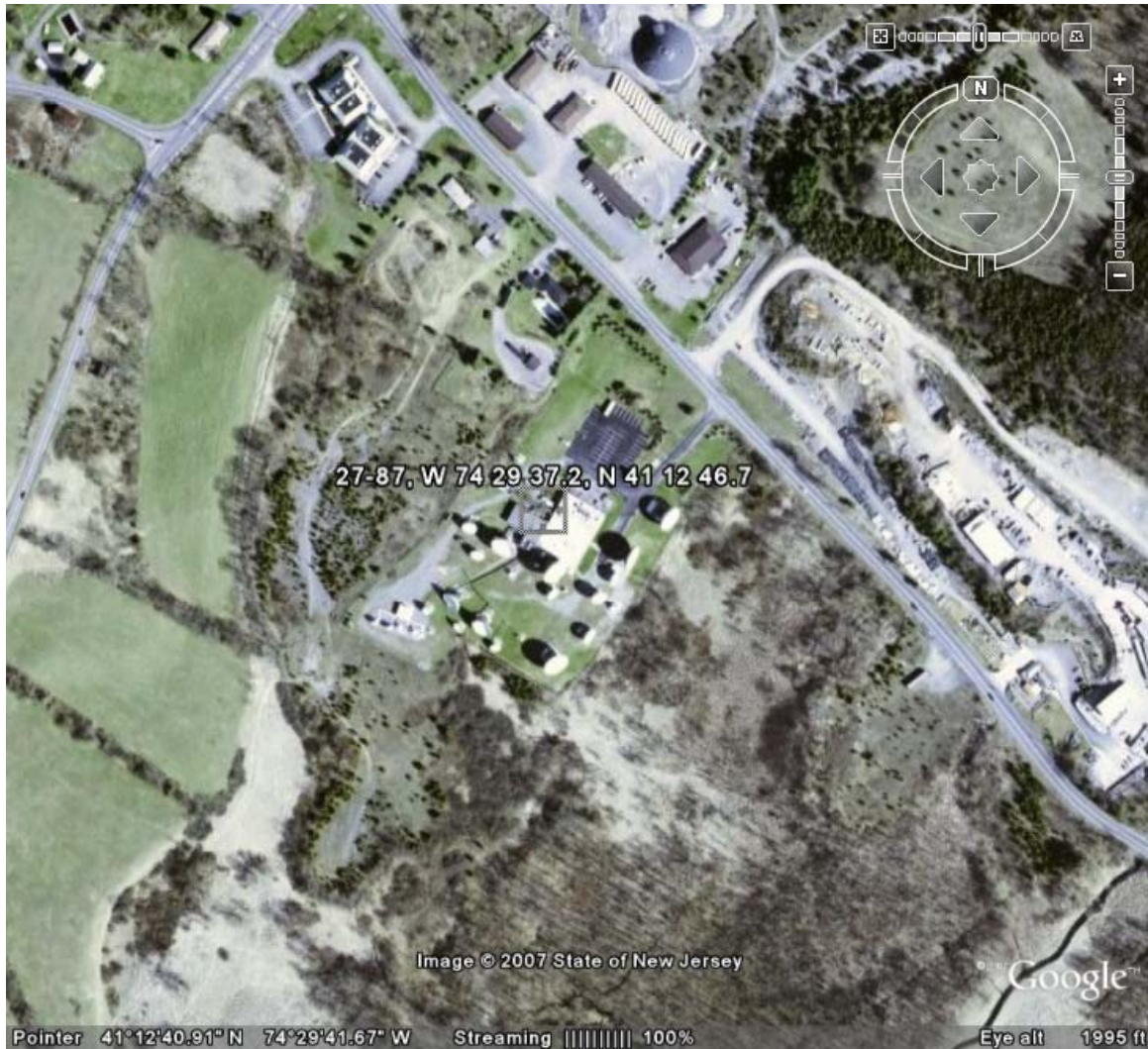
Figure 1. USGS 7.5 minute topographic map



USGS Quad Reference# Wawayanda 41074-B4-TF-024

Datum of the survey: NAD 27

Figure 2. Aerial map



Note: Aerial view is provided for illustrative purposes only. Sirius cannot guarantee the accuracy of the aerial view.

Sirius Satellite Radio Site# 28-05

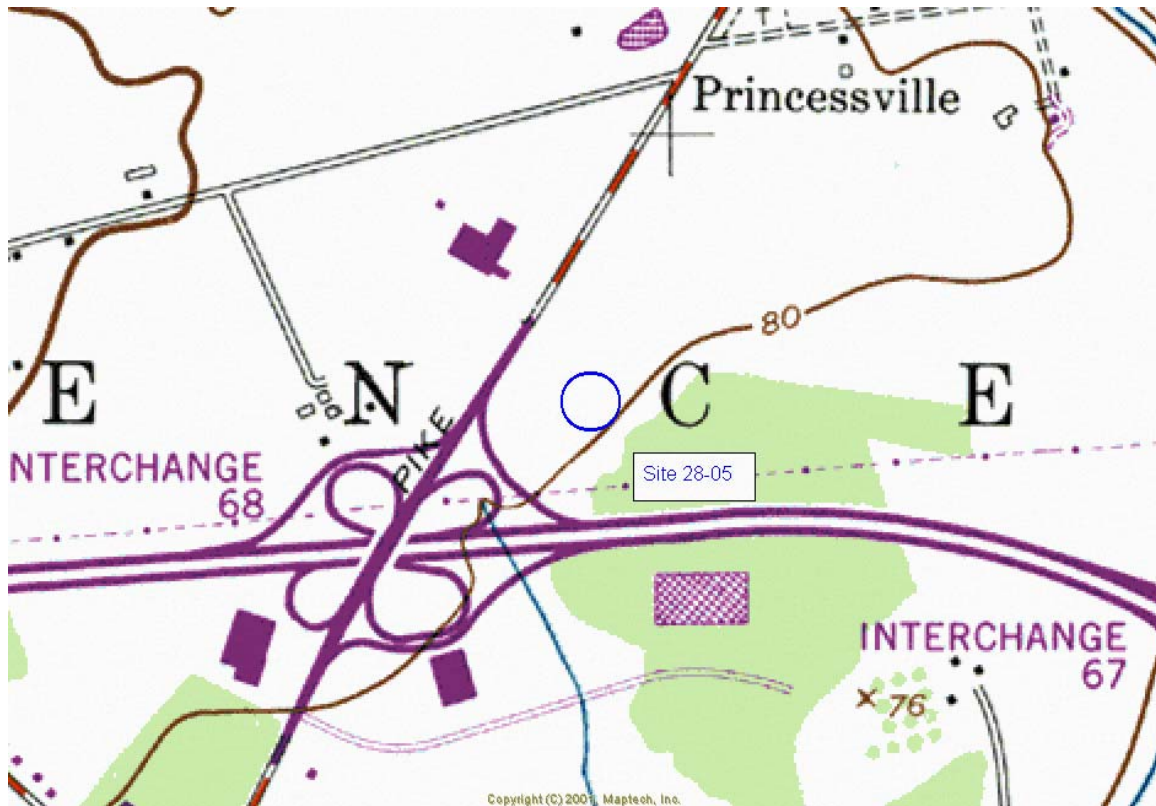
Table 1. Site Information

Site#	Address	Coordinates (NAD 83)		Antennae Height (feet)
		Longitude (W)	Latitude (N)	
28-05	989 Lenox Drive, Lawrenceville, NJ 08648	74-42-33.5	40-17-17.0	55

Table 2. Technical Parameters

No Of Setors	Antenna Type	Sector 1			
		Antenna Beamwidth	Orientation	Downtilt	EiRP (Watts)
1	EMS RV80-18-00NV	80	315	0	1000
1	TA-2350-DAB-T2	360	0	0	1000

Figure 1. USGS 7.5 minute topographic map



USGS Quad Reference# Princeton 40074-C6-TF-024

Datum of the survey: NAD 27

Figure 2. Aerial map



Note: Aerial view is provided for illustrative purposes only. Sirius cannot guarantee the accuracy of the aerial view.