



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
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Report No. SAT-01207

Friday December 23, 2016

Policy Branch Information Satellite Space Applications Accepted for Filing

The applications listed below have been found, upon initial review, to be acceptable for filing. The Commission reserves the right to return any of the applications if, upon further examination, it is determined that the application is not in conformance with the Commission's rules or its policies. Consideration of each satellite application in this Public Notice may depend on the Commission's action on another satellite application earlier in the queue. Petitions, oppositions, and other pleadings filed in response to this notice should conform to Section 25.154 of the Commission's rules, unless otherwise noted. 47 C.F.R. § 25.154.

SAT-AMD-20161114-00107 E S2946 Spire Global, Inc.
Date Filed: 11/14/2016 06:48:39:91600
Amendment

Spire Global, Inc. seeks to amend its application to construct, deploy and operate satellites. The amendment modifies the proposed technical characteristics of 100 satellites in its constellation. (We previously granted in part Spire's application and authorized 28 satellites. We deferred action on its request with respect to 872 additional satellites. IBFS File No. SAT-LOA-20151123-00078. The amendment concerns 100 of the 872 satellites for which action was deferred.) Specifically, Spire seeks authority to operate deploy up to 100 technically identical non-geostationary satellites in its LEMUR-2 series, in two Phases (Phase 1B and 1C). These satellites are proposed to operate in circular orbits up to 600 km in altitude, and in elliptical orbits with apogees up to 720 km. The proposed orbital inclinations range from 24 degrees to 98 degrees.

For Phase 1B, Spire requests authority to operate data downlinks (space-to-Earth) in the following frequency bands: 2020-2025 MHz (primary), 2200-2290 MHz (primary), 401-402 MHz (backup), and 402-403 MHz (backup). Spire requests authority to conduct telemetry, tracking and command operations for Phase 1B satellites in the following frequency bands: 399.9-400.05 MHz (Earth-to-space; primary); 401-402 MHz (space-to-Earth; primary); and 402-403 MHz (space-to-Earth & Earth-to-space; primary). Spire also seeks to receive Automatic Identification System (AIS) signals in the 156.7625-156.7875 MHz (AIS 3), 156.8125-156.8375 MHz (AIS 4), 161.9625-161.9875 MHz (AIS 1), and 162.0125-162.0375 MHz (AIS 2) frequency bands, and receive Application Specific Messages (ASM) signals in the 161.9375-161.9625 MHz (ASM 1) and 161.9875-162.0125 MHz (ASM 2) frequency bands.

For Phase 1C, Spire will operate and receive in all the frequency bands requested for Phase 1B, but Spire additionally requests to operate in the 449.75-450.25 MHz frequency band (Earth-to-space; primary) for telemetry, tracking, and command on a non-conforming, non-harmful interference basis, as well as to receive Automatic Dependent Surveillance-Broadcast (ADS-B) signals in the 1087.7-1092.3 MHz frequency band.

Spire requests waivers of Sections 25.156, 25.157, 25.158 and 25.217(b) of the Commission's rules. Spire also requests a waiver of the U.S. Table of Frequency Allocations, Section 2.106, to operate in the 399.9-400.05 MHz (Earth-to-space), 401-402 MHz (space-to-Earth), 402-403 MHz (Earth-to-space & space-to-Earth), 2020-2025 MHz (space-to-Earth), and 2200-2290 MHz (space-to-Earth) frequency bands on a non-conforming, non-harmful interference basis. Spire further requests a waiver of the U.S. Table of Frequency Allocations, Section 2.106, to receive AIS signals in the 156.7625-156.7875 MHz and 156.8125-156.8375 MHz frequency bands, ASM signals in the 161.9375-161.9625 MHz and 161.9875-162.0125 MHz frequency bands, and ADS-B signals in the 1087.7-1092.3 MHz frequency band, until the bands are allocated in the U.S. Table of Frequency Allocations. Spire also requests a limited waiver of Section 25.114(c) of the Commission's rules, which requires certain information to be filed in the Schedule S.

Spire proposes to receive signals from GPS to determine the position of its satellites for navigation purposes. Spire will also receive satellite radio-navigation signals in order to create radio occultation profiles of the Earth's atmosphere for meteorological purposes, and requests waiver of the U.S. Table of Frequency Allocations, to the extent necessary, for such operations.

For more information concerning this Notice, contact the Satellite Division at 202-418-0719; TTY 1-888-835-5322.