



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
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DA No. 21-1592

Friday December 17, 2021

Report No. SAT-01597

Satellite Policy Branch Information

Actions Taken

The Commission, by its International Bureau, took the following actions pursuant to delegated authority. The effective date of these actions is the release date of this Notice, except where an effective date is specified.

SAT-LOA-20210616-00080	E	S3095	Umbra Lab Inc	
Launch and Operating Authority				
Granted in Part/ Deferred in Part				Effective Date: 12/15/2021

Nature of Service: Earth Exploration Satellite Service

On December 13, 2021, the Satellite Division granted in part and deferred in part, with conditions, the request of Umbra Lab Inc. to construct, deploy, and operate a constellation of low-Earth orbit, non-geostationary orbit (NGSO) satellites in the Earth Exploration Satellite Service (EESS). The Division granted authority to Umbra Lab to deploy, and operate two NGSO satellites, deployed to an altitude of approximately 550 km, and operating at an altitude of approximately 565 km, to conduct Synthetic Aperture Radar (SAR) imaging. Umbra Lab is authorized to operate an EESS downlink with a center frequency of 8150 MHz and a bandwidth of 250 MHz, and to conduct SAR operations using a center frequency of 9600 MHz and a bandwidth of 600 MHz, as well as to conduct SAR operations for testing and demonstration with its Umbra-2001 satellite using a center frequency of 9800 MHz and bandwidth of 1200 MHz. Umbra Lab is also authorized to conduct telemetry, tracking, and command as follows: 2254 MHz center frequency, bandwidth 0.1 MHz (space-to-Earth); and 2080 MHz center frequency, bandwidth 0.1 MHz (Earth-to-space). This application was granted under the streamlined small satellite procedures, 47 CFR § 25.122.

SAT-LOA-20210824-00109	E	S3100	Capella Space Corp.	
Launch and Operating Authority				
Grant of Authority				Effective Date: 12/15/2021

Nature of Service: Earth Exploration Satellite Service

On December 15, 2021, the Satellite Division granted authority, with conditions, to Capella Space Corp. to construct, deploy, and operate two low-Earth orbit, non-geostationary orbit satellites in the Earth Exploration Satellite Service (EESS) at an altitude of approximately 525 kilometers for purposes of Synthetic Aperture Radar (SAR) imaging. The satellites are known as Capella-7 and Capella-8. Capella Space is authorized to operate using a center frequency of 9600 MHz and a bandwidth of 600 MHz for SAR imaging, a center frequency of 8212.5 MHz and bandwidth of 337.5 MHz for its EESS downlink, a center frequency of 2036 MHz and bandwidth of 1.4 megahertz for its space operations uplink (Earth-to-space), and a center frequency of 8027 MHz and bandwidth of 1.4 megahertz for its space operations downlink (space-to-Earth). Capella Space is also authorized to operate inter-satellite links with the Inmarsat system, including all the satellites on the Commission's "ISAT" list, using frequencies assigned for operations by Inmarsat BGAN terminals in the 1525.0-1559.0 MHz (space-to-space) and 1626.5-1660.6 MHz (space-to-space) frequency bands. In addition, the Division authorized Capella-7 and Capella-8 to conduct limited downlink communications with an earth station for purposes of radar calibration in the 9400-9900 MHz band (Earth-to-space). This application was granted under the streamlined small satellite procedures, 47 CFR § 25.122.

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