Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of)
)
Application of Capella Space Corp. for) File No. SAT-LOA-20200914-00108
Authority to Launch and Operate Non-)
Geostationary Satellite Orbit Space)
Stations in the Earth-Exploration	
Satellite Service)

COMMENTS OF IRIDIUM CONSTELLATION LLC

In the above-captioned Application, Capella Space Corp. ("Capella") requests authority to construct, deploy, and operate a constellation of up to three low-Earth orbit, non-geostationary satellites that would operate in the Earth-Exploration Satellite Service.¹ As stated in the public notice accepting Capella's Application for filing, "Capella ... requests waiver of the U.S. Table of Frequency Allocations, section 2.106 of the Commission's rules, to permit Capella ... to operate inter-satellite links ["ISLs"] with the Inmarsat system in the ... 1626.5-1660.0 MHz frequency bands."²

Iridium Constellation LLC ("Iridium") hereby comments on Capella's Application. Iridium has no objection to Capella's Application, but wishes to bring to the Commission's attention an issue implicated by the Application that could recur.

¹ Capella Space Corp., Application of Capella Space Corp. for Authority to Launch and Operate a Non-Geostationary Orbit Satellite System in the Earth Exploration Satellite Service, IBFS File No. SAT-LOA-20200914-00108 (filed Sep 14, 2020).

² Public Notice, Space Station Applications Accepted for Filing, Report No. SAT-01504 (Oct. 9, 2020).

Iridium operates a 66 satellite Big LEO system in low earth orbit.³ Iridium's service links are in the 1617.775-1626.5 MHz part of the Big LEO band, which is adjacent to the 1626.5-1660 MHz band Capella proposes to use for ISLs. Capella has assumed that because its ISL transmissions "will occur only on frequencies that Inmarsat assigns to the spaceborne Inmarsat BGAN terminal onboard the Capella satellite ... consistent with ... [Inmarsat's] coordination agreements with other operators in the band," there could be "no harmful interference" to these other operators.⁴

Capella has overlooked the potential impact of out-of-band emissions from its ISLs on operators such as Iridium in adjacent bands. These emissions are of particular concern when satellites in low earth orbit, like Capella's satellite and Iridium's satellites, are in relatively close proximity.

Iridium has evaluated Capella's proposed ISLs and determined they would not cause harmful interference to Iridium's service links. Given that others may make similar proposals in the future, however, and given that proponents of non-conforming uses are required to show they will not cause harmful interference, Iridium encourages the Commission to put the burden on future applicants to demonstrate compatibility with Iridium's service links

³ See e.g., Application of Iridium Constellation LLC for Modification of License to Authorize a Second-Generation NGSO MSS Constellation, Order and Authorization, 31 FCC Rcd 8675 (IB 2016).

⁴ Capella Space Corp., IBFS File No. SAT-LOA-20200914-00108, Waiver Request at pp 2-3.

and to refrain from accepting these applicants' submissions for filing until an appropriate showing has been made.

Respectfully submitted,

IRIDIUM CONSTELLATION LLC

Maureen C. McLaughlin Vice President, Public Policy IRIDIUM CONSTELLATION LLC 1750 Tysons Boulevard, Suite 1400 McLean, VA 22102 (703) 287-7518 Joseph A. Godles
GOLDBERG GODLES WIENER & WRIGHT
1025 CONNECTICUT AVENUE, NW
SUITE 1000
Washington, DC 20036
(202) 429-4900
Its Attorney

November 9, 2020

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of November, 2020, a copy of the foregoing Comments of Iridium Constellation LLC was sent via first class mail, postage prepaid, to the following:

> William M. Wiltshire HARRIS, WILTSHIRE & GRANNIS LLP 1919 M Street, N.W., Suite 8000 Washington, D.C. 20036

> > /s/Michael Lehmkuhl

Michael Lehmkuhl