

March 23, 2021

The Honorable Jessica Rosenworcel
Acting Chairwoman
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Dear Acting Chairwoman Rosenworcel:

I write to request the Federal Communications Commission (FCC) take steps to address the growing issue of pollution from commercial use of space. With many corporations proposing to send thousands of satellites into space as part of new “mega-constellations,” the FCC should consider the environmental and safety risks posed to our atmosphere and to shared orbital resources that serve defense, scientific research, and communication needs.

In the absence of proper oversight, mega-constellations present a direct threat to our environment when they reenter our atmosphere in large numbers. Upon reentry, the satellites vaporize and release particulates that settle in the stratosphere, contribute to global warming, and deplete the ozone layer.^{1,2} Mega-constellations also contribute to light pollution, impacting the look of the night sky for the public and negatively impacting astronomical research.³ Further, the rise in orbital debris in space compromises valuable assets and threatens to make space inaccessible. If satellites cannot reliably maneuver, we are likely to soon see collisions and more debris spreading out over hundreds of kilometers, polluting surrounding orbits for years.⁴ Some could even plummet to Earth, creating an unsafe situation for aircraft and all of us on the ground.⁵

The FCC needs to act now, before allowing more satellites to be deployed, to mitigate all of these threats. Every proposed mega-constellation should be comprehensively reviewed under the National Environmental Policy Act (NEPA) that considers the significant effects these systems could have on the environment — and the cumulative impact they will have on our effort to fight climate change. Rules to mitigate the risks of additional collisions in space also must be adopted.

Combatting climate change will require us to take an all-hands-on-deck approach to the threats we face. And when we talk about global sustainability, our efforts cannot stop at our geographic border, or even at the limits of our atmosphere. It is time for the FCC to take responsibility, so

¹ Scientific American, <https://www.scientificamerican.com/article/an-underappreciated-danger-of-the-new-space-age-global-air-pollution/>

² Space News, <https://spacenews.com/aerospace-agu-reentry-pollution/>

³ International Astronomical Union, <https://www.iau.org/static/publications/dqskies-book-29-12-20.pdf>

⁴ The New Yorker, <https://www.newyorker.com/magazine/2020/09/28/the-elusive-peril-of-space-junk>

⁵ CNBC, <https://www.cnbc.com/2020/05/16/chinese-rocket-falls-to-earth-space-debris-problem-worsens.html#:~:text=A%20Chinese%20rocket%20that%20became,back%20to%20Earth%20since%201991.>

we can ensure our planet—and the part of space near Earth—are safe and sustainable for years to come. I look forward to working together on this issue.

Sincerely,

A handwritten signature in black ink that reads "Mike Levin". The signature is written in a cursive style with a prominent "M" and "L".

Mike Levin
Member of Congress

CC: Commissioner Nathan Simington
Commissioner Brendan Carr
Commissioner Geoffrey Starks