## STATEMENT OF COMMISSIONER JESSICA ROSENWORCEL, CONCURRING

Re: *Mitigation of Orbital Debris in the New Space Age*; IB Docket No. 18-313; *Mitigation of Orbital Debris*, IB Docket No. 02-54 (Terminated)

Across the globe, we generate more than two billion tons of trash a year. But if you think our waste is limited to the ground, think again. That's because humans have been littering our celestial backyard with spent satellites, rocket fragments, and other discarded debris for as long as we've had the technological know-how. My favorite example is an innocuous little screwdriver that slipped through an astronaut's grasp and has been circling low earth orbit at up to 21,600 miles per hour for the last 35 years. At these speeds even a common household item can wreak havoc. That's ten times faster than a bullet with the punch of a hand grenade.

But this little screwdriver is not alone. Today, the United States Space Surveillance Network is tracking more than 23,000 objects larger than a baseball. The number of marble-sized objects has surpassed half a million. If you count objects the size of a grain of salt, there are easily more than 100 million pieces of debris circling our planet.

Whoa—and this problem is about to get a whole lot more complicated. Whether it's the thousands of satellites being launched as part of first-of-their-kind large constellations, the coming nanosat revolution, or an ill-defined Space Force, the likelihood of a debris disaster is higher than it has ever been in history.

That's why, earlier this year I called on the Federal Communications Commission to do more than just accelerate this problem by rubber stamping every next-generation satellite application that comes our way using yesterday's orbital debris rules. I called for us to think about the future. I called for a comprehensive review so that we can mitigate collision risks and ensure space sustainability going forward. I called for the agency to coordinate more closely with other federal actors to come up with clear national policies for this jumble of new space activity.

I thank my colleagues for heeding this call. But today's rulemaking is—let's be honest—only a timid start. Moreover, I am concerned it does not set this agency up for success in the future.

It misses the forest for the trees. It asks loads of technical questions about what sorts of information about orbital debris we should expect from satellite operators, but it fails to set forth a vision for the coming commercial space age. Likewise, it proposes no principles or measurable goals for space safety.

It also muddles the path forward. Compare the draft that was released three weeks ago to the rulemaking we are voting on today. Instead of moving forward aggressively—as our draft effort contemplated—we backtrack and add confusing language about whether or not this work should even continue in these halls.

This is not the leadership we need as we embark on a new era in space. We need clear guidance from this agency. It should rest on three basic principles.

First, everything that goes up in space should be trackable. We will never be able to protect against threats we cannot see. So we need to understand where all of our satellites are and where debris is with a high degree of precision. That includes working with our federal colleagues to improve methods to assess what is truly in orbit.

Second, everything we put up in space should be drivable. That way our satellites can avoid existing orbital debris that might come their way or de-orbit at the end of mission. On a typical day, our military issues 21 warnings of potential space collisions. That number is going to rise dramatically—and drivability is key to preventing collision.

Third, what goes up must come down. Some satellite operators have proposed large constellations of thousands of satellites in low earth orbit that will be launched around the same time. According to our colleagues at the National Aeronautics and Space Administration, 99 percent of these satellites will need to be taken out of orbit as soon as they have completed their missions in space. Doing so will prevent collisions in the future.

I thank my colleagues for kicking off this proceeding. Because it is not everything I hope it can be, I concur. But I hope we can move expeditiously to develop a realistic debris plan that can be implemented soon. The new space age is not waiting—and we have work to do.