REMARKS OF FCC CHAIRMAN BRENDAN CARR

"BUILD AMERICA: UNLEASHING AMERICA'S SPACE ECONOMY AND WINNING THE SPACE RACE 2.0"

EL SEGUNDO, CA

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It is great to be back here in The Gundo. I had the chance to visit with many of you and the space and satellite businesses that make this area home when I was here about a year and a half ago. Based on my visit both then and now, I can say that El Segundo certainly lives up to its title as the Aerospace Capital of the World.

When I visited last year, I had the chance to meet with so many of America's space entrepreneurs. Take our hosts here at Apex. We just finished a tour and ribbon cutting for this brand new facility. Ian and his team here are building standardized, scalable satellite buses that are attracting customers from the U.S. Space Force to industry leading private companies. When I visited this same spot last year there was nothing more than a dusty, mostly empty warehouse and a used shake table for testing out satellite parts. I think we can all agree that it looks a lot better and more clean-room compliant today. So congratulations to Apex on their opening of this facility.

On that last visit, I also had the chance to visit with businesses like Varda Space Industries. Varda's President, Delian, showed me both his signature mismatched shoes and, more relevant to this speech, how his team is now using the microgravity of space to manufacture new drugs and treatments—including for cancer—that would be impossible to develop down here in with the gravity of Earth. Stuff that seems like total science fiction.

And we're going to have the chance to hear from so many other innovative companies later today, too. Northwood Space is one. They will be participating in our panel discussion as a business that is at the cutting edge of the emerging Ground-Station-as-a-Service sector, which allows multiple satellite systems to share the same infrastructure.

And just this morning, I visited Impulse Space, which is developing lower-cost ways to deliver spacecraft to hard-to-reach destinations in orbit and is doing great work in the growing field of In-Space Services Assembly and Manufacturing.

But the truth is—manufacturing and productivity is nothing new for El Segundo. It's right there in the name. The city acquired it over a hundred years ago when Standard Oil opened its second west coast refinery here.

Even more on point, though, aerospace innovation is nothing new for El Segundo. The industry's roots run deep in this area. From Douglas Aircraft, Northrop, and Hughes Aircraft to the founding of the Aerospace Corporation.

In fact, the Space Race of the 1960s traces its course right through El Segundo. Back then, El Segundo played a central role in the aerospace manufacturing and innovation that powered America's Cold War leadership. Right here is where some of the largest and most important titans of the space industry set up shop. And they helped ensure that the U.S. won that Space Race.

Now, in many ways, past is prologue. Today, the United States sits at the dawn of a new Golden Age of space innovation. And President Trump has been clear that the U.S. will dominate once again. And America's leadership in space could not come at a better time. That is because we are now in the midst of what I refer to as a Space Race 2.0. And like the Space Race of 60 years ago that I just spoke about, the U.S. is going to rely on the innovators right here in El Segundo to help power America to the win.

Of course, there are differences this time around, too. Our main competitor in this Space Race 2.0 is the government of China. They have set their sights on dominating in lower Earth orbit—and frankly up and down every orbit.

So I want to be clear about the challenges and the stakes. A world where the CCP is using its space capabilities to control the access that billions of people across the globe have to data and information would be a less prosperous and more dangerous world.

But this is not the only way in which this Space Race 2.0 is different. America's aerospace industry looks a lot different this time around than it did during the first Space Race. Today, we are not relying on the country's largest government contractors alone. We are not putting up just a handful of innovative and key satellites. We are and must do even more to win this Space Race 2.0.

That is where communities like El Segundo come in. We are relying on businesses of all sizes and hundreds of new and scrappy startups—the innovative space-age businesses that are being founded right here in these old warehouses.

To me, these, and countless other businesses, are a great indicator of how El Segundo has become a world-leading incubator for talent and entrepreneurship, which is creating a virtuous cycle of innovation. More start-ups means more competition, which means more innovation.

You all are already doing the work. You are reindustrializing. You are rejuvenating. And you are investing in world-beating innovations.

So the question for those of us in government with offices over 2,500 miles from here—which, if my math is right, is about 7 times further away than some of the LEO satellites orbiting above us now—the question is what can we do to help boost your operations and cut through the red tape that might otherwise hold you back.

Here's how I think about it. Much like this second Space Race is different than the first one—requiring innovators to be more nimble, to move more quickly, to simplify processes and timelines—the FCC must approach our job very differently too.

And on this front, President Trump is leading the way. Earlier this year, President Trump signed an Executive Order to streamline regulations and foster a competitive commercial space industry—thus ensuring that the U.S. maintains its leading role in the commercial use of space.

We are acting on President Trump's leadership at the FCC. In fact, we are already getting downrange. So let me explain what we've done and then end with what we are going to do.

Earlier this year, I laid out a vision for the FCC's main policy priorities. I call it our Build America Agenda, and one of its core objectives is "Boosting America's Space Economy."

Across the Trump Administration, departments and agencies are ensuring that America dominates in space. In fact, the White House <u>recently prioritized</u> America's space dominance as one of the five highest R&D priorities for our nation.

Before getting into the details of what the FCC is doing to promote space innovation, I'd like to step back and offer you some perspective on how I think the FCC's regulatory framework for space must change.

On this score, I think Europe offers a cautionary tale. When I first started at the FCC—all the way back in 2012—I worked mostly on mobile wireless issues. And that is a regulatory area where you can see how the U.S. and Europe parted ways quite dramatically. Here, we developed a framework for permissionless innovation. There, they have heavily regulated industry players. Here, we focused on removing barriers to investment and deployment. There, they have made it more difficult—with providers investing less than half their U.S. counterparts. Here, we have released thousands of megahertz of spectrum for next-gen services while European providers have fallen behind.

The results speak for themselves. The U.S. won the race to 4G and has been leading the world in 5G, too. This has brought countless economic and geopolitical benefits to America. And it has provided U.S. consumers with better services at lower prices.

We face a similar fork in the road when it comes to the space economy. Europe wants to double down on heavy-handed regulations. In America, we are going to go a different way.

We are going to take the best of the FCC's regulatory approaches from wireless and apply them to our space and satellite regulations.

A regulatory refresh like this only makes sense. After all, the space economy of today bears little resemblance to the one that existed just ten years ago, when many of the FCC's satellite rules were last updated, let alone the 1990s when they were originally developed. Over the past decade, we've seen a 14-fold increase in the number of objects launched into space. It's clear that fundamental regulatory reforms are needed. The success of American companies in space is too important and too pressing to just tinker around the edges.

So let's talk about how we're going to apply this playbook to the space industry.

I'll start with what the FCC has already done.

Big picture, our goal is to make sure that the United States is the friendliest regulatory environment in the world for people to start, to grow, or to accelerate their space operations.

Our efforts on this front are driven by a few guiding principles: speed, simplicity, security, and satellite spectrum abundance.

On speed, we're clearing out satellite application backlogs and reducing processing times at a record pace. Back in January, for instance, we had nearly 1,500 earth station applications pending before the Commission. Today, we've already cut that backlog in half, and we keep chipping away.

On simplicity, we eliminated FCC approval requirements for a range of routine changes that pose no risk to the public. One of our reforms will eliminate roughly half of earth station modification applications. Through these and other streamlining improvements, the FCC will hold itself accountable to more predictable timelines, such as a 30-day shot clock for earth station renewal applications. These reforms will hopefully make life a lot easier for Northwood and other Ground-Station-as-a-Service businesses.

On security, we launched a proceeding that looks at bolstering and safeguarding the services provided by our GPS system.

On satellite spectrum abundance, we've opened a rulemaking that could free up more than 20,000 megahertz for satellite broadband.

We're also taking a fresh look at this decades-old spectrum sharing regime between geostationary and non-geostationary satellites, to supercharge next-generation systems.

And I was pleased to see SpaceX's announcement that it will purchase EchoStar's AWS-4 spectrum for \$19 billion to support a new Direct-to-cell satellite constellation and other innovative service offerings. Direct-to-cell is one of the most important emerging technologies, and this deal could help set up the United States to lead the world in this new technology.

Even with the actions we've already taken, the Commission's space regulations are still riddled with backwards looking regulations.

We see outdated regulatory assumptions. For instance, the FCC's licensing databases were not built to support applications at scale. This artificially restricts who can be authorized and how quickly.

We see outdated technical assumptions. For instance, the FCC's rules are overly conservative about coexistence, which artificially limits how space companies can serve American consumers and businesses.

And we see outdated economic assumptions. For instance, the FCC's frameworks were designed for a nascent space sector that lacked robust investment and competition.

Collectively, these outdated assumptions throttle the space economy. And they prevent space resources from going to their highest and best use.

It is clear to me that more reform is needed. So now is the time for the FCC to take our efforts up a notch—to add rocket fuel to our approach, if you don't mind the pun. This October, we are going big. We are declaring October 2025 Space Month at the FCC. Today, I will be sharing with my FCC colleagues two proposals to fundamentally alter our regulatory framework for space innovation.

We are looking at everything from a first principles mindset in order to enable monumental changes.

For starters, we've got a plan to modernize our licensing processes to match the scale and dynamism of today's space economy.

With three-fold the volume of satellite and earth station requests compared with just a decade ago, it's untenable to just push more stuff through the SAME regulatory system. We need exponential increases in our capacity or efficiency. So we propose throwing away our old process and starting fresh. That means replacing our bespoke licensing processes with a "licensing assembly line."

One way to think of this is that we will replace a "Default to No" process with a "Default to Yes" framework. Straightforward licensing requests would be presumed to be in the public interest and expedited. We would also simplify our applications, establish clear timelines so companies know what to expect, and increase flexibility for licensed operations.

Next, we have a proposal to facilitate more intensive use of satellite spectrum—specifically in what we refer to as the upper microwave band or UMFUs for the initiated. Our current siting restrictions for these airwaves are artificial and were plucked out of thin air during a bygone era. We will now propose a wide range of reforms to our Earth Station siting rules to more intensively use these spectrum bands and to streamline the Earth Station licensing process. We believe these changes will help earth stations and put 5G spectrum to more intensive use while living side-by-side in harmony.

And that is just the space actions we are taking this month. There is more to come in the months ahead too.

For instance, we will take another swing at achieving satellite spectrum abundance. Earlier this year, we started a proceeding on opening up more spectrum for satellite broadband. Soon, we will look at opening more spectrum resources for novel space activities – everything from lunar missions to orbital laboratories.

Combined, these actions mark not just a small step forward but a giant leap in the Commission's work to promote U.S. space dominance.

In my mind, this is a four-stage process.

We started out with our initial efforts to streamline processes and clear out backlogs.

In stage two, we completed end-to-end reviews and deleted unnecessary rules and regulations.

Now, in stage three, we are advancing a number of actions to modernize and reconceptualize our regulation of the space economy from the ground up.

Our end goal, is to reach the point where we have automated many of these processes. And that goal just got one step closer.

I'd like to close with this. I spoke earlier about how the White House just designated space innovation as one of the nation's five most important R&D priorities. There is something else about this initiative that I think speaks to this moment. The Trump Administration's position on R&D is not just that it needs to be more targeted, but that it needs to be more ambitious.

America's scientists often spend 40% of their time doing paperwork on grant applications, rather than direct research. And the new grant applications they work on are too often aimed at what will get funded rather than what could have the biggest impact. University of Chicago professor James Evans summed up our problem nicely. He wrote: "Too many projects get funding because they are probable. But science moves forward one *improbability* at a time."

The United States of America is the greatest country in human history, because, like no other nation, risk-taking is in our DNA. As Americans, we imagine the impossible and then make it real.

After being too timid for too long, America is finally getting its mojo back. Under President Trump's leadership, we are entering a Golden Age of innovation in space, and we are looking to The Gundo to play a crucial role.

Think about it. "Moonshot" is the most popular metaphor for our most ambitious endeavors. For this crowd, moonshots are what you do on a Tuesday. You are pushing boundaries like Americans always have. Please know that you have committed partners at the FCC and in Washington who are doing everything we can to make your next big breakthroughs possible.

Thank you again for hosting me today. I look forward to learning from the panel discussion to come.