

STATEMENT OF COMMISSIONER GEOFFREY STARKS

Re: *FCC Announces Two New Innovation Zones and Amends One Existing Innovation Zone for Program Experimental Licenses, ET Docket No. 19-257.*

Experimentation and innovation are critical to advancing the development of our communication networks. The FCC has a responsibility to encourage such efforts because they will hopefully lead to benefits that will expand and enhance connectivity and promote US leadership and economic competitiveness around the world. The innovation zones we announce today should spur progress in two major areas—drones, or Unmanned Aircraft Systems (UAS), and Open RAN wireless networks.

The first Innovation Zone will allow focused experimentation for UAS use cases. This action is timely. In early 2020, I visited the Nevada Institute for Autonomous Systems (NIAS), an FAA-designated UAS test site outside Las Vegas. During that visit, I learned how NIAS is helping to incubate new UAS companies and develop new applications, techniques, and technologies to facilitate integration of UAS into the national air space. UAS have tremendous potential, with benefits for public safety applications like critical infrastructure inspections, firefighting, and preservation and monitoring of our vast natural resources in rural areas or tribal lands. UAS also offer potential benefits for consumers and other industries through innovative delivery services, transportation, and telecommunications. Authorizing this new zone will provide valuable data to researchers to spearhead experiments and approaches for development.

This is a good step, but we have more work to do. For years, we've heard how the lack of access to licensed spectrum for UAS may be stifling innovation in this potentially explosive sector. It's time we address this issue, which necessitates moving forward in a coordinated manner with our federal partners at the FAA and NTIA. We will need licensed spectrum for a truly integrated airspace, free of harmful interference. If you'll forgive the pun, without licensed spectrum, UAS can't truly take off.

Our decision should also spur progress in another exciting technology -- Open RAN technologies. Open RAN could increase network security, reduce operator costs, and restore the United States as a leader in the provision of communications equipment and services. One of the major challenges associated with Open RAN, however, is overcoming the uncertainty of potential customers, particularly small carriers, with adopting such a novel approach towards network infrastructure.

The second Innovation Zone we authorize today has the potential to address this uncertainty by allowing experimentation at an unprecedented scale in the world's largest wireless network emulator -- aptly named "the Colosseum." The Colosseum is a massive radio frequency emulator supported with 256 programmable software defined radios and is capable of emulating a full wireless network. Until now, this tool was only available to researchers associated with the Defense Advanced Research Projects Agency (DARPA), but it will now be available to researchers from the wireless community as a whole. I saw the Colosseum in action a couple of years ago during the finals of DARPA's Spectrum Collaboration Challenge and can testify that it is an impressive tool. I'm confident that this project will allow researchers to improve our understanding of Open RAN's capabilities and increase confidence among potential Open RAN customers.

The Commission must continue its work of encouraging innovation. The more opportunities to experiment and innovate, the faster we will be able to achieve universal access to the most advanced communications networks. These innovation zones are a good step, but we need to keep working. Thanks to OET for their work on this item.