April 22, 2021

The Honorable Joseph Biden, Jr. President of the United States The White House 1600 Pennsylvania Avenue Washington, D.C. 20500

Dear President Biden:

The U.S. government has for decades laid the foundation for American technological leadership by embracing policies that enable continued growth of GPS and the satellite services that underpin our economy, national security, and public safety. In turn, operators of these critical satellite systems and innovative companies that have deployed communications networks and developed positioning, navigation and timing devices, systems, and applications rely on a stable environment to serve millions of commercial, federal, military, and academic users each and every day.

That foundation was upended one year ago today when the Federal Communications Commission ("FCC") released the *Ligado Order*.¹ The opposition to the *Ligado Order* was sweeping and swift. Significantly:

- the National Telecommunications and Information Administration ("NTIA") took the unprecedented step of asking the FCC to stay the initial *Ligado Order* based on the "significant and irreparable harm [that] will result" from Ligado's proposed terrestrial network because the conditions "set forth in the *Ligado Order* largely are ineffective ... [and] cannot be implemented without significant mission impact and harm;"²
- seven parties representing a broad cross-section of industry interests joined NTIA in petitioning the FCC to reconsider its decision.³ Those petitions which remain pending detail how the *Ligado Order* departed from decades of sound spectrum policy, jeopardizing the aerospace, agriculture, aviation, construction, ground transportation, mapping, marine, meteorological, public safety, satellite communications, and surveying industries and professionals, as well as all those who rely on L-band satellite operations; and
- Congress expressed its profound concern by passing the overwhelmingly bipartisan William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021⁴ with several key provisions aimed at addressing the significant negative impacts of Ligado's proposed service on national security and the economy. Those provisions: (1) require an independent technical review of the Ligado Order; (2) require the Department of Defense ("DoD") to submit an estimate to Congress of the full range of damages caused by Ligado to the Federal government; (3) prohibit

¹ In the Matter of Ligado Amendment to License Modification Applications IBFS File Nos. SESMOD-20151231-00981, SAT-MOD-20151231-00090, and SAT-MOD-20151231-00091, Order and Authorization, IB Docket No. 11-109, FCC 20-48 (Apr. 22, 2020) (Ligado Order).

² Petition for Stay of NTIA, IB Docket Nos. 11-109, 12-340 (filed May 22, 2020).

³ See Petitions for Reconsideration of Air Line Pilots Association, International (filed May 20, 2020); the American Transportation Builders Association, the American Farm Bureau Federation, and the Association of Equipment Manufacturers; Aviation Industry Organizations; Iridium Communications Inc., Flyht Aerospace Solutions Ltd., Aireon LLC, and Skytrac Systems Ltd; Lockheed Martin Corporation; NTIA; the Resilient Navigation and Timing Foundation; and Trimble Inc, IB Docket Nos. 11-109 and 12-340 (filed May 22, 2020).

⁴ Pub. L. No. 116-283.

DoD from contracting with any entity that engages in terrestrial service in the L-band; and (4) prohibit DoD's use of taxpayer funds made available via the NDAA to mitigate the damages incurred by DoD.

Although Ligado continues to attempt to convince policymakers that its proposed terrestrial service will not cause harmful interference and is somehow critical to American success in 5G, the executive branch and affected parties have repeatedly detailed the adverse economic, national security, and public safety impact of the proposed Ligado operations.⁵ As for Ligado's 5G fallacy, NTIA concluded that "an inability to deploy terrestrial 5G or related services using the frequencies involved in the Ligado applications would not hold back the timely deployment of 5G" across the U.S.⁶ Tellingly, Ligado's spectrum is not internationally harmonized for 5G, nor is it part of any 5G standard.

Yet the *Ligado Order* remains in effect, threatening to disrupt the reliability of satellite communications, the Global Positioning System, and weather forecasting services necessary for safety-of-life in commercial aviation operations, precision farming that has revolutionized the agriculture economy, autonomous ground and air vehicles that will bring a new generation of transportation, precise and actionable weather data that can predict hurricanes and other life-threatening natural events. We therefore urge you to work together with the FCC to stay and ultimately set aside the *Ligado Order* – the risks to American lives and to the American economy are simply too great.

Sincerely,

AccuWeather, Inc. Aerospace Industries Association (AIA) Agricultural Retailers Association Air Line Pilots Association, International Aircraft Electronics Association Aircraft Owners and Pilots Association Aireon Airlines for America (A4A) Airo Drone Airo Group ALERT Users Group Allegiant Air American Association of Airport Executives American Bus Association American Farm Bureau Federation American Geophysical Union (AGU) American Meteorological Society (AMS) American Soybean Association

American Sportfishing Association American Road & Transportation Builders Association American Trucking Associations American Weather and Climate Industry Association (AWCIA) Arizona Agricultural Aviation Association Arkansas Agricultural Aviation Association Associated Equipment Distributors Association of Equipment Manufacturers Association of Marina Industries Association of Montana Aerial Applicators Association of Washington Aerial Applicators Aviation Spectrum Resources, Inc. **BoatUS** CalAmp California Agricultural Aircraft Association Cargo Airline Association

⁵ See Memorandum from Thu Luu, Executive Agent for GPS, Department of the Air Force, to IRAC Chairman (Feb. 14, 2020); Letter from Douglas W. Kinkoph, Deputy Assistant Secretary (Acting), NTIA, to Ajit Pai, Chairman, FCC (Dec. 6, 2019) (Kinkoph Letter); Letter from Bryan N. Tramont, Counsel to Iridium, to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109, 12-340 (filed Oct. 2, 2019); Technical Analysis of Ligado Interference Impact on Iridium Aviation Services, IB Docket Nos. 11-109, 12-340, attached to Letter from Bryan N. Tramont, Counsel to Iridium, to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109, 12-340 (filed Dec. 14, 2016).

⁶ Kinkoph Letter at 2.

CNH Industrial CoBank Colorado Agricultural Aviation Association Cubic Corporation DTN **Equipment Dealers Association Frontier Airlines** Florida Agricultural Aviation Association General Aviation Manufacturers Association GeoOptics, Inc. Georgia Agricultural Aviation Association Geospatial Equipment & Technology Institute (GETI) Helicopter Association International Hellen Systems Illinois Agricultural Aviation Association Intelligent Transportation Society of America International Air Transport Association Iridium Kansas Agricultural Aviation Association Lockheed Martin Corporation Michigan Agricultural Aviation Association Microcom Environmental Minnesota Agricultural Aircraft Association Narayan Strategy National Agricultural Aviation Association National Air Carrier Association National Air Transportation Association National Business Aviation Association National Corn Growers Association National Cotton Council National Defense Industrial Association (NDIA) National Society of Professional Surveyors (NSPS) National Weather Association (NWA) Nebraska Aviation Trades Association

NENA: The 9-1-1 Association NetJets Association of Shared Aircraft Pilots (NJASAP) New Mexico Agricultural Aviation Association North Dakota Agricultural Aviation Association Northeast Agricultural Aviation Association Ohio Agricultural Aviation Association Oregon Agricultural Aviation Association Pacific Northwest Aerial Applicators Alliance PlanetiO **Regional Airline Association Resilient Navigation and Timing Foundation** Satelles The Semaphore Group SKYTRAC South Dakota Aviation Association Space Science and Engineering Center at the University of Wisconsin-Madison Spirit Airlines Subsurface Utility Engineering Association (SUEA) Sun Country Airlines Tennessee Aerial Applicators Association Texas A&M Transportation Institute Texas Agricultural Aviation Association Trimble U.S. Contract Tower Association U.S. Geospatial Executives Organization (U.S. GEO) USA Rice University Corporation for Atmospheric Research (UCAR) Vertical Flight Society Weather Elevate

Wisconsin Agricultural Aviation Association