November 20, 2020

The Honorable Jim Inhofe Chairman U.S. Senate Committee on Armed Services 228 Russell Senate Office Building Washington, DC 20510

The Honorable Adam Smith Chairman U.S. House Committee on Armed Services 2264 Rayburn House Office Building Washington, DC 20515 The Honorable Jack Reed Ranking Member U.S. Senate Committee on Armed Services 228 Russell Senate Office Building Washington, DC 20510

The Honorable Mac Thornberry Ranking Member U.S. House Committee on Armed Services 2208 Rayburn House Office Building Washington, DC 20515

Dear Chairmen Inhofe and Smith and Ranking Members Reed and Thornberry:

As you seek to finalize the conference agreement of H.R. 6395, the William (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, we urge your continued support of several provisions that will protect our nations' military global positioning system (GPS) devices and satellite communications services from harmful interference. If the Federal Communications Commission's ("FCC") April 2020 *Ligado Order*¹ is left in place, it would upend decades of sound spectrum policy, negatively impact a significant cross-section of commercial and federal users who rely on the many different L-band satellite services, and threaten the safety of most Americans. As you know, L-Band satellite services are "fundamental to the Nation's economy, national security, and continued technological leadership."² We fully support House Sections 1608 and 1609 and Senate Sections 234, 1083, and 6082, and respectfully request that all five provisions remain in the conferenced version of the legislation.

House Sections 1608 and 1609 prohibit the Department of Defense (DOD) from entering into or renewing a contract with any entity that engages in terrestrial operations using the 1525-1559 MHz or 1625.5-1660.5 MHz bands and from expending funds to retrofit GPS devices that have suffered interference due to the Ligado Network, respectively. Should the Secretary of Defense certify that there will be no harmful interference to a DOD GPS device, the contracting provision would be lifted. Additionally, should any DOD GPS device suffer interference, the Ligado Order requires the operator of the network to pay for those damages. This provision simply prohibits the DOD from spending its own funds. Funds which according to the *Ligado Order*, Ligado is already liable to expend. We fully support these provisions which protect and provide the necessary flexibility to the DOD.

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).

² Letter from Douglas W. Kinkoph, Deputy Assistant Secretary (Acting), NTIA, to Ajit Pai, Chairman, FCC (Dec. 6, 2019).

Given that the National Telecommunications and Information ("NTIA") and fourteen additional federal agencies have stated their public objection to the *Ligado Order*, we believe an independent review of the FCC's decision could alleviate any remaining concerns. Senate Section 234 requires the DOD to engage the National Academy of Sciences, Engineering, and Medicine to conduct an independent review. We believe that all sides of this issue would benefit from such an independent analysis.

Senate Section 1083 requires the DOD to produce an estimate of damages stemming from the *Ligado Order* and Senate Section 6082 provides the DOD with the authority to seek reimbursement for those damages. As previously noted, the *Ligado Order* requires the operator of the network to pay for all damages, this section simply enforces what the order already requires.

Operators and users of L-band satellite systems have relied on a stable spectrum environment – free from harmful interference – to deploy their networks and conduct their operations Ligado's proposed terrestrial network would fundamentally put the vital L-band satellite communications services--that in some instances serve as the only way to reach even the most remote regions of the world and are critical to safe aviation-- at risk. In addition, the proposed Ligado network would disrupt the reliability of satellite communications services and the many critical applications which rely upon GPS, which has direct implications for safety-of-life in commercial aviation operations, precision farming and irrigation management that have revolutionized the agriculture economy, autonomous ground and air vehicles that will bring a new generation of transportation, precise and actionable weather data that predicts and enables warnings for hurricanes and other life-threatening natural events, and many other applications. Simply put, the *Ligado Order* failed to take full account of the diverse services in the L-band, including those relied on by military, federal, and public safety users, that would be stranded or significantly impaired (without available alternatives) by the harmful interference caused by Ligado's proposed terrestrial network.

The L-band is heavily and efficiently utilized by the undersigned organizations and companies, and the broader community of users they represent. Regrettably, the *Ligado Order* is predicated on an insufficient appreciation for the real-world risks of harmful interference and the impacts that interference would have on our organizations, numerous federal agencies and departments, and the broad cross-section of the American people we serve. Should Ligado be allowed to deploy its proposed network, our experience and analyses demonstrate that it could result in the degradation of the safety-of-life and the many more satellite services provided over L-band spectrum. These concerns have culminated in the almost unprecedented step of the NTIA asking the Commission to reconsider its decision based on the detrimental effect Ligado's proposed new adjacent band terrestrial operations would have.³

Your direct involvement is critical to protecting the satellite communications and GPS services that we provide and are relied on by tens of millions of Americans every day. We thank you for

³ Petition for Reconsideration or Clarification of NTIA, IB Docket Nos. 12-340, et al., at 1 (May 22, 2020).

your ongoing attention to this issue and urge your continued support of these provisions for inclusion in H.R. 6395.

Sincerely,

Accuweather, Inc. Aerospace Industries Association Agricultural Retailers Association Airborne Public Safety Association Aircraft Electronic Association Aircraft Owners and Pilots Association Air Line Pilots Association. International Airlines for America (A4A) Airo Drone, LLC ALERT Users Group American Association of Airport Executives American Association of Port Authorities American Geophysical Union American Meteorological Society American Road & Transportation Builders Association American Trucking Associations American Weather and Climate Industry Association Associated Equipment Distributors Association for Unmanned Vehicle Systems International Association of Equipment Manufacturers BoatU.S. CalAmp Cargo Airline Association **CNH** Industrial CoBank **Cubic Corporation DTN** Weather

General Aviation Manufacturers Association GeoOptics, Inc. Geospatial Equipment & Technology Institute Helicopter Association International International Air Transport Association Iridium Microcom Environmental L3Harris Lockheed Martin Narayan Strategy National Agricultural Aviation Association National Air Carrier Association National Air Transportation Association National Cotton Council National Marine Manufacturers Association National Society of Professional Surveyors National Weather Association NENA: The 9-1-1 Association PlanetiQ **Regional Airline Association** Space Science and Engineering Center at the University of Wisconsin-Madison Spire Global Subsurface Utility Engineering Association The Semaphore Group Trimble U.S. Contract Tower Association U.S. Geospatial Executives Organization University Corporation for Atmospheric Research Weather Elevate