The Honorable James M. Inhofe United States Senate Washington, D.C. 20510

The Honorable Jack Reed United States Senate Washington, D.C. 20510 The Honorable Tammy Duckworth United States Senate Washington, D.C. 20510

The Honorable Mike Rounds United States Senate Washington, D.C. 20510

Dear Senators:

The undersigned companies and organizations strongly endorse the Recognizing and Ensuring Taxpayer Access to Infrastructure Necessary for GPS and Satellite Communications Act or the "RETAIN GPS and Satellite Communications Act" introduced today. This legislation would ensure that the costs incurred by the public sector, businesses and consumers as a result of the FCC's decision to permit Ligado Networks LLC to use spectrum in a way that would cause interference to GPS and satellite communications would be covered by Ligado—the licensee benefiting from the decision.

The FCC's Ligado Order already recognizes the potential for interference to GPS receivers and requires that, "Ligado shall expeditiously repair or replace as needed any U.S. Government GPS devices that experience or are likely to experience harmful interference from Ligado's operations." But the Order failed to go far enough in three key ways. First, it did not provide an adequate description of the potential costs to federal agencies and thus the American taxpayer. Federal agencies are responsible for ensuring reliable GPS and satellite communications necessary for all manner of safety of life operations. Second, while recognizing the potential costs associated with interference to Federal agency owned devices, the FCC order inexplicably fails to require that Ligado also bear the costs of interference to other government and private owners of devices and applications that may be disrupted by Ligado's proposed operations. Third, the Order improperly applies interference limits that are fundamentally insufficient to protect critical satellite communications and navigation signals from unknown millions of Ligado devices operating over wide geographic areas.

Ninety-nine percent of GPS receivers are used in critical applications by non-Federal government users, businesses and consumers. In addition, the Order similarly threatens the satellite communications networks that can enable technologies used to complement and support GPS. The reliability of GPS and satellite communications is necessary for safety of life operations, national security and economic activity; critical communications capabilities; commercial and civil aviation; first responders, 9-1-1 and other public safety operators; military readiness and communications; weather forecasting; the movement of goods on our highways; the marking maritime harbors and channels; farmers planting and harvesting crops; operation of construction and mining equipment—and the list goes on and on.

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Associated Equipment Distributors

The RETAIN GPS and Satellite Communications Act acknowledges the harm to GPS and satellite communications end users caused by the Ligado order and ensures the burden of cost sits squarely where it belongs—on Ligado, rather than our first responders, farmers, pilots, boat owners, surveyors or construction companies. We commend you for recognizing the expense and burden the Ligado order places on federal agencies, American taxpayers, businesses and consumers, and for providing clear and immediate relief to critical stakeholders with this legislation. Thank you for your leadership on this important issue.

Sincerely,

Associated General Contractors of America Aerospace Industries Association (AIA) Agriculture Retailers Association (AGC) Air Line Pilots Association, Int'l (ALPA) Association of American Geographers (AAG) Airborne Public Safety Association (APSA) Association of Equipment Manufacturers Aircraft Electronics Association (AEM) Aircraft Owners and Pilots Association Association of Marina Industries Atlas Air Worldwide (AOPA) Aireon, LLC Aviation Spectrum Resources Inc. (ASRI) Airlines for America (A4A) Blue Origin Airo Drone, LLC Boat Owners Association of The United States, Alaska Airlines BoatU.S. Allegiant Air Cargo Airline Association (CAA) Allied Pilots Association Cartography and Geographic Information **American Airlines** Society (CAGIS) American Association for Geodetic Surveying Center for Sportfishing Policy (AAGS) **CNH** Industrial American Association of Airport Executives Coalition of Airline Pilots Associations American Bus Association (CAPA) American Concrete Pavement Association Coalition of Geospatial Organizations (COGO) American Concrete Pipe Association Coastal Conservation Association American Council of Engineering Companies CoBank American Farm Bureau Federation CompTIA Space Enterprise Council American Rental Association Crown Consulting Inc. **Cubic Corporation** American Road & Transportation Builders Association (ARTBA) Delta Air Lines American Society for Photogrammetry and Eastern Region Helicopter Council (ERHC) Remote Sensing (ASPRS) **Equipment Dealers Association** American Society of Civil Engineers (ASCE) Esri American Soybean Association FedEx Corporation American Sportsfishing Association Frontier Airlines American Trucking Associations General Aviation Manufacturers Association

(GAMA)

Letter re RETAIN GPS and Satellite Communications Act

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GIS Certification Institute (GISCI)

Hawaii Helicopter Association

Helicopter Association International (HAI)

Hellen Systems

Intelligent Transportation Society of America

International Air Transport Association (IATA)

International Association of Assessing Officers (IAAO)

Iowa-Nebraska Equipment Dealers Association

Iridium

L3Harris

Lockheed Martin

Management Association for Private

Photogrammetric Surveyors (MAPPS)

Marine Retailers Association of the Americas

Maxar

MidAmerica GIS Consortium (MAGIC)

National Agricultural Aviation Association

National Air Carrier Association

National Air Transportation Association

(NATA)

National Asphalt Pavement Association

National Business Aviation Association

(NBAA)

National Cotton Council

National Defense Industrial Association

National Marine Manufacturers Association

National Ready Mixed Concrete Association (NRMCA)

National Society of Professional Surveyors (NSPS)

National States Geographic Information Council (NSGIC)

National Stone, Sand and Gravel Association

National Utility Contractors Association

NetJets Association of Shared Aircraft Pilots (NJASAP)

NEXA Capital Partners LLC

Oklahoma Defense Industry Association

Oklahoma Society of Land Surveyors

Polar Cargo

Portland Cement Association

Regional Airline Association (RAA)

Resilient Navigation and Timing Foundation (RNTFnd)

Skytrac

Southwest Airlines

Southwest Airlines Pilots Association

Spirit Airlines

Subsurface Utility Engineering Association

Sun Country Airlines

The Vertical Flight Society

Trimble

U.S. Contract Tower Association

U.S. Geospatial Executives Organization

United Airlines

United States Geospatial Intelligence

Foundation (USGIF)

University Consortium for Geographic

Information Science (UCGIS)

Urban and Regional Information Systems

Association (URISA)

USA Rice