

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Ligado Applications to Modify the Ancillary)	IB Docket No. 11-109
Terrestrial Component (ATC) of Its L-Band Mobile)	IB Docket No. 12-340
Satellite Service (MSS) Networks)	
)	

COMMENTS OF AIRLINES FOR AMERICA

Airlines for America (A4A) on behalf of its member airlines submits these comments to the Commission’s April 22, 2016, Public Notice in the above-referenced dockets seeking comment on the December 31, 2015, license modification applications of New LightSquared (“Ligado”).¹ By the Applications, Ligado seeks to modify the Ancillary Terrestrial Component (“ATC”) of its L-band Mobile Satellite Service (“MSS”) networks. In the Applications, Ligado proposes that certain license conditions be placed on its modified ATC authorization to address interference concerns tailored specifically to protect the use of the Global Positioning System (“GPS”) by the aviation sector, in addition to conditions intended to address interference concerns of the general GPS industry and the public as a whole.

A4A is the principal trade and service organization of the U.S. scheduled airline industry.² A4A vigorously advocates on behalf of its members regarding the regulatory environment, particularly regulations that affect flight safety and efficiency, and to advance the understanding of policy makers that the U.S. airline industry is the indispensable network that drives our nation’s economy and global competitiveness.

I. INTRODUCTION

A4A is a cosignatory to the filing made in this docket by Aviation Spectrum Resources Inc. (ASRI) and several other aviation industry stakeholders (the “Joint Aviation Parties”), and

¹ [cites to April 22 PN]; *see also* Applications of LightSquared Subsidiary LLC, Narrative, IBFS File Nos. SAT-MOD-20151231-00090, SAT-MOD-20151231-00091, and SES-MOD-20151231-00981 (filed Dec. 31, 2015) (“Applications”). Contemporaneously with filing the Applications, Ligado withdrew its 2012 request to modify its MSS licenses.

² A4A airline members are: Alaska Airlines, American Airlines, Atlas Air, FedEx Corporation, Hawaiian Airlines, JetBlue Airways, Southwest Airlines, United Airlines, and UPS Airlines. Our associate member is Air Canada.

we underscore here our support of those comments. Specifically, we urge the Federal Communications Commission (FCC) to delay action on the Ligado proposals because serious safety questions must first be resolved. Significant testing by the Federal Aviation Administration (FAA) must be conducted and any potential interference with safety of flight operations must be fully understood and addressed before Ligado's proposals can be considered by the FCC.

II. Additional Concerns of Airlines for America

A. Automatic Dependent Surveillance – Broadcast Out (ADS-B Out) Mandate, January 1, 2020

As noted in the ASRI filing, “the US aviation industry has invested heavily in GPS-enabled devices to reap the benefits of accuracy and timing, among others, for more efficient operation of its infrastructure. Changes that affect these improvements would result in significant costs and delays for US airlines, and ultimately the flying public.” The FAA's effort, by adopting and implementing a series of technologies and systems, to shift the nation's air traffic control system from ground-based radar to a satellite-based GPS system is known as NextGen. *See* <http://www.faa.gov/nextgen>.

Specifically, FAA has invested substantial public funds, and U.S. airlines have equipped or are equipping (also at considerable expense) all aircraft to comply with the FAA's ADS-B Out mandate by January 1, 2020 as part of NextGen upgrades to management of the National Airspace System (NAS). This effort represents tens of billions of dollars invested in a nationwide infrastructure system and onboard equipment, required by law that cannot be easily modified should Ligado go forward and later discover issues that should have been identified by appropriate testing.

Application of the existing 1 dB metric for the GPS interference criterion is the most appropriate metric for GPS interference, and the Commission should wait until testing being undertaken by the Department of Transportation (“DoT”) using this established metric is completed before taking any action on the proposed license conditions in the applications by Ligado.

B. Future Aviation Applications of GPS Threatened

Public law has specified position reporting accuracy of aircraft GPS far beyond the precision currently required for in flight use (14 CFR §91.227(c)), and greater than the accuracy specified in other countries. This requirement represents FAA's intention that ADS-B In and Out will eventually be used in ground operations. FAA's concern about interference near the surface (below 300 feet above ground level, see Ligado filing) is particularly pertinent.

Under this enhanced and expanded ADS-B scenario, an undefinable array of non-aircraft (non-aviation certified) GPS receivers for location, tracking, and system timing signals is likely to become an integral part of on-airport safety. Secure, non-interference operation of such devices will be critical. Again, the 1 dB metric for the GPS interference criterion is the most appropriate metric and should be employed rather than any Ligado-invented testing procedures.

III. CONCLUSION

A4A, on behalf of its members, urges the FCC to put in abeyance any further consideration of the applications of Ligado to modify the Ancillary Terrestrial Component (ATC) of its L-Band Mobile Satellite Service (MSS) networks.

We fully support the comments submitted by the Joint Aviation Parties, and the technical substantiation contained therein. We agree with and support the request that the FCC allow time for completion and consideration of FAA/DoT testing, and that consistent testing be applied to all devices that are to be used in the airport environment and in flight to assure public safety and the integrity of investments, both public and private. Compliance with public law, and respect for the ongoing vision of NextGen all in the interest of public safety, are paramount.

Respectfully submitted on May 23, 2016, by



Robert L. Ireland

Managing Director, Engineering and Maintenance

Airlines for America