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VIA ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Expanding Access to Broadband and Encouraging Innovation through Establishment of an Air-Ground Mobile Broadband Secondary Service for Passengers Aboard Aircraft in the 14.0-14.5 GHz Band*, GN Docket No.13-114; RM-11640

Dear Ms. Dortch:

I write on behalf of Delta Air Lines, Inc. to express Delta's continued support of the Commission's proposal in its Notice of Proposed Rulemaking ("NPRM") to expand access to, and encourage innovation in, broadband access aboard aircraft.

Headquartered in Atlanta, Georgia, Delta employs nearly 80,000 employees worldwide and operates a mainline fleet of more than 700 aircraft. Delta serves more than 160 million customers each year. With its unsurpassed global network, Delta and the Delta Connection® carriers offer service to more than 327 destinations in 63 countries on six continents. Air-to-ground ("ATG") communications are an important part of Delta's operations. Therefore, Delta has a significant interest in the outcome of this proceeding. As discussed in its previously filed ex parte comments, Delta is eager for the FCC to move forward with completion of this rulemaking and the provision of ATG Service in the 14.0 to 14.5 GHz band.

Delta operates the largest fleet of Gogo Inflight Internet equipped aircraft—a total of 565 domestic mainline aircraft and 255 regional aircraft. This service is extremely popular. Delta's customers have come to expect access to the Internet on every domestic flight, and Delta intends to meet those expectations. However, current bandwidth demands will soon exceed Gogo's terrestrial network capacity. Demand will continue to grow and network capacity issues will become more severe until more spectrum becomes available.

Additional spectrum in the 14 GHz band will open up new options for customers who are increasingly demanding robust Internet access. Internet traffic is increasingly dominated by high-

bandwidth applications with low latency requirements such as video streaming,[1] and the expectations of customers accessing the Internet on flights will follow. Moreover, additional spectrum will also enhance aircraft safety. More in-flight bandwidth will allow the development of better weather tracking, more robust monitoring of flight systems, and better situational awareness for flight control systems.

The safety and security of our passengers and crew is Delta's number one priority. While representatives of the Association of Flight Attendants-CWA ("AFA") have met several times with Commission staff and advisors to suggest that additional spectrum may present an undefined security risk,[2] nothing about the Commission's proposal gives Delta any such concerns. Thousands of Internet-equipped aircraft currently operate each day worldwide. Although this technology has been in use for the greater part of a decade, Delta is aware of no national security incidents caused even in part by the availability of Internet access. This is not because bandwidth is currently limited, as in-flight satellite service provides comparable bandwidth to that sought by the airlines in the 14 GHz band. These satellite services are used often on international routes to and from the United States and other routes worldwide without incident. Delta is confident that opening up more spectrum for its domestic fleet that does not rely on satellite connectivity will not lead to safety concerns.

In addition, the Federal Aviation Administration ("FAA") has studied and is continuing to review the issue of aircraft cyber security in depth.[3] Every piece of equipment, every new item of software, and all related modifications that Delta installs on aircraft have to pass rigorous inspection and evaluation by the FAA. With its heightened focus on cyber security, the FAA will address any issues that could arise from services offered using the 14 GHz band. The FCC should not delay the provision of spectrum based on ambiguous security concerns when these issues are better addressed at a more granular level by the relevant government agencies. Indeed, these agencies have already addressed security concerns in the FCC's 14 GHz proceeding by recommending placing specific conditions on the ATG licenses.[4]

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[1] By May 2014, video already made up 64% of Internet traffic and according to one forecast, 80% of Internet traffic will be consumer video by 2019. *Cisco Visual Networking Index: Forecast and Methodology, 2014-2019*, at 2 (2014), http://www.cisco.com/c/en/us/solutions/collateral/service-provider/ip-ngn-ip-next-generation-network/white_paper_c11-481360.pdf.

[2] *See, e.g*, Letter from Christopher J. Witkowski, Association of Flight Attendants-CWA, to Marlene H. Dortch, FCC, GN Docket No. 13-114 (filed Dec. 3, 2015).

[3] In February, the FAA tasked the Aviation Rulemaking Advisory Committee to study cyber security. *See Federal Aviation Administration, Aviation Rulemaking Advisory Committee—New Task*, 80 Fed. Reg. 5880 (Feb. 3, 2015). The FAA has also issued Policy Statement PS-AIR-21.16-02, *Establishment of Special Conditions for Cyber Security*, which addresses, in part, "non-governmental services" on aircraft. The FAA has also chartered the Radio Technical Commission for Aeronautics ("RTCA") as an expert technical advisory organization to study aviation cyber security, and it has so far issued three reports: *DO-356 Airworthiness Security Networks and Airworthiness* (Sept. 23, 2014); *DO-326A Airworthiness Security Process Specification* (Aug. 6, 2014); *DO-355 Information Security Guidance for Continuing Airworthiness* (June 17, 2014).

[4] In a January 15, 2015 letter representing the views of the entire executive branch, the FBI recommended that if the FCC decides to move forward with the 14 GHz proceeding, it should address "any flight safety, national security or law enforcement concerns" by conditioning licenses on continued coordination with "agencies having jurisdiction over these matters," including Department of Transportation (DOT), Federal Aviation Administration (FAA), Department of Justice (DOJ), FBI, Department of Homeland Security (DHS), and the Transportation Security Administration (TSA).

Furthermore, the FCC need not add delay for another layer of study to an already robust system of review and evaluation. Delta is resolutely focused on the safety and security of its passengers, crew and aircraft, and has every incentive to maintain that focus. It would never offer customers a service that could endanger them. It is extremely unlikely that there would be any risks raised in this proceeding that the airlines and the FAA have not already considered. Delta will continue to work closely with the federal government to address issues of aircraft security, and the FCC's provision of ATG spectrum will be one of many issues that the relevant agencies continue to evaluate.

Delta respectfully requests that the Commission act promptly to move forward with its proposal to establish a new ATG Service in the 14.0 to 14.5 GHz band as detailed in the Commission's Notice of Proposed Rulemaking.

Please do not hesitate to contact me should you have any questions.

Sincerely,

/s/ Samuel L. Feder

Samuel L. Feder

See Letter from Sherry E. Sabol, Acting Deputy General Counsel, FBI, to Marlene H. Dortch, FCC, GN Docket No. 13-114 (filed Jan. 15, 2015).