



THALES

November 15, 2022

The Honorable Brian Deese
National Economic Council Director
Executive Office of the President
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

The Honorable Gina M. Raimondo
Secretary of Commerce
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

The Honorable Pete Buttigieg
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

The Honorable Alan Davidson
Assistant Secretary of Commerce
for Communications and
Information
National Telecommunications and
Information Administration
U.S. Department of Commerce
1401 Constitution Ave. N.W.
Washington, DC 20230

Mr. Billy Nolen
Acting Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, D.C. 20591

Dear Director Deese, Secretary Raimondo, Secretary Buttigieg, Assistant Secretary Davidson and Acting Administrator Nolen:

It has been more than a year since a coalition of aviation stakeholders met with the National Economic Council (NEC) to discuss the need for C-Band 5G implementation to occur without sacrificing aviation safety. This meeting came after years of meetings and letters to the Federal Communications Commission (FCC), the National Telecommunications and Information Agency (NTIA) and the Federal Aviation Administration (FAA) raising significant concerns over the FCC's auction of the 3700-3980 MHz spectrum (C-Band) and how it will impact radar altimeters (RAs) and the continued safe operation of commercial aircraft within the National Airspace System (NAS).

Those meetings, and the last-minute intervention of the Secretary of Transportation prevented the grounding of a significant portion of the US commercial aviation fleet. This marked the beginning of a collaborative and fruitful discussion between the telecommunication industry, specifically Verizon and AT&T, and the aviation industry. However, after a year of discussions and despite accommodations made by all parties, we are now seven months away from the next deadline, with significant risks still unresolved. We believe that by finding accommodations now, we can prevent another last-minute herculean intervention by the Administration and major disruption to our air transport system.

The baseline situation remains unchanged. Our industry is strongly supportive of the deployment and implementation of 5G services nationwide, but we will not compromise aviation safety. Since our conversations last winter, the FAA has verified that certain aircraft RAs are susceptible to interference from 5G signals with a subsequent degradation of safety. Since January 2022 the FAA has documented over 100 FAA incidents of potential 5G interference, the majority of which were found to have a direct RA impact resulting in safety alerts by systems such as the Terrain Avoidance Warning System. Unfortunately, the US government agencies do not appear to be on the same page with respect to these safety issues. As a result, aviation stakeholders are caught in the middle and ultimately passengers and shippers will be the ones who will bear the brunt of any operational disruption caused if this issue is not resolved.

Inter-agency government progress appears to be at a stalemate, while stakeholders are doing their part to address these issues. Aviation stakeholders, the FAA, and AT&T and Verizon have spent much of the last year trying to understand and implement what is required to continue safely operating aircraft in a 5G environment. This has required compromise, understanding, and investment by all parties. AT&T and Verizon implemented various mitigations, such as taking a phased approach to maintain lower power levels near airports and tilting antennas downward and have agreed to continue those mitigations through July 2023. The aviation industry is taking on the burden of designing and implementing a fleet retrofit to ensure that RAs are not compromised, and the flying public and shippers can have confidence in the aviation system. Retrofitting the entire airline fleet in less than two years is unprecedented.

Unfortunately, due to global supply chain issues, lack of a certified solution for one key RA, and the FAA only recently identifying the criteria for RAs that would not need to be changed, RA manufacturers and air carriers will likely be unable to fully meet either the December 2022 deadline for smaller regional aircraft nor the July 2023 retrofit deadline, though we continue to do everything within our power to do so. Further, all this investment will be wasted if a long-term mitigation plan is not put in place and codified in regulation, as additional wireless providers that have not been part of these interim voluntary efforts begin to provide services.

Our aviation coalition strongly believes that instead of once again waiting until the eleventh hour, now is the time for the leadership at federal agencies and the White House to implement a solution that allows 5G to move forward and avoid further flight delays and cancellations. The FAA recently sent a petition to the NTIA and FCC requesting a codification of reasonable mitigations. While we have not seen the FAA's official petition to the NTIA and FCC, the FAA has informed stakeholders that to continue the operational safety of the NAS, the FCC rules and applicable Report and Order [FCC-20-22](#) should be modified to address safety issues raised by the FAA. Furthermore, as the FCC, NTIA and FAA work to codify these requirements, it is critical to extend these mitigations through the end of 2023 to allow airlines time to complete the retrofit. We respectfully request that the US government share with stakeholders and the public the entire content of the petition by Friday November 18, 2023. The public has a strong interest in having access to the basis for concerns about aviation safety.

We will continue to be committed to finding reasonable solutions that allow implementation of 5G while addressing safety and operational disruptions in the NAS. Stakeholders cannot do this alone and we need the federal government to codify mitigations for all airports and extend the July 2023 and "Power Up" retrofit deadlines. The entire government must work together to ensure future 5G deployment is unencumbered and our aviation system remains the safest in the world. Aviation stakeholders call on the Administration to meet with us to discuss a way forward that will achieve the goal of moving 5G forward, while ensuring passengers and cargo reach their destinations safely and on time.

Sincerely,

*Aerospace Industries Association
Aerospace Vehicle Systems Institute
Air Line Pilots Association, International*

*Airborne Public Safety Association
AIRBUS Operations S.A.S.
Aircraft Owners and Pilots Association*

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Airlines for America
Boeing
Cargo Airline Association
Collins Aerospace
Embraer
Experimental Aircraft Association, Inc.
Garmin
General Aviation Manufacturers Association

Helicopter Association International
International Air Transport Association
National Air Carrier Association
Raytheon Technologies
Regional Air Cargo Carriers Association
Regional Airline Association
RTCA
Thales

cc: Jessica Rosenworcel, Chairwoman, Federal Communications Commission