

May 27, 2020 – Washington DC

## **AVIATION AND AEROSPACE ORGANIZATIONS REQUEST THE FCC PROTECT FLIGHT SAFETY IN ITS C-BAND PROCEEDING**

Eleven private sector aviation and aerospace organizations have [requested the Federal Communications Commission \(FCC\) to reconsider parts of its recent C-Band Order to protect aviation safety](#). The petitioners are asking the FCC revisit how it applies protections to adjacent band radio altimeter operations that are essential to safe air travel. The petitioners include: The Aerospace Industries Association (AIA), the Aerospace Vehicle Systems Institute (AVSI), Air Line Pilots Association, International (ALPA), Airbus, Aviation Spectrum Resources, Inc. (ASRI), Garmin International, Inc., the General Aviation Manufacturers Association (GAMA), the Helicopter Association International (HAI), Honeywell International Inc., the International Air Transport Association (IATA), and the National Air Transportation Association (NATA).

The following statements have been provided by individual companies supporting the petition for reconsideration:

Capt. Joe DePete, President of the **Air Line Pilots Association, Int'l (ALPA)** said: “ALPA supports the thoughtful and safe deployment of technology, but the planned implementation of a 5G mobile wireless system in this frequency band does not take into consideration existing users on nearby frequencies, including aviation. Deploying 5G near the radio altimeter frequency – used on commercial aircraft – without adequate testing and validation that the protections are adequate, could pose a serious threat to safe flight during critical operations such as landing during bad weather and fog. Additionally, the interference could render useless important safety equipment onboard aircraft such as the Terrain Awareness and Warning System (TAWS), which is required on all U.S. commercial aircraft and has led to zero passenger fatalities due to controlled flight into terrain for the past 15 years. ALPA urges the FCC to take an active role in ensuring a safe 5G deployment in this band.”

**Aerospace Industries Association (AIA)** said: “Radio altimeters depend on interference-free spectrum to ensure the safe operation of every commercial, military, and helicopter flight. Testing shows that the FCC’s ‘C-Band’ decision would significantly increase the risk of interference and potentially jeopardize the safety of the flying public. We fully support the FCC’s mission to make new spectrum available for 5G, but this must be done in a way that protects aviation safety. With this motion, we urge the FCC to reconsider their decision and allow safety and data to drive their decision-making on spectrum.”

**Aviation Spectrum Resources, Inc. (ASRI)** said. “ASRI is jointly supporting the petition for partial reconsideration of the FCC’s decision concerning C-band and its effects on radio altimeters, a system critical to modern flight and aviation safety. Radio altimeters have been

operating adjacent to the 3.7-4.2 GHz Band for over half a century and enabled many safety features that have become essential to modern air travel, such as autoland and terrain avoidance functions. As seen from the investigation of several deadly aviation crashes, tragic accidents can result from erroneous radio altimeter readings. While ASRI has no position on the clearing and auctioning of the intended portion of the C-Band spectrum, it is plain that the FCC's decision did not adequately provide for the protection of radio altimeters given the evidence that had been presented in the C-Band proceeding, pushing the problem of radio altimeter interference protection onto the aviation industry itself. Therefore, ASRI supports the many other aviation and aerospace organizations in formally requesting the FCC revisit its decision and modify its rules as needed to ensure the current safe and efficient airspace that the United States currently enjoys. ASRI stands ready to work with the FCC, the commercial wireless industry stakeholders, and its fellow aviation industry members to address this situation in a timely manner as the FCC moves towards the December auction."

**Garmin International, Inc.** announced that it has joined a broad aviation industry coalition in urging the Federal Communications Commission (FCC) to reconsider its Report and Order to repurpose C-band frequency spectrum nearby to the frequency band that is used by safety-critical FAA-certified radio altimeters, including Garmin's GRA 5500 and GRA 55. Radio altimeters are essential to safe airplane and helicopter operations, allowing pilots to safely land and avoid terrain, particularly during poor weather conditions and low visibility. The industry coalition is working to ensure radio altimeters are appropriately protected from prospective flexible-use applications, including 5G operations.

Despite assurances by the FCC Chairman to Congress that the C-band Report and Order would "be carefully designed so that aircraft are able to use [radio] altimeters in a continuous and uninterrupted manner," it fails to do so. The industry coalition does not seek to block repurposing the C-band spectrum. Instead, the coalition seeks a path that will make the C-band spectrum available for purposes such as 5G, while ensuring full protection of radio altimeters.

**General Aviation Manufacturers Association (GAMA)** said "For decades, the aviation community has relied on the use of radio altimeters, particularly during the take-off and landing phases of flight. Given its critical importance during periods of bad weather, low visibility and difficult maneuvers, it is imperative that the FCC reconsider its decision and protect this flight safety tool from harmful interference."

**Helicopter Association International (HAI)** said: "HAI, the professional trade association for the international manned and unmanned rotorcraft industry, supports the petition for partial reconsideration of the FCC's decision concerning C-band and its effects on radio altimeters. HAI strongly believes that any decision to repurpose the 3.7 to 4.2 GHz band must be fully supported by appropriate analyses and testing to ensure a complete understanding of any interference with or adverse impacts on aviation critical systems.

Radio altimeters are central to safe and reliable vertical flight, including that of helicopters and UAS, especially in low-altitude maneuvers near structures, terrain, and other obstacles. Radio altimeters will also be an important enabler for future UAM operations. The radio altimeter has been cited as a key contributing factor in the prevention of numerous aviation accidents. Thousands of helicopters, including those in our military, are outfitted with radio altimeters, and their crews rely on them every day. Plainly stated, radio altimeters save lives. HAI recognizes the benefits that come with an effective utilization of the radio spectrum. However, in consideration of the potential adverse effects on safety-of-flight systems, HAI strongly recommends that the Commission partner closely with the FAA, NTSB, and industry to gain a complete understanding of the potential impacts on radio altimeter operations that could result from commercial wireless operations in the 3.7 to 4.2 GHz band.”

Douglas Lavin, Vice President, Member and External Relations, the **International Air Transport Association (IATA)** said. “The accurate and reliable operation of the radio altimeter is critical to safety of flight. A joint effort and assessment by all stakeholders including the FCC, aviation, satellite and 5G, are key to ensuring safe and effective co-existence of all systems. It’s important we promptly work together to get this right,”

“Recent decisions by the FCC have the potential for significantly impacting the safety of our national airspace system through interference with radio altimeters,” stated **National Air Transportation Association (NATA)** Vice President of Regulatory Affairs John McGraw. “NATA is pleased to join a broad Industry coalition with the goal to further protect critical aviation systems from interference that could put the safety of our members’ operations at risk.”