August 17, 2017

Marlene Dortch

Secretary

Federal Communications Commission

445 12th Street, S.W.

Washington, D.C. 20554

Re:*WiMAX Forum Petition Proposing Rules for the Aeronautical Mobile Airport Communications Systems, RM-11793*

Dear Ms. Dortch:

On behalf of ARINC Industry Activities and the Airlines Electronic Engineering Committee (AEEC), I wish to express support for the Petition filed by the WiMAX Forum proposing services rules for the Aeronautical Mobile Airport Communications Systems (AeroMACS).[[1]](#footnote-1) The worldwide deployment of AeroMACS will bring significant benefits to the airline operators, cargo operators, air travelers, equipment manufacturers, and many others. The Commission should therefore move quickly to adopt a Notice of Proposed Rulemaking proposing service rules for AeroMACS.

AeroMACS is an airport surface communications system that will enable the growth of data communication infrastructure at airports in the United States and around the world. As the airline demand for high-bandwidth, data intensive services and applications continues to grow, the global aviation community looks to AeroMACS to meet these needs for airport surface communications. The FCC has adopted globally harmonized allocations for AeroMACS in the 5000-5030 MHz and 5091-5150 MHz bands, but the lack of service rules has hindered the widespread deployment of this service in the United States.

The deployment of AeroMACS communication on the airport surface will provide significant benefits to the many airlines that operate at those airports. The high-bandwidth communications services and applications provided by AeroMACS will establish a new framework for airport surface communications infrastructure that will advance the safety and regulatory of flight. For example, AeroMACS has the potential to serve aviation with up-to-date flight plan information, taxi operations, weather maps, weather forecasts, and offer significant possibilities for new capabilities. In addition, airport operations personnel will be able to use AeroMACS networks to perform a host of tasks ranging from coordinating gate operations to snow removal to support for emergency services.

The adoption of service rules will also help promote manufacturing and investment in new AeroMACS products and services. Many equipment manufacturers already have commercial AeroMACS kits available, but large-scale manufacturing remains contingent upon the adoption of service rules. Moreover, the adoption of service rules will spur investment in new and innovative products and services that can be deployed on AeroMACS networks.

ARINC is an international standards organization responsible for organizing and leading the Airlines Electronic Engineering Committee (AEEC). Over 4000 engineers and scientists representing nearly 250 sponsoring organizations participate in the development of ARINC Standards. The AEEC is producing international standards for AeroMACS and other related data communication systems. The AEEC has prepared consensus-based industry standards for over six decades.

**ARINC Characteristic 766:** *Aeronautical Mobile Airport Communication System (AeroMACS) Transceiver and Aircraft Installation Standards* (July 7, 2017) has been developed by the aviation industry for the purpose of enabling high-bandwidth data communication to and from the aircraft on the airport surface. The AEEC has developed this standard with the dedicated participation of airlines, airframe manufacturers, AeroMACS radio suppliers, FAA, EUROCONTROL and many others. Additionally, the AEEC is leading the activity of standards for introducing the Internet Protocol Suite for Aeronautical Safety Services. These standards are expected to aid in the development of safe, secure, reliable communication on the airport surface.

The Public Notice released by the Commission seeks comment on the issues proposed in the Petition.[[2]](#footnote-2) ARINC and AEEC supports comments on these issues as follows:

**Licensing scheme and use of a Channel Manager to determine eligibility and coordinate non-Federal channel usage.** We support the proposal that non-Federal eligible users share available channels under the auspices of a single Commission-appointed nationwide Channel Manager. This licensing scheme is the most efficient way of optimizing the limited spectrum in these bands. A Channel Manager, with oversight from industry participants such as the airport and airline communities, is best positioned to allocate spectrum fairly on a non-discriminatory basis. Relatedly, we support the proposal that non-Federal eligible users be “licensed by rule” under Part 95 and be able to register sites and secure AeroMACS channels by applying to the Channel Manager. This licensing approach is the simplest, fairest and most economical way to assign AeroMACS channels.

**Eligibility of non-Federal entities to use AeroMACS.** We support the Petition’s proposed non-exhaustive list of eligible users, which includes airports, airlines, airline navigation service providers, and aeronautical communications network providers. This list of eligible users includes all entities that are likely to utilize the spectrum in furtherance of the safety and regularity of flight mandate for which the spectrum was originally allocated. Robust access to this spectrum by a variety of users will ensure that we realize the envisioned benefits of safety and regulatory of flight.

**Appropriate technical characteristics and equipment certification requirements.** We support the existing technical characteristics and equipment certifications rules. Specifically, the technical rules for AeroMACS are derived from Standards and Recommended Practices of partner organizations, i.e., ICAO, RTCA, EUROCAE, etc. Adoption of applicable rules will aid in efforts to globally harmonize operations in this band, thus speeding deployment of AeroMACS networks worldwide.

Finally, we at ARINC wish to express its deepest appreciation to the WiMAX Forum for not only submitting this important Petition, but also for its continued leadership in AeroMACS on a worldwide level. AeroMACS truly has no better informed or influential advocate, and we are well served by their direction.

Thank you for seeking comment on the important issues raised in the Petition. In light of the significant benefits that will be realized by the swift and widespread deployment of AeroMACS networks, ARINC Industry Activities and the AEEC urges the Commission to expeditiously adopt a Notice of Proposed Rulemaking proposing service rules for AeroMACS.

Sincerely,

Paul J. Prisaznuk

AEEC Executive Secretary & Program Director

ARINC Industry Activities

cc: Chairman Ajit Pai

Commissioner Mignon Clyburn

Commissioner Mike O’Rielly

Commissioner Brendan Carr

Commissioner Jessica Rosenworcel

Donald Stockdale, Chief, Wireless Telecommunications Bureau

Julius Knapp, Chief, Office of Engineering and Technology

1. *See* WiMAX Forum Petition for Rulemaking to Adopt AeroMACS Service Rules (filed Mar. 31, 2017) (“Petition”). [↑](#footnote-ref-1)
2. *See Wireless Telecommunications Bureau Seeks Comment on WiMAX Forum Petition Proposing Rules for the Aeronautical Mobile Airport Communication System*, Public Notice, DA-17-696 (rel. Jul. 19, 2017 WTB) (“Public Notice”). [↑](#footnote-ref-2)