



AFC Items for the ASRI Board of Directors

AFC Winter 2015

AFC Items for the BOD



The following items are a summary of the last Aeronautical Frequency Committee (AFC) to be brought to the attention of the ASRI Board of Directors.

They are not listed by priority.

VDLM2 Frequency Planning



ASRI has begun clearing capacity for a VDLM2 channel plan in the upper AOC frequency band. The project has 4 separate phases:

- Plan created 4 phases
 1. Clear lower band voice users for ACARS networks
 2. Migrate upper band voice users
 3. Migrate ACARS networks
 - a. RC and SITA enroute networks
 - b. SITA ACARS base frequency
 4. Assign VDLM2 frequencies

- On target to complete all phases by Q2 2017
 - Voice users clear by Q2 2015
 - First VDLM2 frequencies available by Q3 2015

SITA ACARS Frequency Clearance



- SITA is planning to migrate its ACARS base frequency from 136.850 to 131.725 MHz to allow VDLM2 deployment.
- AFC agreed that this would be completed by Q2 2017 for the GS network in North America.
- SITA is coordinating with the airlines (domestic and international) for the required avionics compatibility.

AOC Comm Capabilities Survey



2015 Survey results compiled from most US carriers:

- 8.33K equipage 90% wide-body, 50% narrow body
- VDLM2 equipage 30% wide-body, 60% narrow-body
- VDLM2 MF rates between 20-25% of VDLM2 equipped aircraft
 - There was discussion that this could be lower, but is expected to grow with new aircraft

AFC agreed that 8.33k is not a near term requirement

AeroMACS



The FAA have begun deploying fixed links in the AeroMACS allocation for ATS services on airports.

The AFC is gathering industry requirements for commercial AOC applications that will use the AeroMACS system. As this information will define the AFC's intent and potential regulatory actions, the AFC encourages all carriers to participate in the process.

Iridium ADS-B Upgrade



Iridium Satellite, LLC and NAV Canada have formed a joint venture with support from Harris and ITT Exelis called AIREON to install ADS-B equipment on Iridium's next generation satellites. The system will be receive only, listening for existing ADS-B signals transmitted by an aircraft.

The AFC supports the introduction of the service subject to it not requiring any changes to existing aeronavigation systems or procedures.

SELCAL Code Expansion



The limitation on available SELCAL codes is leading to regular occurrences of duplicate messages, with code reuse now averaging 1 code per 3 aircraft.

With demand increasing at 13% a year, ASRI is working with ICAO, ANSPs, avionics vendors and the FAA to raise the number of available codes to fulfill future demand. A solution has been agreed to increase the number of available tones to 32, while maintaining full compatibility with existing 12 and 16 tone systems without modification.

The AFC requests continued airline and ANSP support in the RTCA, AEEC and ICAO process.

WRC-15 Agenda Items



The AFC has begun planning for WRC-15 and the items relevant to commercial North American aviation industry:

1.1 New mobile broadband allocations

1.4 Amateur HF allocation

1.5 Use of fixed satellite services use for UAS

1.7 AeroMACS interference to fixed satellite services

1.17 New Wireless Avionics System allocation

9.1.5 VSAT protection for African region ATM networks