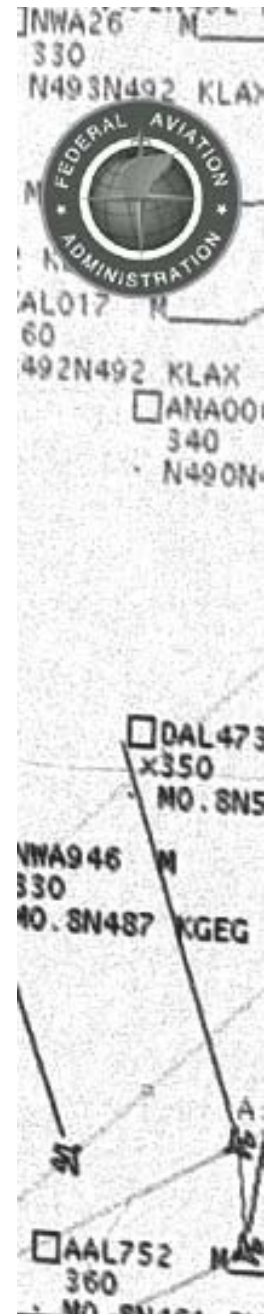


Outcome of the 2007 World Radiocommunication Conference (WRC-07)

ICNS Conference
May 2008



WRC-07

- WRC is a Meeting of the International Telecommunication Union
 - Special Committee of the United Nations
 - Decisions have treaty status
- WRC every 3 to 4 years
- Decides
 - Global Frequency Allocations
 - System standards, technical parameters and procedures
- WRC-07 was held October 22- November 16, 2007
 - Over 2000 participants from more than 180 countries



WRC-07 Agenda Items

- Three agenda items were of particular interest to aviation
- A fourth agenda item set the agenda for WRC-11



WRC-07 Agenda Item 1.3

- Upgrade the radiolocation allocation in 9 GHz band to primary allocation
 - Band used for ASDE
 - Primarily to support evolving wideband (e.g., 500 MHz) radar systems
 - Studies have shown that in general different radar systems can coexist
- Agreed approach makes radiolocation NIB to radionavigation
 - Regulatory “hammer” if future problems
 - “Win” for aviation



WRC-07 Agenda Item 1.5

- Additional spectrum for aeronautical telemetry and telecommand.
 - Telemetry is passing of data (engine function, control surfaces, sensor outputs, etc) during flight tests
 - Telecommand involves aircraft control.
- WRC made a global allocation in 5091-5150 MHz and regional/sub-regional in 4 and 6 GHz spectrum and 5150-5250 MHz
 - 5091-5150 MHz allocation is limited to air-to-ground telemetry only for flight testing
 - Air-ground to facilitate compatibility with existing FSS
 - Flight test to facilitate compatibility with new AM(R)S (see next AI)
 - Similar restrictions in other bands



WRC-07 Agenda Item 1.6

- Aeronautical Mobile (Route) Service (AM(R)S) communications are defined as safety communications requiring high integrity and rapid response
 - Air Traffic Control (ATC)
 - Aeronautical Operational Control, (AOC)
 - Some aeronautical navigation applications
 - don't meet radionavigation definition
- New AM(R)S Allocations made for:
 - 112-117.975 MHz band
 - Actually just removed prior AM(R)S limitation to “support of navigation/surveillance functions”
 - 960-1164 MHz band (L-band)
 - 5091-5150 MHz band (“C-Band”)
 - Airport surface network system
 - Short range, high data throughput
- All allocations require new AM(R)S systems to operate in accordance with ICAO standards



WRC-07 Agenda Item 7.2 (Agenda for WRC-11)

- AI 1.3 Unmanned Aerial Systems (UAS)
 - Communications and situational awareness
 - Payload excluded
- AI 1.4 AM(R)S
 - Review of provisions for new VHF and L-Band allocations and possible new C-Band allocation (5000-5030 MHz)
- AI 1.7 1.5/1.6 GHz AMS(R)S
 - WRC-97 made spectrum generic MSS
 - Gives priority to AMS(R)S requirements
 - Studies indicate inter-system priority/pre-emption not feasible
 - Review to see if alternate requirements needed
 - Based on Japanese operator complaints re access to spectrum)
- AI1.21 15 GHz radiolocation
- AI1.25 New MSS allocations
 - Need for additional AMS(R)S?

