

# CPWG/5

## RTCA SC 215 Iridium Satellite Status

**Presented To: CPWG**

**By: Dave Robinson, FAA, Iridium DFO**

**April 1-3, 2008**



**Federal Aviation  
Administration**



# Special Committee RTCA SC 215

- **ICAO Approval of Iridium Safety Services for Air Traffic Control Communications**
  - Revisions of International Civil Aviation Organization (ICAO) AMS(R)S Standards and Recommended Practices (SARPs) – Approval by ICAO Member States November 2007
  - FAA-sponsored ICAO AMS(R)S working group to draft Iridium-specific guidance material
  - FAA and International participation
  - ICAO approval of Iridium Implementation and Technical Manual and Validation Report for AMS(R)S

**Approved**



# Special Committee RTCA SC 215

- **An RTCA Committee was formed to build upon the ICAO approvals for U.S. certification of Iridium Safety Services**
- **RTCA SC-215 kicked off in March 2007**
- **TOR include: Drafting of Iridium specific normative appendices for DO-262 Avionics MOPS and DO-270 MASPS**
- **6 Plenary Meetings held with the next planned for April 30, 2008**
- **FAA and Industry participation**



# Special Committee RTCA SC 215

## MOPS Status

- DO-262, Minimum Operational Performance Standards (MOPS) for Avionics Supporting Next Generation Satellite Systems (NGSS) – **Revision A to include Iridium Satellite Normative Appendix**
- **Iridium System Specific materials will lead to a revision of TSO C159**

**Near completion**

**Target for PMC Review in Q3 / Q4 2008**



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## MASPS Status

- DO-270, Minimum Aviation System Performance Standards (MASPS) for the Aeronautical Mobile-Satellite (R) Service (AMS(R)S) as Used in Aeronautical Data Links – **Iridium Satellite System Specific Appendix**
- **DO-270 Iridium System specific information to be presented to FAA for operational approval**

**Draft in work**

Target for PMC Review Q1 2009



# Special Committee RTCA SC 215

## TSO C 159

This standard applies to equipment intended to provide Aeronautical Mobile Satellite (R) Services (AMS(R)S) by means of satellite communications between Aircraft Earth Stations (AES), corresponding satellites, and Ground Earth Stations (GES).

The Iridium Satellite System will support data communications between aircraft users and ground-based users, such as Air Route Traffic Control Centers (ARTCCs) and aircraft operators.

**In work**



# Special Committee RTCA SC 215

## Operational Approval Status

AC 120-70A Operational Authorization  
Process for use of Data Link Communication  
System

**Under Revision**



# PARC

## PARC: Performance-Based operation Aviation Rulemaking Committee

**SC-215 is working in parallel with PARC CWG on Iridium Satellite approval**

### TOR

To Produce a roadmap to apply Required Communication Performance, initially to implement:

30/30 NM Separation Minima

Clearance delivery in U.S domestic enroute airspace

To produce data link capability in all airspace domains (oceanic & domestic)

- Include interoperability criteria
- Consider Convergence (FANS/oceanic & ATN/continental)
- Address Technology Issues (RF, SAT, Broadband)





# PARC

- Planning bench tests with Oceanic ATC Center (OAC) to start in April
- Pending results of bench tests, plan is to start flight operational trials with Continental Airlines in July time frame
- Continental Airline Trials for LRCS schedule (summer 08) with 9 AC equipped for test from Guam to Japan
- Next meeting 6-8 May in Houston, TX, hosted by Continental Airlines
- Contact [tom.kraft@faa.gov](mailto:tom.kraft@faa.gov) or [aoldach@rockwellcollins](mailto:aoldach@rockwellcollins) for further information



# Questions?

