

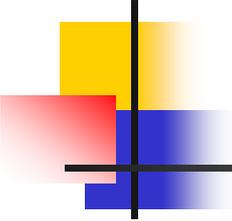
The U.S. Flight Test Perspective On WRC-15

A Presentation to the International
Consortium for Telemetry Spectrum

October 26, 2015

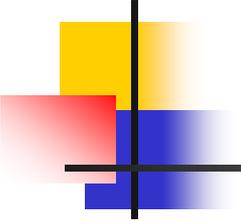
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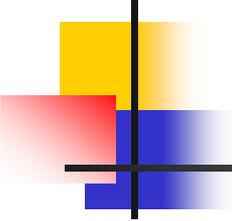
Introduction

- World Radiocommunication Conference begins next week
 - to be held November 2-27 in Geneva
 - 180 nations, 3000 delegates
 - ~20 items on the agenda (not counting standing items)
- Major flight test band, 1435-1525 MHz, targeted for International Mobile Telecommunications ("IMT) use
- Another issue of interest deals with spectrum for Unmanned Aircraft Systems ("UAS")



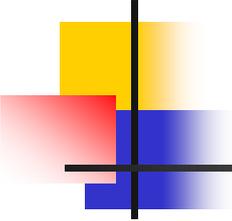
L-band

- A principal item on the agenda for 2015 World Radiocommunication Conference is allocation of additional spectrum for mobile broadband devices (aka “IMT”)
- Numerous administrations in Europe, Asia and Africa, have identified 1435-1525 MHz as a leading candidate for IMT. Band will be identified/allocated for IMT at the Conference



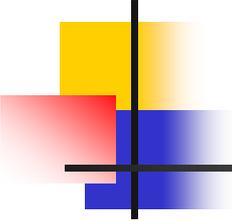
L-band (cont.)

- U.S. has urged consistently no change in ITU Radio Regulation 5.343
 - footnote specifies priority for aeronautical mobile telemetry ("AMT") in the Americas, i.e. *"In Region 2, the use of the band 1435-1535 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service."*
- Working with other administrations in North and South America, an Inter-American Proposal ("IAP") was approved by CITELE in late August for a No Change proposal on RR 5.343



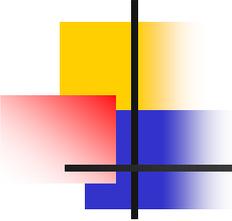
L-band (cont.)

- CITELE administrations also agreed to identify 1427-1518 MHz as band for IMT
- However, U.S. has stated that it has no intention of implementing IMT in L-band
- Post-WRC, bi-lateral negotiations to be expected with Canada and Mexico



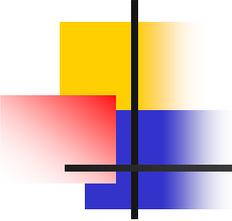
L-band (cont.)

- similar to bi-lateral Canada-U.S. negotiations held in 1998
- at that time, the two administrations negotiated mutual protections for U.S. AMT systems and Canadian T-DAB systems in 1452-1492 MHz along the border
- List of potentially affected U.S. AMT sites, government and non-Government, sent to Canada



UAS Command and Control

- Studies establish that unmanned aircraft can operate in non-segregated airspace using frequency bands allocated to the fixed-satellite service (“FSS”) for beyond line-of-sight (“BLOS”) command and control.
- Studies provide a comprehensive list of mitigation techniques available for UAS links which can be used to overcome changes in the interference environment.



UAS Command and Control (cont.)

- US urges use of the fixed-satellite service by unmanned aircraft for command and control links with a broad set of possible satellite bands, e.g. 10.95-14.5 GHz (Ku) and 17.3-30.0 GHz (Ka).

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