

# Telemetry Band Augmentation:



An Agenda Item at the Next World Radiocommunication Council



Presented by the  
**International Consortium for Telemetry Spectrum**

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# What You Will See and Hear



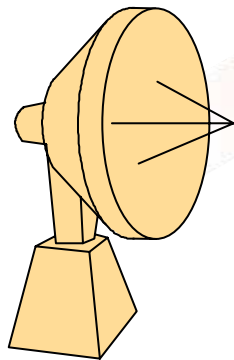
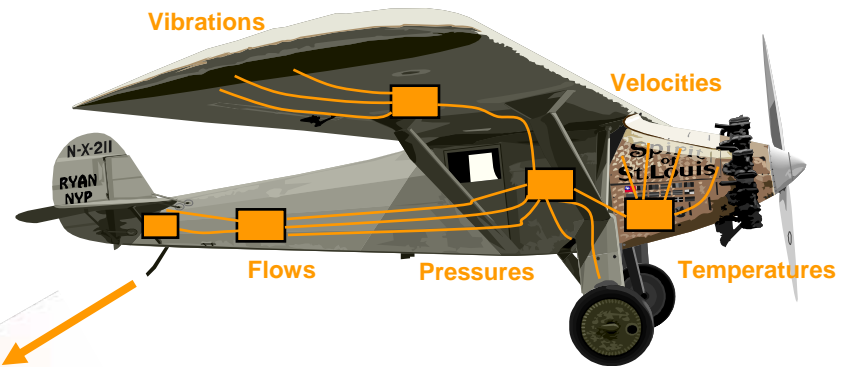
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- A video describing how aerospace vehicles are tested, what telemetry is and how telemetry is used
- A brief view of how telemetry is used around the world
- A summary of conclusions

# What is Telemetry?

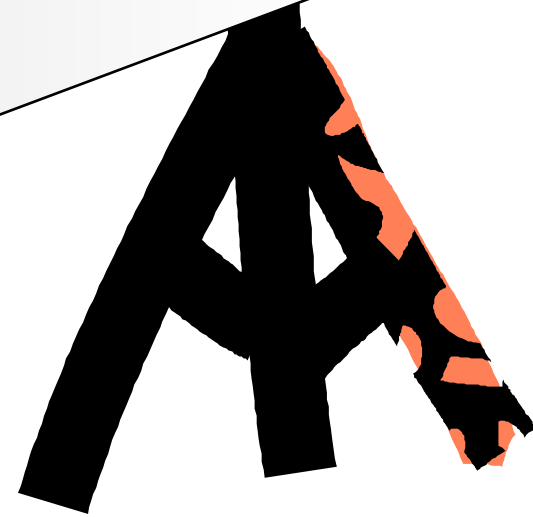
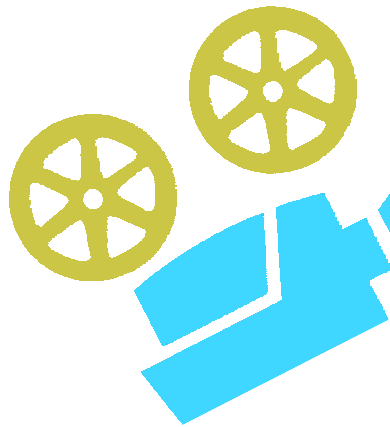
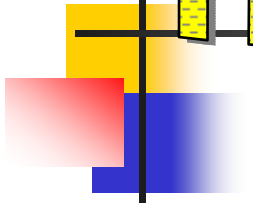
➤ **Telemetry** : The process of measuring at a distance.

➤ **Example: Aeronautical telemetry**: The process of making measurements on an aeronautical vehicle and sending those measurements to a distant location for analysis



If it is **ORANGE** it is flight test measurement

# Time for the Cinema!



# Summary



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- Revolutionary advances in aeronautics and computing have made modern aerial vehicles **extraordinarily complex**
- Aircraft designers seek to capture the **last ounce of performance** and efficiency, while not crossing the fine line of instability
- Flight test telemetry is the **link between the simulated world** of aircraft design **and the real-world** of actual flight -- ***BUT*** ...

# Summary (concluded)



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- The spectrum allocated for flight testing has been outstripped by an **exponential growth** in telemetry measurements and data rates.
- **Additional spectrum** is **essential to reduce risks** in flight testing
- **Additional spectrum** is **essential** to ensure that next generation aircraft are **brought to market sooner, safer, and at less cost**
- **Additional spectrum** is **essential** to support the **needs of national air carriers and researchers**

# Consequences



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- Constrained Flight Test
  - Increased purchase costs
  - Increased delivery schedules
  - Increased recertification schedules
- Constrained R&D
  - Space Launch Vehicle Monitoring
  - Atmospheric sensors & platforms
    - Sounding Rockets, Balloons
    - Research Aircraft



**WRC07/ 1.5**

**Questions?**



