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AIAA: Standards Program

Domestic/National Program

- ANSI and AIAA documents
- U.S. Technical Advisory Groups (TAGs)
  - U.S. TAG for ISO/TC 20/SC 14

International Program

- Secretariat for ISO/TC 20/SC 14 (Space Systems and Operations)
Consensus Bodies: AIAA Committees on Standards (CoS)
- Examples:
  - Aerospace Pressure Vessels, Mass Properties, Commercial Space

Published Docs: Aerospace Research Central (ARC)
- Examples:
  - Space Systems—Composite Overwrapped Pressure Vessels (ANSI/AIAA S-081B-2018)
  - Occupant-Imparted Loads for Commercial Suborbital RLVs (AIAA/CSF S-143-2016)

- Provides the U.S. position and comments on SC14 projects
ISO/TC 20/SC 14: Space Systems and Operations

- **Working Group 1: Design Engineering and Production**
  - *Space systems — Mass properties control* (ISO 22010)
  - *Space systems — Explosive systems and devices* (ISO 26871)

- **Working Group 2: System Requirements, Verification and Validation, Interfaces, Integration, and Test**
  - *Space systems — General test documentation* (ISO 17566)
  - *Space systems — Spacecraft to launch vehicle interface control document* (ISO 15863)

- **Working Group 3: Operations and Support Systems**
  - *Space systems — Disposal of orbital launch stages* (ISO 16699)
  - *Space systems — Rendezvous and Proximity Operations (RPO) and On Orbit Servicing (OOS) — Programmatic Principles and Practices* (Under Development, future ISO 24330)
ISO/TC 20/SC 14: Space Systems and Operations

- **Working Group 4: Space Environment (Natural and Artificial)**
  - *Space systems* — Lunar simulants (ISO 10788)
  - *Space environment (natural and artificial)* — Earth upper atmosphere (ISO 14222)

- **Working Group 5: Space System Program Management and Quality**
  - *Space systems* — Definition of the Technology Readiness Levels (TRL) and their criteria of assessment (ISO 16290)
  - *Space systems* — Off-the-shelf item utilization (ISO 21350)

- **Working Group 6: Materials and Processes**
  - *Space systems* — Contamination and cleanliness control (ISO 15388)
Working Group 7: Orbital Debris
- Space systems — Space debris mitigation requirements (ISO 24113)
- Space systems — Space debris mitigation design and operation guidelines for spacecraft [Technical Report] (ISO/TR 18146)

ISO/TC 20/SC 14 **Work Program** (Published Docs and Projects Under Development)

- Harmonization of terms (within SC14 and with SC13)
- Russia is proposing a Working Group (WG8) on the topic of “Manned Space Flights”
  - Will be discussed at the May 2020 meeting in Ukraine
Contact Information

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