

GNSS Avionics Standards

ADS-B Workshop – SP/20

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Federal Aviation
Administration



GNSS Technical Standard Orders (TSO)

- **TSO-C129a**
 - RTCA DO-208
 - Most deployed GNSS today meet this specification
 - Does not guarantee ADS-B compliance, refer to AC 20-165
- **TSO-C145c**
 - RTCA DO-229d
 - Many incremental improvements to TSO-C129a
 - Satellite Based Augmentation Systems (SBAS)
 - U.S. SBAS is known as Wide Area Augmentation System (WAAS)
 - Several existing GNSS meet this specification, few deployed
 - Does not guarantee ADS-B compliance , refer to AC 20-165
- **TSO-C146c**
 - Same as TSO-C145c but for stand-alone GNSS

GNSS Technical Standard Orders (TSO)

- **TSO-C161a**
 - RTCA DO-253c
 - Ground Based Augmentation System (GBAS)
 - U.S. GBAS is known as Local Area Augmentation System (LAAS)
 - Does not guarantee ADS-B compliance, refer to AC 20-165
- **TSO-C196**
 - RTCA DO-316
 - Many incremental improvements to TSO-C129a
 - No Satellite Based Augmentation System (SBAS)
 - Currently no GNSS meet this specification
 - Does not guarantee ADS-B compliance , refer to AC 20-165

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TSO's and Advisory Circulars
<http://rgl.faa.gov/>

