

ANNEX C
TO TAA ADVISORY 2021-01
DATED 6 MAY 2021
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Table C-1 – Example of a Partial ADS-B Out Criteria Table

Criterion # (AC 20-165B)	Criterion Text	Compliance Technique	Compliance Notes	Results (Met / Not Met)	Comments
3.1	General Installation Guidance	N/A	N/A, title only		
3.1.1	Environmental Qualification Ensure the environmental qualification of the installed equipment is appropriate for the aircraft, in accordance with AC 21-16G, <i>RTCA Document DO-160 versions D, E, F, and G, "Environmental Conditions and Test Procedures for Airborne Equipment"</i> .	Description	Engineering Inspection		
3.1.2	The ADS-B System Design Assurance (SDA) parameter indicates the probability of an ADS-B system malfunction causing false or misleading position information or position quality metrics to be transmitted. SDA may be preset at installation for systems that do not use multiple position sources with different design assurance levels; otherwise the system must be capable of adjusting the SDA broadcast parameter to match the position source being employed at the time of transmission.	Description, Analysis	Engineering Inspection		
3.1.2.1	Compliant Architecture	N/A	N/A, title only		
3.1.2.1.1	ADS-B equipment that meets the minimum performance requirements of TSO-C166b or TSO-C154c, and is directly connected to a position source meeting the minimum performance requirements of any revision of the following TSOs may set the SDA = 2 without further analysis: • TSO-C129, Airborne Supplemental Navigation Equipment Using the Global Positioning System (GPS); [...].	Description	Engineering Inspection and Evidence of TSO Approval		
3.1.2.1.2	For installations in aircraft with more complex system architectures, a system safety assessment, as described below, is required to set the SDA. [...].	Analysis			
3.1.2.2	Conducting the System Safety Assessment	N/A	N/A, title only		
Annex D of this advisory (TAA Advisory 2021-01) – Additional Technical Considerations and Interpretations, Section 2.1	<u>ADS-B Out – Continuity</u> The EASA continuity (loss of function) requirement for ADS-B Out functionality is defined in CS-ACNS Issue 4 (advisory reference 3.2.2.g), as 2×10^{-4} /flight hour. The FAA requirement for continuity considers the loss of function of an ADS-B Out system to be a Minor failure condition, which equates to a continuity of 10^{-3} /flight hour (advisory reference 3.2.2.m, Para 3.b.). Therefore, the TAA's recommended ADS-B Out functionality continuity requirement is dependent on whether operations will be conducted within the USA or Europe. For aircraft where the Statement of Operating Intent (SOI) clearly indicates that operations will only ever occur within the USA a continuity requirement of 10^{-3} /flight hour is applicable. For aircraft where the SOI indicates operations will also occur in Europe a continuity requirement of 2×10^{-4} /flight hour is applicable. Either requirement can normally be achieved by a single ADS-B out system.	Description	Engineering Inspection		