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Review of Test Procedures for DI = 3

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SUMMARY

There are two DI values that identify SD field coding that request extended data readout. These values are 3 and 7. The difference is that the value of 3 also identifies the SD field as containing multisite SI lockout information while the DI value of 7 identifies that SD field as containing IIS lockout information. With the exception of the test procedure in 2.6.6.5 Part 5: Data Mix #1 part b., all test procedures that extract extended data use the DI value of 7. In order to provide a more balanced test of the transponder protocol it is suggested that the following test procedures be modified to mix using DI=3 and DI=7 when extracting GICB registers:

- 2.5.4.6.2.2 Extended Squitter Protocol Verification, Steps 1 through 11
- 2.5.4.20 Procedure #20: Extended Capability Report
- 2.5.4.32.1 Procedure #32: Transmission of TCAS Capability Information to a Mode S Sensor and to other TCAS aircraft
Step c indicate DI≠3 and DI≠7 with UF=4 and UF=5
Replace DI=7 with DI=3 for either UF=20 or UF=21
- 2.5.4.33.1 Procedure #33: TCAS or transponder/TCAS Interface Failure During Transmission of RA Report and Data Link Capability Report to a Mode S Sensor
- 2.6.4 Register 17 Common Usage GICB Capability Report
- 2.6.5 Register 18 to 1C Mode S Specific Services Capability Reports
- 2.6.6 Baseline Aircraft Identification and Aircraft Registration Testing
- 2.7.2 Register 17 Common Usage GICB Capability Report
- 2.7.3 Register 18 to 1C Mode S Specific Services Capability Reports
- 2.7.4 Register 1D to 1F Mode S Specific Services MSP Capability
- 2.7.5 Register 40 Selected Vertical Intention
- 2.7.6 Register 50 Enhanced Surveillance – Protocol and Interface
- 2.7.7 Register 60 Enhanced Surveillance – Protocol and Interface

In addition to the above test procedures, the following change is suggested for the requirements section 2.2.23.1.2:

The paragraphs a through e each contain a note that defines a GICB readout request with DI=7. They should all be changed to also include DI=3.