

3.2.8 Failure Indication

3.2.8.1 ADS-B Transmission or Receiver Device Failure Annunciation

The ADS-B system operational status **shall** be available to the crew. Failures of the ADS-B transmitter and receiver **shall** be annunciated to the crew. Though acceptable, dedicated ADS-B transmit and receive failure indicators are not required. Text messages, displayed to the crew until acknowledged, are acceptable. Systems which combine transmit and receive functions in a common unit may use a single annunciation to indicate a failure. When an ADS-B function is hosted in another system, the host system failure annunciation is adequate to indicate loss of ADS-B function (e.g. If the transponder also transmits ADS-B squitters, loss of ADS-B transmission is logically assumed with a TRANSPONDER FAIL indication.). Otherwise, transmitter and receiver failure warnings **shall** be independent (§Error! Reference source not found.).

DELETE THE BLUE HIGHLIGHTED AREA AS IT IS COVERED IN THE FOLLOWING BY REFERENCING BACK TO 2.2.11.6.

3.2.8.2 ADS-B Function Fail Annunciation (§2.2.11.6)

3.2.8.2.1 ADS-B Transmit Function Fail Annunciation

Loss of capability to generate ADS-B Message Transmissions, including loss of ADS-B data input, **shall** result in the ADS-B Function Fail annunciation which **shall** be indicated to the Flight Crew in accordance with §2.2.11.6.

3.2.8.2.2 ADS-B Receive Function Fail Annunciation

Loss of capability to generate and deliver ADS-B Reports to the intended interface or application **shall** result in the ADS-B Function Fail annunciation which **shall** be indicated to the Flight Crew in accordance with §2.2.11.6.

2.2.11.6 ADS-B Function Fail Annunciation

The ADS-B Transmitting and Receiving Subsystems depend on a position source to provide the data to populate the ADS-B Messages and Reports. These sources or interconnects between them and the ADS-B device may fail and prevent the system from transmitting ADS-B Messages or Reports. In this case, the ADS-B transmit/receive subsystem cannot function, but there is not a failure of the ADS-B device itself. It is desirable to indicate that the ADS-B function is failed independently of the ADS-B Device Failure Annunciation.

If the conditions of setting TYPE Code equal ZERO, as per §Error! Reference source not found. are met, then the ADS-B Function Fail Annunciation **shall** be asserted. The status of the ADS-B Function **shall** be indicated to the flight crew.

Note: Although it is desirable to have an independent ADS-B Function Fail annunciation, some legacy airplanes may have to share the ADS-B Device Failure annunciation to also indicate when an ADS-B Function Fail has occurred. In the case where the ADS-B Transmitting Subsystem is also integrated with a Mode S Transponder (§Error! Reference source not found.), caution should be taken to ensure that the ADS-B Function Fail is not interpreted as a Mode S Transponder Device Failure that could generate a subsequent TCAS Fail annunciation.