Collins Aerospace
An RTX Business

AVIONICS QUALIFICATION POLICY 2025 MID-YEAR REPORT

Prepared for: The Aviation Industry

July 1, 2025

2025 YTD- AQP TEST RESULTS SUMMARY

Phase 3 Tests	Phase 3 Test Waivers	Phase 4 Tests
11	13	0

Tested Results Category*[1]	Number of Tested Suites	Percent
Passed	4	37%
Waived: Non-Network Impacting	3	27%
Waived – Network Impacting	0	0%
Failed	4	36%

***1: Final AQP Status – In many cases the manufacturer corrected detected issues, some critical, during the course of the AQP test session. All reported results as of July 1, 2025.**

NEWS & TRENDS IN AQP TESTING

- With the maturity of classic VHF, the number of VHF AQP tests is continuing to decline and is being replaced with testing of systems supporting new communications media including Iridium Certus, enhanced Swift Broadband-Safety, and ACARS over IP.

- The enhanced Swift Broadband-Safety (SB-S Ver 2.0) AQP facility and test procedures were completed in June 2020; ATN-over-SB-S 2.0 (IRIS) testing began in 2QTR2023.

- Iridium Next/Certus Test Facilities and Test Procedures are complete and active AQP testing began in 2024.

- We are beginning to review and define AQP test concepts for the developing technologies including Internet Protocol Suite (IPS) and Hyper-Connected ATM.

- Since September 2015, all VDLM2 capable avionics systems submitted for AQP must include functionality intended to comply with AEEC Standard 631-6 for Multi-Frequency operation.

NEWS & TRENDS IN AQP TESTING

- Current AQP Policy: Revision M: January 25, 2022. Revised to include many minor updates to current AQP practices but without major technical or program changes.

- For mature, AQP-approved suites, we are frequently able to Waive the AQP testing requirement for minor software updates.
  - Thirteen such waivers were provided YTD in 2025.

- Most avionics suites submitted for AQP support POA, VDL Mode 2 AOA and ATN plus long-range media (Aero-Satellite/Iridium/HF).
  - Complete AQP testing is averaging eight days.

AQP CLASSIFICATIONS

Pass: Avionics are fully compliant with AEEC standards and have unrestricted network use.

Waived: Avionics have minor deviations from AEEC standards that do not require additional RF resources. Unrestricted use.

Waived/Network-Impacting: Avionics have defects that will require additional RF resources. Unrestricted use; however, RF charges may apply in North America and Europe.

Failed: Avionics have serious problems that will impact the network and be disruptive to other airline messages. Restricted from use.

Not Tested: Avionics version has not been submitted for AQP testing. RF utilization charges will apply and possible termination of communications service.

WHAT YIELDS A "FAILED" AQP STATUS?

Stuck Message	Data link system sends a message in an endless loop jamming up the radio channel regionally for all aircraft and users.
Stuck Transmitter/Radio/ Carrier	Data link suite keys transceiver continually blocking communications for all other users on the media.
Killer Message/Protocol	Data link sends illegal or corrupted message that would cause ARINC data link service component(s) to stop operating ("crash").
Locking-Up Data Link Requiring Reboot	Data link suite repeatedly enters unrecoverable fault mode ("crashes") under normal use and ceases sending downlinks and responding to all uplinks. A circuit breaker reset is required to restore ATS and AOC service−generally not allowed in flight.
Unstable Data Link System	Data link suite is repeatedly unresponsive to human input or addressed uplink activity making it unsatisfactory from a customer viewpoint. Typically associated with "Locking-Up".

QUESTIONS ?

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