

RA 4051 - Airborne Checks

Rationale

Airborne Checks¹, including taxi checks, may be required as part of an investigation or diagnostic process, or for monitoring of a Product, Part or Appliance that cannot be fully functioned whilst the Air System is stationary. Unless each Airborne Check is specified by a Competent Person exercising engineering judgement within defined boundaries, additional Hazards may be introduced, potentially increasing Risk to Life (RtL)². ► This RA ◀ requires measures to be put in place to control the use of Airborne Checks and to ensure that they are specified by Competent individuals, such that any additional Hazards can be assessed and any additional RtL² ◀ is correctly managed.

Contents

4051(1): Airborne Checks

Regulation 4051(1)

Airborne Checks

4051(1) The Military Continuing Airworthiness Manager (Mil CAM)³ shall ensure that ► aviation engineering ◀ orders and / or ► local ◀ procedures⁴ ◀ are promulgated to control the use of Airborne Checks⁵ ◀.

Acceptable Means of Compliance 4051(1)

Airborne Checks

1. The ► aviation engineering ◀ orders and ► / or local ◀ procedures⁴ ◀ should include, as a minimum:
 - a. The process to assess the Competence⁶ of those personnel who will be required to specify Airborne Checks and to authorize⁷ them to do so.
 - b. Instructions for assessing whether it is appropriate to conduct an Airborne Check, supported by guidance on factors to be taken into account, especially those that affect RtL² ◀.
 - c. Instructions for specifying the extent of an Airborne Check.
 - d. The requirement to agree the scope of the checks with the Authorizing Officer⁸.
 - e. Instructions for recording⁹ the extent and outcome of an Airborne Check.
 - f. Arrangements for releasing the Air System for flight¹⁰
 - g. The requirement for an Airborne Check to remain within the limits¹¹ stated in the Release To Service or Military Permit to Fly¹².
 - h. The conditions that will prevent an Air System from being released on Continuous Charge Operations¹³ if correct system function cannot be positively confirmed during an Airborne Check.

¹ A requirement not covered by the Flight Test Schedule (FTS), or where the testing of the Air System or component in accordance with the FTS is deemed inappropriate. The requirements can be operational, or to address a lack of Technical Information (TI) and / or Test Equipment. If used in the recovery of a Loose Article, refer to RA 4253 – Loose Article Recovery.

² Refer to RA 1210 – Ownership and Management of Operating Risk (Risk to Life).

³ Refer to RA 1011 – Military Continuing Airworthiness Manager Responsibilities.

⁴ ► Refer to RA 4009 – Aviation Engineering Orders and Local Procedures.

⁵ Not applicable to Air Systems operating under RA 1165 – UK Civil Aviation Authority Oversight of UK Military Registered Air Systems Arrangements. ◀

⁶ Refer to RA 1002 – Airworthiness Competent Persons.

⁷ Refer to RA 1006 – Delegation of Engineering Authorizations.

⁸ Refer to RA 2306 – Authorization of Flights.

⁹ Refer to RA 4813(1): Recording and Retention of Maintenance Work (MRP 145.A.55(a)).

¹⁰ Refer to RA 4961 – Aircraft Maintenance Programme ► and Military Continuing Airworthiness Management Organization Responsibilities for Air System Release ◀ - MRP Part M Sub Part C.

¹¹ ► Refer to RA 2309(1): Aircraft Limitations. ◀

¹² Refer to RA 2401(1): Air System Document Set.

¹³ Refer to RA 2210(2): Continuous Charge Operations.

**Guidance
Material
4051(1)****Airborne Checks**

2. An Airborne Check is unlikely to be appropriate unless all of the following conditions are met:
 - a. The required action or activity cannot be carried out while the Air System is stationary. This might be because of an inherent requirement of the test or because the necessary test equipment is not available in the required timescale.
 - b. The Flight Test Schedule¹⁴ does not provide an appropriate test.
 - c. Suitable TI¹⁵ cannot be generated in the required timescale.
3. The ►aviation engineering◄ orders and ►/ or local◄ procedures►⁴◄ may restrict those activities deemed suitable for Airborne Checks and may specify circumstances where specific referrals are required prior to conducting an Airborne Check.
4. An Airborne Check is not to be used repeatedly in lieu of amendment to TI¹⁶, nor is it to be used repeatedly in lieu of test equipment. In both cases, shortfalls will be reported to the appropriate Delivery Team Leader or Commodity Team Leader.

¹⁴ Refer to RA 2220 – Maintenance Test Flights.

¹⁵ ►Refer to RA 5815 – Instructions for Sustaining Type Airworthiness.◄

¹⁶ Refer to RA 4810(3): Requirement to Inform Technical Information Author of Errors (MRP 145.A.45(c)).