

FACTSHEET – PRODUCTION ASSURANCE IN THE DEFENCE AVIATION SAFETY PROGRAM

AIM

This factsheet details how the production of aircraft components is assured in the Defence Aviation Safety Program (DASP). This includes what release documentation is acceptable under DASRs, and the means through which that documentation is obtained. The factsheet only covers aircraft components and does not include whole aircraft.

INTRODUCTION

Production of Defence registered aircraft is assured by DASA through the issue of Certificates of Airworthiness. For Certificates of Airworthiness to remain valid through the life of the aircraft, only components accompanied by acceptable release documentation may be installed on the aircraft. Acceptable release documentation can take various forms, depending on the means through which production is assured.

ACCEPTABLE RELEASE DOCUMENTATION

The purpose of release documentation is to provide evidence that the manufactured component conforms to approved design data. Aircraft components to be installed on Defence registered aircraft must be accompanied by one of the following release documents:

1. DASR Form 1—Authorised Release Certificate.
2. A native or alternate component Certificate of Release to Service (CRS) issued within a recognised airworthiness framework (refer to DASA AC 004/2018—*Airworthiness Recognition in the DASP* for identification of a native and alternate component CRS).
3. For standard parts or items designated as specific equipment under DASR 21.A.303, a Certificate of Conformity from the item's manufacturer (refer AMC1 to DASR 145.A.42(a)(4)).
4. For components fabricated under DASR 145.A.42(c), certificates of conformity produced by the fabricating maintenance organisation that are acceptable to DASA.

Release documentation under (1), (2) or (3) above enables that component to cross organisational (and possibly national) boundaries between its manufacture and installation. Manufactured components that do not need to cross organisational boundaries can be installed with locally produced certificates of conformity that contain all of the technical information found on a DASR Form 1 per item (4) above.

DASA PRODUCTION ASSURANCE

DASA assures production of all Defence registered aircraft and aircraft components using one of three mechanisms depending on the release documents required by continuing airworthiness regulations. This is depicted below in Figure 1.

Assurance through Recognition Frameworks

The majority of aircraft and aircraft component manufacture for Defence occurs outside Australia and is assured through DASA's recognition framework. To be installed on a Defence registered aircraft, these components must be accompanied by a recognised native (Form 1 equivalent) or alternate release certificate. Each DASA Recognition Certificate provides details on the unique conditions and caveats to be applied to validate the native or alternate release certificates. Production of components assured through recognition do not require a DASR Form 1 as it provides no additional safety assurance above what is inherent under the recognition framework.



Assurance through DASR 21 – production by Military Production Organisation Approval (MPOA) or letter of agreement holder

Components manufactured outside of a recognised airworthiness framework (other than standard parts, specific equipment or components fabricated under DASR 145.A.42(c)) require a DASR Form 1 for installation. To issue a DASR Form 1 an organisation must hold a Military Production Organisation Approval (MPOA) under DASR 21 Subpart G, or a letter of agreement to manufacture under DASR 21 Subpart F. In this instance, the award and oversight of MPOA or a letter of agreement is DASA's assurance mechanism for the production of such components.

The only organisations that DASA will consider for award of MPOA or letters of agreement are those that do not hold a recognised approval that enables release of the manufactured components under a native or alternate artefact (see AC 004/2018—*Airworthiness Recognition in the DASP*). That is, the requirements of DASR 21 Subparts F or G will be imposed on an organisation for the sole purpose of issuing a DASR Form 1 for the manufactured components. Note that the normal approach is for an organisation to be awarded MPOA under DASR 21 Subpart G. Applications under Subpart F will only be considered by DASA in exceptional circumstances, where the requirements to obtain MPOA would not be appropriate for the scope and extent of production.

Assurance through DASR 145 – fabrication by maintenance organisations

DASR Form 1 must not be used for components fabricated by maintenance organisations under their DASR 145 approval. A locally produced certificate of conformity must be used instead. DASA's assurance of this production is via the issue and oversight of the organisation's DASR 145 approval. A DASR 145 MO will only have this activity included in the scope of their DASR 145 approval if they can sufficiently demonstrate their capability to perform such fabrication. Note that unless otherwise approved by DASA, only the DASR 145 MO who fabricated the component can install this component.

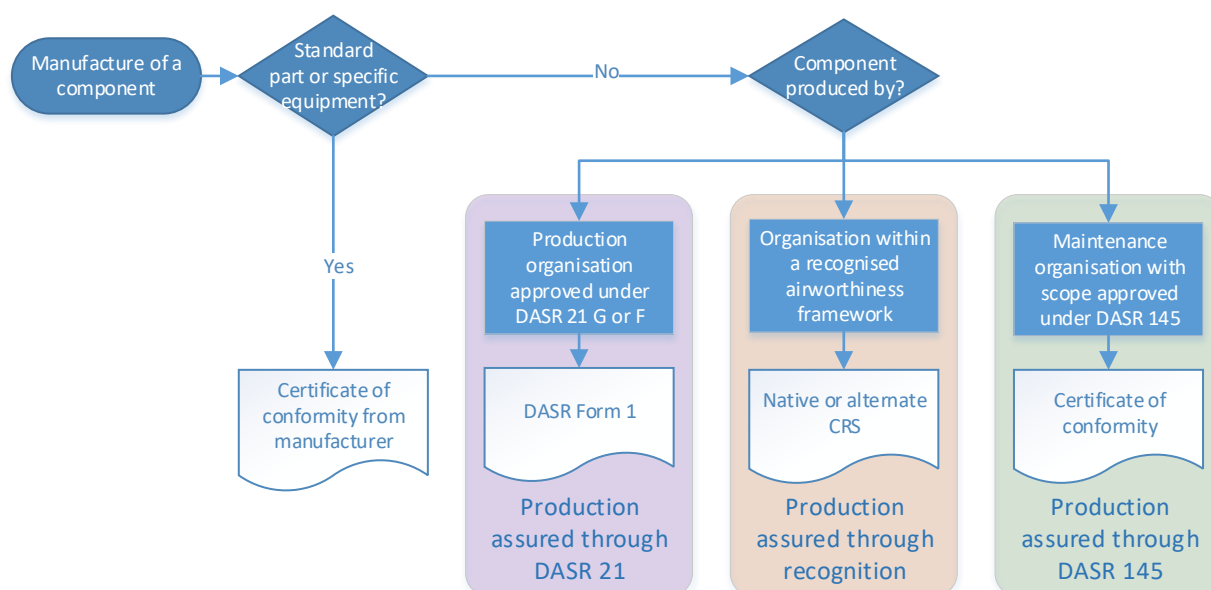


Figure 1 - Production assurance and release documentation under DASP

MANUFACTURE AND RELEASE OF TEST ARTICLES

If a test article is manufactured to gather certification evidence, the responsibility to control the manufacture of that article and ensure it accurately reflects the proposed design data rests entirely with the organisation seeking certification of the design. For test article manufacture required to achieve certification of a major change, the Certification Programme should describe the production control processes that will be used by the applicant in producing the test articles. If DASR Form 1 is used to release a test article for trial installation in an aircraft, Block 12 of the DASR Form 1 must clearly state that the article is in conformity with *non-approved design data*. The manufacture of test articles for certification does not require MPOA under DASR 21 Subpart G or a letter of agreement under DASR 21 Subpart F. These principles also apply for minor changes being approved under MDOA privilege.

MANUFACTURE OF MODIFICATION KITS

Maintenance organisations approved under DASR 145 may fabricate modification kits and issue certificates of conformity provided (a) the scope of their DASR 145 approval allows it, and (b) the completed modification kit will be installed by the same maintenance organisation (and under the same DASR 145 approval) issuing the certificate of conformity. Modification kits meeting both criteria above must not be released using DASR Form 1, but must still be manufactured to the approved design data and have locally produced certificates of conformity attesting to that fact. Fabrication of modification kits for onward supply cannot be performed under a DASR 145 approval and constitutes series production that must be assured by either recognition or through DASR 21. Modification kits manufactured external to the installing maintenance organisation must be accompanied by a DASR Form 1, or release documentation acceptable to DASA through recognition.

FURTHER INFORMATION

- DASA AC 004/2018—*Airworthiness Recognition in the DASP*
- DASA AC 008/2018—*Acceptance of Aircraft Components*
- AMC/GM to DASR 21.A.303(c) and (d) – Standard parts and specific equipment
- AMC to DASR 145.A.42(c) – Fabrication of parts by maintenance organisations
- DASR 21 Subpart G – *Military Production Organisation Approval*
- DASR 21 Subpart F – *Production Without Military Production Organisation Approval*