




ACCEPTABLE MEANS OF COMPLIANCE AND GUIDANCE MATERIAL

A composite image featuring a navigation chart with various markings and a person's hands writing on a document. The chart includes text like 'NAVIGATION PL...', 'WAC SCALE 1:1,000,000', and '08 JAN'. The person is wearing a white shirt and is focused on writing with a pen.

Continuing airworthiness requirements for aircraft and aeronautical products

Part 42 of CASR

| | |
|----------|--------------|
| Date | October 2022 |
| File ref | D21/346255 |

An Acceptable Means of Compliance (AMC) explains how one or more requirements of the Civil Aviation Safety Regulations 1998 (CASR) for the issue of a certificate, licence, approval or other authorisation, can be met by an individual or organisation applying to the Civil Aviation Safety Authority (CASA) for the authorisation.

AMC are non-binding advisory documents issued by CASA which may be used by persons and organisations to achieve compliance with CASR.

Applicants are not required to utilise an AMC to comply with a legislative requirement but if they do, CASA will issue the authorisation to which the AMC relates.

AMC do not articulate the only way compliance can be achieved. Individuals and operators may, on their own initiative, propose other ways of meeting the requirements of CASR; however, any such proposal will be subject to separate assessment by CASA to determine whether the proposed methods are likely to produce the required legislative outcome.

Guidance material (GM) is non-binding material issued by CASA which helps to illustrate the meaning of a requirement or specification in CASR. It provides explanations of the CASR and sometimes an amplification of the policy intention underpinning the applicable provision of CASR, rather than a means of complying with it. GM should be read in conjunction with the applicable provision of CASR and AMC. GM is identified by grey shaded text.

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Status

This version of the AMC and GM is approved by the Branch Manager, Airworthiness and Engineering.

Note: Changes made in the current version are not annotated. The document should be read in full.

| Version | Date | Details |
|---------|-----------------|---|
| v3.1 | October 2022 | Administrative review only. |
| v3.0 | September 2021 | Updated GM 42.900 (3) - Airworthiness review procedure (survey of the aircraft), to provide high level information about using remote technology to carry out airworthiness review surveys. |
| v2.2 | May 2018 | Added new AMC 42.420(5)(a)(i). |
| v2.1 | August 2017 | Added new GM 42.430(2) under Subpart 42.E. |
| v2.0 | August 2016 | <p>The guidance on the typical structure and content of a continuing airworthiness management exposition has been moved to Appendix A and include some minor changes.</p> <p>Amended GM 42.585 (3) (a) to include reference to:</p> <ul style="list-style-type: none"> • Appendix A, containing guidance on the typical structure and content of an exposition. • Annex A, containing a sample exposition. • Omitted AMCs 42.900 (2) (i) (i) and (ii) under Subpart 42.I because paragraph 42.900(2)(i) has been omitted from the regulations. |
| v1.2 | 1 April 2014 | <p>Insert new acronym: ICA Instructions for Continuing Airworthiness.</p> <p>Added a new GM 42.360(3)(b)(i) under Subpart 42.D.</p> |
| v1.1 | 10 October 2013 | <p>Omitted the 'General' section at the beginning of the document and included the content of this section under Subpart 42.G.</p> <p>Amended GM 42.010 under Subpart 42.A.</p> <p>Amended GM 42.030 (2) (a) and GM 42.030 (2) (b) under Subpart 42.B.</p> <p>Added a new GM 42.040 (1) under Subpart 42.B.</p> <p>Amended GM 42.105 under Subpart 42.C.</p> <p>Amended GM 42.420 (2) (c) and GM 42.445 under Subpart 42.E.</p> <p>Added following GMs under Subpart 42.E.</p> <p>GM 42.445 (2) (b) and (c).</p> <p>GM 42.455 (1) (a)</p> <p>Omitted GM 42.470 from Subpart 42.E.</p> <p>Reissued AMC and GM for Subpart 42.G.</p> <p>Amended GMs 42.920 and 42.925 under Subpart 42.I.</p> |

CONTINUING AIRWORTHINESS REQUIREMENTS FOR AIRCRAFT AND AERONAUTICAL PRODUCTS

| Version | Date | Details |
|---------|------------------|---|
| | | Made minor changes to the document that are editorial in nature. |
| v1.0 | 14 November 2012 | Reissued AMC and GM for Subpart 42.H. Reissued AMC and GM for Subpart 42.I. Minor changes to the document that are editorial in nature. |

1 Reference material

1.1 Acronyms

The acronyms and abbreviations used in this AMC/GM are listed in the table below.

| Acronym | Description |
|---------|--|
| AD | Airworthiness Directive |
| AC | Advisory Circular |
| AMC | Acceptable Means of Compliance |
| AMO | Approved Maintenance Organisation |
| AOC | Air Operators Certificate |
| CAAP | Civil Aviation Advisory Publication |
| CAMO | Continuing Airworthiness Management Organisation |
| CAO | Civil Aviation Order |
| CAR | Civil Aviation Regulations 1988 |
| CASA | Civil Aviation Safety Authority |
| CASR | Civil Aviation Safety Regulations 1998 |
| CDL | Configuration Deviation List |
| CRS | Certificate of Release to Service |
| GM | Guidance Material |
| ICA | Instructions for Continuing Airworthiness |
| MEL | Minimum Equipment List |
| MOS | Manual of Standards |
| NATA | National Association of Testing Authorities |
| RPT | Regular Public Transport |

1.2 References

Legislation

Legislation is available on the Federal Register of Legislation website <https://www.legislation.gov.au/>

| Document | Title |
|------------------|--|
| Part 21 of CASR | Certification and airworthiness requirements for aircraft and parts |
| Part 42 of CASR | Continuing airworthiness requirements for aircraft and aeronautical products |
| Part 145 of CASR | Continuing airworthiness—Part 145 approved maintenance organisations |

Advisory material

CASA's advisory materials are available at <https://www.casa.gov.au/publications-and-resources/guidance-materials>

| Document | Title |
|----------|------------------------|
| AC 21-09 | Special Flight Permits |
| AC 42-3 | Reliability Programs |

1.3 Forms

CASA's forms are available at <http://www.casa.gov.au/forms>

| Form number | Title |
|-------------|----------------------------------|
| Form 404 | Defect Report |
| Form 502 | Airworthiness Review Certificate |

2 Foreword

This document provides guidance material and acceptable means of compliance for Part 42 of CASR.

If a discrepancy exists between the regulations and this document the regulations must be followed.

3 Dictionary Part 3

GM 5 - Definitions relating to carrying out maintenance

Meaning of carrying out maintenance on an aircraft, and

Meaning of carrying out maintenance on an aeronautical product

It is important to be aware of the difference between *carrying out maintenance on an aircraft* and *carrying out maintenance on an aeronautical product* to ensure that the maintenance is certified correctly.

These Regulations define carrying out maintenance on an aircraft and carrying out maintenance on an aeronautical product so as to enable, in certain circumstances, simple maintenance tasks carried out on aeronautical products to be considered as maintenance carried out on an aircraft and certified accordingly.

Note that whilst these definitions enable flexibility in certification of simple maintenance tasks, they do not provide authorisation to vary from the maintenance data - variations must be approved in accordance with the Part 42 MOS and Subpart 42.J.

Several examples have been provided below to illustrate the intent of the regulations with regards to when maintenance carried out on an aeronautical product may be considered as maintenance carried out on an aircraft and when it may not.

It should also be noted that in the examples where the maintenance is to be certified as maintenance carried out on an aircraft, the operator, CAMO or Part 145 approved maintenance organisation (AMO) may instead choose to send the aeronautical product to a maintenance organisation that has the capability to carry out the maintenance in a workshop and certify the maintenance with an authorised release certificate.

Example 1: Maintenance that may be considered as maintenance carried out on an aircraft.

The Instructions for Continuing Airworthiness (ICA) for an aircraft requires the lights in an instrument to be replaced. The maintenance data for replacement of the lights permits removal of the instrument to improve access to the lights. The instrument may be removed from the aircraft and have the lights replaced and then be reinstalled in the same location on the same aircraft in accordance with the maintenance data. All the maintenance tasks in this example, including replacement of the lights, may be certified as maintenance carried out on an aircraft.

Example 2: Maintenance that may be considered as maintenance carried out on an aircraft.

The ICA for an aircraft requires inspection of the fire extinguishing system cylinders. The maintenance data for the inspection permits removal of the cylinders to improve access. The cylinders may be removed from the aircraft and inspected and then be reinstalled in the same location on the same aircraft in accordance with the maintenance data. All the maintenance tasks in this example, including the inspection, may be certified as maintenance carried out on an aircraft.

Example 3: Maintenance that may be considered as maintenance carried out on an aircraft.

An air duct in an aircraft has been internally contaminated with hydraulic fluid. The contaminated duct may be removed from the aircraft and cleaned and then reinstalled in the same location on the same aircraft and tested using an aircraft system, all in accordance with the applicable maintenance data. All the maintenance tasks in this example, including the cleaning, may be certified as maintenance carried out on an aircraft.

Example 4: Maintenance that may be considered as maintenance carried out on an aircraft.

Inspection of a rudder on an aircraft has found minor damage on one of the rudder panels. The damage can be repaired in accordance with the aircraft structural repair manual, but the repair is more easily carried out if the rudder is removed from the aircraft. The rudder may be removed from the aircraft and repaired in accordance with the aircraft structural repair manual, and then reinstalled in the same location on the same aircraft and tested using the aircraft systems. All the maintenance tasks in this example, including the repair, may be certified as maintenance carried out on an aircraft.

Example 5: Maintenance that may not be considered as maintenance carried out on an aircraft.

An aircraft experiences a defect on an electric motor driven hydraulic pump assembly. Replacement of the electric motor portion of the pump assembly would rectify the defect. The maintenance data for replacement of the electric motor requires a functional test of the pump assembly using specific workshop test equipment. Replacement of the electric motor may not be considered as maintenance carried out on an aircraft because specific workshop equipment is required by the maintenance data.

4 Part 42 of CASR

4.1 Subpart 42.A: Preliminary

GM 42.010 - Applicability of Part

This regulation states that CASR Part 42 applies to a registered aircraft and any aeronautical product for a registered aircraft. A registered aircraft, according to the CASR Dictionary, means an aircraft registered under CASR Part 47.

However, transitional regulation 202.181 further affects the applicability of CASR Part 42. Under regulation 202.181, CASR Part 42 applies to a registered aircraft that is authorised to operate, under an AOC, for a purpose mentioned in paragraph 206 (1) (c) of CAR. Such an aircraft is commonly known as a RPT aircraft. According to regulation 42.181, Part 42 also applies to:

- aeronautical products for RPT aircraft; and
- a Part 145 organisation that is carrying out maintenance on RPT aircraft or on aeronautical products for RPT aircraft; and
- a pilot and or a flight engineer who carries out maintenance RPT aircraft.
- GM 42.020 - Part 42 Manual of Standards

This regulation provides CASA the power to issue a MOS for Part 42 and sets out the matters the MOS may specify.

4.2 Subpart 42.B: Continuing airworthiness requirements

GM 42.030 (2) (a) - Continuing airworthiness requirements — all aircraft

For an aircraft authorised to operate under an air transport AOC, the registered operator's obligations under this paragraph are fulfilled by the CAMO of the AOC holder as the registered operator, the CAMO and the AOC holder are the same entity. In this case the processes and procedures for ensuring compliance with this paragraph may be included in the CAMO's exposition.

GM 42.030 (2) (b) - Continuing airworthiness requirements — all aircraft

The intent of this paragraph is to ensure that the flight crew of an aircraft do not commence a flight unless a CRS has been issued for the aircraft in relation to the maintenance that has been carried out on the aircraft since the aircraft was last operated for a flight. The procedures for flight crew to ensure this may be included in the flight technical log for the aircraft. If the aircraft is authorised to operate under an AOC, it may also be included in the AOC holder's operations manual.

GM 42.030 (2) (d) - Continuing airworthiness requirements — all aircraft

Normally aircraft are fitted with operational or emergency equipment that is additional to the equipment required by the type certification basis for the aircraft. Following are examples of operational or emergency equipment that are required by or under the Regulations:

- CAO 20.18 specifies basic operational requirements for aircraft equipment. However, some of the equipment mentioned in CAO 20.18 may also be required by type certification basis for the aircraft.
- CAO 20.11 set out the requirements for emergency and life saving equipment and CAO 20.4 sets out the requirements for the provision of oxygen and protective breathing equipment.
- Regulation 252A of CAR specifies requirement for emergency locator transmitters and regulation 262AC of CAR specifies requirement for airborne collision avoidance systems.

Some of these equipment may not be necessary for all flights. The equipment requirement for a particular flight, including requirement for any operational and emergency equipment is normally covered by the MEL for the aircraft.

AMC 42.030 (2) (e) - Continuing airworthiness requirements — all aircraft

An acceptable means of compliance with this paragraph is to ensure that the flight crew of an aircraft does not commence a flight with a defect in the aircraft unless:

- operation of the aircraft for the flight with the defect is permitted by the MEL or the CDL for the aircraft or a special flight permit;
- the rectification of the defect is deferred in accordance with CASR Subdivision 42.D.6.1 by an individual on behalf of an AMO; or
- the defect is in an item of operational or emergency equipment that is not required by the certification basis for the aircraft and is not required by or under these Regulations for the operation of the aircraft for the flight.

The procedures for flight crew to ensure this may be included in the flight technical log for the aircraft or in case of an AOC holder, in the AOC holder's operations manual.

GM 42.030 (2) (f) - Continuing airworthiness requirements — all aircraft

The registered operator of an aircraft is to enter in the flight technical log for the aircraft, the following defects, before the aircraft commences a flight:

- any defect the rectification of which is not required under the MEL or the CDL for the aircraft; and
- a defect in an item of operational or emergency equipment fitted to the aircraft.

GM 42.040 (1) - Aircraft authorised to operate under AOCs and large aircraft must have continuing airworthiness management organisations – Aircraft authorised to operate under air transport AOC

Subregulation 42.040 (1) requires the registered operator of an aircraft that is authorised to operate under an air transport AOC to be approved as a CAMO for the type and model of the aircraft. An air transport AOC includes an AOC issued for a purpose mentioned in paragraph 206 (1) (c) of CAR 1988, which is also known as a RPT AOC. Under subsection 4A of CAOs 82.3 and 82.5, if an Australian aircraft is authorised to operate under a RPT AOC, then the AOC holder must also be the registered operator of the aircraft.

This means, a RPT AOC holder must be approved as a CAMO for each type and model of aircraft that is authorised to operate under the RPT AOC. If a parent organisation such as a business group has a number of subsidiaries, then each subsidiary that holds a RPT AOC is also required to hold a CAMO approval and is required to maintain full control of the airworthiness management of the aircraft that are authorised to operate under the RPT AOC.

Subpart 42.G specifies how an application for a CAMO approval must be made. Chapter 1 of Part 42 MOS specifies the resources needed for holding a CAMO approval including requirements for proper facilities, organisational structure, qualified personnel, adequate process and procedures.

4.3 Subpart 42.C: Continuing airworthiness management — requirements for person responsible for continuing airworthiness for aircraft

GM 42.100 - Purpose of Subpart

The Regulations define the person responsible for continuing airworthiness for an aircraft.

This Subpart sets out the regulatory requirements for the person responsible for continuing airworthiness.

GM 42.105 - Meaning of person responsible for continuing airworthiness for aircraft

For an aircraft that is authorised to operate under an air transport AOC, the registered operator of the aircraft is the person responsible for continuing airworthiness for the aircraft. Under regulation 42.040, the registered operator must be approved as the CAMO for the aircraft.

GM 42.115 (1) - Rectification of defect to aircraft before flight - all aircraft

If there is a defect in an aircraft then the defect must be rectified before the next flight unless continued operation is permitted or rectification of the defect may be deferred.

Guidance material for special flight permits is available in AC 21-09.

GM 42.135 - Replacement of life limited aeronautical product - all aircraft

Life limit is defined in regulation 42.015.

This regulation is only applicable to mandatory 'life' limits. This regulation does not apply to other time limits for maintenance, such as overhaul and repair.

GM 42.140 - Approved maintenance program required – aircraft authorised to operate under AOCs and large aircraft

Under regulation 202.185 of CASR, an approved maintenance program is taken to include an approved system of maintenance.

GM 42.145 - Compliance with maintenance program required - all aircraft

The Part 42 MOS allows the development of a maintenance program with the ability to manage the one off extension of maintenance tasks in accordance with the approved program.

GM 42.155 - Ensuring effectiveness of approved maintenance program using approved reliability programs - certain aircraft

The CAMO must have a means of ensuring the effectiveness of the approved maintenance program.

If any of the conditions in regulation 42.155 are met, then the means must be an approved reliability program. If regulation 42.155 does not apply, then the means must be an analysis in accordance with regulation 42.160.

Guidance material on reliability programs is available in AC 42-3.

AMC 42.160 - Ensuring effectiveness of approved maintenance program - other aircraft authorised to operate under AOCs and large aircraft

An acceptable means of compliance with regulation 42.160 would be to have an approved reliability program for the relevant aircraft.

GM 42.160 - Ensuring effectiveness of approved maintenance program - other aircraft authorised to operate under AOCs and large aircraft

The CAMO must have a means of ensuring the effectiveness of the approved maintenance program.

If any of the conditions in regulation 42.155 are met, then the means must be an approved reliability program. If regulation 42.155 does not apply, then the means must be an analysis in accordance with regulation 42.160.

The basis of the analysis should be documented and objective data from the maintenance program and service history of the aircraft and similar types in the world fleet.

The guidance material for reliability programs is also relevant to the intent of the analysis requirements, and so should also be reviewed and considered during development of an analysis procedure.

The analysis procedure that is used by the CAMO must be set out in the CAMO's exposition. The procedure should include elements such as:

- Applicability (i.e. the aircraft maintenance program(s) for which this procedure is to be applied);
- A general description of the procedure and the objective;
- The frequency of the analysis, noting that regulation 42.160 requires the analysis to be carried out at least once every 12 months;
- Identification of the types of data that are to be included in the analysis, which could include the following:
 - pilot reports;
 - flight technical log;
 - dispatch reliability data (maintenance and airworthiness related);
 - utilisation and operations (including environmental considerations);
 - modifications and repairs;
 - ICA from the type certificate and supplemental type certificate holders;
 - major defect reports, service difficulty reports and incident reports, both from the CAMO and from the world fleet;
 - maintenance records, including both aircraft and aeronautical products. In particular, inspection findings, test results, and defect rectification reports, including workshop reports for the aeronautical products; and
 - previous analysis reports;
- Data collection (i.e. how the data is to be obtained by the person carrying out the analysis);
- Analysis and interpretation of the data. The analysis should involve examination of the data for evidence that the maintenance program is not effective, assessment of all findings with regards to their effect on airworthiness, and determination of the actions that are required to correct any deficiencies. Examples of findings that may require variations of the maintenance program include the following:
 - changes to the operations of the aircraft (e.g. a significant increase in utilisation or moving the aircraft to a new location that has more corrosive environmental conditions);
 - failures of critical systems and equipment (e.g. in flight engine shut down), recurring defects (e.g. severe fatigue cracking in similar locations and/or multiple aircraft) and trends (e.g. increasing failure rates of particular components); and
 - new modifications or repairs that have special ongoing maintenance requirements;
- Recording the results of the analysis. This should be a report that covers the full procedure, including details of the data that was reviewed, the findings, and the recommended actions;

- Incorporation of required variations of maintenance program (i.e. how the recommendations from the results of the analysis are included in the maintenance program);
- Evaluation and review of the analysis procedure to ensure that the procedure is effective and achieving the objective;
- Records system, to ensure that the record keeping requirements of regulation 42.160 are complied with; and
- Identification of who within the CAMO is responsible for carrying out each part of the procedure and the administration of the procedure as a whole.

The objective of regulation 42.160 is to ensure the effectiveness of the approved maintenance program with respect to airworthiness. If the analysis identifies any possible variations of the maintenance program that are not related to airworthiness (for example, that there have been no adverse results from a particular task and so the task interval could possibly be extended), then these should be considered as a normal variation of a maintenance program under Division 42.J.4 or 42.J.5, and do not need to be included in the associated report, and furthermore, are not subject to the 30 day limit specified in subregulation (3).

GM 42.270 - Reporting major defects - all aircraft

This regulation covers major defects that become apparent on an aircraft, including when the source of the defect is an aeronautical product that is removed from the aircraft after the defect has become apparent.

The person responsible for continuing airworthiness of the aircraft is not absolved of the obligations relating to major defects by removing a known or suspected defective aeronautical product from an aircraft and sending the product to a maintenance organisation or pool part supplier.

Major defects that are discovered by a maintenance organisation during maintenance on an aeronautical product are covered under regulation 42.385, however, regulation 42.385 is only applicable when the existence of the major defect was not apparent prior to the aeronautical product being removed from an aircraft.

This regulation does not exclude electronic methods of reporting.

The approved form is Form 404, which is available on the CASA website.

4.4 Subpart 42.D: Maintenance

GM 42.295 - Who is permitted to carry out maintenance on aircraft - approved maintenance organisations

If maintenance is to be carried out on an aircraft used in RPT then the maintenance provider must be approved as a maintenance organisation under CASR Part 145.

If an aircraft is grounded at a location where there is no appropriately qualified certifying staff available to carry out the required maintenance (for example, if an aircraft experiences a defect

in flight and diverts to a port that is not in Australian territory and does not have an AMO, then an AMO may authorise certain persons to perform maintenance certification and issue certificates of release to service for aircraft maintenance for a single maintenance event under paragraph 145.A.30 (l) of the Part 145 MOS.

GM 42.310 (1) (a) (ii) - General requirements for carrying out maintenance - facilities

Refer to section 145.A.25 of the Part 145 MOS and the associated CASR Part 145 guidance material for guidance on appropriate maintenance facilities.

GM 42.310 (1) (c) - General requirements for carrying out maintenance – measuring and test equipment

Measuring equipment means any equipment that is used to measure a physical or non-physical quantity such as length, mass, time, temperature, torque, pressure, current etc. Test equipment means equipment used during maintenance to check performance of aircraft, aircraft system and aeronautical product.

The accuracy of equipment is appropriate for the maintenance being carried if the equipment is capable of measuring within the tolerance mentioned in the maintenance data. For example if the maintenance data requires measuring resistance in milliohms (mΩ) with a maximum uncertainty of +/- 5 mΩ; the meter should be capable of limiting uncertainty to this level.

Appropriate intervals for verification of accuracy will depend on the type of equipment, frequency of use, storage and handling condition. The AMO's exposition should set out procedures for controlling the accuracy of equipment including the relevant calibration interval. The equipment manufacturer's recommended interval may be adopted initially. The calibration interval should be varied based on the reliability of the equipment in maintaining its accuracy as determined from the historical data.

Verification of accuracy by means that is traceable to a nationally or internationally recognised standard can be achieved by carrying out the verification against a reference standard certified by a nationally or internationally accredited laboratory (such as the NATA). This will allow traceability to the national or international standards of measurement. NATA accreditation is not necessary to carry out the verification of the accuracy of measuring and testing equipment.

GM 42.315 - Ensuring individuals are competent to carry out maintenance

Refer to section 145.A.37 of the Part 145 MOS and the associated CASR Part 145 guidance material for guidance on training and assessment of individuals.

AMC 42.330 - Removal of tools etc after carrying out maintenance

An acceptable means of compliance with the element of regulation 42.330 for the management of tooling would be to have:

- a “shadow board”, or electronic tool and equipment management system, or tool and equipment audit system; and
- training to ensure that all employees know how to use the system, and understand the relevance of the system to airworthiness and regulatory compliance; and
- a policy and/or system that deals with personal tools.

If maintenance personnel are permitted to use personal tools then there must be a system in place that will enable maintenance personnel to demonstrate compliance with this regulation.

GM 42.340 - Requirement for verification and record for critical control system maintenance

Critical control system maintenance and aircraft control system are defined in regulation 42.015.

The CAMO and the AMO may choose to develop a list of tasks that require independent verification in addition to the critical control system maintenance tasks.

GM 42.360 - When qualified individual may defer rectification of defect

Paragraph 42.360 (3) (a) should only be applied to items that are not required for flight, for example, passenger convenience items and cabin interior items that are only decorative.

Defects in aircraft structure or flight related systems, no matter how minor, may only be deferred in accordance with the maintenance data for the aircraft or affected aeronautical product.

Furthermore, the defect must be the primary consideration for application of paragraph 42.360 (3) (a) with the system or part as secondary. If there is a defect in a system that is not related to flight, but the defect has the potential to affect another system or structure that is related to flight, then paragraph 42.360 (3) (a) may not be applied. If the defect in the non-flight related system requires maintenance action to isolate the defect from other systems and structure, then paragraph 42.360 (3) (a) may not be applied.

Several examples have been provided to illustrate the intent of the regulations with regards to when paragraph 42.360 (3) (a) may be applied and when it may not. Note that the examples are generic in nature and any maintenance must always be carried out in accordance with the relevant maintenance data.

Example 1: Defect for which paragraph 42.360 (3) (a) may be applied

An in-flight entertainment system is defective. Troubleshooting indicates the defect is the program control system software and inspection reveals no other defects. The system may be switched off and paragraph 42.360 (3) (a) may be applied.

Example 2: Defect for which paragraph 42.360 (3) (a) may not be applied

An in-flight entertainment system is defective. Troubleshooting indicates the defect is in the power supply, and inspection reveals a defect in the electrical power supply wiring and there is the potential for arcing. Maintenance is required to isolate the power supply to the defective wiring. Paragraph 42.360 (3) (a) may not be applied.

Example 3: Defect for which paragraph 42.360 (3) (a) may be applied

A passenger lavatory is defective. Inspection reveals that the lavatory flush control lever has broken off. The lavatory may be locked out and paragraph 42.360 (3) (a) may be applied.

Example 4: Defect for which paragraph 42.360 (3) (a) may not be applied

A passenger lavatory is defective. Inspection reveals that the water supply hose is leaking. Maintenance is required to isolate the water supply to the defective hose. Paragraph 42.360 (3) (a) may not be applied.

GM 42.360 (3) - When qualified individual may defer rectification of defect

A defect for which a special flight permit has been issued does not require a deferral under subregulation 42.360 (3) for the flight to continue. This may remain as an open defect in the flight technical log and should be managed by the person responsible for continuing airworthiness in accordance with the conditions and limitations in the special flight permit.

GM 42.360(3)(b)(i) – When qualified individual may defer rectification of defect – permitted by instructions for continuing airworthiness (ICA)

ICA includes ad hoc written instructions from the type certificate holder or manufacturer of an aircraft or aeronautical product that specify revised or new standards such in-service-limits for continuing airworthiness of the aircraft or aeronautical products. Such ICA may be used to defer rectification of a defect that is not covered by pre-existing ICA.

To meet the requirements to be ICA, the instructions must be issued by the type certificate holder or manufacturer. In practice, the instructions will be acceptable if they are issued:

- by the part of the type certificate holder or manufacturer's organisation that is responsible for issuing ICA; or
- by a person who has the authority to issue ICA on behalf of the type certificate holder or manufacturer.

For example, if ICA is issued by a type certificate holder's or a manufacturer's engineering support personnel, such as individuals from aircraft-on-ground (AOG) support desk or field service representatives, then these personnel are expected to hold appropriate authority within the organisation to issue the ICA (as specified in (1) and (2) above).

For example, instructions issued by a type certificate holder's or a manufacturer's engineering support personnel, such as individuals from aircraft-on-ground (AOG) support desk or field service representatives, are acceptable as ICA if the instructions have been issued in accordance with the type certificate holder's or a manufacturer's organisation procedures for issuing ICA for the aircraft or aeronautical product (as specified in (1) and (2) above).

If the ICA involves making a change to the approved design of the aircraft or aeronautical product, then a Part 21 approval is required. See regulation 42.325.

The qualified individual who defers the rectification of a defect must ensure that the defect is deferred in accordance with a document that meets the requirements to be ICA and that any maintenance specified in the ICA is carried out in accordance with current maintenance data.

Under subparagraph 42.030(2)(e)(ii), the registered operator should also be satisfied that the instructions used to defer rectification of a defect meet the requirements to be ICA.

If the defect is on a part of an aircraft or aeronautical product that has been subject to a supplemental type certificate or modification/repair design, then this guidance also applies in

relation to ad hoc instructions issued by the holder of the supplemental type certificate or modification/repair design approval.

GM 42.385 - Major defect reporting — approved maintenance organisation carrying out maintenance on aeronautical product

This regulation covers major defects that are discovered by a maintenance organisation during maintenance on an aeronautical product when the existence of the major defect was not apparent prior to the aeronautical product being removed from an aircraft. It is not applicable to a maintenance organisation that is carrying out maintenance on, or an investigation of, an aeronautical product that has a known defect on behalf of a CAMO or operator.

In addition to the requirement to report the major defect to CASA, if the AMO knows the identity of the owner and/or previous user of the aeronautical product then the AMO should also report the defect to the owner and/or previous user of the aeronautical product.

4.5 Subpart 42.E: Aeronautical products

GM 42.420 (2) (c) - Fitting parts other than standard parts

If storage life of a part has expired and maintenance is required to restore the life of the part then the part may be sent to an appropriately approved maintenance organisation to carry out the maintenance.

GM 42.420 (5) - Fitting parts other than standard parts – authorised release certificate

Under regulation 202.188 and 202.193 of CASR, an authorised release certificate includes an equivalent document that was issued on or before 26 June 2013 by a CAR 30 organisation under CAR 42WA.

GM 42.420 (5) - Fitting parts other than standard parts – in-house release documents

Under regulation 202.189 of CASR, an in-house release document includes an equivalent document that was issued on or before 26 June 2013 by an organisation that has subsequently become a Part 145 organisation.

AMC 42.420(5)(a)(i) – Fitting parts other than standard parts – prototype parts fitted for approval of an US supplemental type certificate

When developing a new replacement or modification part for an aircraft, there may be a need to fit a prototype version of the part to the aircraft for one or more of the following reasons, leading to the approval of the design of the part:

- to show that the part complies with the airworthiness standards that apply to the part and/or to the aircraft installation to which the part belongs;
- to verify conformity of the part to its intended fit and function as anticipated in the design data for the part and/or as specified in the design data for the installation of the part in the aircraft.

If a prototype part fitted to an aircraft for the reasons mentioned above is found to comply with the relevant airworthiness standards and is found to conform with its design data; the aircraft can be released to service with the part fitted provided:

- the design of the part has been approved for the aircraft; and
- an authorised release certificate is available for the part to comply with subparagraph 42.420 (5)(a)(i) of CASR.

The authorised release certificate is needed to verify that the part conforms with its approved design data and is fit for its intended use. It should be noted that for a modification part, the approval for the design of the part is included in the approval of the modification.

An aircraft to which Part 42 applies may be modified in accordance with a US supplemental type certificate (STC). When a US STC is exclusively developed for the modification of such an aircraft, a prototype version of a modification part included in the proposed US STC may be fitted to the aircraft leading to approval of the STC. Under the US system, an authorised release certificate for the prototype part is not available after the part is found to comply with the relevant airworthiness standards and is found to conform with its design data. However, under subparagraph 42.420 (5)(a)(i) of CASR an authorised release certificate is necessary for the fitment of a new part to an aircraft. This AMC may be used to comply with the requirement of subparagraph 42.420 (5)(a)(i) of CASR for a prototype modification part fitted to an aircraft under the circumstances mentioned in this AMC.

The prototype part must be supplied with a properly completed FAA Form 8130-3 that includes a statement of conformity to the current unapproved design data for the part. The form must include the 'Form Tracking Number' and all the information that is required by FAA Order 8130.21H (or a later version of the document, if applicable) for a prototype part including the name and authorisation number of the individual who signed the form. Most importantly the status of the part must be marked as 'prototype'. The current unapproved design data to which the part conforms must also be identified.

After showing of compliance with the relevant airworthiness standards and/or verification of conformity with the design data on the aircraft, the certificate of release to service in relation to the maintenance that involved fitment of the part to the aircraft may only be issued if:

- the STC has been approved; and
- STC holder has provided a letter of conformity that includes a statement to the effect that the part originally supplied as prototype under FAA Form 8130-3 with Tracking Number.... conforms to its approved design approved under the STC Number... and was fit for its intended use at the time of supply.

To be acceptable under this AMC, the statement in the letter of conformity must refer to the tracking number of the completed Form 8130-3 that was issued for the prototype part and the approved STC number. The letter of conformity must:

- be on the STC holder's letterhead;
- be signed by an individual within the STC holder's organisation who has had overall responsibility for ensuring conformity of the part and include the name and the title of the position held by the individual.

A copy of the Form 8130-3 and the letter of conformity provided by the STC holder after the approval of the STC must be attached with the maintenance record for the fitment of the part to the aircraft, to ensure traceability of the part to its approved design.

GM 42.430(2) - Fitting parts removed from aircraft—permission for paragraph 42.420(5)(c)

Under subregulation 42.430(2), a part that has been removed from an aircraft may be fitted to another aircraft provided maintenance is not carried out on the part after its removal. The subregulation requires the aircraft from which the part is removed to be registered. This ensures traceability of the part to the aircraft and allows condition of the part to be assessed based on the information in the aircraft's continuing airworthiness records kept by the registered operators of the aircraft. A registered aircraft in most cases would be an aircraft that is in service. However in certain cases an aircraft that is no longer in service may still be registered and re-use of parts removed from such an aircraft is permitted. The subregulation sets out a number of other rules governing the removal, storage and fitment of such parts to ensure that the parts are fit for the intended use.

The continuing airworthiness records for the aircraft from which a part is removed should be carefully examined to determine if there is any defect in the aircraft that affects the part. Any defect in the part would render the part unserviceable. Paragraph 42.420(2)(a) requires a part to be serviceable before it can be fitted to an aircraft; the only exception being an unserviceability that is permitted by the minimum equipment list (MEL) for the aircraft to which the part is being fitted.

If the part is subject to a life limit, the continuing airworthiness records should be examined to ensure that the life limit has been accurately and authentically documented. A life limited part should never be fitted to an aircraft if the part has reached its life limit.

The continuing airworthiness record for the source aircraft should also be examined to ensure that the part has not been subjected to extreme loads, extreme temperatures or immersion in a liquid resulting in damage or deterioration of the part. This is particularly important for parts being salvaged from an aircraft that has been involved in an incident or accident. Paragraph 42.430(2)(e) restricts fitment of such a part. Examples of incidents that may cause a part to be subjected to extreme loads include heavy or hard landing, flight in severe turbulence and propeller ground strike. Exposure to extreme temperatures can be caused by fire or in case of an engine part, by engine over temperature. Natural calamities such as flood may cause immersion related damage to a part. Some of the damage or deterioration may not be visible but may still render the part unsalvageable.

If the aircraft from which the part is removed has been out of service for extended period, there is a need to verify that the aircraft and associated part has been preserved in accordance with the applicable instructions for continuing airworthiness and has been protected from environmental factors.

The removal of the part should be treated as a normal maintenance process and should be carried out in accordance with the requirements of Subpart 42.D of CASR which sets out rules for carrying out maintenance. The removal should be carried out in a maintenance facility that is appropriate for the maintenance process involving the removal. Paragraph 42.430(2)(a)

requires a part to be removed by a qualified and competent person who is permitted under the regulation to replace the part in the aircraft under normal circumstances. Applicable maintenance data should be followed and tools and equipment specified in the data should be used to remove the part. This would ensure that the part is not damaged or degraded during removal.

After the removal, a general visual inspection of the part should always be carried out to ensure that the part has not suffered any damage or deterioration. It should be noted that paragraph 42.430(2)(b) allows fitting of such a part to another aircraft if maintenance is not carried out on the part after its removal. However, this should not prevent a general visual inspection of the part as it would not be considered maintenance.

If there is any doubt about the serviceability of a part, the condition of the part should be assessed by a maintenance organisation that holds the appropriate rating to carry out maintenance on the part. The part should only be used after the maintenance organisation has carried out the necessary maintenance to make it serviceable and has issued an authorised release certificate in relation to the maintenance carried out.

A record of removal should be created for the part in a suitable worksheet and should be attached with the part to establish its identity and traceability for its subsequent fitment to an aircraft. The record should include the following information:

- the registration mark or serial number of the aircraft from which the part has been removed
- the name of the part
- the location of the part in the aircraft
- the part number and, if applicable, the serial number of the part
- condition of the part in terms of whether it is serviceable or unserviceable
- if the part is unserviceable, the reason for unserviceability
- if the part is subject to regular maintenance such as overhaul or inspection – time since last maintenance
- if the part is subject to life limit – the expended life of the part
- if applicable, the name and approval certificate reference number of the maintenance organisation
- name, signature and licence or certification authorisation number of the individual who removed the part
- the date of removal

If necessary, the registered operator of the aircraft should be contacted to obtain information in relation to any regular maintenance or life limit that may apply to the part.

The record of removal may be in the form a serviceable or unserviceable tag as appropriate, provided all the above mentioned information for the part is included in the tag.

If the removed part is to be stored, it should be stored in an appropriate manner to ensure that the condition of the part does not deteriorate during storage. Any specific storage instruction from the manufacturer of the part should be followed. All open connections of the part should be

blanked to prevent contamination of and damage to the part. Subregulation 42.430(2)(c) sets out the minimum requirements for storage of such parts.

When the removed part is fitted to an aircraft, the maintenance record for fitting the part should include the registration mark or serial number of the aircraft from which the part has been removed as required under regulation 42.395. A copy of the record of removal should be attached with the maintenance record for the retention by the registered operator of the aircraft. This would enhance traceability of the part to its source.

Finally, the person fitting the part to an aircraft should ensure that the person responsible for continuing airworthiness for the aircraft to which part is being fitted agrees to the fitting of the part. This is important as the person responsible for continuing airworthiness may have to establish subsequent maintenance requirements for the part including establishing compliance with the aircraft's maintenance program and applicable airworthiness directives. There may also be a need to verify compatibility of the part with the existing aircraft configuration.

GM 42.435 - Fitting parts fabricated by approved maintenance organisations — permission for subparagraph 42.420 (5) (a) (ii)

Refer to section 145.A.43 of the Part 145 MOS and the associated CASR Part 145 guidance material for guidance on fabrication of parts by AMOs.

GM 42.445 - Fitting standard parts

Standard part is defined in Part 1 of the CASR Dictionary. Standard parts are manufactured in complete compliance with specifications that are established, published and maintained either by organisations that set consensus standards or government agencies. The specification must include all information necessary to produce the part including design, manufacturing, test and acceptance criteria and be published so that any person may produce the part. Examples of such specifications are National Aerospace Standards (NAS), Society of Automotive Engineers (SAE), and American National Standards Institute (ANSI) etc. An authorised release certificate is not required for standard parts as these parts are not produced under an approval from a national airworthiness authority.

GM 42.445 (2) (b) and (c) - Fitting standard parts

Any person who installs a standard part on an aircraft or aeronautical product during maintenance must ensure that the part comes with adequate information that allows:

- identification of the part including the specification that the part complies with; and
- the part to be traced to its manufacturer.

This information, commonly known as identification and traceability information is necessary to establish the authenticity of the part. The traceability information is also necessary to isolate any faulty batch of parts from a particular manufacturer.

A standard part may incorporate a physical marking of the specification or the part number on the part itself. If a physical marking is present, then any identification information specified in the document accompanying the part should be consistent with the marking on the part.

Identification and traceability information may also be printed on the original packaging of a standard part by the manufacturer of the part. If information on the packaging is used to establish identity and traceability of the part then the original packaging should be intact and the information should include the manufacturer's name, the specification the part complies with, part number, batch number and the quantity of the part in the package.

Any person who installs a standard part on an aircraft or aeronautical product during maintenance must also have evidence or proof that the part complies with the applicable specification. Such evidence may take the form of a certificate of conformance from the manufacturer of the part. A certificate of conformance for the part should state that the part complies with the relevant specification and should include the identification and traceability information such as manufacturer's name, part number and batch number of the part covered by the certificate. A properly completed certificate of conformance issued by the manufacturer of the part may be used to comply with all of the requirements of paragraphs 42.445 (2) (b) and (c).

Distributors of parts may split a batch of standard parts procured from the manufacturer into smaller quantities for onward supply to consumers. In this case, a copy of the certificate of conformance from the manufacturer, for the original batch, will be acceptable to meet the requirements of paragraphs 42.445 (2) (b) and (c).

Instead of providing a certificate of conformance, the distributor of a standard part may include a statement, in the picking slip or invoice for the part being supplied, that the part complies with applicable specification and that they hold the certificate of conformance to substantiate this. The document on which the statement is made, should identify the part to which it relates and should include traceability information for the part such as the manufacturer's name, manufacturer's batch number, distributor's stock number or inward good receipt number etc. In this case, the person fitting the part on an aircraft or aeronautical product should be satisfied that the distributor's stock number or inward good receipt number allows traceability of the part to the manufacturer's certificate of conformance held on file by the distributor.

AMC 42.450 - Fitting parts removed from same place on aircraft — permission for paragraphs 42.420 (1) (a) and 42.445 (1) (a)

It is acceptable to fit a part under this regulation if the part has been maintained off the aircraft as aircraft maintenance. According to the meaning of 'carrying out maintenance on an aeronautical product' in Part 3 of the CASR Dictionary it is considered no aeronautical product maintenance has been carried out on the part in this case.

GM 42.455 (1) (a) - Using materials

Regulation 42.455 applies to any material used in or on an aircraft or aeronautical product during maintenance. Examples of such materials are:

- hydraulic fluids used to replenish an aircraft system;
- chemicals used in cleaning or treating corrosions;
- grease or oil used to lubricate mechanical parts;

- sheet metals used to repair structures;
- sealants used in repairs.

Any person who uses a material on or in an aircraft or aeronautical product during maintenance must ensure that the material comes with adequate information that allows:

- identification of the material including the specification that the material complies with; and
- the material to be traced to its manufacturer.

This information, commonly known as identification and traceability information is necessary to establish the authenticity of the material. The traceability information is also needed to isolate any faulty batch of materials from a particular manufacturer.

Solid materials may incorporate physical marking of the specification on the material itself. If physical marking is present, then any identification information specified in the document accompanying the material should be consistent with the marking on the material.

Identification and traceability information may also be printed on the original packaging of a material by the manufacturer of the material. If information on the packaging is used to establish identity and traceability of the material, then the original packaging should be intact and the information should include the manufacturer's name, the specification the material complies with, product code, batch number and the quantity of the material in the package.

Any person who uses a material on or in an aircraft or aeronautical product during maintenance, must also have evidence or proof that the material complies with the applicable specification. Such evidence may take the form of a certificate of conformance from the manufacturer of the material. A certificate of conformance for the material should state that the material complies with the relevant specification and should include the identification and traceability information such as the manufacturer's name, product code and batch number of the material covered by the certificate. A properly completed certificate of conformance issued by the manufacturer of the material may be used to comply with all of the requirements of paragraph 42.455 (1) (a).

Distributors of material may split solid bulk materials such as sheet metal, electrical cable, hose etc. procured from the manufacturer, into smaller quantities for onward supply to consumers. In this case, a copy of the certificate of conformance from the manufacturer, for the original quantity, will be acceptable to meet the requirements of paragraphs 42.455 (1) (a). However, it should be noted that repackaging of liquid materials into smaller quantities is not acceptable. To ensure proper quality, liquid material should only be used if it comes in the manufacturer's original packaging.

Instead of providing a certificate of conformance, the distributor of a material may include a statement, in the picking slip or invoice for the material being supplied, that the material complies with applicable specification and that they hold a certificate of conformance to substantiate this. The document on which the statement is made should identify the material to which it relates and should include traceability information for the material such as, manufacturer's name, manufacturer's batch number, distributor's stock number or inward good receipt number etc. In this case, the person using the material on an aircraft or aeronautical product should be satisfied that the distributor's stock number or inward good receipt number

allows traceability of the material to the manufacturer's certificate of conformance held on file by the distributor.

GM 42.460 - Control of unserviceable parts

The two day limit specified in regulation 42.460 is the maximum limit for compliance with all the requirements of regulation 42.460; however, this limit does not absolve the maintenance organisation or individual of responsibility for taking reasonable precautions to ensure that an unserviceable part is not inadvertently used within the two day limit.

GM 42.465 - Control of unsalvageable parts

The two day limit specified in regulation 42.465 is the maximum limit for compliance with all the requirements of regulation 42.465; however, this limit does not absolve the maintenance organisation or individual of responsibility for taking reasonable precautions to ensure that an unsalvageable part is not inadvertently used within the two day limit.

GM 42.475 - Control of unapproved parts

The two day limit specified in regulation 42.475 is the maximum limit for compliance with all the requirements of regulation 42.475, however, this limit does not absolve the maintenance organisation or individual of responsibility for taking reasonable precautions to ensure that an unapproved part is not inadvertently used within the two day limit.

4.6 Subpart 42.G: Continuing Airworthiness Management Organisation

GM 42.570 - Purpose of Subpart

This Subpart sets out the regulatory requirements for a CAMO. In particular it specifies:

- how an application for a CAMO approval must be made;
- how a CAMO approval is issued by CASA;
- how changes to a CAMO approval are to be managed;
- how pilots and flights engineers may be authorised by a CAMO to provide maintenance services;
- some of the administrative obligations of a CAMO in relation to its approval to provide continuing airworthiness management services.

GM 42.580 - Regulations 11.070 to 11.075 do not apply in relation to certain matters

Under Part 11, the holder of an authorisation must notify CASA of any changes to the holder's circumstances and any other matters that affect the authorisation. Regulations 11.070 to 11.075 set out these general notification requirements.

Subpart 42.G includes certain requirements regarding notification to CASA that are additional to the general requirements of Part 11. This regulation exempts a CAMO from the notification

requirements of regulations 11.070 to 11.075 in relation to the changes made to a CAMO in accordance with this Subpart.

GM 42.585 (3) (a) - Applying for approval – CAMO exposition

The applicant for a CAMO approval must submit with their application the proposed exposition. Section 1.2 of the Part 42 MOS specifies the information that the exposition must contain. This includes basic information about the CAMO such as:

- a description of the CAMO's organisational structure, facilities and scope of approval;
- names of individuals occupying key positions and list of certain personnel;
- duties and responsibilities of individuals.

In addition, the exposition must demonstrate how the CAMO ensures compliance with the requirements of CASR Part 42 and the Part 42 MOS. This requires various processes, procedures and associated forms, checklists, lists of items and individuals to be included in the exposition. Although, the exposition is the primary document to demonstrate compliance with the legislation, this does not mean a single exposition document has to physically contain all the information. Content of the exposition may be included in other documents kept by the CAMO provided the primary exposition document makes precise reference to the content. In this case, the content continues to be part of the exposition and is subject to the same requirements and controls as the exposition.

Processes and procedures included or referred to in the exposition should be of adequate depth and include enough details to demonstrate they establish compliance with the applicable requirements of CASR Part 42 and the Part 42 MOS.

Duties and responsibilities of individuals as mentioned in the exposition should relate to the obligation of the CAMO or the individuals, under CASR Part 42 and Part 42 MOS. These are not meant to cover employment conditions, performance criteria or administrative functions. Where content of the exposition requires identifying the individual responsible for an action or a decision that is part of a process, it is intended that the individual will be identified by their position title (such as 'continuing airworthiness manager') or if applicable, by means that describes their function (such as 'airworthiness review employees' or 'data entry clerks').

Where content of the exposition deals with records to be created or kept by the CAMO, the relevant processes and procedures in the exposition should take into account the requirements of CASR Subpart 42.N in relation to the following:

- legibility of the records;
- retrieval of records;
- protection of the records from loss, damage or accidental alteration.

See Appendix A for guidance on the typical structure and content of an exposition for a CAMO. An applicant may use the guidance to develop an exposition that reflects their organisation's structure, process and procedures. This guidance is suitable for a potential CAMO that would be responsible for managing continuing airworthiness for aircraft authorised to operate under its own AOC.

See Annex A for a sample exposition document for a CAMO. An applicant may customise the sample exposition for its own use based on the guidance and the sample text included in the document. This document is suitable for a potential small or medium size CAMO with a simple organisational structure that would be responsible for managing continuing airworthiness for aircraft authorised to operate under its own AOC.

GM 42.590 - Issuing approval

Regulation 42.590 requires CASA to be satisfied that an applicant for a CAMO approval has the suitable resources to provide continuing airworthiness management services it proposes to provide including:

- facilities such as office accommodation, office equipment, record keeping system;
- instructions for continuing airworthiness for aircraft and aeronautical products;
- qualified personnel who are capable of performing the continuing airworthiness management tasks.

Part 42 MOS sets out the details of facilities, equipment, data and personnel that the applicant must have.

Under regulation 42.590 CASA will also have to be satisfied that the applicant has an exposition that meets the requirements of Part 42 MOS. The MOS requires the applicant to include in the exposition adequate processes for the accomplishment of continuing airworthiness management tasks in accordance with the requirements of CASR Part 42 and the Part 42 MOS.

Suitable resources and adequate processes are essential for effective management of continuing airworthiness of aircraft. CASA will assess, before the grant of an approval, the suitability of the resources and the adequacy of the processes taking into account the following:

- applicant's scope of approval;
- the number and types of aircraft for which the applicant proposes to provide continuing airworthiness management services;
- volume and complexity of the continuing airworthiness management services the applicant is expected to provide.

A CAMO may enter into an arrangement with any person including an individual or organisation to accomplish one or more continuing airworthiness management tasks based on the need to share resources or to access technical expertise that is not available in-house. However, the CAMO remains responsible for the proper accomplishment of the tasks and should demonstrate in its exposition how it actively controls the tasks to ensure the tasks are carried out in a timely manner and in accordance with applicable requirements of the legislation. When a person carries out a task under such an arrangement, it should be carried out as an integral part of the CAMO's continuing airworthiness management system, irrespective of any other approval held by the person. To achieve active control of a task, the relevant process in the CAMO's exposition for the accomplishment of the task should:

- establish responsibility of the individuals within the CAMO for timely initiation of the task;

- identify the responsible manager of the CAMO who is responsible for outcome of the task;
- refer to the procedures for carrying out the task in compliance with the legislative requirements;
- provide an adequate level of oversight by the CAMO of the individuals who carry out the task on behalf of the CAMO;
- implement communication between the individuals who carry out the task and other CAMO personnel, that is necessary for proper accomplishment of the task;
- ensure timely exchange of records and information between the individuals who carry out the task and other CAMO personnel for proper accomplishment of the task and subsequent update of the continuing airworthiness records system;
- establish means to verify the proper outcome of the task;
- demonstrate how any problem encountered during the performance of the task is addressed.

The scope and complexity of the process underpinning the active control of a task should depend, amongst other things, on the following factors:

- extent and nature of the task to which the process relates;
- location of the individuals involved with the process;
- the nature and scale of the operation of the aircraft to which the task relates;
- size and complexity of the organisational structure of the CAMO.

The CAMO remains responsible for ensuring that the individuals are qualified and competent to perform the continuing airworthiness management tasks irrespective of the arrangements under which the tasks are performed. Any facility, equipment and data used in the process to accomplish the tasks will be subject to the requirements of the Part 42 MOS, CASA's assessment and oversight. These will also have to be covered by the CAMO's quality system audit. The CAMO should maintain appropriate competence and resources to oversee all continuing airworthiness management tasks and to ensure active control of these tasks. Having a contract or service agreement with another person is not sufficient to meet the continuing airworthiness obligations of the CAMO under the regulation. However written copies of such contract or agreement can be used to support the person's obligation to perform the tasks in accordance with the process proposed in the CAMO's exposition.

GM 42.590 (1) (b) - Issuing approval – personnel

For CASA to approve an applicant as a CAMO, CASA must be satisfied, amongst other things, that the applicant has the necessary personnel who are capable of providing the continuing airworthiness management services that the applicant proposes to provide. Regulation 42.590 requires the applicant to nominate individuals as the responsible manager, continuing airworthiness manager, quality manager of the CAMO. Also, the Part 42 MOS requires the applicant to have qualified individuals such as airworthiness review employees, maintenance program approval employees to carry out specific functions of the CAMO. In this context, an individual will be considered a manager or employee of a CAMO in a particular position if the

CAMO has a formal arrangement in place with the individual that requires the individual to carry out the duties and responsibilities of the position.

A manager or an employee of a CAMO may also be an employee or a manager of another organisation such as a CAMO or an AMO. Also, an individual may be nominated for more than one position within a CAMO with some exception related to the position of quality manager. An individual nominated for the position of the quality manager of a CAMO must not be the accountable manager, continuing airworthiness manager or a responsible manager for the CAMO. This restriction is included in subparagraph 42.590 (1) (f) (iii) of CASR.

If an individual holds more than one position in a CAMO or holds positions in more than one CAMO, then the individual must meet the qualifications, knowledge and experience requirements as set out in the Part 42 MOS for each of the positions.

CASA will have to be satisfied that the individual who holds multiple positions is capable to carrying out the duties and discharging the responsibilities of all the positions taking into account:

- the extent of their duties and responsibilities in each position; and
- the competence and the availability of the individual to fulfil the role of each position.

In deciding whether part time service of an individual will be acceptable for a position within a CAMO, CASA will also consider the following factors:

- the number and types of aircraft for which the CAMO is expected to provide continuing airworthiness management services;
- the volume and complexity of the continuing airworthiness management services the CAMO is expected to provide;
- the level of resources the CAMO provides to support the role of the particular position;
- the physical location of the individual and the CAMO and how it affects the availability of the service of the individual.

GM 42.590 (1) (c) - Issuing approval – accountable manager

For CASA to approve an applicant as a CAMO, CASA must be satisfied, amongst other things, that the applicant has nominated an individual for the position of accountable manager.

Paragraph 42.590 (1) (g) requires CASA to be satisfied that the individual nominated for the position of accountable manager holds the qualifications specified for the position in the Part 42 MOS.

For an air transport AOC, the CAMO and the AOC holder is always the same entity. So, subsection 1.4.2 of the Part 42 MOS requires the accountable manager for a CAMO for an air transport AOC holder to be the individual who has corporate authority for managing and financing the operation authorised under the AOC. When determining the suitability of an individual for the position of accountable manager for such a CAMO, CASA will assess whether the individual has overall corporate authority for managing and financing the operation authorised under the air transport AOC. If the air transport AOC holder is a corporation, then the accountable manager should be the individual (however he/she is described) who holds or carries out the duties of the position of chief executive officer of the AOC holder's organisation. Under section 28 of the Civil Aviation Act 1988 this individual is also one of the key personnel in

the AOC holder's organisation and must demonstrate that he or she has appropriate experience in air operations to safely carry out the operations under the AOC.

CASA may ask an applicant for a CAMO approval to provide written evidence in the form of business documents such corporate governance structure, position descriptions, delegations etc. setting out the level of financial and management decision making authority held by the proposed accountable manager in relation to the operations carried out under the AOC.

The accountable manager of a CAMO should have knowledge of his or her responsibilities under the legislation. Under subsection 1.4.1 of the Part 42 MOS the accountable manager is ultimately responsible for ensuring that:

- the CAMO complies with applicable requirements of CASR 1998, Part 42 MOS, its approval and its exposition; and
- the CAMO has adequate resources to provide the continuing airworthiness management services it is approved to provide.

GM 42.590 (1) (d) - Issuing approval – responsible manager

For CASA to approve an applicant as a CAMO, CASA must be satisfied, amongst other things, that the applicant has nominated one or more individual for the position of responsible manager. A responsible manager is responsible for ensuring that the CAMO continues to comply with:

- the CAMO's regulatory obligation under CASR 1998 and Part 42 MOS; and
- the CAMO's exposition in relation to those regulatory obligation.

The number of responsible managers within a CAMO should depend on the:

- the number and types of aircraft that the CAMO is expected to provide continuing airworthiness management services for;
- the volume and complexity of the continuing airworthiness management services the CAMO is expected to provide;
- the resources the CAMO provides to support the role of the responsible manager.

A single responsible manager may be nominated for all of the regulatory obligations of a CAMO that manages continuing airworthiness of few small aircraft but such an arrangement may not be appropriate for a CAMO that manages continuing airworthiness of a number of large aircraft engaged in air transport operation.

If there is more than one responsible manager within a CAMO, then their responsibilities may be allocated in terms of the CAMO's regulatory obligation for a particular matter. For example, separate responsible managers may be nominated for airworthiness review, for maintenance program and for continuing airworthiness records system etc. If a CAMO manages continuing airworthiness of a number of different types of aircraft, it may choose to nominate a responsible manager for each aircraft type. In this case, each responsible manager will be responsible for the whole range of continuing airworthiness obligations for the particular aircraft type.

A CAMO may also nominate a substitute responsible manager for each responsible manager's position, to ensure that the CAMO's capabilities are not affected by temporary absence of a

responsible manager. Once approved and listed in the exposition, the substitute responsible manager would be able to resume the role of the responsible manager in their absence.

For a CAMO that manages continuing airworthiness of aircraft authorised to operate under an air transport AOC, each responsible manager who is responsible for the aircraft authorised to operate under the AOC must directly report to the continuing airworthiness manager for the CAMO. In all other cases, a responsible manager must report directly to the accountable manager.

Paragraph 42.590 (1) (g) requires CASA to be satisfied that the individual nominated for the position of responsible manager holds the qualifications specified for the position in the Part 42 MOS. Section 1.5 of the Part 42 MOS sets out the qualification requirements for this position. These qualification requirements also apply to a substitute responsible manager. When determining the suitability of an individual for the position of responsible manager, CASA will also consider whether he or she holds another position within the CAMO or in any other organisation that would affect their ability to discharge their responsibilities as the responsible manager. It should be noted that under subparagraph 42.590 (1) (f) (iii) of CASR, a responsible manager of a CAMO must not hold the position quality manager of the CAMO. See also GM 42.590 (1) (b) for general guidance on personnel requirements.

GM 42.590 (1) (e) - Issuing approval – continuing airworthiness manager

Under section 1.6 of the Part 42 MOS, a continuing airworthiness manager is required for a CAMO that manages continuing airworthiness of aircraft authorised to operate under an air transport AOC. The continuing airworthiness manager is responsible for management and supervision of the continuing airworthiness management services for the aircraft that are authorised to operate under the air transport AOC. Each responsible manager who are responsible for continuing airworthiness of the aircraft authorised to operate under the air transport AOC must report directly to the continuing airworthiness manager.

Paragraph 42.590 (1) (g) requires CASA to be satisfied that the individual nominated for the position of continuing airworthiness manager holds the qualifications specified for the position in the Part 42 MOS. Section 1.6 of the Part 42 MOS sets out the qualification requirements for this position. When determining the suitability of an individual for the position of continuing airworthiness manager, CASA will assess whether the individual holds the required qualifications specified in the Part 42 MOS. CASA will also consider whether he or she holds another position within the CAMO or in any other organisation that would affect their ability to discharge their responsibilities as the continuing airworthiness manager. It should be noted that under subparagraph 42.590 (1) (f) (iii) of CASR a continuing airworthiness manager of a CAMO must not hold the position quality manager of the CAMO. See also GM 42.590 (1) (b) for general guidance on personnel requirements.

If an AOC holder is required under section 28 of the Civil Aviation Act 1988 to have a head of the aircraft airworthiness and maintenance control (HAAMC) then the continuing airworthiness manager of the AOC holder's CAMO may be taken to be the HAAMC.

GM 42.590 (1) (f) (ii) - Issuing approval – quality manager

Under section 1.7 of the Part 42 MOS, a quality system is required for a CAMO that manages continuing airworthiness of:

- an aircraft that is authorised to operate under an air transport AOC; or
- a large aircraft.

Under the same section of the MOS, a quality manager is required for a CAMO that is required to have a quality system.

The quality manager is responsible for implementing and managing the quality system of the CAMO. The quality manager must report directly to the accountable manager, in relation to their responsibilities as the quality manager. For complete independence, a quality manager of a CAMO must not hold the position of a accountable manager, responsible manager or the continuing airworthiness manager of the CAMO. This restriction is included in subparagraph 42.590 (1) (f) (iii) of CASR.

Paragraph 42.590 (1) (g) requires CASA to be satisfied that the individual nominated for the position of quality manager holds the qualifications specified for the position in the Part 42 MOS. Section 1.7 of the Part 42 MOS sets out the qualification requirements for this position. When determining the suitability of an individual for the position of quality manager, CASA will assess whether the individual holds the required qualifications specified in the Part 42 MOS. CASA will also consider whether he or she holds another position within the CAMO or in any other organisation that would affect their ability to discharge their responsibilities as the quality manager. See also GM 42.590 (1) (b) for general guidance on personnel requirements.

GM 42.600 - Privileges for continuing airworthiness management organisations

A CAMO's privilege to provide continuing airworthiness management services is limited by the scope of its approval. Following information is included in the certificate of approval to define the scope of approval:

- the type and model of aircraft for which the CAMO may provide continuing airworthiness management services;
- the type of continuing airworthiness management services the CAMO is approved to provide;
- Any condition and limitation affecting the approval.

Continuing airworthiness management service is defined in regulation 42.575 in terms of the types of tasks that a CAMO may carry out to manage continuing airworthiness of an aircraft.

GM 42.610 (4) - Application for approval of significant changes to continuing airworthiness management organisations

Significant changes are defined in regulation 42.575. This includes change to the personnel holding the following positions:

- accountable manager;
- responsible manager;

- continuing airworthiness manager;
- quality manager.

For an unexpected change to personnel holding any of the above position, the subregulation requires the CAMO to apply for CASA approval within 7 days after the change. Under such circumstances the CAMO may continue to provide continuing airworthiness management services if it can practically do so in compliance with all other requirements of the legislation. The organisational structure of the CAMO will dictate whether a CAMO will be able to do this under the circumstances. Under regulation 42.605, it is a condition of an approval that the CAMO complies with the requirements of Part 42, the Part 42 MOS and its approval at all time. It would be convenient if the CAMO has a substitute position holder who can resume the role of the position in this case. Once the CAMO has made an application for the appointment of another individual to the position, it would be up to CASA to assess the situation and take action accordingly.

GM 42.620 - Changes to continuing airworthiness management organisations that are not significant changes

Significant change in relation to CAMO is defined in regulation 42.575. If a CAMO intends to make changes to an organisation that are not significant changes, then the CAMO may do so without approval from CASA. In this case the CAMO's exposition must include a procedure for making such changes to the organisation in accordance with the requirements of this regulation.

GM 42.630 (2) (a) - When pilot licence holders and flight engineers may be authorised

Part 42 MOS Chapter 15 includes a list of maintenance that a pilot or a flight engineer may carry out under an authorisation issued under regulation 42.630.

GM 42.630 (2) (d) - When pilot licence holders and flight engineers may be authorised

The purpose of the training is to impart the knowledge and skill necessary to carry out the maintenance. The regulation does not specify the level and scope of the training. This will depend on the type of maintenance for which the pilot or the flight engineer is being authorised and the prior knowledge and skill of the individual in relation to carrying out the maintenance. The training may need to include both theoretical and practical elements or just practical. If a pilot or flight engineer currently holds the privilege to carry out a particular maintenance, the scope of required training for the maintenance may be minimum.

The training may be carried out by either:

- an AMO that holds the privileges to carry out the maintenance; or
- a maintenance training organisation approved under Part 147 that is approved to provide training for the maintenance;
- on the relevant aircraft type.

After the required training, the pilot or the flight engineer must be assessed by the AMO or the maintenance training organisation for competency. Before the CAMO issues an authorisation under regulation 42.630 for a particular maintenance, the CAMO must ensure the pilot or the flight engineer holds written statement from the AMO or the maintenance training organisation

to verify that the pilot or flight engineer is competent to carry out the maintenance. Under regulation 42.660, the CAMO is required keep a copy of the statement for 2 years after the authorisation ceases to be in force.

AMC 42.630 (2) (e) (i) - When pilot licence holders and flight engineers may be authorised

Although a pilot or a flight engineer is required to hold a statement issued by an AMO or a maintenance training organisation in relation to their competency, the CAMO issuing the authorisation is ultimately responsible for ensuring that the pilot or the flight engineer is competent at the time the authorisation is issued. This requirement applies at the time of initial issue and subsequent issue of the authorisation. The reason for this is that an individual may lose competency over time if they do not carry out the maintenance on a regular basis.

An acceptable means of complying with this requirements is to ensure that the initial authorisation is issued within 6 months of the assessment that has been carried out by the AMO or the maintenance training organisation under subparagraph 42.630 (2) (d) (i) . For subsequent issue, the CAMO must ensure the pilot or the flight engineer has satisfactorily carried out the maintenance at least once in 6 months preceding the re-issue of authorisation.

AMC 42.630 (2) (e) (ii) - When pilot licence holders and flight engineers may be authorised

An acceptable means of complying with this requirements is to carry out an assessment to demonstrate that pilot or the flight engineer have comprehensive knowledge of the regulation dealing with the following matters:

- how to carry out maintenance on aircraft;
- how to record details of maintenance carried out on aircraft;
- how to perform maintenance certification and issue certificate of release to service for maintenance carried out on aircraft.

The relevant regulations are included in Subparts 42.D, 42.E and 42.H of Part 42. The assessment may be carried out by the CAMO that issues the authorisation or a maintenance training organisation that hold the privilege to carry out training and assessment for maintenance personnel in this regard. The assessment may be in the form of written test or oral examination or a combination of both. A written record of the assessment must be made and kept by the CAMO that carries out the assessment as part of the record kept under subregulation 42.660 (3). If the assessment is made by a maintenance training organisation, the CAMO must keep a copy of the results of the assessment.

AMC 42.630 (3) (c) (vi) - When pilot licence holders and flight engineers may be authorised

Following are the acceptable means of compliance with subparagraph 42.630 (3) (c) (vi):

- for an authorisation being issued for aircraft that are listed in an AOC, identify the type and model of aircraft and the AOC;
- for an authorisation being issued for aircraft that are not listed in an AOC, identify the type, model and the registration mark of each aircraft.

GM 42.630 (4) - When pilot licence holders and flight engineers may be authorised

The authorisation remains in force for 2 years from date of issue. At the end of 2 years, the CAMO may re-issue the authorisation in accordance with the requirements mentioned in subregulation 42.630 (2).

GM 42.650 - Provision of continuing airworthiness management services

This regulation puts an obligation on the CAMO to provide continuing airworthiness management services in accordance with the processes and procedures set out in the CAMO's exposition and within the scope of its approval. The CAMO will commit an offence if it does not follow the processes and procedures within the exposition in relation to providing the continuing airworthiness management services or if it operates outside the scope of its approval. Scope of approval for a CAMO is specified in its approval certificate and is expressed in terms of the following:

- the type and model of aircraft for which the CAMO is approved to provide continuing airworthiness management services;
- the kinds of continuing airworthiness management services that the CAMO is approved to provide for each aircraft type and model;
- any condition and limitations affecting the approval.

The CAMO should ensure the processes and procedures in the exposition provide compliance with the applicable requirements of Part 42 and Part 42 MOS. The CAMO may change the processes and procedures within the exposition without CASA's approval if the change do not amount to a significant change to the CAMO. This will have to be done in accordance with regulation 42.620. Significant change in relation to CAMO is defined in regulation 42.575 and includes changes to the CAMO's scope of approval. If a CAMO intends to change the scope of its approval, then it must apply to CASA, under regulation 42.610 for the approval of the change.

GM 42.660 (1) – Copies of authorisation and records

The requirement of subregulation 42.660 (1) applies if the CAMO is not the registered operator of the aircraft. If CAMO and the registered operator are the same entity, then compliance with the requirement is achieved through subregulation 42.660 (2).

GM 42.660 (3) – Copies of authorisation and records

The CAMO must keep records that substantiate that the requirements for the issue of an authorisation have been met. This includes the following:

- copies of the written statement from the AMO or the maintenance training organisation in relation to training, assessment and competency requirements mentioned in paragraph 42.630 (2) (d);
- documents that demonstrate, as per AMC 42.630 (2) (e) (i), that the authorisation holders are competent to carry out the maintenance at the time the authorisation is issued;

- record of assessment carried out, as per AMC 42.630 (2) (e) (ii), that demonstrate the authorisation holders have comprehensive knowledge of the regulation;
- evidence that the authorisation holders have comprehensive knowledge of the operator's procedures for issuing CRS and maintenance certifications.

4.7 Subpart 42.H: Maintenance certification and certificate of release to service

GM 42.680 - Purpose of Subpart

Under regulation 42.030 it is an offence to operate an aircraft for a flight if maintenance has been carried out on the aircraft and a CRS has not been issued for the aircraft in relation to the maintenance. Under regulation 42.745, a CRS for an aircraft must not be issued unless maintenance certification has been performed for all the maintenance carried out on the aircraft.

This Subpart specifies:

- when maintenance certification and a CRS is required;
- who may perform maintenance certification or issue a CRS;
- how to perform maintenance certification or issue a CRS;
- the conditions that must be met before maintenance certification is performed and a CRS is issued;
- for maintenance carried out on an aircraft.

Under regulation 42.780, if an AMO carries out maintenance on an aeronautical product the AMO must not release the product for use in an aircraft or another aeronautical product unless a CRS has been issued for the product in relation to the maintenance. This Subpart specifies requirements for the issue of a CRS for aeronautical products. In particular it specifies:

- when a CRS is required;
- who may issue a CRS;
- how to issue a CRS;
- the conditions that must be met before the issue of a CRS;
- for maintenance carried out on an aeronautical product.

GM 42.705 (1) (a) - Requirements to be met by individuals before performing maintenance certification

The individual performing maintenance certification must ensure requirements relating to how maintenance must be carried out, as set out in Parts 42 and 145, have been complied with. Division 42.D.4 of Part 42 sets out regulations that specify how maintenance must be carried out. It includes requirements for:

- using adequate facilities for the maintenance;
- following appropriate maintenance data;
- using correct tools and equipment; and

- if the maintenance is a modification or repair involving design change — ensuring there is a Part 21 approval for the modification or the repair.

Also relevant are regulations contained in Division 42.E.2 of Part 42 that specify requirements for:

- using proper parts and materials in maintenance; and
- establishing traceability of parts and materials used in maintenance.

If the maintenance is carried out by a Part 145 organisation, the individual performing maintenance certification must also ensure compliance with additional requirements included in Part 145 MOS in relation to facilities, tools and equipment for the maintenance.

GM 42.705 (1) (b) - Requirements to be met by individuals before performing maintenance certification

The maintenance certification should relate to the maintenance for which the certification is being performed. Under regulation 42.395 if an individual carries out maintenance on an aircraft on behalf of an AMO, the AMO must ensure information about the maintenance has been recorded before the CRS is issued for the aircraft. This includes identification of the aircraft, a description of the maintenance and the details of any parts fitted. Regulation 42.395 includes a similar requirement for an independent maintainer who carries out maintenance. Paragraph 42.705 (1) (b) requires the individual performing maintenance certification for particular maintenance to ensure that the information regarding the maintenance has been correctly recorded in accordance with regulation 42.395. This information forms the basis of a maintenance certification.

GM 42.715 - How maintenance certification is performed

This regulation sets out the method of performing a maintenance certification. Regulation 42.395 specifies the information that must be recorded in relation to any maintenance carried out on an aircraft, which includes identification of the aircraft, a description of the maintenance and details of any parts fitted. To complete the maintenance certification the individual must:

- sign the record containing the information required by regulation 42.395; and
- enter in the record the date of the certification and his/her certification authorisation number or licence number as appropriate.

The signature, date and authorisation/licence number should be entered in a manner so they relate to the maintenance being certified. Regulation 42.395 does not specify the type or form of document in which the details of maintenance must be recorded as the document may be an AMO's worksheet or the operator's flight technical log for the aircraft. For scheduled maintenance the information may even be pre-recorded in the operator's task cards. Such documents should be designed to accommodate the signature and other information required under this regulation.

GM 42.725 (1) - Requirement not to release aircraft without certificate of release to service

According to subregulation 42.725 (1), if maintenance has been carried out on an aircraft on behalf of an AMO, the AMO must not release the aircraft to another person unless a CRS has been issued for the aircraft on behalf of the AMO.

“the organisation must not release the aircraft to another person” means that the AMO must not relinquish control of the aircraft to another person such as the operator, the pilot of the aircraft representing the operator or another maintenance organisation that is carrying out or intends to carry out maintenance. The intention of this subregulation is to ensure that the AMO does not inadvertently handover an aircraft to another person (in most cases to the operator for subsequent flight) without meeting the AMO’s obligation under Part 42 in relation to the maintenance. Regulation 42.745 sets out the requirements that must be complied with before the issue of CRS. Compliance with regulation 42.745 ensures requirements in relation to carrying out maintenance under Part 42 have been met and provides effective co-ordination of maintenance carried out by a maintenance provider at a particular time.

It should be noted that subregulation 42.725 (1) requires “a certificate of release to service for the aircraft in relation to the maintenance” carried out. The CRS is intended to be a single certification for the complete aircraft that provides the co-ordination for all maintenance carried out at a particular time. So, it would be inappropriate if multiple CRS are issued for maintenance carried out at a particular time as it would defy the purpose of having the CRS as the final certification after maintenance.

However, if more than one AMO carries out maintenance on an aircraft at a particular time, then under subregulation 42.725 (1) each AMO must issue a CRS for the maintenance it has carried out. The intent is that each AMO takes responsibility for the maintenance it carries out. Which AMO ultimately hands the aircraft back to the operator will depend on various factors affecting the maintenance such as:

- at which AMO’s facility the maintenance is being carried out;
- which AMO is carrying out the majority of the maintenance; and
- the time of completion of maintenance by each AMO.

For example, consider two AMOs (AMO 1 and AMO 2) are engaged in the maintenance of an aircraft simultaneously. If AMO 2 completes the maintenance first, it may issue the CRS for the maintenance it has carried out and leave the complete control of the aircraft to AMO 1. On the other hand if the maintenance is being carried out at the facility of AMO 2, then the AMO 2 will most likely retain control of the aircraft until all the maintenance has been completed and the aircraft is handed back to the operator.

So, if an AMO carries out maintenance on an aircraft, the AMO must issue a CRS for the aircraft in relation to the maintenance before the AMO gives the aircraft back to the operator of the aircraft, their representative or to any other person including another maintenance organisation. This applies to any AMO that carries out maintenance under its own approval including a ‘D’ rated AMO that carries out specialist maintenance. If the D rated AMO does not have suitably qualified individual to issue the CRS for the aircraft then the ‘D’ rated AMO should

provide the specialist maintenance service under the approval of an 'A' rated AMO that has the ability to issue CRS for the aircraft.

In this case the individual who carries out the specialist maintenance should perform the maintenance certification for the specialist maintenance as a certifying employee of the 'A' rated AMO. The 'A' rated AMO should have a process in place to assess the qualification and competence of the individual carrying out the specialist maintenance and to induct the individual into the AMO's system.

Any arrangement to engage two or more AMOs to carry out maintenance on an aircraft requires consent and co-operation of all parties involved in the maintenance, including the registered operator of the aircraft. It is important that AMOs communicate with each other and with the registered operator of the aircraft for proper accomplishment of the maintenance and subsequent issue of CRS by each AMO. However, as the person responsible for arranging maintenance for an aircraft, the registered operator of the aircraft is ultimately responsible under regulation 42.030 for ensuring all required maintenance has been carried out and a CRS has been issued by each AMO. Under regulation 42.030 the registered operator must do this before the aircraft is operated for a flight.

GM 42.745 - Requirements to be met before certificate of release to service may be issued

Regulation 42.745 sets out the specific requirements that must be met before the issue of a CRS for an aircraft in relation to maintenance carried out on the aircraft. It is the responsibility of the AMO (under regulation 42.750) and also of the individual issuing the CRS (under regulation 42.755) to ensure that these requirements are met. Compliance with regulation 42.745 provides effective co-ordination of maintenance carried out by a maintenance provider at a particular time. It ensures requirements in relation to carrying out maintenance under Part 42 have been complied with. In addition, it ensures that the person responsible for continuing airworthiness of the aircraft has been made aware of any:

- maintenance that the AMO was unable to carry out; or
- existing defects in the aircraft that have not been deferred.

GM 42.745 (c) - Requirements to be met before certificate of release to service may be issued

Paragraph 42.745 (c) requires that maintenance certifications be performed for all the maintenance carried out on an aircraft before the issue of the CRS. If the holder of a certificate of approval (issued under regulation 30 of CAR) becomes a Part 145 AMO, then certification of completion of maintenance (issued under 42ZE and 42ZN of CAR) for any maintenance carried out on an aircraft by the holder is considered to be a maintenance certification. This would allow issue of a CRS for an aircraft on which maintenance has been carried out and certified under CAR by a certificate of approval holder before the holder became a Part 145 AMO. See transition regulation 202.191 of CASR.

GM 42.745 (f) - Requirements to be met before certificate of release to service may be issued

This paragraph allows issue of a CRS for an aircraft even if there is a defect in the aircraft, the rectification of which has not been deferred (open defect). Please note 'defect in the aircraft' means any abnormality in the aircraft including:

- any fault or malfunction in an aircraft system or equipment;
- damage to any part or structure of the aircraft;
- any condition that makes the aircraft incomplete such as missing parts, unassembled controls, opens access panels etc.

In some cases it is possible that an AMO or an independent maintainer is unable to assess, rectify or defer rectification of a defect because the AMO or the independent maintainer does not hold appropriate scope of approval. For example, consider an AMO that is only approved to carry out avionics system maintenance, is engaged in the maintenance of an aircraft and observes a defect in the aircraft structure. The AMO would be required to record the defect in accordance with regulation 42.355. The AMO would then be able to issue a CRS for the aircraft in relation to any avionics system maintenance it has carried out provided the CRS includes the details of the open defect. Before the CRS is issued the AMO or the independent maintainer must notify the person responsible for continuing airworthiness for the aircraft that the CRS is being issued with an open defect.

AMC 42.745 (f) (i) - Requirements to be met before certificate of release to service may be issued

Paragraph 42.745 (f) allows issue of a CRS for an aircraft even if there is a defect in the aircraft the rectification of which has not been deferred (open defect). The CRS must include the details of the open defect that has not been deferred. This does not necessarily mean that the complete description of the defect should be included in the CRS. It will be acceptable if the CRS includes a precise reference to the open defect recorded in another document that is part of the aircraft's flight technical log and that includes the complete description of the defect. The CRS section of the aircraft's flight technical log should be designed to accommodate such reference to open defects if there is possibility that the aircraft will be released with an open defect.

GM 42.745 (f) (ii) - Requirements to be met before certificate of release to service may be issued

Subparagraph 42.745 (f) (ii) requires the person issuing a CRS for an aircraft to ensure (through regulation 42.750 and 42.755) that the person responsible for continuing airworthiness for the aircraft has been notified of any defect in the aircraft, the rectification of which has not been deferred (open defect). In order to establish that they have met their obligation under this subparagraph, the person issuing the CRS should notify the person responsible for continuing airworthiness in writing and ensure that the person responsible for continuing airworthiness has received the notification.

GM 42.745 (g) - Requirements to be met before certificate of release to service may be issued

This is meant to cover any maintenance that the AMO is expected to carry out on the aircraft and does not include any open defect that has already been dealt with under paragraph 42.745 (f).

GM 42.760 - Form and content of certificate of release to service

Regulation 42.760 sets out the minimum information that must be included in the document that represents a CRS. A document is not considered to be a CRS unless it includes this minimum information. In addition to the information required under regulation 42.760 a CRS must also include:

- the signature of the individual issuing the CRS, the date and the time of the issue as required under regulation 42.765;
- information regarding any defect in the aircraft, the rectification of which has not been deferred, as required under paragraph 42.745 (f); and
- information regarding any maintenance requested for the aircraft, that has not been carried out, as required under paragraph 42.745 (g).

The document on which the CRS is issued should be designed to accommodate all of this information. However, information about any defect not deferred (open defect) and scheduled maintenance not carried out, as mentioned above may not be relevant to some operators as the operators may not allow issue of a CRS with an open defect or outstanding maintenance.

AMC 42.760 (1) (a) - Form and content of certificate of release to service

Paragraph 42.760 (1) (a) requires that the document that represent a CRS for an aircraft be identified as a CRS. Subregulation 42.760 (2) requires a CRS for an aircraft to be included in the flight technical log for the aircraft. The following statement may be included in the particular section of the flight technical log that contains the CRS to satisfy the identification requirement:

“Certificate of release to service issued under Division 42.H.3 of CASR Part 42”.

GM 42.760 (1) (b) - Form and content of certificate of release to service

Paragraph 42.760 (1) (b) requires that a document that represents the CRS for an aircraft, must include the registration mark of the aircraft. Subregulation 42.760 (2) requires a CRS for an aircraft to be included in the flight technical log for the aircraft. There is no need for the registration mark to be repeated in each CRS, if the particular section of the flight technical log that includes the CRS already contains this information. If a CRS is issued in a tear-off section of the flight technical log to facilitate retention of copies by the maintenance organisation or any other person, then the tear-off section must include all the information in relation to the CRS including the registration mark.

GM 42.760 (2) - Form and content of certificate of release to service

“The certificate must be included in the flight technical log for the aircraft” means the certificate must either:

- be physically issued in the flight technical log document; or
- if issued in a separate document — be attached to the flight technical log.

If the flight technical log consists of more than one document, such as aircraft journey/trip log and maintenance/technical log, then it is recommended that the CRS is always included in the same location in the flight technical log, if possible. This will allow everyone involved with the operation of the aircraft including the flight crew to refer to one location for the current CRS. However, it may be necessary or convenient for some operators to use more than one type of document for the issue of CRS. For example, operators may use the aircraft maintenance/technical log for the issue of a CRS after line maintenance and may use a dedicated form for the issue of a CRS as a standalone document after base maintenance.

If a dedicated form is used for the issue of a CRS for an aircraft, the form may belong to either the operator of the aircraft or the AMO issuing the CRS. It is important that the operators provide instructions to the AMOs and the individuals issuing a CRS that clearly state how they issue the CRS under different situations. The flight crew should also be made aware of different forms of CRS and where to locate the CRS after particular maintenance.

Under regulation 42.260, the person responsible for continuing airworthiness for an aircraft is required to keep a CRS as part of the continuing airworthiness records for the aircraft for a fixed duration. However, only the current CRS that has been issued in relation maintenance carried out on the aircraft since the last flight is required by the operator and the flight crew for the purpose of regulation 42.030. So, there is no need to keep in the flight technical log any CRS that is no longer current. These may be removed from the flight technical log at the discretion of the operator and should be kept by the person responsible for continuing airworthiness in accordance with regulation 42.260.

AMC 42.760 (2) - Form and content of certificate of release to service

Subregulation 42.760 (2) requires a CRS for an aircraft to be included in the flight technical log for the aircraft. So, it is important that the aircraft flight technical log is designed properly to accommodate the CRS for the aircraft. The following are acceptable means of compliance for this subregulation:

The flight technical log may include a dedicated section for the issue a CRS. This will provide a single place of reference for each CRS issued for the aircraft. This section may be an integral part of the flight technical log or may be a standalone document that is designed to include a series of CRS issued for the aircraft over a period of time.

The ‘maintenance action’ section of the flight technical log may include a separate section for the issue of a CRS. This arrangement does not mean an individual CRS will have to be issued for each maintenance action. If multiple maintenance actions are carried out at a particular time, the last completed maintenance action section in the sequence should be used for the issue of the CRS.

A dedicated form may be used for issue of each CRS as a standalone document. This will allow the flexibility to include additional information to be recorded in the CRS, including information about open defect and outstanding maintenance as required under paragraphs 42.745 (f) and (g). Operators may choose to use this means of compliance for the issue of a CRS after base maintenance of their aircraft and may elect to use other means of compliance mentioned above for a CRS after line maintenance.

If a CRS for an aircraft is issued in more than 1 copy (that is in duplicate or triplicate), then any one of the copies may be included in the flight technical log for the aircraft to satisfy the requirement of this subregulation.

GM 42.780 - Requirements not to release aeronautical products without certificate of release to service

This regulation requires an AMO that carries out maintenance on an aeronautical product, to issue a CRS for the product, if the AMO releases the product for subsequent use in an aircraft or another aeronautical product. The AMO is not required to issue a CRS for the product if the product is no longer suitable for use in an aircraft or another aeronautical product.

It should also be noted that paragraph 42.795 (d) requires the AMO and the individual who issues a CRS for an aeronautical product to ensure that “in respect to maintenance carried out the product is serviceable”. See GM 42.795 (d) for guidance in this regard.

GM 42.795 (b) - Requirements to be met before certificate of release to service may be issued

In this paragraph “maintenance is complete” means any maintenance the AMO is expected to carry out is complete. If there is outstanding maintenance or if the product requires additional maintenance before it can be installed on an aircraft or aeronautical product then this information must be included in the remark section of the authorised release certificate that is used to issue the CRS for the part.

The regulation does not mandate separate task level certification for maintenance carried out on aeronautical products. However, the AMO’s worksheets or task cards should require sign-off by each individual who carries out any maintenance on the product. This will provide accountability for each stage of maintenance carried out on the product and will provide evidence to the certifying employee that all required maintenance has been completed before the CRS is issued for the aeronautical product.

GM 42.795 (c) - Requirements to be met before certificate of release to service may be issued

AMOs and individuals who issue CRS for an aeronautical product must ensure requirements relating to how maintenance must be carried out, as set out in Parts 42 and 145, have been complied with. Division 42.D.4 of Part 42 sets out regulations that specify how maintenance must be carried out. It includes requirements for:

- using adequate facilities for the maintenance;
- following appropriate maintenance data;

- using correct tools and equipment; and
- if the maintenance is a modification or repair involving design change — ensuring there is a Part 21 approval for the modifications or the repair carried out on the aeronautical product.

Also relevant are regulations contained in Division 42.E.2 of Part 42 that specify requirements for:

- using proper parts and materials in maintenance; and
- establishing traceability of parts and materials used in maintenance.

AMOs and individuals issuing a CRS must also ensure compliance with additional requirements included in the Part 145 MOS in relation to facilities, tools and equipment for the maintenance.

In this paragraph “maintenance was carried out in accordance with this Part and Part 145” is taken to include maintenance carried out by a certificate of approval holder (issued under regulation 30 of CAR), in accordance with approved maintenance data. This allows issue of a CRS for an aeronautical product on which maintenance was carried out by a certificate of approval holder before the holder became a Part 145 AMO. See transition regulation 202.193 of CASR.

GM 42.795 (d) - Requirements to be met before certificate of release to service may be issued

In this paragraph “in respect of the maintenance, the product is serviceable” means the maintenance has been carried out on the product properly, in accordance with the requirements of Part 42 and there is no known defect in the product that makes the product unserviceable. It does not mean the product is immediately fit for installation on an aircraft or aeronautical product.

The AMO releasing a product after maintenance is only responsible for the work it has carried out. Normally any product released by an AMO should be serviceable for subsequent use; but in some cases a part on which maintenance has been carried out may require additional maintenance before it can be installed on an aircraft or another aeronautical product. For example an engine part that has been machined may require heat treatment before it is installed back on the engine.

In this case, if an AMO just carries out machining of the part, the AMO is required to issue a CRS for the part in relation to the machining, before it releases the part to another AMO for the heat treatment. The remark column in the authorised release certificate should be used to record any information relating to outstanding maintenance requirements, in this case the heat treatment. The AMO should not issue a CRS for the part if the machining has not been carried out correctly or if the AMO is aware of a defect in the part that makes the part unserviceable.

4.8 Subpart 42.I: Airworthiness Reviews

GM 42.835 - Purpose of Subpart

Under regulation 42.030 the registered operator of a large aircraft or an aircraft operated under an AOC commits an offence if the aircraft is operated for a flight and an airworthiness review certificate is not in force for the aircraft. The airworthiness review certificate for an aircraft is issued after satisfactory completion of an airworthiness review of the aircraft and is valid for 1 year from the date of issue. Under certain circumstances the validity of an airworthiness review certificate may be extended. This subpart specifies requirements for carrying out an airworthiness review, issue and extension of an airworthiness review certificate. In particular it specifies:

- how an airworthiness review must be carried out;
- who may issue and extend the validity of the airworthiness review certificate;
- how an airworthiness review certificate must be issued;
- the circumstances under which the validity of an airworthiness review certificate may be extended and how it is extended; and
- obligations of the CAMO and the individual issuing and extending the validity of the airworthiness review certificate.

GM 42.840 - Who may issue an airworthiness review certificate

An airworthiness review certificate for an aircraft may be issued by the CAMO that is responsible for managing the continuing airworthiness of the aircraft. The CAMO must authorise one or more individuals as airworthiness review employee(s) for a particular type and model of aircraft with responsibility for carrying out an airworthiness review and issuing the airworthiness review certificate for the aircraft. See subregulation 42.015 (1) for the definition of 'airworthiness review employee'. To be authorised as an airworthiness review employee an individual must meet specific qualifications, knowledge and experience requirements as set out in the Part 42 MOS.

GM 42.845 (d) - Requirements to be met for issue of airworthiness review certificate

During airworthiness review of an aircraft an airworthiness review employee must examine continuing airworthiness records for the aircraft and perform a physical survey of the aircraft to determine whether the aircraft continues to comply with the airworthiness requirements as set out in subregulation 42.900 (2) and 42.900 (3). All findings against each of these requirements must be recorded in writing. Any adverse finding would need corrective action before the issue of the airworthiness review certificate. However, in some cases the airworthiness review may lead to adverse findings in other areas that are not related to the requirements of subregulations 42.900 (2) and 42.900 (3).

These findings should be dealt with in accordance with the organisation's procedure and relevant regulatory requirements; and corrective actions may not always be necessary before the issue of an airworthiness review certificate. For example if a CAMO has opted to carry out a modification under regulation 42.130 and during the airworthiness review it is found that the

modification is overdue then this finding would not prevent the issue of the airworthiness review certificate.

GM 42.845 (f) - Requirements to be met for issue of airworthiness review certificate

The intent of this paragraph is to ensure that the CAMO and the airworthiness review employee who is responsible for issuing the airworthiness review certificate do not issue the certificate if they are aware or have reason to believe that the aircraft is not airworthy. The term 'airworthy' is defined in subregulation 42.015 (2).

GM 42.860 - Form of airworthiness review certificate

The approved form for the issue of an airworthiness review certificate is Form 502, available through CASA's website. An airworthiness review certificate is not complete unless it contains all of the information required by the approved form.

GM 42.870 - How long airworthiness review certificate remains in force

The time for which the airworthiness review certificate would remain in force is mentioned in the certificate. The airworthiness review certificate would remain in force even if any of the following things occurs:

- the registration holder of the aircraft changes;
- the registered operator of the aircraft changes;
- the CAMO for the aircraft changes.

The airworthiness review certificate ceases to be in force if the certificate of airworthiness for the aircraft:

- stops being in force under subregulation 21.181 (4);
- expires; or
- is cancelled.

See regulation 42.930 for more information on how the validity of the certificate of airworthiness affects the airworthiness review certificate. Also, if Part 42 no longer applies to an aircraft, then the airworthiness review certificate is no longer relevant and will cease to be in force. Once an airworthiness review certificate is no longer in force, an airworthiness review must be carried out for the issue of a valid airworthiness review certificate.

GM 42.875 - Who may extend airworthiness review certificate

The CAMO for an aircraft may extend the time for which an airworthiness review certificate is in force, if the CAMO:

- issued the airworthiness review certificate for the aircraft; and
- has continuously managed the airworthiness of the aircraft in accordance with Part 42 since the issue of the certificate.

The extension must be done on behalf of the CAMO, by an airworthiness review employee whose authorisation permits them to issue the certificate for the aircraft.

GM 42.880 (2) - Requirements to be met for extension of airworthiness review certificate

If the time for which an airworthiness review certificate is in force is not extended within the time specified in subregulation 42.880 (2), then the certificate will cease to be in force and an airworthiness review must be carried out for the issue of a valid certificate.

GM 42.880 (5) - Requirements to be met for extension of airworthiness review certificate

The extension of the time for which an airworthiness review certificate is to remain in force does not require an airworthiness review in accordance with regulation 42.900. However, subregulation 42.880 (5) requires that the aircraft be airworthy at the time of the extension. The intent of this subregulation is to ensure that the CAMO and the airworthiness review employee who is responsible for the extension do not extend the time if they are aware or have reason to believe that the aircraft is not airworthy. The term 'airworthy' is defined in subregulation 42.015 (2).

GM 42.900 (2) - Airworthiness review procedure

Regulation 42.900 sets out the procedure for carrying out an airworthiness review. Subregulation 42.900 (2) requires an airworthiness review employee of the CAMO to examine the continuing airworthiness records for the aircraft to determine whether continuing airworthiness requirements are being met for the aircraft.

For many aircraft the amount of records that must be examined and the extent of examination required will be extensive. It is anticipated that the airworthiness review employee will be assisted by other employees of the CAMO in this regard. This subregulation does not prevent other employees of the CAMO who are not airworthiness review employees to retrieve records, compile information and prepare reports etc. for the examination by the airworthiness review employees. However, it is up to the airworthiness review employee carrying out the airworthiness review to be satisfied about the source, authenticity and accuracy of the information made available to them.

So, the airworthiness review employee is expected to have a level of understanding of the continuing airworthiness records system for the aircraft that allows them to carry out the review without error.

AMC 42.900 (2) - Airworthiness review procedure

When carrying out an airworthiness review in accordance with this subregulation, the airworthiness review employee may rely on the records of a past review to determine if particular requirements have been complied with in the past. For example, when checking modifications for Part 21 approvals in accordance with paragraph 42.900 (2) (g), the airworthiness review employee may use the records of a past review to establish that all modifications checked during the past review were compliant. Only the records of review created under subregulation 42.905 (2) by a CAMO approved under Subpart 42.G would be acceptable for this purpose. The records created under subregulation 42.905 (2) for the current airworthiness review should clearly identify the items that have been verified using the records of a past review and should cross refer to these records held by the CAMO.

It is important that the CAMO holds the original records of the past review if these records are used to support the findings of the current and subsequent reviews. To allow proper assessment, the records of a past review should include the following information as a minimum:

- details of all the items checked previously;
- the date it was checked;
- the details of the findings;
- relevant corrective action if applicable;
- identification of the airworthiness review employee who checked the item; and
- identification of the CAMO that carried out the review.

When relying on the records of a past review to determine whether particular requirements have been complied with in relation to an aeronautical product, it should be confirmed that the records actually relate to the product currently fitted to the aircraft, by part number and serial number, if applicable. For example, if records of a past review is used to establish that an AD has been complied with in relation to an engine, it should be established that the record relates to the particular engine serial number that is currently fitted to the aircraft. The records of a past review will have no relevance in relation to an aeronautical product if the product is no longer fitted to the aircraft.

AMC 42.900 (2) (a) - Airworthiness review procedure (utilisation information for aircraft, engine and propeller)

An acceptable means of compliance with paragraph 42.900 (2) (a) is to examine the records kept under regulation 42.190 to determine whether the information about the utilisation of the aircraft has been recorded as required by regulation 42.190. The records should be examined to the extent necessary to determine if the information is up to date and accurate.

AMC 42.900 (2) (b) - Airworthiness review procedure (compliance with maintenance program)

An acceptable means of compliance with paragraph 42.900 (2) (b) is to examine the records of compliance with the maintenance program kept under regulation 42.200 to determine whether each maintenance task due to be carried out in accordance with the aircraft's maintenance program has been carried out.

If the record of compliance with the maintenance program is kept in a computerised system, then a report generated by the computerised system may be used to comply with this requirement; provided the report clearly shows when the maintenance was last carried out, when it is next due and highlight any overdue task. The airworthiness review employee carrying out the review should ensure that such computer generated reports include all maintenance tasks required to be carried out under the aircraft's maintenance program.

In addition to the examination of records kept under regulation 42.200, the following actions should also be undertaken:

- For each maintenance task that is mandatory under the aircraft's type design approval (such as airworthiness limitation and certification maintenance requirements), documents that substantiate that the maintenance has been carried out should be

examined to verify that information kept under regulation 42.200 for these tasks are correct.

- For all other maintenance tasks that are not mandatory under the aircraft's type design approval, a sample of maintenance tasks should be selected and the documents that substantiate that the maintenance has been carried out should be examined to verify that information kept under regulation 42.200 for these tasks is correct.

The sample should include a range of maintenance tasks carried out at various intervals. The sample size should be at least 5% of the total number of maintenance tasks carried out or 50 maintenance tasks, whichever is lower. If discrepancies are found during the sample check, further investigation should be carried out to the extent necessary to determine the level of inaccuracy in the records kept under regulation 42.200. Each time a review is carried out, a different set of samples should be selected to ensure over time a wide range of maintenance tasks are checked.

Examples of documents that may substantiate maintenance has been carried out include:

- maintenance records for maintenance carried out on the aircraft;
- copies of authorised release certificates for aeronautical products;
- log books for products such as engines and propellers; and
- log cards for landing gear.

For an aeronautical product, the document that substantiates that the maintenance has been carried out on the aeronautical product should relate to the product that is identified in the records kept under regulation 42.200, by part number and serial number if applicable.

AMC 42.900 (2) (c) - Airworthiness review procedure (records of critical control system maintenance)

An acceptable means of compliance with paragraph 42.900 (2) (c) is to select a sample of critical control system maintenance that has been carried out on the aircraft and examine the aircraft's continuing airworthiness records to determine whether independent verification of each of these maintenance tasks has been recorded in accordance with Division 42.D.5. The samples should relate to critical control system maintenance carried out on the aircraft in the past 12 months. As a minimum, 5 instances of critical control system maintenance should be selected as the sample size. However if the extent of critical control system maintenance carried out on the aircraft in the past 12 months is not sufficient for 5 samples then all the instances of critical control system maintenance should be included in the review.

AMC 42.900 (2) (d) - Airworthiness review procedure (rectification of defects)

An acceptable means of compliance with paragraph 42.900 (2) (d) is to examine the aircraft's continuing airworthiness record system to determine whether there is any defect in the aircraft that needs rectification before flight in accordance with regulation 42.115. Defects that require rectification before flight should be rectified before the issue of an airworthiness review certificate.

AMC 42.900 (2) (e) - Airworthiness review procedure (deferred defects)

An acceptable means of compliance with paragraph 42.900 (2) (e) is to examine the existing deferred defects as recorded in the aircraft's continuing airworthiness record system to determine whether deferral of rectification has been done in accordance with Subdivision 42.D.6.1.

AMC 42.900 (2) (f) - Airworthiness review procedure (compliance with ADs)

An acceptable means of compliance with paragraph 42.900 (2) (f) is to examine the records of compliance with ADs kept under regulation 42.195 to determine whether actions required by each AD that applies to the aircraft and aeronautical products fitted to the aircraft have been complied with. An examination of documents that substantiate each AD has been complied with should be carried out to verify that information kept under regulation 42.195 is correct. Examples of documents that may substantiate an AD has been complied with, includes:

- maintenance records for maintenance carried out on the aircraft;
- copies of authorised release certificates for aeronautical products; and
- log books for products such as engines and propellers.

For an aeronautical product, the document that substantiates that the AD has been complied with in relation to the aeronautical product should relate to the product that is identified in the records kept under regulation 42.195, by part number and serial number if applicable.

Where an AD requires compliance with requirements contained in another document such as a service bulletin, a record of compliance with the service bulletin would be acceptable as evidence of compliance with the AD.

AMC 42.900 (2) (g) - Airworthiness review procedure (Part 21 approval for modifications)

An acceptable means of compliance with paragraph 42.900 (2) (g) is to examine the records of modifications kept under regulation 42.205 to determine whether there is a CASR Part 21 approval for each design of the modification. For the purpose of this paragraph, a modification includes a repair that involves change to the approved design of the aircraft. See regulation 42.015 for the meaning of Part 21 approval.

AMC 42.900 (2) (h) - Airworthiness review procedure (life limited aeronautical products)

An acceptable means of compliance with paragraph 42.900 (2) (h) is to examine the records of life limited parts kept under regulation 42.210 to determine whether each life limited part has been correctly identified by part number, serial number and whether the life limit has been exceeded for any of the parts. In addition, documents that have been used to substantiate remaining life at installation should be checked to verify that information kept under regulation 42.210 for life limited parts is correct. Examples of such substantiating documents include:

- maintenance records for installation of the parts;
- authorised release certificates for the parts; and
- life limited part history/log card.

See regulation 42.015 for the meaning of the term 'life limit'.

AMC 42.900 (2) (j) - Airworthiness review procedure (empty weight and centre of gravity position)

An acceptable means of compliance with paragraph 42.900 (2) (j) is to examine the record of the aircraft's empty weight and centre of gravity position kept under regulation 42.185 to determine if it is consistent with all the changes made to weight and centre of gravity position since the last weighing of the aircraft. All changes made to the weight and centre of gravity position should be substantiated by documents such as a modification approval and an equipment list for the aircraft.

AMC 42.900 (2) (k) - Airworthiness review procedure (compliance with approved design)

An acceptable means of compliance with paragraph 42.900 (2) (k) is to examine the aircraft's continuing airworthiness records to determine whether the aircraft's configuration as recorded complies with the specification mentioned in type certificate data sheet (TCDS) for the aircraft, engine and propeller. Of particular relevance are records kept under regulation 42.180 for the engine and propeller and records kept under regulation 42.205 in relation to modifications made to the aircraft. Any variation of configuration from TCDS should be supported by a Part 21 approval. See regulation 42.015 for the meaning of Part 21 approval.

GM 42.900 (3) - Airworthiness review procedure (survey of the aircraft)

The physical survey must be carried out by an airworthiness review employee.

The survey may be carried out using remote technology in accordance with documented procedures that are appropriate to determine that the requirements of the regulation have been met. Remote technology may include means such as photos or videos (taken at the time of, or as a generally acceptable means of compliance, within 48 hours of, the review), or real-time video and audio communication. The quality and extent of the remote technology must be sufficient to enable the airworthiness review employee to form a view as to the condition of the aircraft for the purposes of the airworthiness review.

If the survey involves maintenance actions such as opening access panels, testing or operating a particular system of the aircraft then such maintenance must be carried out by persons who are permitted under Part 42 to carry out the maintenance on the aircraft. If the airworthiness review employee is not permitted to carry out the maintenance, then they may be assisted by appropriately qualified maintenance personnel who are permitted to carry out the maintenance. Such maintenance must be recorded in accordance with Subpart 42.D and maintenance certification and a CRS must be issued for the maintenance in accordance with Subpart 42.H.

Under all circumstances the airworthiness review employee remains responsible for carrying out the physical survey and for determining whether the requirements of this subregulation are met.

GM 42.905 (2) - Record of findings of airworthiness review

During airworthiness review of an aircraft an airworthiness review employee must examine continuing airworthiness records for the aircraft and perform a physical survey of the aircraft to determine whether the aircraft continues to comply with the airworthiness requirements as set out in subregulation 42.900 (2) and 42.900 (3). All findings against each of these requirements

must be recorded in writing. This should include both positive and adverse findings that clearly show the status of compliance with the requirements. The CAMO should use detailed check sheets for this purpose. The check sheets should break down each requirement into individual items that the airworthiness review employee is required to check as part of airworthiness review. This will form the basis of issuing the airworthiness review certificate. As a minimum the following information should be recorded in the check sheets:

- identification of the specific requirement to which the record check or the survey relates – for example compliance with ADs, checking for the marking or placard;
- details of all items checked – for example list of applicable ADs, description of marking and placards;
- the date the check was performed;
- the details of the findings;
- for each adverse finding a cross reference to the record of corrective actions;
- name and signature of the airworthiness review employee who examined the item; and
- identification of the CAMO that carried out the review.

GM 42.910 - Record of corrective action taken

The records of corrective action should relate to the record of negative findings to allow the airworthiness review employee to decide whether corrective actions have been taken in relation to each negative finding. If the corrective actions require maintenance then the maintenance must be recorded and certified in accordance with Part 42. The record of corrective action may refer to the maintenance records to demonstrate that the corrective actions have been taken. If the corrective action requires action other than maintenance such as updating of records or documents then the action should be carried out and documented in a manner required by the organisation's procedure. In this case the record of corrective action required under this regulation may refer to the other document on which the corrective action has been recorded.

GM 42.915 - Retaining records relating to airworthiness review certificates

The records kept under this regulation form the basis for issuing the airworthiness review certificate. The records must be kept for at least three years from the date the related airworthiness review certificate is issued. However, if the CAMO relies on these records during the subsequent airworthiness reviews to determine if particular requirements have been complied with in the past, the CAMO will have to keep these records for a longer period. See AMC 42.900 (2) for more information.

GM 42.920 - Documents to be sent to CASA and registered operator

The copy of the airworthiness review certificate should be sent to the CASA central office in Canberra for retention in the aircraft file. Please send it using any of the following options:

Mail to: Registrar, Aircraft Registration
Civil Aviation Safety Authority
GPO Box 2005
Canberra ACT 2601

Fax to: 02 6217 1991

Scan and Email to: aircraftregistration@casa.gov.au

GM 42.925 - Notice of decision not to issue airworthiness review certificate

This regulation is intended to cover a situation where a CAMO has decided not to issue an airworthiness review certificate for an aircraft because the CAMO is unable to perform the corrective actions for the adverse findings or is unable to determine that the aircraft is airworthy.

The decision not to issue an airworthiness review certificate does not preclude issue of the certificate at a later date once all the requirements for the issue of the certificate have been met and the aircraft has been assessed as airworthy.

The notification to CASA should be send to the CASA office responsible for the oversight of the aircraft.

GM 42.930 - Relationship with certificate of airworthiness

If an airworthiness review certificate ceases to be in force under this regulation, an airworthiness review must be carried out for the issue of a valid airworthiness review certificate. This will have to be done in addition to any action required to restore the certificate of airworthiness.

If a certificate of airworthiness for an aircraft is suspended, the airworthiness review certificate is also considered suspended. The airworthiness review certificate will come in force as soon as the suspension is no longer effective.

If the airworthiness review certificate expires during the period of the suspension, then a full airworthiness review must be carried out and a valid airworthiness review certificate must be issued.

4.9 Subpart 42.J: Approval of maintenance programs and variations of approved maintenance programs

GM 42.935 - Purpose of Subpart

This Subpart covers approval of maintenance programs and approval of variations of approved maintenance programs, superseding the old systems under CAR 42M and 42R.

Note that approval of one-off extensions of maintenance task intervals and approval of maintenance data and variations of maintenance data are covered in the Part 42 MOS and the Part 145 MOS.

GM 42.940 - Circumstances in which continuing airworthiness management organisations may approve proposed maintenance program

Under the new regulations, maintenance programs for aircraft that operate under an RPT AOC may only be approved by CASA under regulation 42.980.

The new regulations have adopted a system based on organisational approvals. CASA approves organisations with privileges for matters such as the variation of maintenance

programs. The organisation may then authorise its employees to exercise those privileges on its behalf in accordance with the organisation approved exposition.

Maintenance program approval employee is defined in subregulation 42.015 (1).

The qualifications, knowledge and experience requirements for maintenance program approval employees of a CAMO are set out in the Part 42 MOS.

If a CAMO is seeking the privilege to approve the variation of maintenance programs then the CAMO's exposition must include procedures for authorising maintenance program approval employees that meet the requirements set out in the Part 42 MOS.

GM 42.985 - Circumstances in which continuing airworthiness management organisations may approve proposed variations

Maintenance program approval employee is defined in subregulation 42.015 (1).

The qualifications, knowledge and experience requirements for maintenance program approval employees of a CAMO are set out in the Part 42 MOS.

If a CAMO is seeking the privilege of approval of variations of approved maintenance programs then the CAMO's exposition must include procedures for authorising maintenance program approval employees that meet the requirements set out in the Part 42 MOS.

GM 42.990 - Requirements to be met for approval of variations of maintenance programs

If a proposed variation of an approved maintenance program is not within the limitations set by regulation 42.990 (for example, if the variation does not comply with the ICA of the aircraft), then the variation may only be approved by CASA under regulation 42.1025.