

► This RA has been substantially re-written; for clarity no change marks are presented – please read RA in its entirety ◀

RA 1161 – Military Registration of Aircraft Operating within the Defence Air Environment

Rationale

Registration of an Aircraft, and its associated registration marking, is required to provide each Aircraft with a unique identifier. To operate within the Defence Air Environment (DAE) military registration is required and registration markings must be displayed. Not having Aircraft appropriately registered and marked introduces a Risk that Accountability and Assurance of Air Safety will be diluted or neglected entirely. This Regulatory Article (RA) details the military registration and activation process for all Aircraft operating within the DAE.

Contents

1161(1): Military Aircraft Registration
1161(2): Application for Approval in Principle
1161(3): Request for Activation on the UK Military Aircraft Register
1161(4): Withdrawn – Not deemed Regulatory material
1161(5): Military Open Category / Specific S1 sub-category Remotely Piloted Aircraft Registration

Regulation 1161(1)

Military Aircraft Registration

1161(1) All Aircraft¹ operating and intending to operate in the DAE **shall** be registered on the UK Military Aircraft Register (MAR).

Acceptable Means of Compliance 1161(1)

Military Aircraft Registration

1. All Aircraft to be employed within a DAE Operating Category² **should** be registered following submission of a successful Application for Approval in Principle (AAiP) and Request for Activation (RfA).
2. To qualify for military registration, all the following conditions **should** be met:
 - a. The Aircraft **should** meet the UK Air Navigation Order (ANO) definition of a 'Military Aircraft'³; and
 - b. If Civilian-Owned, the Aircraft **should not** be eligible / appropriate⁴ for registration by the UK Civilian Aviation Authority (CAA); and
 - c. If the Aircraft is not intended to be operated in MOD Interest:
 - (1) The task **should** be in the interest of the wider UK Government; and
 - (2) The Sponsor⁵, on behalf of the MOD as a UK Government Department, **should** agree that MOD resource needs to be utilized to support the activity; and
 - d. The Aircraft **should** be capable of controlled flight; and
 - e. The Aircraft **should** be intended to complete multiple flights.
3. All crewed Aircraft and Certified category RPA **should** be issued a registration number for each individual tail.

¹ This Regulation applies to Crewed Aircraft, Certified Category Remotely Piloted Aircraft (RPA) and Specific S2 sub-category RPA only. For Open Category / Specific S1 sub-category RPA, see RA 1161(5).

² Refer to RA 1160(1): Defence Air Environment Operating Categories.

³ Refer to the UK Air Navigation Order 2016, Schedule 1.

⁴ Appropriateness of registration on the UK MAR or UK Civil Aircraft Register may be case specific, and advice or guidance can be obtained from the MAA as required.

⁵ Refer to RA 1019 - Sponsor of Military Registered Civilian-Owned Air Systems or Civilian Operated Air Systems - Air Safety Responsibilities.

**Acceptable
Means of
Compliance
1161(1)**

4. For Specific S2 sub-category RPA, the MAA **should** determine from the AAiP requirements whether the RPA will be issued a Military Aircraft Registration Number by:
- Individual tail; or
 - RPA Type. For these RPA, the Delivery Duty Holder (DDH) or Accountable Manager (Military Flying) **should** maintain a record of individual Aircraft identified by a unique serial number (identifying both the operator and the tail); and ensure that both the Type Military Aircraft Registration Number and the unique Aircraft Serial Number are displayed on the main fuselage.

5. The Sponsor / Senior Responsible Owner (SRO) **should** ensure Aircraft are only registered with one aviation authority at any one time. Before registration on the UK MAR, the Sponsor / SRO **should** provide proof of de-registration for Aircraft transferring from another register. Similarly, UK military registered Aircraft transferring to another register will require a UK military Certificate of De-Registration.

Note:

“Any UK registration marks that are currently in use or have been registered in the past are not re-issued to a second aircraft to avoid any confusion. An individual airframe may have more than one registration mark in its lifetime, but a particular registration mark can only apply to one airframe. Therefore, there are no historical registration marks available for issue unless it is the original aircraft that is being re-registered or restored to the UK Register. Generally an original aircraft can return to any of the UK registration marks that it has previously carried.” – quoted from “UK CAA - Availability of UK marks”.

6. The status of an Aircraft’s registration on the UK MAR **should** be one of the following;
- Provisional.** Provisional registration occurs prior to operation of the Aircraft and following successful AAiP.
 - Active.** Activation on the UK MAR, and registration of the Aircraft as Active, occurs prior to first flight of the Aircraft and following successful RfA on the UK MAR.
 - Inactive.** For Aircraft registered by individual tail only, designation of an individual Aircraft by tail number as Inactive applies when the Aircraft is no longer being operated for a sustained period. The Military Continuing Airworthiness Manager (Mil CAM) **should** notify the MAR Registrar⁶ when an Aircraft needs to be designated as Inactive, and discuss and agree with the MAA the requirements to return the Aircraft to Active (which, as a minimum, will include a RfA).

Note:

A Specific S2 sub-category RPA registered by type cannot be made inactive.

- De-Registered.**

(1) **Aircraft registered by individual tail.** When military registration is no longer required (Out of Service Date, disposal or transfer to another regulating authority), and Regulation under the MAA Regulatory Publications (MRP) is no longer appropriate, the Mil CAM **should** make the request to the MAA⁶ notifying the Sponsor / SRO, to de-register the Aircraft. On review, the MAA **should** issue a Certificate of De-Registration to the Mil CAM. When the Mil CAM requests the de-registration of the Aircraft type, the Mil CAM **should** make the request to the MAA⁶ notifying the Sponsor / SRO, to withdraw the related Aircraft Manual of Airworthiness Maintenance - Documentation (MAM-D) forms⁷.

⁶ Via DSA-MAA-OpAssure-MAR@mod.gov.uk.

⁷ The Mil CAM needs to ensure the Sponsor details are provided to the MAA as part of the MAM-D forms withdrawal request.

**Acceptable
Means of
Compliance
1161(1)**

(2) **Specific S2 sub-category RPA registered by type.** When military registration of the RPA type is no longer required (eg Out of Service Date, disposal or transfer to another regulating authority), and Regulation under the MRP is no longer appropriate, the ADH / AM(MF) **should** notify the MAA⁶, allowing the RPA type to be De-Registered once all operators of the type have ceased operations.

7. When operating on the UK MAR, registration markings **should** be appropriately displayed for the size and type of the Aircraft.

**Guidance
Material
1161(1)**

Military Aircraft Registration

8. A flow chart providing guidance to meet the requirements for Military Aircraft registration is at Annex A.

9. The registration of Aircraft provides a unique identity that enables the following essential actions:

- a. The certification of fitness for flight of individual tails.
- b. Identification in flight.
- c. Configuration control.
- d. A record of usage and Maintenance.

10. Considerations for military registration:

- a. Sponsors issue a Certificate of Usage (CofU) for Civilian-Owned Aircraft⁸.
- b. Nomination of Competent organizations to operate the Aircraft⁹.
- c. The following will apply to crewed Aircraft and Certified RPA, and may apply to Specific S2 sub-category RPA¹⁰:
 - (1) The Aircraft is designed by competent organizations⁹.
 - (2) Competent organizations be nominated to maintain the Aircraft⁹.
 - (3) The Type Certification Basis (TCB) will consist of applicable Certification Specifications for Airworthiness that have been shown to deliver a level of Safety that is consistent with the intent of Def Stan 00-970¹¹.

11. Remote Pilot Stations (RPS) are not registered on the UK MAR. As an element of a Remotely Piloted Air System (RPAS), an RPS may be allocated to a number of different RPAS. The administration and identification of RPS are to be locally controlled and managed.

12. Examples of Aircraft that may be suitable for military registration include:

- a. A Type developed from a military design that was originally procured by the MOD and designed by a DO approved under the MAA Design Approved Organization Scheme (DAOS).
- b. A new Aircraft, not the subject of a MOD contract, but designed by a DO approved under the MAA DAOS.
- c. A new Aircraft, subject of a MOD contract.
- d. An Aircraft designed in a foreign country which is the subject of a Memorandum of Understanding (MOU) between the UK Government and the country of origin government, agreeing the further development of the design, and flight testing in UK airspace, under the auspices of a DO approved under the MAA DAOS, operated by an ADH / Defence Contractor Flying Organization.

⁸ Refer to RA 1160(3): Certificate of Usage.

⁹ Refer to RA 1005 – Contracting with Competent Organizations.

¹⁰ Refer to RA 1605 – Remotely Piloted Air Systems Specific S2 sub-category.

¹¹ Refer to RA 5810 – Military Type Certificate (MRP 21 Subpart B).

**Guidance
Material
1161(1)**

- e. Aircraft returning for operation in the UK that have previously been registered prior to export. Foreign-Owned Aircraft returning to the UK for Maintenance or Modification may be considered for registration.
- f. Aircraft supported by a UK Government Department, with an authoritative statement to the effect that the proposal is in the wider UK national interest.

13. For the purposes of defining Military-Owned Aircraft within the RA 1160 series, foreign-Owned Military Aircraft are included. Where necessary, the term 'not UK MOD-Owned Aircraft' is used to denote Aircraft which are either Civilian-Owned or foreign Military-Owned.

14. When an Aircraft that is already registered on the UK MAR undergoes a Major Type Design Change (including designation as a new mark), a new Certificate of Registration may be required.

15. The requirement for the Specific S2 sub-category RPA to be registered by individual tail or by RPA type will be determined by:

- a. Where Continuing Airworthiness (CAw) needs to be managed by a CAW Management Organization (CAMO), Military Aircraft Registration Numbers will be issued for each individual tail.
- b. Where CAw needs to be managed by the Chief Air Engineer to the DDH or the Accountable Manager in a Maintenance Approved Organization Scheme (MAOS) approved organization (in lieu of a CAMO), a Military Aircraft Registration Number will be issued for the Aircraft type.

16. Civil Registered, Civilian-Owned Historic Military-Type Aircraft.

Applications to display historic military markings and liveries are made to the appropriate Front Line Command (FLC) iaw the procedures detailed on the UK CAA webpage.

17. **Registration Markings.** Guidance for Aircraft Registration markings can be taken from Digital Air Publication (DAP) 119A-0601-0B Chapter 9¹² and Civil Aviation Publication (CAP) 523¹³. Where RPA are either too small to physically accommodate registration markings or are unable to have them applied in the standard positions, guidance can be taken from UK CAA guidance on labelling Drones and model Aircraft. When Operational considerations are required for applying registration markings the Camouflage Working Group needs to be consulted¹⁴.

18. **Inactive.** Aircraft may be designated as Inactive on the UK MAR for numerous reasons. The requirements to return the Aircraft to Active status will depend on the nature of the period of inactivity and its future operating context once re-activated. Consultation with the MAA on the requirements for re-Activation will be required, ideally prior to designating the Aircraft as Inactive. Examples of designating an Aircraft as Inactive may include (but are not limited to):

- a. **Storage.** If the Air Safety governance arrangements remain in place throughout the period of storage, and the Aircraft needs to return to the same operating context, further evidence to support a return to Active status may not be required.
- b. **Sale of an Aircraft to a Civilian Operator.** If a Military-Owned and Military Operated Aircraft needs to be sold to a civilian operator for continued use in the DAE, it may be entitled to remain registered as Inactive on the UK MAR for a temporary period providing there is: a designated Sponsor for the future activity; a contract in place for the future activity; and the Air Safety management Approvals remain in place with no gap in regulatory oversight. Prior to operation of the Aircraft with the civilian operator, the MAA will require the Sponsor to complete an AAiP and RfA process in order to return the Aircraft to Active status.

19. **Transfer to other registers.** Upon de-registration of an Aircraft from the UK MAR for transfer to another register (civil or military), any decisions regarding

¹² Refer to DAP 119A-0601-0B – Surface Finishing Processes, Procedures, Materials and Equipment. Additional guidance with regards to identification markings on small RPAS can be sought independently through DSA-MAA-MRPEnquiries@mod.gov.uk.

¹³ Refer to CAP 523 – Display of Nationality and Registration Marks on Aircraft: Guidance for Owners.

¹⁴ Via Air-CAP-Del-AE-MFTSSO1@mod.gov.uk.

**Guidance
Material
1161(1)**

operation of the Aircraft whilst still bearing the UK MAR registration markings are within the purview of the receiving regulatory body. The SRO, Sponsor, and / or FLC may wish to consider any reputational aspects associated with an Aircraft being operated on another register whilst still bearing UK military markings and take appropriate action(s). If an Aircraft, having been de-registered from the UK MAR for temporary registration on another regulatory body's register, returns to the UK MAR it will follow full AAiP and RfA processes.

20. **Non-applicability for registration on the UK MAR.** RA 1166¹⁵ and RA 1240¹⁶ offer Defence the ability to contract for the utilization of civilian registration and thus these Aircraft do not need to be registered on the UK MAR.

**Regulation
1161(2)**

Application for Approval in Principle

1161(2) When applying to register an Aircraft¹ on to the UK MAR an AAiP **shall** be submitted⁶.

**Acceptable
Means of
Compliance
1161(2)**

Application for Approval in Principle

Crewed Aircraft and Certified Category RPA

21. For Civilian-Owned Aircraft the AAiP **should** be prepared by the Applicant for the Sponsor using the template hosted on the MAA's website.

22. When satisfied that the Aircraft has qualified for military registration and met the registration principles, the SRO (for Military-Owned) or Sponsor (for Civilian-Owned) **should** submit the completed application (whose template is hosted on the MAA website), the CofU for Civilian-Owned, and the associated Air System Safety Case (ASSC) Report, to the MAA¹⁷.

23. As part of the AAiP submission and in addition to the requirements of RA 1205¹⁸, the submission of the ASSC Report **should** explicitly detail Claims / Arguments / Evidence that summarize:

- a. The organizational Approvals for the design, Maintenance and operation of the Aircraft.
- b. The approach taken to develop the Type Airworthiness Safety Assessment¹⁹ and Airworthiness Strategy.
- c. The proposed arrangements for the upkeep of Type Airworthiness (TAw) and CAw while the Aircraft is registered on the MAR.
- d. The approach to develop the Maintenance policy.

24. **Special Case Flying.** For Special Case Flying, the Sponsor **should** ensure the AAiP appropriately demonstrates that it is in the interest of the other UK Government Departments to place the Aircraft on the UK MAR.

Specific S2 sub-category RPA

25. The RPA Categorization Submission²⁰ **should** contain the AAiP requirements. The Categorization Submission **should** be accompanied by the CofU for Civilian-Owned RPA, and the associated ASSC Report. A separate AAiP submission is not required.

26. **Special Case Flying.** For Special Case Flying, the Sponsor **should** ensure the Categorization Submission appropriately demonstrates that it is in the interest of the other UK Government Departments to place the RPA on the UK MAR.

¹⁵ Refer to RA 1166 – UK Civil-Registered Aircraft Utilized by the Ministry of Defence.

¹⁶ Refer to RA 1240 – Chartering of Civilian Air Systems for Military Purposes.

¹⁷ Via DSA-MAA-OA-ACC@mod.gov.uk.

¹⁸ Refer to RA 1205 – Air System Safety Cases.

¹⁹ Refer to RA 5012 – Type Airworthiness Safety Assessment.

²⁰ Refer to RA 1600 – Remotely Piloted Air Systems.

**Guidance
Material
1161(2)**

Application for Approval in Principle

Crewed Aircraft and Certified Category RPA

27. The end-to-end process for registering an Aircraft typically takes 6 months. It is highly recommended that the SRO (for Military-Owned Aircraft) or the Applicant (for Civilian-Owned Aircraft) holds a launch meeting at the start of a project to register an Aircraft with the Military Aircraft Registration section of the MAA⁶, so that timescales are clear and expectations are managed. This is especially important in cases where the Aircraft is unfamiliar to the MAA or there will be a significant difference in the design and / or usage of the Aircraft compared with an equivalent In-Service Type.

28. For the AAiP, submission of an appropriately mature ASSC Report that summarises the developing ASSC is required²¹.

29. The AAiP template requires the following information, each to be supplemented by a detailed narrative where appropriate.

- a. **Purpose of Military Registration:** eg Export support, service provision, training.
- b. **Operating, Type and Continuing Organization arrangements:** Details of the Contractor Flying Approved Organization Scheme, DAOS (inc Type Airworthiness Management supplement if required), CAMO and MAOS Approvals within which operations will be conducted.
- c. **Intended route to Type Certification:** Details the proposed TCB and summary of the Type Certification programme.
- d. **Intended DAE Operating Category(s):** Declaration of the endorsed DAE Operating Category(s) for the activity, highlighting if the activity will be undertaken in one or more DAE Operating Categories.
- e. **Proposed Types of Flying:** Details the proposed types of flying related to the Intended DAE Operating Category(s).
- f. **Proposed programme of flying:** Supporting detail to para 29.e, confirming the proposed air activities to be undertaken, such as: air-ground weapons trials, air-air refuelling, formation, low flying, and dates from which first flight will take place.
- g. **Geographical Area:** The area where the flying needs to take place. Aircraft may be flown outside of the UK, but such plans will need to consider requirements for diplomatic clearance.
- h. **ASSC Report:** Reference to appropriate ASSC Report.
- i. **Previous Registration Number(s):** Registration numbers that a previous authority may have used prior to de-registration.

30. Once the AAiP is approved, the MAA Registrar will provisionally enter the Aircraft details onto the UK MAR and notify the SRO / Sponsor of the provisional tail numbers.

Specific S2 sub-category RPA

31. Once the Categorization Submission is approved, the MAA Registrar will provisionally enter the RPA details onto the UK MAR and provide the provisional tail number(s) or type number alongside the Letter of Endorsed Categorization (LEC).

**Regulation
1161(3)**

Request for Activation on the UK Military Aircraft Register

1161(3) Prior to operation of the Aircraft¹, the Aircraft **shall** be registered as Active on the UK MAR⁶.

²¹ Once the ASSC Report has been submitted to the MAA it will take a minimum of 30 working days to complete the review.

**Acceptable
Means of
Compliance
1161(3)**

Request for Activation on the UK Military Aircraft Register

Military-Owned Aircraft

32. The SRO **should** submit a RfA for the required Aircraft tail numbers²² utilizing the template (available on the MAA's websites), along with the Live ASSC Report (Development or In-Service), to the MAA¹⁷.

33. In addition to the requirements of RA 1205¹⁸, submission of the Live ASSC Report (Development or In-Service) **should** explicitly include Claims / Arguments / Evidence that summarize:

- a. The arrangements for the management of flying operations, TAw, and CAw.
- b. The TCB and Airworthiness Strategy.
- c. Proposal for the Air System Document Set (ADS).
- d. The arrangements for either Military Permit To Fly (MPTF) (Development or In-Service) or Release To Service (RTS).

Civilian-Owned Aircraft

34. For Civilian-Owned Aircraft a RfA for the required Aircraft tail numbers²² **should** be prepared by the Applicant for the Sponsor.

35. When satisfied with the arrangements for the management of Air Safety, as appropriate for the Aircraft's DAE Operating Category, the Sponsor **should** submit the RfA for the required Aircraft tail numbers²², along with the Live ASSC Report (Development or In-Service), to the MAA¹⁷.

36. In addition to the requirements of RA 1205¹⁸, submission of the Live ASSC Report (Development or In-Service) **should** explicitly include Claims / Arguments / Evidence that summarise:

- a. The arrangements for the management of flying Operations, TAw, and CAw.
- b. The TCB and Airworthiness Strategy.
- c. Proposal for the ADS.
- d. The arrangements for either MPTF (Development, In-Service, or Special Case Flying) or RTS.

**Guidance
Material
1161(3)**

Request for Activation on the UK Military Aircraft Register

37. The RfA needs to be considered well in advance of the proposed first flight, the SRO / Sponsor may wish to review and seek independent advice on particular aspects of the submission.

38. It is also highly recommended that the MAA is engaged well in advance of the proposed first flight to ensure that timescales for review of the Live ASSC are clear and expectations managed.

39. The MAA will review the RfA, along with the Live ASSC Report (Development or In-Service), to assure itself that appropriate arrangements for Air Safety management, specific to the Aircraft's DAE Operating Category, have been identified and are in place. The MAA will then issue the SRO / Sponsor a letter of activation Approval.

40. Following activation Approval, Certificates of Registration for individual Aircraft tail numbers will be issued by the MAA Registrar upon request.

**Regulation
1161(4)**

Indemnity

1161(4) Withdrawn – Not deemed Regulatory material.

²² For Specific S2 sub-category RPA registered by type, a separate RfA for the type registration number is required by each operator (ie each LEC holder for the RPA type).

**Acceptable
Means of
Compliance
1161(4)**

Indemnity

41. Withdrawn – Not deemed Regulatory material.

**Guidance
Material
1161(4)**

Indemnity

42. Withdrawn – Not deemed Regulatory material.

**Regulation
1161(5)**

Military Open Category / Specific S1 sub-category Remotely Piloted Aircraft Registration

- 1161(5) Open Category / Specific S1 sub-category RPA operating and intending to operate in the DAE **shall** be registered on the UK MAR.

**Acceptable
Means of
Compliance
1161(5)**

Military Open Category / Specific S1 sub-category Remotely Piloted Aircraft Registration

43. The RPAS Responsible Owner (RPAS RO) / RPAS Accountable Manager (RPAS AM) **should** request military registration²³ by submitting the RPAS Categorization Submission²⁰ to the MAA, along with the CofU for Civilian-Owned RPA.
44. To qualify for military registration, all the following conditions **should** be met:
- The RPA **should** meet the UK ANO definition of a 'Military Aircraft'³; and
 - If Civilian-Owned, the RPA **should not** be eligible / appropriate⁴ for registration by the UK CAA; and
 - The RPA **should** be intended for operation in MOD Interest; and
 - The RPA **should** be capable of controlled flight; and
 - The RPA **should** be intended to complete multiple flights.
45. Open Category and Specific S1 sub-category RPAS **should** be given a Military Aircraft Registration Number for the RPA type. The RPAS RO / RPAS AM **should** maintain a record of individual RPA identified by a unique serial number (identifying both the operator and the tail); and ensure that both the Type Military Aircraft Registration Number and the unique RPA serial number are displayed on the main fuselage.
46. An RPA **should** only be registered with one aviation authority at any one time.
47. The status of an Open Category / Specific S1 sub-category RPA registration on the UK MAR **should** be one of the following;
- Active.** Activation on the UK MAR, and registration of the RPA type as Active, occurs prior to first flight of the RPA and successful award of an MAA LEC and Certificate of Registration.
 - De-Registered.** When military registration of the RPA type is no longer required (eg Out of Service Date, disposal or transfer to another regulating authority), and Regulation under the MRP is no longer appropriate, the RPAS RO / RPAS AM **should** notify the MAA⁶, allowing the RPA type to be De-Registered once all operators of the type have ceased operations.
48. When operating on the UK MAR, registration markings **should** be appropriately displayed for the size and type of the RPA.

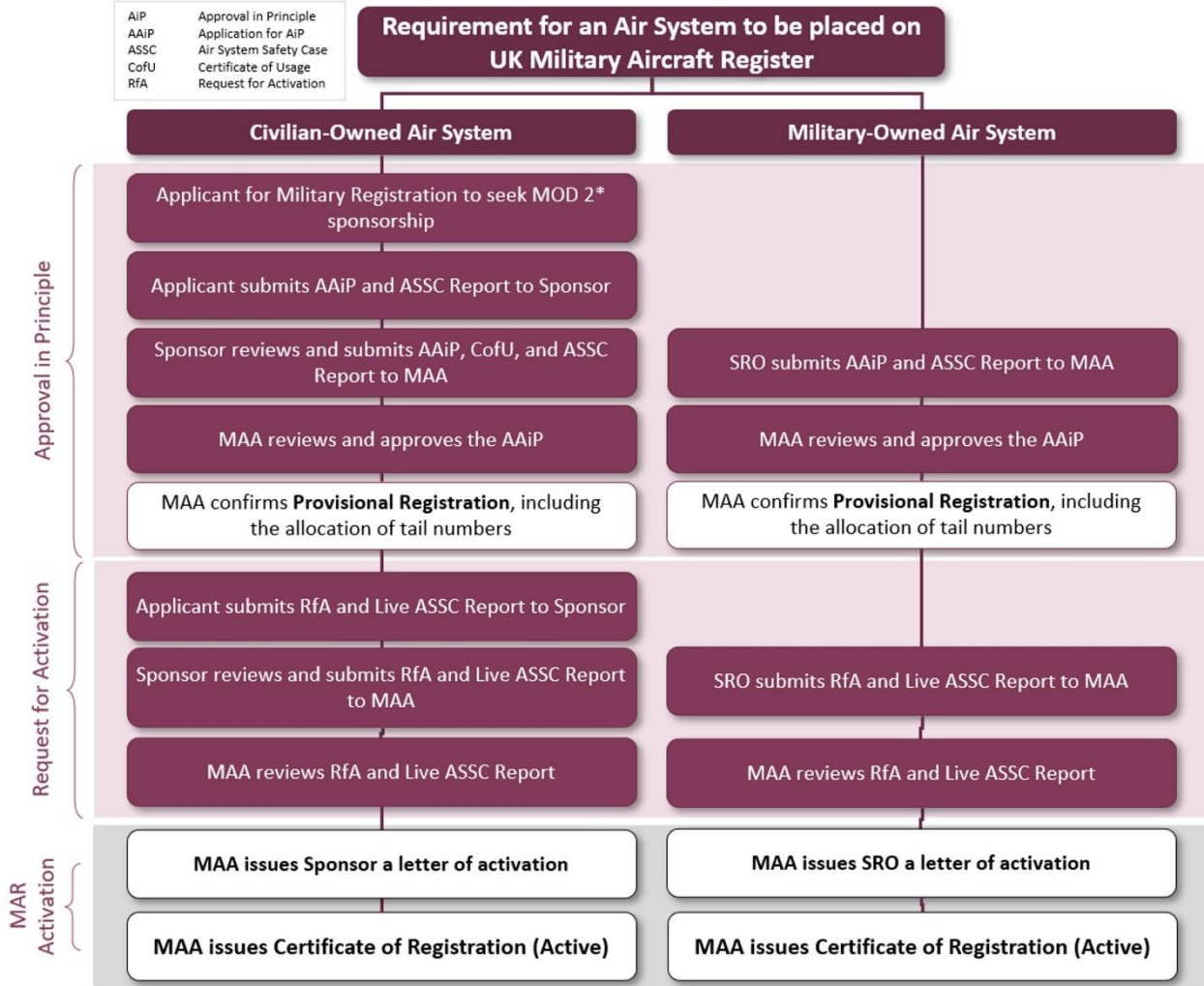
²³ Open Category / Specific S1 sub-category RPA do not require a separate AAiP or RfA.

**Guidance
Material
1161(5)****Military Open Category / Specific S1 sub-category Remotely
Piloted Aircraft Registration**

49. A flow chart providing guidance to meet the requirements for Military Aircraft registration is at Annex B.
50. The registration of RPA provides a unique identity that enables the following essential actions:
- a. The certification of fitness for flight of individual tails.
 - b. Identification in flight.
 - c. Configuration control.
 - d. A record of usage and Maintenance.
51. Considerations for military registration:
- a. Sponsors issue a CofU for Civilian-Owned RPA⁸.
 - b. Nomination of Competent organizations to operate the RPA⁹.
52. RPS are not registered on the UK MAR. As an element of the RPAS, a RPS may be allocated to a number of different RPAS. The administration and identification of RPS are to be locally controlled and managed.
53. **Registration Markings.** Guidance for RPA registration markings can be taken from DAP 119A-0601-0B Chapter 9¹² and CAP 523¹³. Where RPA are either too small to physically accommodate registration markings or are unable to have them applied in the standard positions, guidance can be taken from UK CAA guidance on labelling drones and model Aircraft. When Operational considerations are required for applying registration markings the Camouflage Working Group needs to be consulted¹⁴.
54. **Non-applicability for registration on the UK MAR.** RA 1240¹⁶, offers Defence the ability to contract for the utilization of civilian registration and thus these RPA do not need to be registered on the UK MAR.

Annex A

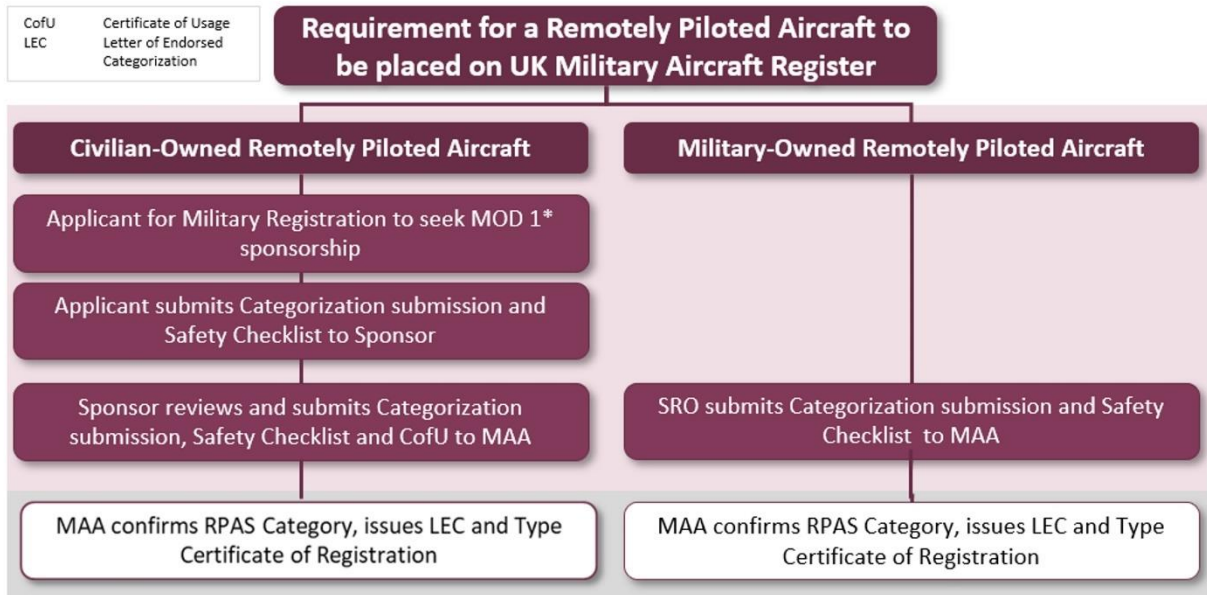
Figure 1: Military Aircraft Registration Flow Chart²⁴



²⁴ Before registration on the UK MAR, the Sponsor / SRO **should** provide proof of de-registration for Aircraft transferring from another register.

Annex B

Figure 2: Open Category and Specific S1 sub-category RPA Military Aircraft Registration Flowchart²⁴



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