

**NPA/26/01****Title of Proposal:** RA2370 Issue 6**RA(s) or Manual Chapter(s):** RA2370**Organizations and / or business sectors affected:** All of the Regulated Community**RFC Serial No:** MAA/RFC/2021/132, 2022/032, 2022/054, 2022/273, 2023/158, 2025/016*MAA Author*

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**Cross-references to Other Documents or Relevant Sources****Other MRP Amendments:** N/A**Service Inquiry Recommendations:** N/A**AAIB Recommendations:** N/A**Other Investigation Recommendations:** N/A**Any Other Document:** N/A**Feedback Notes for the Regulated Community**

The Regulated Community are invited to offer feedback about the proposed amendment in the following areas:

- Air or Flight Safety impact
- Operational impact
- Errors or omissions
- Timescale for implementation
- Cost of implementation
- Amendment to internal processes/orders

- Resourcing the outcome of change
- (Contract amendments because of the change)

The format for feedback is available within a single Excel Template file on both internal and external MAA websites; it is important to use this format to ensure that your responses are considered and answered correctly.

### **Summary of Proposed Amendment**

**Objective:** Introduce proportionate regulation to facilitate the testing of small UAS to meet the growing demand.

Update the definition of T&E and introduce an Experimentation category to capture the broad range of T&E work conducted by the RC.

Introduce regulation governing AFE to match the introduction of the RA 1700 series.

**Changes made:** Significant, this RA has been substantially re-written and should be read in its entirety. Major changes include; update to the definition of T&E, introduction of an Experimentation category, new regulation for the testing of small UAS and the introduction of the Pre-approved UAS Test Clearance, introduction of regulation for the testing of AFE, recognition of additional ETPS courses and multiple minor changes.

**Impact Assessment:** Significant positive impact. Impact to orgs conducting T&E (or wishing to conduct T&E) only. Already issued T&E Endorsements may need updating to reflect changes. Expectation that multiple units operating small UAS will wish to conduct T&E under the new regulation. Negligible cost or interoperability impact..

### **Consultation Period Ends:** 3 February 2026

The consultation period for this proposed amendment ends on the stated date. Please send your feedback, using the Response Form, via email to [DSA-MAA-MRPEnquiries@mod.gov.uk](mailto:DSA-MAA-MRPEnquiries@mod.gov.uk)

#### *MAA Approval*

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

## RA 2370 – Test and Evaluation

### Rationale

*In the Defence Air Environment (DAE), the Risks to Life (RtL) associated with Test and Evaluation (T&E) are two-fold: firstly the process of evidence gathering has the potential to present a greater RtL than that associated with the routine operating environment, and secondly the generation of flawed evidence may negatively impact the subsequent Safety case or clearance. Therefore T&E activity, the associated evidence-generation and data interpretation, needs to be conducted and supervised by approved organizations and Suitably Qualified and Experienced Persons (SQEP).*

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### Definitions

#### Definitions relevant to this RA

1. **T&E.** T&E is the end-to-end process of planning, executing, and analysing Air System or simulator assessments. These assessments must meet one or more of the following criteria:

- Generates evidence in support of an Air System Safety Case (ASSC)<sup>1</sup>, or an equivalent As Low As Reasonably Practicable (ALARP) and Tolerable Safety argument, including where that evidence may reasonably be expected to be used to do so in the future.
- Validates whether a system is fit-for-purpose in its intended environment and / or is able to fulfil its intended role against stakeholder requirements. For example, to assure the Acquisition or capability development process based on the User Requirement Document. *'Has the right system been built?'*
- Verifies compliance with system requirements, Regulations, or specifications. For example, to assure that a system will operate as designed / intended based on the Systems Requirement Document. *'Has the system been built right?'*
- Presents a greater RtL than that associated with established operational use, due to the introduction or evaluation of new techniques, procedures, or flight profiles, or the technical Assurance level of the equipment under test.

2. **Experimentation.** Experimentation is the systematic exploration of new ideas, concepts, technologies, or methods under controlled conditions to discover cause and effect relationships and to identify potential improvements or innovations. In a flight test context, experimentation may involve trying new Configurations, operating regimes, demonstrating a novel concept or procedures that are not fully validated, with a goal of gaining insight rather than solely generating and then analysing data. Examples could include feasibility studies, proof of concept demonstrations and de-risking studies prior to formal flight trials.

3. **Small Uncrewed Air Systems.** Small Uncrewed Air Systems (sUAS) are Uncrewed Air Systems (UAS) in the Open and Specific S1 Category<sup>2</sup>.

4. **T&E on sUAS.** T&E for sUAS is any deliberate testing, data gathering or evidence generation associated with changes to an existing sUAS that meaningfully

<sup>1</sup> The ASSC utilising evidence gathered by T&E may not necessarily be that of the article under test. For example, the use of an Air System as a test bed for an installation destined for a different Air System.

<sup>2</sup> Refer to RA 1600 – Uncrewed Air Systems for UAS Categorization criteria.

<b>Definitions</b>	<p>change how it flies, what it can do or the level of RtL it poses to both involved and uninvolved persons.</p>
<b>Applicability</b>	<p><b>Applicability of this RA</b></p> <p>5. This RA applies to all T&amp;E activity conducted within the DAE.</p> <p>6. Experimentation, by its nature, introduces new or novel elements that may present a greater RtL than routine operations. Accordingly, flight test experimentation is governed by this RA.</p> <p>7. This RA also governs any aviation activity that is new or novel, in nature and presents an elevated RtL. Activity outside a Release To Service or equivalent Aircraft release document will most likely fall under T&amp;E. It is the nature of the activity that influences RtL, not the naming.</p>
<b>Regulation 2370(1)</b>	<p><b>Test and Evaluation Governance</b></p> <p>2370(1) T&amp;E activity <b>shall</b> be subject to governance by SQEP.</p>
<b>Acceptable Means of Compliance 2370(1)</b>	<p><b>Test and Evaluation Governance</b></p> <p>8. <b>Endorsement.</b></p> <p>a. Aviation Duty Holders (ADH), Accountable Managers (Military Flying) (AM(MF)), UAS Responsible Officer (UAS RO) or UAS Accountable Managers (UAS AM) who manage or conduct T&amp;E activity <b>should</b> be endorsed by the Military Aviation Authority (MAA)<sup>3</sup>. Refer to Annex A for detailed guidance on completing the T&amp;E Endorsement application.</p> <p>b. When not themselves T&amp;E SQEP, ADH, AM(MF), UAS RO, or UAS AM <b>should</b> appoint SQEP to oversee T&amp;E activity. In these cases ADH, AM(MF), UAS RO, or UAS AM <b>should</b> provide evidence of said individual's SQEP when submitting their application for endorsement by the MAA<sup>3</sup> and note that Accountability remains with the endorsed ADH, AM(MF), UAS RO, or UAS AM.</p> <p>9. <b>Nomination of Units and organizations.</b> ADH, AM(MF), UAS RO, or UAS AM <b>should</b>:</p> <p>a. Nominate Units and organizations for T&amp;E activity and its associated T&amp;E category <i>law</i> the endorsement issued by the MAA.</p> <p>b. Nominate SQEP<sup>4</sup> for T&amp;E activity.</p> <p>10. <b>Approval of T&amp;E activity.</b> ADH, AM(MF), UAS RO, or UAS AM <b>should</b>:</p> <p>a. Detail in orders the manner in which T&amp;E activity will be approved as follows:</p> <p>(1) The scope of involvement of the ADH, AM(MF), UAS RO, or UAS AM in the Approval process, and how they will manage T&amp;E RtL.</p> <p>(2) The composition and Competency of the Approval Board, which will be SQEP for the activity being conducted, include minimum T&amp;E qualifications <i>law</i> Annexes C, D and F and include representatives from the following areas as appropriate: Design Organization, T&amp;E, Continuing Airworthiness, Type Airworthiness<sup>5</sup> and flight operations.</p> <p>(3) The categorization of T&amp;E activity.</p> <p>b. Detail in orders the process for allocating T&amp;E activity to specific Units or organizations.</p> <p>11. <b>T&amp;E Approval Board.</b> The Approval Board <b>should</b>:</p>

<sup>3</sup> The T&E Endorsement application form is available on the MAA's website.

<sup>4</sup> In accordance with (*law*) Annexes B, C, D, and F.

<sup>5</sup> Refer to RA 5880 – Military Permit to Fly (Development) (MRP Part 21 Subpart P).

**Acceptable  
Means of  
Compliance  
2370(1)**

- a. Approve or reject T&E activity on behalf of the ADH, AM(MF), UAS RO, or UAS AM, based on an assessment of the Hazards the activity generates, and agreement on both the level and appropriate ownership of RTL.
- b. Examine each trial before planning commences and endorse or reject the proposed T&E categorization.
- c. Ensure that those designing, planning, supervising and conducting T&E activity are SQEP.
- d. Ensure that the trial design is capable of generating the appropriate level and fidelity of evidence<sup>6</sup>.

12. **Combined Test Teams (CTT).** CTT **should** operate under the governance of a single clearly identifiable ADH, AM(MF), UAS RO, or UAS AM and within the boundaries of a governance arrangement agreed by all relevant participants / stakeholders (eg T&E Organizations, Design Organization, Delivery Team).

**Guidance  
Material  
2370(1)**

**Test and Evaluation Governance**

13. Nil.

**Regulation  
2370(2)**

**Test and Evaluation Personnel**

2370(2) T&E activity **shall** only be designed, planned, supervised and conducted by SQEP.

**Acceptable  
Means of  
Compliance  
2370(2)**

**Test and Evaluation Personnel**

14. ADH, AM(MF), UAS RO, or UAS AM **should** detail in orders the T&E Competencies required of those designing, conducting, reporting and supervising T&E across the T&E categories. These T&E Competencies **should** meet or exceed the minimum qualification requirements<sup>7</sup> and include appropriate experience in the following:

- a. Test programme management, Risk Management and T&E governance.
- b. The planning, conduct and reporting of T&E activity, including data analysis and interpretation.
- c. The intended functionality of the Air System and / or the system under test.
- d. The application of relevant test techniques.

15. ADH, AM(MF), UAS RO, or UAS AM **should** record evidence of T&E Competencies (including training, qualifications, and experience) and T&E currency.

16. ADH, AM(MF), UAS RO, or UAS AM **should** detail in orders T&E specific currency requirements appropriate to their role and qualification<sup>8</sup>.

**Guidance  
Material  
2370(2)**

**Test and Evaluation Personnel**

17. A wide range of T&E qualifications are available from various training establishments. For consistency, the MAA uses the courses offered by the Empire Test Pilot School (ETPS) as a benchmark, as detailed in Annex B.

18. ADH, AM(MF), UAS RO, or UAS AM may recognise an equivalent Test Pilot (TP) or Flight Test Engineer (FTE) qualification awarded by test pilot schools such as the United States Navy Test Pilot School (USNTPS), United States Air Force Test Pilot School (USAF TPS) or L'Ecole du Personnel Navigant d'Essais et de Reception (EPNER). For non-TP or FTE roles, alternative qualifications or relevant experience may satisfy the intent of this RA. Recognition of an individual's equivalent qualification or experience will be based on a thorough review of the course syllabus, its relevance

<sup>6</sup> Refer to RA 5219 – Instrumentation and Flight Data Recorder Requirements for Flight Trials of Air Systems.

<sup>7</sup> iaw Annexes B, C, D and F.

<sup>8</sup> Refer to RA 2103 – Currency and Continuation Training.

<b>Guidance Material 2370(2)</b>	to the role, and the individual's demonstrable experience. All supporting evidence and justification for equivalence will be formally recorded and remain auditable.
<b>Regulation 2370(3)</b>	<b>Test and Evaluation Activity</b> 2370(3) ADH, AM(MF), UAS RO, or UAS AM <b>shall</b> issue orders detailing the governance, categorization, planning, conduct and reporting of T&E activity.
<b>Acceptable Means of Compliance 2370(3)</b>	<b>Test and Evaluation Activity</b> 19. <b>T&amp;E categorization.</b> ADH, AM(MF), UAS RO, or UAS AM <b>should</b> categorize T&E activity as follows: <ol style="list-style-type: none"><li><b>Cat 1.</b> Developmental T&amp;E.</li><li><b>Cat 2.</b> Flight Safety Critical T&amp;E.</li><li><b>Cat 3.</b> Production T&amp;E.</li><li><b>Cat 4.</b> Non-Flight Safety-critical T&amp;E.</li><li><b>Cat 5.</b> Operational T&amp;E.</li></ol> <p>f. <b>Experimentation.</b> Experimentation sorties <b>should</b> follow the same processes as all other categories of trial and still require structured planning and Risk Assessment but are not subject to the same formal data generation or post-sortie analysis requirements. Accordingly, such activities need to be categorized under the T&amp;E category that best reflects the nature of the activity and aligns with the most appropriate T&amp;E classification. However, due to the differing data requirements the Trial Supervisor Qualification and Aircrew Qualification can be determined by the Approval Board who <b>should</b> consider the Risks and technical competence required to safely execute the trial.</p> <p>g. <b>Trials Support Flying.</b> Sorties necessary to enable T&amp;E activity but which do not themselves constitute test sorties.</p> <p>20. <b>T&amp;E documentation.</b> ADH, AM(MF), UAS RO, or UAS AM <b>should</b> detail in orders the processes for determining:<ol style="list-style-type: none"><li>T&amp;E objectives.</li><li>Hazard identification and Risk Management processes specific to T&amp;E.</li><li>Test plans, flight test cards, post-flight reports and trial reports.</li><li>Pre-flight trial training requirements.</li><li>Currency requirements for the T&amp;E activity.</li><li>Additional / specific Safety and survival training requirements.</li><li>Any T&amp;E specific procedures for support personnel.</li><li>SQEP to approve, supervise, plan and conduct T&amp;E activity.</li><li>SQEP to author and release trials reports.</li><li>SQEP to approve, supervise, plan and conduct trials support flying.</li></ol></p>
<b>Guidance Material 2370(3)</b>	<b>Test and Evaluation Activity</b> 21. <b>Categorizing T&amp;E activity.</b> Categorization advice is available from the Air and Space Warfare Centre (ASWC) or the Maritime Warfare Centre. When categorizing T&E activity, ADHs, AM(MF)s and UAS RO / AMs will consider that the highest potential for RtL may result from the subsequent use of evidence generated by data gathering, analysis, reporting and conclusions rather than from the trials activity itself. 22. <b>T&amp;E categories.</b> The following provides guidance for determining the category of T&E Activity:

**Guidance  
Material  
2370(3)**

a. **Cat 1. Developmental T&E.** T&E that expands the flight envelope, extends the flight limitations or develops the handling techniques of an Air System. This entails operations outside, or to the limits of, existing, temporary or proposed Airworthiness and flight limitations of the Air System. It may include, but is not exclusive to, assessment of:

- (1) Initial flight or significantly modified Air Systems.
- (2) Changes in flight characteristics or flight envelope definition or expansion.
- (3) Novel or unusual design, features or techniques.
- (4) Changes to handling qualities of an Air System that might include changes to visual references, flight instruments and symbology, flying controls, flying control systems, Air System performance, external stores and weapons carriage / release / jettison and underslung loads.

b. **Cat 2. Flight Safety-critical T&E.** T&E that is conducted on a production standard Air System that provides evidence for an Airworthiness clearance of Flight Safety-critical Systems. This will entail operating to the limits of existing, temporary or proposed Airworthiness and flight limitations of the Air System. It may include, but is not exclusive to, assessment of:

- (1) Communications Systems.
- (2) Navigation Systems.
- (3) Sensors that affect Flight Safety.
- (4) Weapon integration.
- (5) Collision avoidance Systems.
- (6) Secondary role Systems.

c. **Cat 3. Production T&E.** This may be referred to as post-manufacture test flying or post-factory flight test. This activity assures the production standard of a newly built Air System and / or associated Systems that have been newly installed; this activity is not Maintenance test flying<sup>9</sup>. Production T&E may not be required for all UAS, particularly those of smaller physical attributes and / or complexity.

d. **Cat 4. Non-Flight Safety-critical T&E.** Assessment of new Systems or software whose operation is not considered Flight Safety-critical, but which requires T&E activity for clearance. Flying conducted by an Air System to facilitate the testing of a system with which it would not normally be fitted in order to assess that system in the airborne environment. It may include, but is not exclusive to, assessment of:

- (1) New cabin installations.
- (2) Passenger radio Systems.
- (3) Mission system software.
- (4) Integration of Aircrew Equipment Assemblies to an Air System.

e. **Cat 5. Operational T&E.** T&E aimed at determining the performance or effectiveness of an Air System's non-Flight Safety-critical Systems / software and developing or ensuring the validity of tactics, techniques and procedures of the Air System and associated doctrine, where they affect the ASSC. It is normally carried out within the limits of existing or temporary Airworthiness limitations of the Air System. It may include, but is not exclusive to, assessment or development of the following:

- (1) Tactics, Techniques and Procedures.
- (2) Weapon effectiveness.
- (3) The operational employment of mission Systems.

<sup>9</sup> Refer to RA 2220 – Maintenance Test Flights.

**Guidance  
Material  
2370(3)**

f. **Experimentation.** An organization may choose experimentation over full flight test to rapidly explore concepts, assess feasibility, and de-Risk ideas before committing resources to formal trials, evidence generation and subsequent clearance. Where the activity is deemed to fall under the definition of experimentation it will be categorized under the most appropriate T&E Cat (1-5) but suffixed with an X to highlight the differing data and SQEP requirements.

g. **Trial Support Flying.** Sorties essential to enabling the trial but do not directly generate data or evidence. It may include, but is not limited to:

- (1) Positioning flights.
- (2) Chase / Photo support.
- (3) Telemetry relay.
- (4) Target / Threat simulation.

23. **Trials supervisors.** Trial supervisors are responsible to the endorsed ADH, AM(MF), UAS RO, or UAS AM for ensuring that T&E Activity is carried out safely iaw the direction of the T&E Approvals Board. They are not required to be flying supervisors or authorizers.

**Regulation  
2370(4)**

**Test and Evaluation of Small Uncrewed Air Systems**

2370(4) T&E of sUAS **shall** only be undertaken with an Approval granted by the MAA.

**Acceptable  
Means of  
Compliance  
2370(4)**

**Test and Evaluation of Small Uncrewed Air Systems**

24. **Organizational Approval.** Unless covered by an extant T&E Endorsement, ADH, AM(MF), UAS RO, or UAS AM tasked to conduct regular SUAS T&E **should** hold a Pre-approved sUAS Test Clearance (PUTC). The PUTC will be proportionate to the category of sUAS, the Competence of the organization and personnel, and the Risk presented by the activity.

25. **sUAS and crewed T&E Interaction.** For T&E that includes both sUAS and crewed Aircraft interacting, the crewed Aircraft T&E SQEP requirements **should** take precedence. The activity cannot solely be covered by a PUTC.

26. **Contractor Flying Approved Organization Scheme (Small Uncrewed Air Systems) (CFAOS(SU)).** For CFAOS(SU) organizations, sponsor approval of the proposed PUTC scope **should** be obtained before engaging with the MAA<sup>10</sup>.

**Guidance  
Material  
2370(4)**

**Test and Evaluation of Small Uncrewed Air Systems**

27. **T&E on sUAS.** T&E on sUAS is required when physical changes to a platform or how it is used affect the assessed Risk of operation. Data from T&E will be used to confirm that any changes to the platform or its operating concept do not introduce unacceptable RtL or the environment. This includes validating that the system remains airworthy and that operational procedures keep Risks ALARP. T&E provides data to support updated Risk Assessments when Modifications or new roles are introduced. Without evidence, Risk arguments would be speculative and unreliable. It can also verify that the system continues to meet relevant standards, Regulations, and operational requirements after changes.

28. An activity qualifies as T&E when it deliberately produces evidence to substantiate Safety or compliance arguments, or to assess operational effectiveness, and involves changes that could introduce new or increased RtL. Examples include:

- a. Major change / Modification. A change that has appreciable effect on the mass, balance, structural strength, operational characteristics, armament system, or other characteristics affecting the Airworthiness of the Air System.
- b. Flight Termination System Testing.

<sup>10</sup> Refer to RA 1031 – Contractor Flying Approved Organization Scheme (Basic Uncrewed Air Systems)

## Guidance Material 2370(4)

- c. Change of role which increases the assessed Risk of operation such as eg Intelligence, Surveillance and Reconnaissance to Beyond Visual Line of Sight (BVLOS) dropping stores
- d. Developing new procedures that increase the assessed RtL.

29. **Not considered T&E.** Activity is not considered T&E if it does not deliberately generate evidence for Safety or compliance arguments, or assess operational effectiveness, and does not introduce new or increased assessed RtL. Examples include:

- a. Minor change / Modification. A change that has no appreciable effect on the mass, balance, structural strength, operational characteristics, armament system, or other characteristics affecting the Airworthiness of the Air System.
- b. Repair.
- c. Replacement of original parts with equivalent built to a similar standard.
- d. Cosmetic change.

30. **PUTC.** Approved sUAS T&E organizations will operate under a PUTC, which defines the freedoms, limits, and rules under which sUAS trials may be conducted without reference to the MAA. The PUTC allows organizations to operate UAS within a more permissive framework that is not tied to a type of Air System or location. Such organizations could be approved to independently modify and / or add UAS types / marks via the governance and methodology of the organization's MAA approved T&E processes.

- a. In such cases each PUTC will be underpinned by:
  - (1) Documented orders.
  - (2) SQEP.
  - (3) Risk identification and mitigation processes.
- b. A PUTC will be tailored to the organization's capability. ADH, AM(MF), UAS RO, or UAS AM need to apply for a PUTC via the template at Annex E.

31. **Documentation.** PUTCs will be submitted to and endorsed by the MAA. Applications need to specify, SQEP, supporting orders, the freedoms sought and the mitigation to justify the requested freedoms. Guidance on the information required is at Annex E.

32. **UAS Categorization.** With appropriate mitigations, S1 T&E may be permitted to operate beyond the standard limitations defined in RA 1600<sup>11</sup>, particularly regarding Aircraft mass and BVLOS.

33. **Trial Categorization.** Within the PUTC there is no categorization of trials on sUAS. SQEP requirements need to be scaled to the Risk of the activity rather than aligned to crewed aviation standards.

34. **Letter of Endorsed Categorization (LEC).** For the avoidance of doubt organizations will still submit a categorisation submission<sup>11</sup> and receive a LEC prior to operating a UAS within the bounds of an MAA approved PUTC.

## Regulation 2370(5)

### Test and Evaluation of Airborne Forces Equipment

2370(5) T&E of Airborne Forces Equipment (AFE) **shall** be subject to the governance, personnel, and procedural requirements outlined in this Regulation. However, AFE trials **shall** be categorized using a distinct framework appropriate to the nature of AFE.

<sup>11</sup> Refer to RA 1600 – Uncrewed Air Systems Categorization.

**Acceptable  
Means of  
Compliance  
2370(5)****Test and Evaluation of Airborne Forces Equipment**

35. **AFE T&E activity.** AFE T&E activity is subject to the same governance, SQEP, and procedural requirements as other T&E activity under RA 2370. However, the categorization of AFE trials **should** be conducted separately by the ADH or AM(MF), using the following categories:

- a. **Cat A.** Aircraft Parachute Clearance.
- b. **Cat B.** Parachute System Test.
- c. **Cat C.** Safety Critical Ancillaries.
- d. **Cat D.** Non-Safety Critical Ancillaries.
- e. **Cat E.** Operational T&E.

36. **AFE and crewed T&E Interaction.** Where the minimum requirements of the T&E approval board and the trial supervisor differ for a trial involving both crewed aviation and AFE, the higher T&E SQEP requirement **should** apply.

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2370(5)****Test and Evaluation of Airborne Forces Equipment**

37. **AFE T&E categories.** The following provides guidance for determining the category of AFE T&E Activity:

- a. **Cat A. Aircraft Parachute Clearance.** Activities conducted to test and validate an Aircraft for use as a parachute despatch platform. This includes all evaluation necessary to confirm the Aircraft meets Safety and operational requirements for parachute deployment.
- b. **Cat B. Parachute System Test.** Activities conducted to assess the design, performance, and operational limits of parachute systems. This includes verification of Safety, functionality, and compliance with clearance standards for parachute systems and associated components.
- c. **Cat C. Safety Critical Ancillaries.** Activities conducted to evaluate systems or software whose correct operation is essential to parachutist Safety. This includes testing to ensure reliability, accuracy, and compliance with Safety requirements for equipment that directly affects life-preserving functions.
- d. **Cat D. Non-Safety Critical Ancillaries.** Activities conducted to evaluate systems or software that support parachute operations but do not directly affect parachutist Safety. This includes testing to confirm functionality, integration, and suitability for operational use without impacting critical Safety outcomes.
- e. **Cat E. Operational T&E.** Activities conducted to assess the operational performance and effectiveness of equipment that has already been cleared. This includes validation under realistic conditions and refinement of operational employment to ensure mission effectiveness.

**Annex A****T&E Endorsements**

1. The following information is designed to assist in the completion of the Application for Test and Evaluation Endorsement form.
2. The primary purpose of the application will ensure compliance with RA 2370. The following aspects **should** be addressed:
  - a. Detail the reason(s) as to why the organization is required to conduct T&E and the roles of the nominated T&E units within the organization.
  - b. Detail the chain of RtL holders.
  - c. Detail the SQEP of key nominated personnel and SQEP available in the broader organization. Justify how this supports the breadth of T&E endorsements requested.
3. Detail how T&E will be approved and categorized. Specifically cover the role of the ADH, UAS RO, AM(MF) or UAS AM in the process and the composition of the Approval Board.
  - a. Detail the orders and process which describes the T&E competencies of those designing, conducting, reporting and supervising T&E.
    - b. Provide links to orders which cover the following:
      - (1) How T&E objectives are identified and confirmed.
      - (2) Hazard identification and Risk Management processes specific to T&E.
      - (3) The management and Approval of test plans, flight test cards, post-flight reports and trial reports.
      - (4) T&E specific training and Competency checks.
      - (5) Any T&E specific procedures support personnel.
      - (6) SQEP to approve, supervise, plan and conduct T&E activity.
      - (7) SQEP to author and release trials reports.
  - c. **CTT only.** Confirm the other party has the appropriate T&E SQEP and describe the governance arrangements (such as an Memorandum of Understanding).
  - d. **CFAOS only.** Confirm T&E is supported as a Sponsor requirement via the MAA CFAOS Form 2. New T&E approvals will require an updated MAA CFAOS Form 2 to be submitted for Sponsor agreement, and no T&E can be conducted until reflected on the extant CFAOS schedule

## Annex B

## T&amp;E Qualifications

1. To ensure the safe and effective conduct of T&E activity within the DAE, individuals must possess qualifications that demonstrate their SQEP status. This annex outlines the T&E Qualifications offered by ETPS. The MAA have used these as a baseline to establish a hierarchy that supports the consistent application of SQEP across various roles and categories of T&E.
2. For TP and FTE qualifications the ADH, AM(MF), UAS RO, or UAS AM may recognise an equivalent TP or FTE qualification awarded by test pilot schools such as USNTPS, USAFTPS or EPNER.
3. The T&E qualifications used in Annexes C, D and F are defined below:

Qualification	Description
Class A TP	Class A Test Pilot graduate of the ETPS
Class A UAS TP	Class A UAS Test Pilot Graduate of ETPS. For UAS trials treat as a Class A TP, for non-UAS Trials treat as Class A FTE.
Class A FTE	Class A Flight Test Engineer graduate of ETPS, or a course deemed equivalent by the T&E ADH or AM(MF).
Class B TP	Class B Test Pilot graduate of ETPS
Class B FTE	Class B Flight Test Engineer graduate of ETPS
UAS Systems (STS) Course Graduate	UAS STS graduate of ETPS
Qualified AeroSystems (QAS)	Graduate of the ASWC AeroSystems Course or an equivalent course that is approved and assured by ASWC on behalf of the T&E ADH, UAS RO, AM(MF) or UAS AM.
Evaluator Aircrew (EA)	Aircrew who have successfully completed a dedicated training course that includes live flying, including but not limited to the ETPS Evaluator Aircrew Course, that includes the Competencies listed at paragraph 14 and who are deemed SQEP and are authorized to participate in T&E by the ADH, UAS RO, AM(MF) or UAS AM.
Defence Evaluator (DE)	Personnel who have successfully completed a dedicated training course that does not include live flying, including but not limited to the ETPS Defence Evaluator Course, that includes the Competencies listed at paragraph 14 and who are deemed SQEP and are authorized to participate in T&E by the ADH, UAS RO, AM(MF) or UAS AM.
Production Pilot	Aircrew approved as SQEP, competent and endorsed by the ADH, UAS RO, AM(MF) or UAS AM to conduct Production T&E.

4. **Hierarchy.** For the purposes of Annexes C, D and F when determining SQEP minima, the qualification hierarchy is (in descending order): Class A TP / FTE, Class B TP / FTE, UAS STS, QAS, EA, DE and Production Pilot.

## Annex C

## T&amp;E Categories and Minimum Qualification Requirements for Crewed Air Systems and Certified UAS.

T&E Category	T&E Activity Description	Minimum Duty Delivery Holder (DDH), AM(MF), or CFAOS Post Holder Qualification	T&E Approval Board Qualification (Minimum one per Approval Board)	Trial Supervisor Qualification <sup>Note 1</sup>	Aircrew Qualification <sup>Note 1 and 2</sup> (Minimum one per Aircraft Crew)
CAT 1	Developmental T&E	Class A TP / Class A FTE	Class A TP / Class A FTE	Class A TP / Class A FTE	Class A TP
CAT 2	Flight Safety-critical T&E	Class B TP / Class B FTE	Class B TP / Class B FTE	Class B TP / Class B FTE	If piloting task, workload or HMI assessment required: Class B TP. For all else: EA
CAT 3	Production T&E	N/A	Class A TP / Class A FTE	N/A	Production Pilot
CAT 4	Non-Flight Safety-critical T&E	Nil	Class B TP / Class B FTE	EA	EA
CAT 5	Operational T&E	Nil	EA	EA	EA

Note:

<sup>1</sup> For Experimentation (X Category), Trial Supervisor Qualification and Aircrew Qualification can be determined by the Approval Board.

<sup>2</sup> For Trials Support Flying, Aircrew Qualification can be determined by the Approval Board.

## Annex D

## T&amp;E Categories and Minimum Qualification Requirements for Specific S2 Category UAS.

S1 and Open Category UAS may be operated under an organization's PUTC, negating the need to categorize the trial or meet the SQEP requirements detailed below. For an appropriately endorsed T&E organization without a PUTC they may conduct T&E on S1 and Open UAS using the table below.

T&E Category	T&E Activity Description	Minimum DDH, AM(MF), or CFAOS Post Holder Qualification	T&E Approval Board Qualification (Minimum one per Approval Board)	Trial Supervisor Qualification <sup>Note 1</sup>	Aircrew Qualification <sup>Note 1 and 2</sup> (Minimum one per Air System Crew)
CAT 1	Developmental T&E	Nil	UAS STS	UAS STS	UAS STS
CAT 2	Flight Safety-critical T&E	Nil	UAS STS	UAS STS	If piloting task, Aircrew workload or HMI assessment required: UAS STS For all else: EA
CAT 3	Production T&E	N/A	N/A	N/A	Nil
CAT 4	Non-Flight Safety-critical T&E	Nil	EA	DE	DE
CAT 5	Operational T&E	Nil	EA	DE	DE

Note:

<sup>1</sup> For Experimentation (X Category), Trial Supervisor Qualification and Aircrew Qualification can be determined by the Approval Board.

<sup>2</sup> The minimum T&E qualification may be held by another individual, other than the Remote Pilot (RP), who is directly supporting the RP in the operation of the UAS. The T&E qualified individual **should** be empowered to influence the conduct of the T&E activity, whilst recognising the authority of the RP, akin to a crew member on a crewed Air System.

**Annex E****Pre-approved sUAS Test Clearance**

The PUTC application must provide sufficient evidence to assure the MAA that the organization has the governance, SQEP, and processes necessary to conduct sUAS T&E safely within the requested freedoms. The following headlines are a guide as to what may be expected.

Note: The PUTC does not replace the Categorization Submission for each UAS, which may reference the PUTC. The PUTC is an organizational approval, the Categorization Submission is for the UAS.

**1. Organization**

- 1.1 The details required for 'Organization' as listed in the Categorisation Safety Checklist, detailed in RA 1600 Annex B needs to be provided.

**2. Operations**

- 2.1 The details required for 'Operations' as listed in the Categorisation Safety Checklist, detailed in RA 1600 Annex B needs to be provided.

**3. T&E SQEP Evidence**

- 3.1 Provide T&E and aviation relevant qualifications, experience, and currency of key personnel involved in T&E.
- 3.2 Include T&E and aviation relevant training and competency requirements for trial design, UAS operation, and emergency procedures.

**4. T&E Governance and Orders**

- 4.1 Provide copies or links to orders covering T&E approval, Risk Management, and reporting.
- 4.2 Include processes for Hazard identification and Risk Management specific to T&E.

**5. Safety Management**

- 5.1 Provide copies or links to the Air Safety Management Plan.
- 5.2 Confirm Air Safety reporting processes.

**6. Engineering Assurance**

- 6.1 Provide evidence of Airworthiness review and configuration control processes associated with T&E.
- 6.2 Include Maintenance and Modification management procedures associated with T&E.

**7. Trial Assurance**

- 7.1 Describe the trial approval process and technical Assurance of trial plans and reports.
- 7.2 Include Risk Assessment methodology for trials.

**8. Freedoms Requested and Mitigations**

- 8.1 List the specific freedoms requested and provide justification and Risk mitigations for each requested freedom.
- 8.2 Possible freedoms could include (Note; this list is illustrative only):
  - Freedom to test A1 within RA 1600 limits
  - Freedom to test A2 within RA 1600 limits
  - Freedom to test A3 within RA 1600 limits
  - Freedom test S1 within RA 1600 limits
  - Freedom to test S1 beyond BVLOS limits

- Freedom to test S1 above mass limits
- Freedom to test S1 above mass and beyond BVLOS limits

8.3 Elevated Risk activities may be approved under a PUTC but require stronger justification, enhanced Risk mitigation, and will be subject to increased scrutiny. As a guide, such activities typically align with SQEP requirements for an S2 category trial and may include (Note; this list is illustrative only):

- Freedom to be armed
- Freedom to test complex swarming
- Freedom to operate autonomously

The inclusion of such activity in a PUTC will require close liaison with the MAA

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## Annex F

## T&amp;E Categories and Minimum Qualification Requirements for AFE T&amp;E

T&E Category	T&E Activity Description	Minimum DDH, AM(MF), or CFAOS Post Holder Qualification	T&E Approval Board Qualification (Minimum one per Approval Board)	AFE Trial Supervisor Qualification
A	Aircraft Parachute Clearance	Class A TP / Class A FTE	Class A TP / Class A FTE	Class A TP / Class A FTE
B	Parachute System Test	Class B TP / Class B FTE	Class B TP / Class B FTE	DE
C	Safety Critical Ancillaries	QAS	QAS	DE
D	Non-Safety Critical Ancillaries	Nil	DE	DE
E	Operational T&E	Nil	DE	DE