

G-DC-RPEX-01

Guide for the application for a special certificate for experimental RPA flights

(unofficial courtesy translation)

G-DC-RPEX-01 1.0

© AESA

AGENCIA ESTATAL DE SEGURIDAD AÉREA

This document is protected by Intellectual Property Law. All rights inherent to the Law, as well as those of translation, reprinting, radio transmission, television, Internet (web page), reproduction in photomechanical form or in any other form and storage in data processing facilities are reserved, even if only partially used.

Any hard copy or full or partial copy of this document is considered as an uncontrolled copy and must always be checked against its current version on the web.

Table of contents

1.	OBJECT AND SCOPE.....	3
2.	INTRODUCTION.....	3
3.	ELEGIBILITY FOR THE APPLICATION FOR A CEVE	4
3.1	OPERATIONS	4
3.2	FLIGHTS	4
3.3	APPLICANT	4
3.4	AIRCRAFT	5
4.	APPLICATION	5
5.	APPLICATION PROCESSING.....	6
5.1	PROCESS.....	6
5.2	RECEIPT OF THE APPLICATION	8
5.3	EVALUATION OF THE APPLICATION	9
5.4	ISSUANCE OF THE SPECIAL CERTIFICATE FOR EXPERIMENTAL FLIGHTS.....	10
6.	GUIDE MATERIAL AND ACCEPTABLE MEANS OF COMPLIANCE	10
6.1	CHARACTERIZATION OF THE RPAS	10
6.2	SAFETY ZONE.....	12
6.3	SAFETY ANALYSIS	12
7.	FURTHER ACTIVITIES	13
7.1	EXPIRATION.....	13
7.2	CHANGES	13
7.3	EX OFFICIO ACTIONS	13
7.4	WITHDRAWAL.....	13
8.	RECORDS	13
9.	DEFINITIONS	14
10.	REFERENCE DOCUMENTS	14
11.	ACRONYMS.....	15

1. OBJECT AND SCOPE

The object of this guide is to describe the activities to conduct and the requirements to fulfil for the issue of a special certificate for experimental flights carried out by RPAs (Remoted Piloted Aircraft).

This guide applies to the issue, and when appropriate the withdrawal, of special certificates for experimental flights carried out by RPAs excluded from the application of the Regulation (EU) nº 2108/1139 of 4 July 2018 of the European Parliament and of the Council, and aimed to perform experimental flights according to Royal Decree 1036/2017 of 15 December. The definition for “experimental flights” is stated in article 5 s) of the Royal Decree 1036/2017.

2. INTRODUCTION

According to the European Union legislation, the national authorities are responsible for the regulation and supervision of the aircraft excluded from the application scope of Regulation (EU) 2018/1139.

Such is the case of the RPAs that perform military, customs, police, search and rescue, firefighting, border control, coastguard and similar activities.

Likewise, and temporarily while the pertinent implementing proceedings of the Regulation (EU) 2018/1139 are laid out, the RPAs with MTOM below 150 kg, or, for any MTOM when they are outside the scope of Regulation (EC) nº 2016/2008 because any of the circumstances specified in Annex II therein are met, are considered excluded.

Royal Decree 1036/2017 of 15 December establishes the applicable requirements with respect to the airworthiness of these aircraft. RPAs with MTOM above 25 kg (and those below 25 kg that operate out of specific limitations) must have an RPA airworthiness certificate according to the criteria and procedures established in Article 11 therein. As an exception, experimental flights with these RPAs can be performed if they obtain a “Special Certificate for Experimental Flights” (CEVE).

The special certificate for experimental flights can be issued upon request of an individual or a legal person pretending to perform flights such as production tests and maintenance, demonstration, investigation and development of new products and also to demonstrate the safety of specific operations for technical and scientific works, when the capacity of the aircraft to perform the foreseen flights in safety conditions be assured.

The completion of experimental flights requires, even with a CEVE, a previous authorization from AESA to carry out them (except from those concerning the police operations of the State Security Forces and Corps, customs, those concerning the roadway traffic performed directly by the Traffic General Directorate, and those related to the National Intelligence Centre). This procedure is processed by the RPAS Unit, of the DSA, and it is not included in this guide.

The following email address is available in order to solve possible doubts from the interested applicants: (Initial airworthiness mailbox) certificacion.aesa@seguidadaerea.es

3. ELEGIBILITY FOR THE APPLICATION FOR A CEVE

3.1 OPERATIONS

The issuance of a CEVE is not entitled for the following operations:

- a) Flights performed in their integrity within interior spaces completely closed
- b) Those related to military aircraft
- c) Those of RPAs used exclusively for aerial exhibition, sport, recreational and competition activities including the leisure activities of the plaything aircraft.

The customs, police, search and rescue, firefighting, border control, coast guard and similar services and activities, under control and responsibility of the State and undertaken for the general interest by a public authority or in its name, are eligible for the application for a CEVE.

For the remaining operations, and while the pertinent development proceedings of the Regulation (EU) 2018/1139 are not available, the pertinent application can be accepted when the operations are performed with aircraft excluded from Regulation (EC) n° 216/2008 because any of the circumstances specified in its Annex II are met.

3.2 FLIGHTS

The CEVE are only appropriate when intending to perform the following experimental flights:

- | |
|--|
| (1) Production test and maintenance flights, performed by manufacturers or organizations dedicated to maintenance tasks. |
| (2) Demonstration flights not opened to the public but aimed to a closed group of attendants by the organizer of an event, or by a manufacturer or operator in front of potential clients. |
| (3) Flights destined to investigation programs, performed by its manager, with the objective of demonstrating their viability of performing a specific activity with such RPAs. |
| (4) Development flights aimed to establish technics and procedures for the performance of a specific activity with RPAs, previous to the operation of said activity, performed by its intending carrier. |
| (5) I+D flights, performed by manufacturers or other entities, organizations, authorities, institutions or technological centres for the development of new RPAs or of elements that configure the RPAS. |
| (6) Test flights necessary for an operator to demonstrate that the operation or operations projected with the RPA can be performed safely. |

3.3 APPLICANT

It is only accepted as applicant to initiate the procedure of a CEVE the individual or legal person that proves to be the one to perform the experimental flight, according to the point 3,2.

3.4 AIRCRAFT

It is only possible to ask AESA for a CEVE for those RPAs:

- excluded from the scope of Regulation (UE) 2018/1139 (*), and
- with MTOM >25 kg, or
- with MTOM ≤25 kg intending to perform specialized aerial operations which exceed the limitations of Article 21, section 1 of Royal Decree 1036/2017.

* Temporarily while the pertinent implementing proceedings of the Regulation (EU) 2018/1139 are laid out, the RPAs with MTOM below 150 kg, or, for any MTOM when they are outside the scope of Regulation (EC) nº 2016/2008 because any of the circumstances specified in Annex II therein are met, are considered excluded.

4. APPLICATION

In order to apply for the issue of a CEVE, the applicant must fill in form F-DC-RPEX-01 and send it to Initial Airworthiness Division (DAI). The necessary instructions to complete it are included in the form itself and in the present guide.

The applicant will be, in all cases, the organization intending to perform the flights, although a duly accredited representative may present the application on its behalf. The accreditation must be presented together with the application.

The application must be presented together with the justification (model 791) of having satisfied the amount corresponding to the taxes in force established by law concerning the issue of a certificate of airworthiness (tax no. 5). All the information about taxes and payment methods can be found in:

http://www.seguridadaerea.gob.es/lang_castellano/tasas/default.aspx.

Together with the form F-DC-RPEX-01 (which includes a signed statement indicating that the aircraft is able to perform a safe flight), the applicant must submit all the documentation necessary to assess the application and, if convenient, to issue the CEVE.

The minimum documentation to submit is:

- (A.1) **Characterization of the RPA system:** to document the characterization of the RPAS, it may be used the form established in Appendix D of the resolution of the Director of AESA adopting acceptable means of compliance and guidance material for operations with RPAS. However, it must be taken into account that the information requested for a CEVE application, in most cases, will be greater than that intended in such appendix. The information considered as minimum is specified in Chapter 6.
- (A.2) **Safety zone:** the documentation will identify the flight zones and its features, both concerning the safety area as well as the flight profiles. It may be used the methodology established in the Appendix L of the Director of AESA adopting acceptable means of compliance and guidance material for operations with RPAS. However, it must be taken into account the information considered as minimum for a CEVE application indicated in Chapter 6.
- (A.3) **Safety assessment:** The applicant must prepare a safety analysis based on the integrity and reliability of critical equipment and safety systems with essential functions for the control of the RPA and its recovery, to ensure that the RPA does not exceed the authorized operating area or cause damage to the personnel responsible of the operation, or people and assets that could be found in the authorized operation area.

The assignation of the severity levels of the risks, and the acceptable probabilities of occurrence of the associated hazards to the operation, must be in accordance with what it is established in document EASA “SC-RPAS.1309 Special Condition Equipment, systems and installations” corresponding to the type of RPA.

The guidelines to perform the analysis and the acceptable means of compliance are included in Chapter 6.

(A.4) Capacity of the aircraft to perform safely the proposed flights. The applicant must declare:

- 1) The purpose of the certificate.
- 2) The conditions and restrictions that are considered necessary to safely carry out the proposed flights.
- 3) The duration of the flight campaign and the frequency of the flights.
- 4) The conformity of the RPAS system with the design documentation.
- 5) That all risk mitigating measures identified in the safety assessment have been implemented.

The applicant must provide the required documentation to support the risk assessment and the above statements.

(A.5) RPAS configuration control: the method to be employed must be defined, so as to guarantee in all cases that its design and characteristics allow the pilot to intervene in the flight control at any time.

The application format is not intended to comply with a fixed structure of design and certification documents. The applicant can complete the pertinent cells of the form referring to one or several documents he possesses (even to an enclosed list). When the information required is only a part of a broader one, it is important to indicate the sections, chapters or pages to be applied, both to speed the evaluation process as well as to avoid possible mistakes in the process.

5. APPLICATION PROCESSING

5.1 PROCESS

5.1.1 PROCESS TERMS

The initial term to decide and notify the resolution is 6 months since the date when the application was received in the AESA electronic register, as long as this application be correct and completed enough to evaluate its conformity. If such term finishes without an explicit resolution, the application must be considered as dismissed.

This maximum term can be interrupted when it is required to the applicant the correction of deficiencies or the submit of new documents or other elements of judgement for a time that will last between the notification of the requirement and the pertinent fulfilment by the applicant, or otherwise, for the given term, as well as in all the other cases established in Article 22 Law 39/2015, of 1 October, of the Common Administrative Procedure of the Public Administrations.

When the interruption of the processing is attributable to the applicant, he will be warned that after three months the procedure will expire. If this term expires and the requested applicant has not carried out the activities required to renew the processing, AESA will proceed to archive the proceedings, notifying the applicant accordingly. The pertinent appeals can be initiated against this resolution declaring the expiration of the processing.

5.1.2 RELACIÓN WITH OTHER PROCESSES

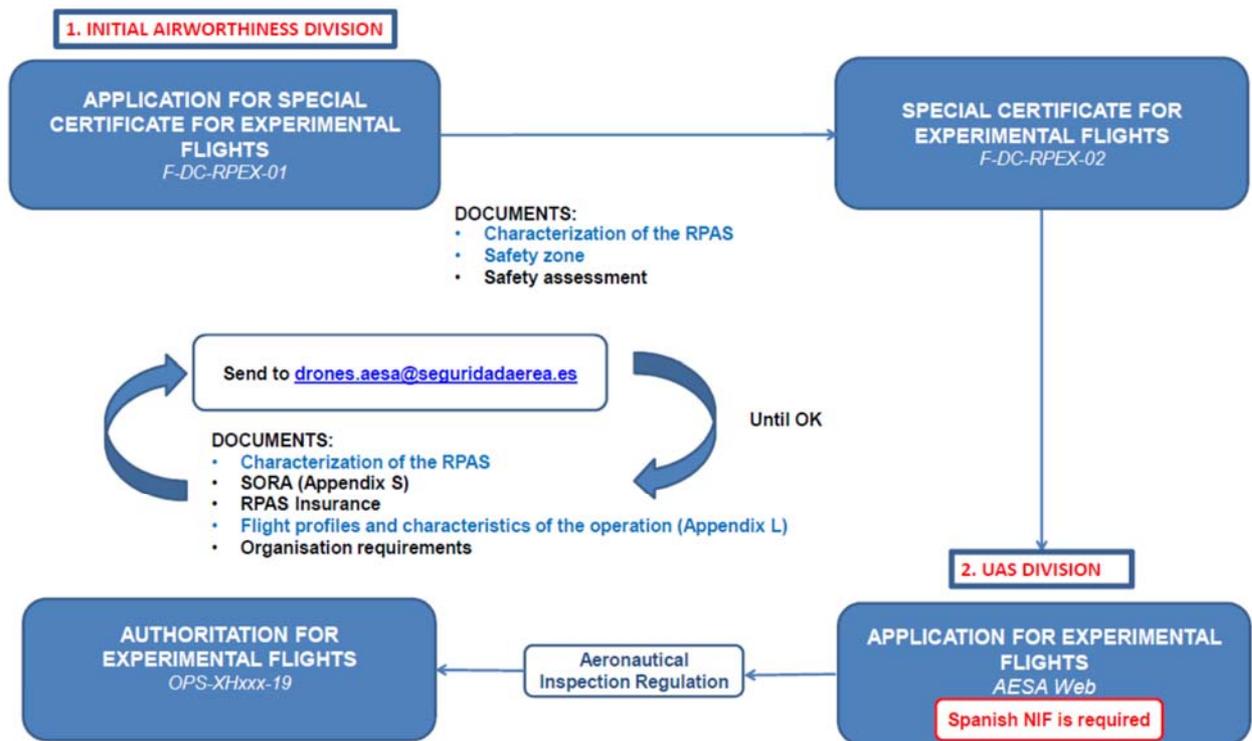
The issuance of the CEVE does not entitle the holder to perform the foreseen flights. The applicant must take into consideration, both referring to viability and terms, that he will need to manage the pertinent authorizations with units other than the DAI.

Airspace

If the proposed flights require a segregated airspace, the managers of the corresponding test polygons must be contacted. If these are not valid, the activation of a temporary segregated airspace (TSA) must applied for to the Civil Aviation General Directorate (DGAC).

Flight authorization

The department in charge will be the AESA Division for Unmanned Aircraft Systems (DUAS), which will require the CEVE to be added to the application. Such Division can be contacted in order them to evaluate the possibility of advancing in the flight authorization processing together with the CEVE.



As an exception, the police operations attributable to State Security Forces and Corps, customs, roadway traffic made by the Traffic General Directorate and those carried out by the National Intelligence Centre will not need the previous flight authorization issued by AESA, though they must comply with the operation conditions and limitations established in the CEVE.

5.2 RECEIPT OF THE APPLICATION

During this phase the personnel from AESA Initial Airworthiness Division (DAI) will justly check that the application complies with the minimum requirements to initiate the administrative processing, particularly that:

- ✓ The application is made by the pertinent format (F-DC-RPEX-01); it has been duly filled in and signed; the corresponding representation accreditation of the signatory is enclosed if necessary and it complies with the general rules of the Law 39/2015 Article 66.1.
- ✓ Each experimental flight object of the application is one of those indicated in section 3.2.
- ✓ The data from the applicant, and those of the accredited representative when necessary, are complete, and the role of the organization in the experimental flights for which the application has been presented is clearly indicated and coherent with such flight types.
- ✓ The applicant is the registry owner of the aircraft or a contracted maintenance organization; if it has a Spanish registration number, or the aircraft manufacturer or designer if it is not the case, and it is document accredited.
- ✓ The identification of the aircraft is complete and unique for the aircraft, except in the case of test production flights, where generic serial numbers can be admitted.
- ✓ The aircraft is within Royal Decree 1036/2017 scope; is excluded as well from Regulation 2018/1139 by its Article 3 (a) (or, as long as EASA does not develop the implementation regulation, by Annex II of Regulation (EC) nº 216/2008) and is potentially eligible to obtain the previous AESA authorization to perform experimental flights (particularly, that the aircraft is not fully autonomous, but its design and features will allow the pilot to intervene in the flight control at any time).
- ✓ The aircraft for which the pertinent certificate is requested has a Spanish registration number or, if it does not have it, the temporary identification assignment is pertinent with the requested flights (registration number for test purposes).
- ✓ For each category of the required documentation, the reference to the document including it has been indicated, and such document has been presented together with the application.
- ✓ The receipt of the tax payment is enclosed, and the amount corresponds to the established one.

Depending on the outcome of the previous checks, the Head of the Initial Airworthiness Division will decide on the acceptability of the application:

- a) If the minimum requirements to initiate the administrative processing are not met, the applicant will be requested to amend them. If after the term granted the application is not satisfactorily rectified, a negative resolution will be issued, or it will be considered as withdrawal. If the application is rectified, the processing will continue as follows.
- b) If the minimum requirements are met, the applicant will be notified of the application receipt, indicating the file number, the term for the resolution and notification of the proceeding, the result and effects of the administrative silence and the composition of the evaluation team (at least the reference to the Officer in Charge).

5.3 EVALUATION OF THE APPLICATION

The evaluation team will check that:

- 1) Taking into consideration the purpose for which the special certificate is requested, its issuance is appropriate as such purpose is justified by the activities of the applicant organization, and because the special certificate for experimental flights is the more adequate legal measure available to allow the requested flight types.
- 2) The pretended duration is appropriate for the purpose itself, not exceeding 1 year unless the need to perform flights longer be duly accredited.
- 3) The information included in the application credits the capacity of the aircraft to perform the foreseen flights under safety conditions:
 - a) It documents the features of the aircraft, including its configuration definition, characteristics and performances, as well as the proceedings for piloting it.

Multiple payload configurations could be accepted depending on their influence in the operation safety.
 - b) It establishes a safety zone, related to the flight performing zone.

The experimental flights will be only carried out within the pilot's visual line of sight, or otherwise, in an airspace segregated to that effect, and always in zones outside building conglomerations in towns, villages or inhabited places or people groups in open spaces, as well as in uncontrolled airspace and outside an Flight Information Zone (FIZ).
 - c) It includes an aeronautic study on operations safety, in which it is demonstrated that they can be performed under safety conditions, as well as the suitability of the security zone to perform the experimental flights.

This study, which could be generic or specific for a given geographic area or specific operation type, will consider the basic features of the aircraft to be used and their equipment and systems.
 - d) It justifies by documents the capacity of the aircraft to perform safely the proposed flights, defining the conditions or restrictions necessary to this effect.
 - e) It defines the method to be used for the RPAS configuration control, so as to guarantee in any case that its design and features allow the pilot to intervene in the flight control at any time.
- 4) The statement of capacity to perform a safe flight refers to the conditions or restrictions for which it has been justified, and it is duly signed by the applicant.
- 5) Based on the documents presented or on any other that may be necessary to ask to the applicant, if the aircraft is able to perform a safe flight in the specified conditions and restrictions.

As a guide for the evaluation, the criteria indicated in Chapter 6 will be used.

For this evaluation, additional information from the applicant, or to correct the submitted one, can be requested. If the deficiencies or lacks in the information prevent from continuing with the evaluation, the applicant will be requested to rectify it, allowing a reasonable time period to carry out such action.

Duly justified, and always prior to the end of the initial rectification period, the applicant may ask for an extra time to the initially given period.

When the deficiencies are not rectified, the applicant will be informed of its right to present allegations before resolving negatively the application procedure.

5.4 ISSUANCE OF THE SPECIAL CERTIFICATE FOR EXPERIMENTAL FLIGHTS

When there are no deficiencies, or they have been rectified, the issuance of the requested certificate will be made, under the corresponding conditions and limitations, including those which the evaluation team has considered to add upon those proposed by the applicant.

The certificate will include, explicitly or taking reference to the applicant's documents, the following conditions:

- ✓ The identification of the aircraft (or several ones), for which the CEVE is given, both by means of the serial number (or by the prototype manufacturing number) and by means of the registration mark assigned (temporary, definitive or for test purposes).

Only for production test purposes, and if a serial numbering system has been established for the configuration, a generic serial number may appear.

- ✓ The type (or types) of the experimental flight for which it is valid, as defined in Royal Decree 1036/2017.
- ✓ The validity time of the certificate. If within this period other time limitations are established (such as flight frequency) they will be indicated too.
- ✓ The configuration (or configurations, if different payloads are admitted) for which the certificate is issued.
- ✓ Requirements or circumstances that may affect the validity of the certificate, both those included in the documentation submitted by the applicant and those established by the DAI.
- ✓ The limitations and restrictions applicable to the operations, included those relative to the operations area and to the use of aerial space.

When the flights to be performed require the use of a temporary segregated airspace (TSA), the pertinent special certified will be conditioned on such flights be performed in a TSA on that purpose.

Unless the applicant duly justifies the opposite, the following restrictions will be included as a general rule:

- Within the pilot's visual line of sight (VLOS).
- Daylight and in Visual Meteorological Conditions (VMC).
- Out of controlled airspace.

6. GUIDE MATERIAL AND ACCEPTABLE MEANS OF COMPLIANCE

6.1 CHARACTERIZATION OF THE RPAS

For the request of a special certificate for experimental flights, at least the following information should be included:

- 1) **Three-view drawings** or three-view dimensioned photographs of the RPA.
- 2) **RPA configuration description**, including the following:
 - a. Wingspan.
 - b. Length.
 - c. Maximum gross take-off weight.
 - d. Payload capacity.
 - e. Maximum altitude.

- f. Endurance.
 - g. Maximum airspeed.
RPA structure, composition and design characteristics (if applicable, details on any loads or stress analysis that demonstrates positive structural margins of safety during flight)
 - h. Powerplant.
 - i. Flight controls.
 - j. Launch and recovery systems (if applicable).
- 3) **Control Station.** Description of the ground/airborne stations used to control the RPAS.
- 4) **System Configuration.** Description of the aircraft system configuration and all onboard and ground-based equipment.
- 5) **Sense-and-avoid.** Description of the method(s) in place for sense-and-avoid other aircraft.
- 6) **Lost Link.** Explanation of the proceeding in case a lost link occurs.
- 7) **Emergency Flight termination procedures.** Description of the system.
- 8) **Software (SW) / Airborne Electronic Hardware (AEH) management.** Concise description of the aspects related to RPAS SW and AEH, including:
- a. Software programs required for the RPAS operation (identify them).
 - b. Software requirements and the functional allocation between hardware and software.
 - c. Software verification, validation and integration testing procedures.
 - d. Software load control procedures.
 - e. Procedures in place to manage and document change configuration.
- 9) **Command and control.** Detailed description of the system and / or procedures for command and control the RPA:
- a. Avionic system. Provide an overall system diagram of the avionics architecture, and the location of data sensors air, antennas, radios, and navigation equipment.
 - b. Primary Navigation system, backup systems, and how the system identifies loss of navigation capacity events and how it reacts.
 - c. Flight control and autopilot system. Indicate if they are own or commercial products.
- 10) **Command and control communications.** Description of its design and characteristics. Identify whether there is redundancy and / or independence of the radio link system.
- 11) **Communications spectrum.** Description / listing of the frequencies used in the control of the RPA and payloads.
- 12) **Inspection and maintenance.** Provide the inspection and maintenance program for the RPA and the associated systems, including the control station and the support systems.
- 13) **Flight Manual. Provide a copy of the flight/operation manual.** This document must unambiguously describe the applicable procedures for the experimental flights requested. This manual will gather all the limitations applicable to the RPAS and the emergency procedures described in clear and unambiguous steps.

6.2 SAFETY ZONE

The documentation will identify the operating zone for the experimental flights and its characteristics:

- 1)) **Flight area.** Indicate the take-off point, a description of the flight area and the additional safety ring that covers the possible area of uncontrolled fall of the RPA.
- 2) Identify if there are populated areas or agglomerations of people in the area or adjacent to it, as well as if there are critical infrastructures or areas of high ecological value.
- 3) Identify if there are nearby aerodromes, as well as routes or take-off or approach zones.

6.3 SAFETY ANALYSIS

The first step is to define, in as much detail as possible, the operation to be carried out, with special emphasis on the area of operation (population, areas of high ecological value, infrastructures, separation with populated areas, airports...).

The next step will be to identify the risks associated to the operation and assign them a level of severity, according to the classification established in the EASA document “SC-RPAS.1309 Special Condition Equipment, systems and installations” corresponding to the type of RPA.

If the risk severity is not hazardous or catastrophic, the safety analysis may be qualitative, identifying the mitigating measures for the reduction of the severity of the hazards. For this, it will perform an analysis of the causes that may trigger them, taking into account the onboard segment, control station, communication segment, control and command, all phases of the operation of the RPAS, flight area, meteorological conditions and the design criteria of the RPAS subsystems that guarantee the safe operation of the system under the foreseen conditions.

When the level of severity of the risks be classified as hazardous or catastrophic, a safety analysis shall be carried out following the methodology contained in the document “SAE ARP 4761 Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment”. No single fault can cause a catastrophic risk.

The probability of occurrence of the hazards associated with the operation must be lower than that established in the EASA document “SC-RPAS.1309 Special condition equipment, systems and installations”, in the version corresponding to the type of product according to the criteria of the kinetic energy established in section 6 of the “EASA policy E.Y013-01”. In this regard, if an exposure time factor is used to reduce the probability of occurrence of the hazard, this factor must be accepted by AESA, and in no case can the probability be reduced by more than 2 orders of magnitude.

To demonstrate the required level of SW/AEH development guarantee, the methodology of SAE ARP 4761 must be complemented by establishing a development and verification process that meets the objectives established in documents RTCA DO-178B / EUROCAE ED-12B “Software considerations in Airborne Systems and Equipment Certification”, and RTCA DO-254 / EUROCAE ED-80 “Design Assurance Guidance for Airborne Electronic Hardware”, taking into account the level of development guarantee established in the EASA document “SC-RPAS.1309 Special Condition Equipment, systems and installations”.

7. FURTHER ACTIVITIES

7.1 EXPIRATION

The regulations do not envisage the CEVE renewal: when the term indicated in the certificate finishes without all the foreseen flights be carried out or in case new additional flights are needed, a new special certificate for experimental flights must be applied for.

7.2 CHANGES

When there are changes in the RPAS with respect to the configuration as appears in the certificate, it will be necessary to obtain a new special certificate for experimental flights, except when the changes to the RPAS have been made by an applicant that has assured the fulfilment of the requirements for the design organizations establishes in Article 14.1 Royal Decree 1036/2017 (conformity with Part 21, Subpart J, or alternative procedures), and that those changes do not have effect in the conditions and restrictions for which the special certificate has been issued and to which the declaration signed by the applicant stating that the aircraft is able to perform a safe flight has been updated.

In this case, the applicant will be required to update the declaration by using the same format as for the initial application, F-DC-RPEX-01, filling only the identifying data and those including changes. Once evaluated, and if no deficiencies are found, an acknowledgement receipt for the applicant shall be issued.

7.3 EX OFFICIO ACTIONS

AESA can carry out inspections concerning a CEVE to check the fulfilment of the conditions under which it was granted, either:

- a) because there is information that calls into question doubts about the fulfilment of such conditions, or
- b) Because it is included within the sampling of the periodic inspection plans.

The CEVE holder will be notified of the beginning of the actions, also with indication of the assigned inspection team.

If non-compliances are found, the special measures envisaged in Article 30 Law on Air Safety (immobilization of the aircraft) could be contemplated, as well as the opening of a sanctions proceeding.

7.4 WITHDRAWAL

The special certificate for experimental flights will run out of effect, with the previous corresponding procedure, when the limitations and applicable conditions are not met.

8. RECORDS

The DAI will archive together with the file, at least:

- the documents submitted by the applicant,
- the formal communications between the applicant and the DAI,
- the documents established during the investigation that reflect the activities carried out to demonstrate the compliance with the regulations, and
- a copy of the certificate issued.

This file, which can be paper copy, digital or mixed, will be kept at least for 6 years since the expiration date of the certificate.

The documents and information used as part of the investigation process, property of the applicant in subjects such as industrial or commercial secret will be protected from third parties' access.

9. DEFINITIONS

Remoted Piloted Aircraft (RPA): Unmanned aircraft, distant guided from a remote piloting station.

Remoted Piloted Aircraft System (RPAS): The aggregate of configurable elements integrated by the remoted piloted aircraft, its related remoted piloting station(s), the necessary command and control links and any other system element that may be required at any time during the flight operation.

Maximum Take-off Mass (MTOM): maximum mass including payload, fuel or batteries in case of electric engines, at which the manufacturer has established the aircraft to perform the take-off safely, complying with all the certification requirements, when it proceeds or, otherwise, taking into consideration the structural resistance of the aircraft or any other limitations.

Operator: Any legal or natural person performing or intending to perform the experimental flights object of this procedure, and responsible of the compliance with the requirements established for a safety operation.

Operation within Pilot's Visual Line of Sight (VLOS): Operation during which the pilot keeps direct visual contact with the RPA, without the aid of optical or electronic devices other than correcting lenses or sunglasses.

Operation Beyond Pilot's Visual Line of Sight (BVLOS): Operations carried out without direct visual contact with the RPA.

Temporarily Segregated Airspace (TSA): A defined volume of airspace for temporary use for a specific activity, through which no other traffic is permitted, nor even under ATC authorization.

10. REFERENCE DOCUMENTS

GENERAL REFERENCES			
CODE	TYPE OF DOCUMENT	TITLE	Edition
	Regulation	Regulation (EU) 2018/1139 of the European Parliament and of the Council, of 4 July 2018, on common rules in the field of civil aviation and establishing a European Aviation Safety Agency	*
	Law	Law 39/2015 Common Administrative Procedure for the Public Administrations	*
	Law	Law 48/1960 on Air Navigation	*
	Royal Decree	Royal Decree 98/2009 approving the Inspection Regulation	*

* * Latest edition in force applies.

SPECIFIC REFERENCES			
CODE	TYPE OF DOCUMENT	TITLE	Edition
	Regulation	Commission Regulation (EU) no. 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organizations	*
	Royal Decree	Royal Decree 1036/2017, that regulates the civil use of the remoted controlled piloted aircraft	*
SC-RPAS.1309-01	EASA Special Condition	SPECIAL CONDITION, Equipment, systems, and installations	
E.Y013-01	EASA Policy	EASA Policy statement on airworthiness certification of Unmanned Aircraft Systems (UAS)	
RTCA DO-178C / EUROCAE ED-12C	Industry Documentation	Software Considerations in Airborne Systems and Equipment Certification	
RTCA DO-254 / EUROCAE ED-80	Industry Documentation	Design Assurance Guidance for Airborne Electronic Hardware	
SAE ARP4761	Industry Documentation	Guidelines and methods for conducting the safety assessment process on civil airborne systems and equipment	

* * Latest edition in force applies.

11. ACRONYMS

ACRÓNIMO	DESCRIPCIÓN
EASA	European Aviation Safety Agency
AESA	Spanish Aviation Safety and Security Agency (“Agencia Estatal de Seguridad Aérea”)
DSA	Aircraft Safety Directorate (“Dirección de Seguridad de Aeronaves”)
DAI	Initial Airworthiness Division (“División de Aeronavegabilidad Inicial”)
JDAI	Head of the Initial Airworthiness Division (“Jefe de la División de Aeronavegabilidad Inicial”)
FR	Officer in charge (“Funcionario Responsable”)
FIZ	Flight Information Zone
CEVE	Special Certificate for Experimental Flights (“Certificado Especial para Vuelos Experimentales”)
SW	Software
AEH	Airborne Electronic Hardware