

# PRESENTATION OF THE FRENCH REGULATORY FRAMEWORK FOR SERIES- PRODUCED ULTRALIGHTS

## A. General description

In France, ultralight motorised aircraft are referred to as “ULM” (Ultra-Légers Motorisés).

The applicable regulation<sup>1</sup> is an [Order dated 23 Sept. 1998](#) and the associated [Instruction dated 24 June 2019](#).

Article 2 of the Order defines the technical limits (number of occupants, maximum weight, maximum power, stall speed or rotor loading etc.) that must be respected in order to be eligible for the ULM regime.

For series-produced ULMs (including ULMs assembled from a kit), the main principles are the following:

1. The manufacturer of the aircraft shall obtain a “Fiche d’identification”, valid for all aircraft of the same model, and mentioning the name of the manufacturer, the designation of the ULM model and the main descriptive elements (in particular those confirming that the aircraft complies with the ULM regime limits).

The Fiche is issued by the DGAC based on a declaration from the manufacturer that the aircraft is compliant with the applicable design standards (see § B).

The declaration must be accompanied by a technical dossier containing the justifications of compliance with the design standards, and the user documentation.

However, this dossier is sent only for archiving purposes and for future reference if required (e.g. after an accident); the DGAC does not perform a detailed review of the dossier but only a verification that the dossier does include the required sections and that these sections are consistent with each other (in terms of model concerned, weights, speeds etc.).

**Important: this issuance of the Fiche does not imply that the DGAC has approved that the ULM is compliant with the design standards. This compliance remains the sole responsibility of the manufacturer.**

2. The owner/operator of such an aircraft shall “register” their aircraft as a ULM and obtain a “Carte d’identification”.

The Carte is issued by the DGAC based on:

- A declaration from the manufacturer (holder of the Fiche, see § 1) that this specific aircraft serial number is compliant with the descriptive elements of the Fiche and with the applicable design standards (including any modification to the aircraft configuration on which the technical dossier sent to the DGAC was based).  
This declaration is usually made on a copy of the Fiche, by filling in the section provided for this purpose at the bottom of the Fiche (including the ULM s/n and a signature of the manufacturer).
- A declaration from the owner that he has received from the manufacturer the applicable user and maintenance manuals.
- A declaration from the owner that the aircraft is airworthy.
- A weighing report (confirming that the maximum empty weight is not exceeded)

The Carte is valid for an unlimited duration, provided the owner periodically declares that the ULM is airworthy (this declaration results in the issuance of an acknowledgement of receipt which shall be annexed to the Carte, and which is valid for 24 months).

The carte mentions the name of the holder, the name of the ULM model and the number of the associated Fiche, and identification marks, that must be affixed to the aircraft.

<sup>1</sup> An [order of 13 August 2024](#) creates a new ultralight category : special ULMs (ULM-S), which is not covered by this note.

Note: the marks may be reserved in advance so that they can be painted by the manufacturer.

**Important: the Carte does not constitute neither a Certificate of Registration in the sense of ICAO Annex 7, nor a Certificate of Airworthiness. Its legal status is actually an *exemption* from the obligation to hold such certificates.**

Consequently:

- The Carte does not constitute a certificate of ownership.
- This exemption is only legally valid for flights over French territory; therefore, flying over any foreign territory is only possible with the authorisation of the relevant country's authorities (this authorisation may be generic or individual, depending on the case).
- When a French ULM is exported to a foreign country, the DGAC cannot issue an export certificate of airworthiness.

3. Continued airworthiness (incident and accident handling):

It is the manufacturer's responsibility to establish and maintain a system for:

- Collecting, investigating and analysing occurrence reports in order to identify potential unsafe conditions and define the appropriate corrective actions.
- Making such correctives actions available to the concerned ULM owners/operators.

4. If a ULM is equipped with radio transmitters (VHF, transponders, etc.), the ULM must hold a Radio licence( LSA) issued by the DGAC in accordance with an [Order dated 18 April 2011](#).

In particular:

- The radio transmitters must be of an approved type (e.g. (E)TSO).
- If the installed radio transmitters include a mode A+C, mode S or ADS-B OUT transponder, an approved maintenance organisation must perform a full test of the ACT system to check that the altitude transmitted by the transponder is accurate.

5. ULMs shall be operated in compliance with the [Order dated 17 Feb. 2025](#) “relating to the conditions of use of ultralight motorised aircraft (ULMs)”.

**Important: this order includes requirements for specific equipment, depending on the kind of operation.**

## B. Design standards

The applicable design standards include:

- Noise standards: they are defined in an [Order dated 24 Feb. 2012](#). The objective is to determine the minimum height at which the noise level on the ground is less than 65dB(A). The ULM must not be used below this height, unless for take-off and landing.
- Airworthiness standards

The applicable airworthiness standards are defined in § 7 of the [Instruction dated 24 June 2019](#).

By default, they are high-level, objective-based requirements:

- The ULM characteristics must comply with the limits of the corresponding ULM class (number of occupants, maximum weight, maximum power, stall speed or rotor loading etc.).
- The ULM structural must be capable to withhold the specified load factors with acceptable margin.
- The ULM must be free from flutter up to a maximum demonstrated airspeed  $V_{DF}$  (in TAS).
- The ULM must have acceptable flying qualities within the flight envelope and the main performance data shall be determined (take-off and landing distances, climb rate, etc.).
- The user manual shall contain any information required for a safe operation of the ULM.
- The maintenance manual shall contain any information required to maintain the airworthiness of the ULM, including a maintenance program.

However, if the ULM has novel or unusual design or operating characteristics, additional technical conditions (CTCs) may apply:

- Generic CTCs (helicopter, variable pitch propeller, safety parachute, retractable landing gear, glider towing) are published on <https://www.ecologie.gouv.fr/en/public-policies/ulm-manufacturers#references-reglementaires-8> under section “Documents techniques”.
- In the case of ULMs with a wing load at maximum mass greater than 30 kg/m<sup>2</sup>, the Flight and Structure requirements of a technical code such as CS-VLA (or another technical code acceptable to DSAC), shall apply.

The manufacturer shall propose the envisaged technical code and obtain the agreement of DSAC. It is recommended that this exchange takes place as early as possible, prior to sending the final declaration of compliance, in order to ensure that the technical dossier contains all the necessary supporting documents.

- Specific CTC may be defined for a specific aircraft as necessary. It is the manufacturer’s responsibility to highlight any novel or unusual design or operating characteristics not covered by the generic CTCs.

Note: currently, electric-powered ULM are not subject to specific CTCs. It is the manufacturer’s responsibility to perform a risk analysis and ensure that the risks are appropriately mitigated. Amongst those risks, the following shall be considered (not exhaustive):

- a. Does the pilot have a means of assessing the flight time remaining before the residual charge of the batteries is too low for continued safe flight and landing?
- b. How can the pilot detect a fire or an abnormal rise in battery temperature in flight?
- c. Do the user and maintenance manuals include all the information needed to use, recharge, replace, maintain and handle the batteries?
- d. In the event of recharging on the ground or, if applicable, in flight (regeneration), are the batteries protected against overcharging or an excessive rise in temperature?
- e. In the event of battery failure (flames, emission of liquids or gases, pressure rise), how have the risks to the occupants and the primary structure of the ULM been considered?
- f. Is there a possibility of an unexpected engine start when the system is switched on if the thrust lever (or the thrust knob) is not on neutral position?
- g. In case of an accident, are the first responders informed through labelling of the high voltage equipment location, in order to protect them from electrocution?

If lithium batteries are used for propulsion, RTCA DO-311A “Minimum Operational Performance Standards for Rechargeable Lithium Batteries and Battery Systems” provides useful guidance for the design, tests and installation of these batteries (in particular in relation with above points b, d and e).

## C. Online ULM documentation

Further information for series-produced ULM manufacturers are available on the DGAC website:

- In French: <https://www.ecologie.gouv.fr/politiques-publiques/ulm-demarches-constructeurs-dulm-serie>
- In English (partially): <https://www.ecologie.gouv.fr/en/public-policies/ulm-manufacturers>

You will find in particular:

- The forms to be used
- A detailed guide for applying for a Fiche d’identification (currently only for paramotors and multi-axis ULMs).