 European Union Aviation Safety Agency	Means of Compliance with Light-UAS.2405	Doc. No. : MOC Light-UAS.2405-01 Issue : 1 Date : 04.12.2023 Proposed <input type="checkbox"/> Final <input checked="" type="checkbox"/>
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SUBJECT : *Lift/Thrust/Power System Integrity*

REQUIREMENTS incl. Amdt. : Special condition Light-UAS Medium Risk 01,
point Light-UAS.2405

ASSOCIATED IM/MoC : Yes / No

ADVISORY MATERIAL : N/A

Introductory Note

EASA is establishing means of compliance for Special Condition Light-UAS (SC Light-UAS) Medium Risk (SAIL III and IV). The research project Shepherd analysed available standards and recommended the selection of some sections of ASTM F3298-19 to substantiate full compliance with Light UAS 2405. EASA has further reviewed this assessment and presents the results in this document as means of compliance with Light-UAS.2405.


The means of compliance herein presented are expected to be demonstrated within the frame of SAIL IV DVR. They can be utilized also for SAIL III. Applicability for SAIL V and VI will be assessed separately.

EASA may publish in the future more specific design objectives to comply with the Light-UAS.2405. As the MoC is for compliance within DVR projects, the applicant and EASA have anyway the opportunity to agree on more prescriptive criteria and / or on pass / fail conditions as considered appropriate.

List of acronyms

DVR: design verification report

SAIL: specific assurance and integrity level

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1. SC Light-UAS.2405

The integrity of the Lift/Thrust/Power system including mounting and accessory attachment must be demonstrated throughout the limit flight envelope of the UA.

2. Means of Compliance with Special Condition Light-UAS.2405

The following sections of *ASTM standard F3298-19 "Standard Specification for Design, Construction, and Verification of Lightweight Unmanned Aircraft Systems"* address lift/thrust/power system integrity and related provided information. When all sections are complied with, Light UAS.2405 can be considered fully covered.

6.5.1 Multi-Engine (multiple rotors)

7.11.3 Propeller*)

7.12.6 Powerplant and Rotor/Vertical Lift System Compatibility

9.4.3 Side Load conditions

16.3 Propulsion System (with regard to 16.3.3, 16.3.4, 16.3.5)

*) The term "extremely remote" as mentioned in chapter 7.11.3.6 is substituted by "probable". Probable Failure Conditions are those that are anticipated to occur one or more times during the entire operational life of each UAS. (Source: AMC to Regulation 2019/947).