

APPROVAL CERTIFICATE

EASA.21J.451

Pursuant to Regulations (EU) 2018/1139 and (EU) 748/2012 and subject to the conditions specified below, the Agency hereby certifies

RUAG Schweiz AG RUAG Aviation

**Seetalstrasse 175
P.O. Box 301
CH-6032 Emmen
Switzerland**

as a DESIGN ORGANISATION

approved according to Part 21, Section A, Subpart J.

CONDITIONS :

1. The approval is limited to that specified in the enclosed Terms of Approval, and
2. This approval requires compliance with the procedures specified in the Design Organisation Handbook, reference DOE-(E), in the latest revision, and
3. This approval is valid whilst the approved Design Organisation remains in compliance with Part 21, Section A, Subpart J.
4. Subject to compliance with the foregoing conditions, this approval shall remain valid until surrendered or revoked.

For the European Union Aviation Safety Agency,

Date of issue: 10/12/2019



Hans LUNDSTROEM
Senior DOA Teamleader

Terms of Approval

Design Organisation Approval Certificate

EASA.21J.451

1 Scope

This Design Organisation Approval is applicable for the scope defined in Annex A for design work with regard to the airworthiness, operational suitability and environmental characteristics of the products.

2 Privileges

- a) (Reserved)
- b) (Reserved)
- c) The holder of this design organisation approval shall be entitled, within the scope of this terms of approval, and under the relevant procedures of the design assurance system:
 - 1. to classify changes to a type-certificate or to a supplemental type-certificate and repair designs as "major" or "minor";
 - 2. to approve minor changes to a type-certificate or to a supplemental type-certificate and minor repair designs;
 - 3. (Reserved);
 - 4. (Reserved);
 - 5. to approve certain major repair designs under Part 21, Section A, Subpart M to products or auxiliary power units (APUs);
 - 6. to approve for certain aircraft the flight conditions under which a permit to fly can be issued in accordance with point 21.A.710(a)(2), except for permits to fly to be issued for the purpose of point 21.A.701(a)(15);
 - 7. to issue a permit to fly in accordance with point 21.A.711(b) for an aircraft it has designed or modified, or for which it has approved, in accordance with point 21.A.263(c)(6), the flight conditions under which the permit to fly can be issued, and where the holder of this design organisation approval itself:
 - (i) controls the configuration of the aircraft, and
 - (ii) attests conformity with the design conditions approved for the flight;
 - 8. (not applicable)
 - 9. (not applicable)

Terms of Approval 21J.451
Issue 6, 11/03/2020


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3 Obligations

The holder of this design organisation approval shall, within the scope of this terms of approval:

- a) maintain the handbook required under point 21.A.243 in conformity with the design assurance system;
- b) ensure that this handbook or the relevant procedures included by cross-reference are used as a basic working document within the organisation;
- c) determine that the design of products, or changes or repairs thereto comply with the applicable specifications and requirements and have no unsafe features;
- d) provide the Agency with statements and associated documentation confirming compliance with point (c), except for approval processes carried out in accordance with point 21.A.263(c);
- e) provide to the Agency data and information related to the actions required under point 21.A.3B;
- f) under the privilege of paragraph 2(c)(6), determine the flight conditions under which a permit to fly can be issued;
- g) under the privilege of paragraph 2(c)(7), establish compliance with points (b) and (e) of point 21.A.711 before issuing a permit to fly to an aircraft;
- h) designate data and information issued under the authority of the approved design organisation within the scope of its terms of approval as established by the Agency with the following statement: "The technical content of this document is approved under the authority of the DOA ref. EASA. 21J.451".

Date of issue: 11/03/2020



Hans LUNDSTROEM
Senior DOA Team Leader

Terms of Approval 211.451
 Issue 6, 11/03/2020




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
Annex A

Scope of work

	TC	STC	major changes	minor changes	major repairs	minor repairs	flight conditions	permit to fly
Large and small aeroplane								
Avionics								
All areas								
Cabin								
All areas								
Electrical Systems								
All areas								
Flight								
Flight characteristics								
Structures								
All areas								
Large and small rotorcraft								
Avionics								
All areas								
Cabin								
All areas								
Electrical Systems								
All areas								
Flight								
Flight characteristics								
Night Vision Imaging Systems (NVIS)								
Structures								
All areas								

Legend:

	Title for category of product
	Title for design scope
	Title for design area

	Within scope
	Outside scope

Terms of Approval 21J.451
Issue 6, 11/03/2020

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List of products

[not applicable]

Limitations

Limitations common to all products and activities

1. The design and certification of software and airborne electronic hardware is limited to Design Assurance Level E
2. Design activities requiring aeroelasticity competence are excluded
3. Development of Operational Suitability Data excludes the OSD constituents Simulator Data and Maintenance Certifying Staff Data
4. The privilege under paragraph 2(c)(5) is limited to the approval of the design of major repairs to products for which the DOA holds the supplemental type-certificate.

Product	Limitations particular to each product
Large aeroplane	For non-TCH activity: The technical field of performance is excluded