





Design Organisations

PIL-2023-004

Military Airworthiness Authority









Contact information:

Military Airworthiness Authority E-mail: UAEMAA@mod.gov.ae Website: https://mod.gov.ae/

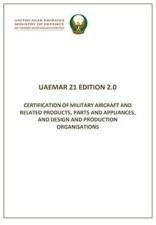
UAEMAR 21

UAEMAR 21 Implementing Regulation is issued by the UAE Military Airworthiness Authority (MAA). It details the **Initial and Continuing Airworthiness** requirements for the certification of military aircraft and related products, parts and appliances, and Design and Production Organisations.

The regulation contains Subparts pertaining to:

- Military Type Certificates (MTC), Restricted MTC, and Supplemental Type Certificates
- Noise Certificates
- Military Production Organisation Approval
- Military Design Organisation Approval
- Parts and Appliances
- Repairs
- Military Technical Standard Order Authorisation
- Military Permits to Fly, and
- Identification of Products, Parts and Appliances.

UAEMAR 21 is available on the UAE MOD website: https://mod.gov.ae/regulations/.



UAEMAR 21 Edition 2.0

Design Organisation (DO)

UAEMAR 21 Section A, Subpart J, establishes the procedure for the approval of Design Organisations and the rules governing the rights and obligations of applicants for such organisation approvals.

The Design Organisation is required to demonstrate that it has established and is able to maintain a **Design Assurance System** (DAS) for the control and supervision of the design, and of design changes, of products, parts and appliances covered by the organisations application to the MAA.

Military Design Organisation Approval (MDOA)

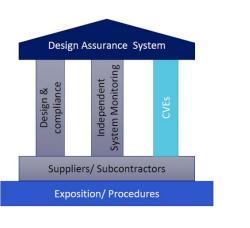
An organisation shall be entitled to have a **Military Design Organisation Approval** issued by the MAA when it has demonstrated compliance with the applicable requirements under this Subpart.

The issuance of an **Approval Certificate** is recognition that an organisation has demonstrated the capability to design, to validate design data, and to show and verify compliance with applicable airworthiness certification requirements.



UAEMAR Form 102 - Design Organisation Approval Certificate

The DAS comprises of the organisational structure, staff, responsibilities, procedures and resources to ensure the proper functioning of the Design Organisation.



The DAS enables the Design Organisation:

- 1. to ensure that the designs comply with the type-certification basis, the operational suitability data certification basis and environmental protection requirements;
- 2. to independently monitor compliance with documented procedures of the system.

The DAS shall include an independent checking function of the showings of compliance and account for the acceptability of the parts or appliances designed or the tasks performed by partners or subcontractors according to procedures.

Nominated management staff are accountable for the effectiveness of the DAS.

Chief Executive

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 Provides the necessary resources for the proper functioning of the Design Organisation.

Head of Design Organisation

(HDO, nominated to MAA for approval)

- Overall responsibility for ensuring the satisfactory accomplishment of the design, certification and continued airworthiness.
- Signs the Declaration of Compliance.
- Carries the ultimate responsibility for the compliance against UAEMAR 21 Subpart J.

Chief of Office of Airworthiness

(COA, nominated to MAA for approval)

- Coordination of all tasks related to Certification.
- Liaison with MAA for activities related with certification.
- · Exercising MDOA privileges.
- Responsible to maintain/update the MDOE.

<u>Chief of the Independent System Monitoring</u> (CISM, nominated to MAA for approval)

- Conduct audits to independently monitor the compliance with and adequacy of the DAS.
- Report to the HDO.

<u>Compliance Verification Engineers</u> (CVEs) are responsible for approving all compliance documents, including test programmes. They also approve the technical content of manuals approved by the MAA e.g. Aircraft Flight Manual, Airworthiness Limitations, and Certification Maintenance Requirements.

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Subpart

The Design Organisation shall provide a DO Handbook or **Military Design Organisation Exposition** (MDOE) to the MAA, describing the organisation, the relevant procedures and the products, or changes to products to be designed.

Requirements for the DO Handbook can be found within UAEMAR 21.A.243.



UAEMAR 21.A.239 – Design Assurance System

UAEMAR 21.A.243 – Handbook (Design Organisation Exposition)

UAEMAR 21.A.245 – Approval requirements.

UAEMAR 21.A.251 – Terms of Approval

UAEMAR 21.A.263 – Privileges

UAEMAR 21.A.265 – Obligations of the Holder

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