SIM-To-Lnt-027

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P.O.Box 30, FI-41161 TIKKAKOSKI, tel. +358 299 800, fax +358 299 291 929, email fimaa@mil.fi

REQUIREMENTS FOR AERIAL WORK COMMISSIONED BY THE FINNISH DEFENCE FORCES AND PERFORMED USING CIVIL AIRCRAFT

This Military Aviation Regulation applies to the granting of certificates for aerial work commissioned by the Finnish Defence Forces and performed using a Finnish or foreign civil aircraft as well as the requirements for such certificates.

Enabling Act:

Aviation Act (864/2014) Section 7

Valid from:

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Repeal:

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DEFINITIONS

UAV operations, as referred to in this Military Aviation Regulation, means aviation on unmanned aerial vehicles (UAV).

Aerial work, as referred to in this Military Aviation Regulation, means the use of civil aircraft, including unmanned aerial vehicles (UAVs), for aerial photography flights, mapping flights, research flights, aircraft and object towing flights, parachute flights, material drops and other such tasks commissioned by the Finnish Defence Forces.

Operator, as referred to in this Military Aviation Regulation, means the party that carries out the aerial work commissioned by the Finnish Defence Forces.

1 GENERAL

The purpose of this regulation is to set out the requirements needed for granting certificates for aerial work commissioned by the Finnish Defence Forces and performed using Finnish or foreign civil aircraft in order to guarantee the safety of military and other aviation.

This English version is a translation of the original document in Finnish. However, in case of a discrepancy, the Finnish translation will prevail.

2 CERTIFICATE REQUIRED FOR AERIAL WORK

In accordance with Section 7.1 Paragraph 10 of the Aviation Act (864/2014), the military regulatory body shall grant the certificates for aerial work commissioned by the Finnish Defence Forces and performed using a Finnish or foreign civil aircraft and sets out the requirements for such certificates.

Any Operator performing aerial work commissioned by the Finnish Defence Forces using a civil aircraft is required to hold a certificate for undertaking the activity in question granted by the Finnish Military Aviation Authority.

3 AERIAL WORK CERTIFICATE

3.1 The prerequisites for the granting of an Aerial Work Certificate in regard of the organisation and the personnel

The basic prerequisite for granting an Aerial Work Certificate to an Applicant is that the Finnish Military Aviation Authority is convinced of the Applicant's ability to conduct the intended operations in a safe manner.

The Operator shall designate a Director responsible for the entire operations as well as a Director of Air Operations responsible for the air operations or a Director of UAV Operations responsible for the UAV operations. The designated persons shall have such knowledge, skills and experience as considered satisfactory by the Finnish Military Aviation Authority, considering the nature and extent of the operations.

If the operations in question are extensive or complex air operations or UAV operations, the Finnish Military Aviation Authority may require that the aforementioned persons in charge take exams or perform demonstrations of their professional skills to establish that they are qualified for the roles of the organisation in question.

The Finnish Military Aviation Authority may approve a person in a number of roles of responsibility, if this is considered purposeful in view of the nature and extent of the operations.

A pilot of a civil aircraft used for aerial work shall hold a valid Commercial Pilot Licence, Commercial Helicopter Pilot Licence or another pilot's licence of a higher category and a Class I Medical Certificate, even though such work would not be performed against payment or other compensation. Furthermore, such pilot shall have successfully completed the required training for that work as provided by the Operator or the Finnish Defence Forces. The Finnish Military Aviation Authority may grant an exemption from the requirement concerning a Commercial Pilot Licence on the basis of a well-founded application, if the Applicant has received applicable training for the work or has applicable experience.

Prior to commencing air operations, the Operator shall familiarise with the Finnish Defence Forces' regulations inasmuch as these affect the safety of aerial work, also with consideration to the safety of third parties. The Operator shall maintain a written record of any aerial work related training it provides itself or obtains elsewhere and of the Operator's familiarisation with the Finnish Defence Forces' regulations. These records shall be retained for a minimum of three years.

When a UAV is used for aerial work, the Applicant shall have the personnel needed for performing the operations in a safe manner as well as applicable equipment and the necessary instructions at its disposal. Any UAV operator shall have such medical certificate as is required from a UAV operator in civil aviation.

3.2 Aircraft used in the operations intended in the Aerial Work Certificate

Any aircraft used for aerial work shall have an airworthiness certificate. Any UAV used for aerial work shall have such characteristics that allow it to be used safely for the operations specified in the Aerial Work Certificate.

3.3 Instructions for aerial work

The Operator shall prepare instructions for the aerial work at hand. These instructions shall account for the nature and extent of the operations, the risks related to the aerial work and the equipment used therein.

The Finnish Military Aviation Authority may require changes to be made in the aerial work instructions, should these contain requirements, instructions or information conflicting with any regulations or failing to correspond with actual operations or should the Finnish Military Aviation Authority consider the content of such aerial work instructions insufficient or inappropriate.

The aerial work instructions shall cover the nature and extent of the work in view of the following:

1. A description of the aerial work

- The type and any special features of the aerial work: operations below the minimum flight altitude, hovering in a space that is not subject to ground effect and particularly dangerous operations;
- The demands of the work: particular skills requirements relating to air operations or UAV operations, personnel requirements also concerning other personnel beside the flight crew and safety and protective equipment;
- The operating areas and operating environment: e.g. densely populated areas, areas unsuitable for forced landings and water areas and any requirements and restrictions related to

these including weather minimums and minimum flight altitudes;

 An assessment of risks and measures to reduce risk in the aerial work at hand.

2. The aircraft and its equipment

- The aircraft and their use in different types of aerial work specified for each individual aircraft;
- The equipment: a listing of all equipment used in the aerial work, whether installed in the aircraft or otherwise needed, that are not part of the aircraft's basic configuration;
- The performance requirements for the aerial work at hand.

3. The cockpit crew or remote pilots

- The minimum crew;
- The crew selection criteria, with consideration to overall flight experience, recent flight experience and recent flight experience in the role in question;
- Familiarisation training, including the training programme;
- Refresher training, including the training programme;
- Training required for transition from one aircraft type or version to another, including the training programme;
- Requirements concerning flight times, duty periods and rest periods.
- 4. Other necessary flight crew members, remote crew members and ground personnel
 - Description of the duties;

- Personnel selection criteria;
- Familiarisation training, including the training programme;
- Refresher training, including the training programme;
- Requirements concerning flight times, duty periods and rest periods.
- 5. Operating procedures for normal circumstances, emergencies and exceptional situations
 - Operating procedures for the cockpit crew and remote pilots and other flight crew or remote crew members including cooperation methods;
 - Operating procedures for the ground crew.
- 6. The place of operation and ground equipment
 - The size of the landing site or loading site and the necessary ground equipment such as the refuelling equipment, fire fighting equipment, lifting equipment and landmarks.
- 7. When using an unmanned aerial vehicle for aerial work, the following must also be accounted for:
 - The arrangements made for collision avoidance;
 - The arrangements made for protecting the ground crew and ground assets;
 - The size of the UAV;
 - The colour and markings of the UAV;
 - The visibility enhancing equipment of the UAV;

- The weather conditions and visibility, including the nature of the background against which observations are made and the circumstances related thereto;
- Use of observers;
- Operating distances and reliability of the communication equipment.

3.4 The application procedure for an Aerial Work Certificate

An Aerial Work Certificate shall be applied in writing no less than 30 days prior to the commencement of the intended operations. The application shall be drafted in the Finnish or Swedish language and addressed to the Finnish Military Aviation Authority. Foreign Operators may also submit their application in the English language. A foreign Operator's application may be prepared on behalf of the Operator by that administrative unit of the Finnish Defence Forces that has commissioned the military aerial work. The application shall be submitted in electronic format to the e-mail address fimaa@mil.fi or mailed in an envelope to the address Finnish Military Aviation Authority, P.O. Box 30, 41161 Tikkakoski. The application shall contain the following information:

- The Applicant's name or business name, domicile, postal address and phone number;
- The place (aerodrome or equivalent) where the air operations/UAV operations are mainly conducted;
- An account addressing the requirements stated in paragraphs
 3.1 and 3.2; and
- The certificate issued to the Operator for corresponding civil operations using a UAV in an airspace within which other aviation is not prohibited or which has not been segregated for military purposes.

The following shall be attached to the application:

- A written expression of consent of the responsible persons intended in paragraph 3.1 to their respective duties, an account of their training for the intended duties and an account of their experience in these duties;
- The instructions for aerial work; and
- A list of the aircraft used, and additionally written proof of the right to use this aircraft, if the Applicant has not been entered in the Aircraft Register as owner, holder or user of the aircraft. Furthermore, the Applicant shall present a review on the adequacy of the capability of the aircraft and the applicability of their other characteristics and features, when using the aircraft for lifting operations or transports of slung loads or when the intended operation may cause a particular hazard to third parties.

The following may also be attached to the application:

- An account provided by the Finnish Defence Forces on the nature of the aerial work; and
- An order or other document on the military exercise or other Finnish Defence Forces event to which the aerial work is related

3.5 Validity of the Aerial Work Certificate

The Aerial Work Certificate is granted on a temporary basis or to be valid indefinitely. The certificate holder shall report without delay to the Finnish Military Aviation Authority any changes in the details intended in paragraphs 3.3 and 3.4.

4 BASIC OPERATIONAL REQUIREMENTS

4.1 The requirements to be observed in air operations and UAV operations

Any aerial work commissioned by the Finnish Defence Forces and performed using a civil aircraft shall comply with the Standardised European Rules of the Air (SERA). In principle, the Military Aviation Air Traffic Service Regulation SIM-To-Lv-012 shall not be applied to any Operations that are subject to this Military Aviation Regulation. However, any aircraft conducting Operations subject to this regulation may be given a clearance limit that is an airspace reservation placed under the control of a military control unit. Moreover, any flights taking place in an active Temporary Segregated Area (TSA), a Temporary Reserved Area (TRA) extending to international waters or a danger area (D), prohibited area (P) or restricted area (R) shall be subject to the requirements of SIM-To-Lv-012.

In its decision concerning the applied certificate, the Finnish Military Aviation Authority may, for a justified reason, grant permission to deviate from SERA within the constraints of the flight rules observed in military aviation.

All aerial work performed with aeroplanes on the basis of a valid Aerial Work Certificate shall comply with not only this regulation but also the requirements set in the aviation regulation OPS M2-1 concerning general aviation operations conducted with an aeroplane.

All military aerial work performed with helicopters on the basis of a valid Aerial Work Certificate shall comply with not only this regulation but also the requirements on private helicopter operations that are valid in Finland.

Any aerial work performed on a UAV shall be implemented so that the operations cause no hazard to other aviation or ground personnel.

4.2 Restrictions on the number of personnel in an aircraft or at a UAV ground control station

When performing aerial work pursuant to an Aerial Work Certificate granted by the Finnish Military Aviation Authority, only such personnel as are necessary for the work at hand shall

have access to the aircraft or the UAV ground control station. However, this restriction shall not concern either personnel that are being trained for aerial work and in this capacity are familiarised with the special duties in question in-flight or during a flight or persons participating in the development of working methods or equipment or directing or inspecting an Operator's operations.

5 EXEMPTIONS AND EXCEPTIONAL PROCEDURES

When operations are conducted in an airspace within which other aviation operations are prohibited or which has been segregated for military activity, the Finnish Military Aviation Authority may, on the basis of applications, grant exemptions from the requirements of this regulation as may be necessary for operational reasons, provided that such exemptions will not deteriorate aviation safety. When applying for an exemption, an Applicant shall present an account of how a corresponding safety level can be attained.

Director

Colonel, M.Sc. (Tech.) Kimmo Nortaja

Head of Flight Operations

Lt Col Markku Suomela