

European Aviation Safety Agency
UASPrototypeRule@easa.europa.eu

Oslo, 15.09.2016

**Initial comment regarding:
"Prototype Commission Regulation on Unmanned Aircraft Operations"**

General comments

The Prototype Commission Regulation (hereinafter referred to as "Prototype") is a big step in the right direction compared to A-NPA 2015-10 of last year, but it needs some clarification and modification to better suit the community of pilots flying remote-controlled aeromodels for sport and recreational purposes, which we represent. Our comments below explain what we would like to see changed.

Article 2, Definitions

The Prototype avoids the use of the term "drone" entirely, which is a good thing. But the terms "UA"/"UAS" might still present misunderstandings by the public, UAS operators and authorities, because there is no obvious distinction between commercial and non-commercial operation.

We would prefer if the Agency distinguished between commercially flown remote controlled craft (UA – unmanned aircraft), and privately flown models for sport and/or recreational purposes (aeromodels) with different requirements, because of the latter's proven safety record and minimal risk. While risk-based categories are a sensible approach that we support, the Prototype categories raise many questions, because they do not differentiate between commercial and non-commercial operations.

We propose the following changes to Article 2, Definitions:

"UA – unmanned aircraft 'UA' (unmanned aircraft) means any aircraft operated for commercial purposes or designed to be operated commercially without a pilot on board,"

We propose the following addition to Article 2, Definitions:

"Aeromodel means any aircraft operated or designed to be operated without a pilot on board, when used solely for sport and recreational purposes"

This change should obviously also be reflected in the rest of the regulation.

Article 3, Categories of UA operations

Regarding **category 3, certified**: We understand the Prototype in such a way that the LUC chapter regarding licencing of Operators refers to this category, meaning that a holder of a valid LUC will be able to fly operations with UAS in C ategory 3, although that is not made clear in the Prototype. To our knowledge, the Prototype does not (at this time) specify Category 3 Certified operations.

Article 4 - Principles for UA operations (Insurance requirement)

There is a general requirement for insurance for both the Open and Specific categories, which is an appropriate measure to protect 3rd party interests. However, regulation (EC) No. 785/2004, which outlines the current requirement for liability insurance, should be restructured in a similar risk-based manner, so that operators and insurance providers have separate specifications of the insurance coverage that will be deemed sufficient by the Agency for Open and for Specific categories, and for private vs. commercial operations. Private model airplane pilots operating in model flying clubs represent a very slight risk compared to commercial UAV operators, and the insurance requirements must be proportionate to reflect this.

Article 15: Transitional provisions

“Grandfathering” of clubs or associations to operate according to Specific category requirements is very important to operations such as ours, meaning we will be able to continue operations based on our impeccable safety record of many decades. The transitional period of three years seems sufficient.

The membership records of model flying clubs must be recognized as sufficient pilot registration.

Subpart A – OPEN CATEGORY

UAS.OPEN.40 through UAS.OPEN.80

The Open category has detailed technical requirements in different subcategories, most of which are only possible to implement in multirotor UA. However, other designs such as a single rotor helicopter or fixed wing remote controlled model/UAS will not simply stop at 50 meters above ground, and cannot be reliably fenced in by geo-fencing. Regardless of technical limitations, only multirotor UA possess the ability to “stop” at a given GPS coordinate or height, and even then such technology may be hacked, turned off, cease to work, or be outdated in a short period of time. Safety devices that might work on one specific type of UAS do little to help aviation safety, therefore we strongly recommend that the Agency does not rely on electronic safety measures that are not yet fully capable, in order to ensure 3rd party and/or aviation safety. To be clear: A pilot flying under these rules will probably be able to turn off the safety devices in order to fly anywhere, and, if caught, will blame the technology and avoid punishment. From that standpoint, the regulation could in fact be counterproductive.

Online pilot registration and mandatory insurance will on the other hand be a valid safety measure for both factory made UAS and home built UAS of every type for all the years to come, regardless of technical development. The Agency could specify pilot registration requirement so that the operator must leave an electronic signature confirming that they have read and understood the limitations in the Open Category, and provide proof of insurance. That also solves the problem of distribution. The Agency does not have to enforce paper leaflet distribution with the UAS, and the registration will ensure that custom and home built UAS pilots are aware of current regulation. In addition, with the fast technological development, paper information will typically spend years in circulation, while online information can be quickly changed to reflect updated regulation. By providing online registration, warnings and notices can be sent to all pilots swiftly and easily by e-mail from the competent authority.

We suggest the following simplification, from 4 to 3 subcategories:

UAS.OPEN subcategory Ao: “harmless”

The category should include:

Remote controlled flying objects with flying weight less than 500 grams, tethered flying objects (kites, balloons, control line models), free flying models, toys etc. In addition this subcategory should specifically exempt indoor model flying, because such activity pose zero risk. We cannot see any rationale for requiring 3rd party insurance in this category, except where the operations are commercial. (Which again raises the question whether or not the Agency should differentiate between commercial and private recreational activities).

UAS.OPEN subcategory A1:” low risk”

This category should merge the requirements found in Open categories A1 and A2, except for geo-fencing specifications for reasons described above.

UAS.OPEN subcategory A2: “medium risk”

The category should include the requirements found in Prototype Open categories A3, except for geo-fencing specifications for reasons described above.

There is no need for a fourth category. A simpler regulation is easier to understand and more likely to be properly enforced.

Subpart B - Specific category

UAS.SPEC.30 item C

Remove geo-fencing data requirement, which should not be required in Specific category. (with reference to *Article 4, principles of UAS operations*, which only requires this for the Open category.)

UAS.SPEC.60

New organizations and operators can perform the necessary risk assessment to apply to become certified by their competent authority, and the procedure outlined in **UAS.SPEC.60** is appropriate. This is a proportionate measure to ensure that UAS operators are competent, and that 3rd party and manned aviation are not at risk from Specific category operations.

Regarding the risk assessment procedure, we strongly suggest that the “standard scenarios” which are to be published by EASA will:

- a) Clearly distinguish between scenarios for commercial and non-commercial operators with regards to risk and insurance requirements, in accordance with the Basic Regulation for manned aircraft operations, and following the principle that commercial operations are associated with higher risk.
- b) Use common airspace regulations already in place. For example: Flying in controlled airspace, two-way communication and ATC clearance should be required for UAS. Do not create special scenarios for pilots who operate from the ground. A UAS operator should have neither special privilege, nor special punishment.
- c) Allow competent authority to construct requirements and scenarios on a national level. For example: Norway has abundant class G-airspace and will benefit from different scenarios than other member states.

UAS.SPEC.60 B-3

Risk assessment requirement: To state specific features of a single UAS will be extremely bureaucratic. Un-manned craft are cheap, disposable, and any given operator may possess “hundred” highly different types. We recommend that the Agency change this to a requirement for specific limitations for all UAS to be operated by that operator. For example, it is not difficult to state that all the operators UA’ will have a maximum range and speed.

For the operators, acquiring the different kind of UA may also become bureaucratic and difficult to enforce, when considering the following scenarios:

- If model-flying members of our organization become approved as *Specific* operators, how does the shop owner selling the UAS know that the customer is approved, i.e. is allowed to purchase a UAS without the limitations specified in the *Open* category?
- If a UAS company is approved for operations in the *Specific* category, but only for UAS capable of line-of sight range, or maximum speed 200 km/h, how will they be able to purchase such a specific UAS?
- How will the competent authority be able to regulate the design features and performance of custom made or home built UAS?

UAS.SPEC.60 B-7

Neither UAS Operators nor competent authorities are competent to assess the environmental impact of UAS operations. Environmental issues are addressed in national regulations and should be removed from the Agency's UAS regulations.

Subpart C – Light UA Operator Certificate (LUC)

UAS.LUC.10 through 40

We agree that pilot training and proficiency testing by the competent authorities should be required for category 3 operations, and that certification of UAS by a competent authority is a good idea. We assume the Agency will describe such operations and requirements that fall into this category in an NPA in the near future, so that comments can be made. That being said, we also assume that recreational model flying will only be allowed in the Open and Specific categories, and thus LUC and Certified category operation will probably be out of scope for our organization.

Thanks in advance for taking our comments into account.

Best regards

Jon Gunnar Wold

Manager, Aeromodelling
Norwegian Air Sports federation
www.nlf.no

About The Norwegian Air Sport Federation (NLF)

The Norwegian Air Sport Federation *Norges luftsportforbund*, (NLF) organizes 80 aeromodelling clubs in Norway. NLF has decades of experience with community based safety systems, training programs and operational rules regarding all aspects of remote controlled model airplanes. In addition, NLF organizes balloon flying, gliding, hang- and paragliding, general aviation, parachuting and microlight aircraft. Our experience in organizing remote controlled flying alongside manned flight is substantial and unique. NLF does not at this time organize any other type of model flying apart from that flown for sport and recreational purposes within line of sight (VLOS). It is within that scope that we offer our comments.