

### UAS Safety Checklist - UAS Regulation 2019/947 (1) - OPEN Category

# \*\*\* Please save and use this document each time you plan to fly your UAS! \*\*\*

### WHAT IS ALLOWED IN THE OPEN CATEGORY?

- Flight up to maximum 120 meters. Above, my UAS will interfere with manned air traffic!
- Flight in <u>V</u>isual <u>Line</u> <u>Of</u> <u>Sight</u> ("VLOS")
- Flight with UAS weighing up to 25 kg maximum (All equipment/payload included!)
- Flights are allowed only according to A1/A2/A3 subcategories specifications

### WHAT IS STRICTLY FORBIDDEN IN THE OPEN CATEGORY?

- Flight **B**eyond **V**isual **L**ine **Q**f **S**ight ("**BVLOS**")
- Overflight of assembly of people and, in most cases, of uninvolved person
- Interference or getting close to manned aviation traffic (They cannot see you!)
- Dropping any material, interference or flying close to emergency response services (police, fire fighters...)

# WHICH ELEMENTS SHOULD YOU CHECK BEFORE EVERY FLIGHT?

- METEO: Day/Night, Winds (altitude effect), Clouds (Cumulonimbus), Precipitation, Temperature
- ENVIRONMENT: Geozones, elevation, shape/surface/obstacles (turbulences), radio-interferences
- UAS HW Propeller, engine, frame / wing, batteries / fuel, controller / servos, remote command.
  - SW safety function (RTH, max. height and distance), direct remote ID and geo-awareness systems (If equipped mandatory)
- HUMAN: On ground, in the air, myself: I'M SAFE (Illness\*Medication\*Stress\*Alcohol\*Fatigue\* Emotion)

### WHAT ABOUT THE UAS GEOGRAPHICAL ZONES (GEOZONES)?

- Flights are allowed only in accordance with the conditions and/or restrictions of the zones
- UAS geographical zones are usually situated around airports, heliports, sensitive areas, prisons, etc.
- They are available on DAC website for the Grand-Duchy of Luxembourg. For other countries, please check the UAS websites in Europe (Link at the end of this flyer (2) EASA NAAs)

### WHAT SHOULD I DO WHEN

- I buy a new UAS? I should first read the manufacturer instructions
- I want to ensure that no uninvolved person is in the operation area? I do a walk-around inspection
- I fly? I should permanently scan the airspace cause the manned aviation cannot detect my UAS
- I use the OODA methodology? I Observe, take an Option, Decide and Act (Situational Awareness)
- Serious injury or airborne conflict happens? I should descent, land safely and report occurrence (3)
- My UAS overflies people who are not involved? I should change the position to prevent overflight
- I lose the radio link with my UAS? I should move closer to try re-establish the connection
- I am unsure about the UAV attitude? I climb slightly and I apply the pitch forward/yaw procedure
- I finish flying my drone? I do my post flight checks and keep a log



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I am charging the batteries? I don't let them unattended

#### SHALL I REGISTER MYSELF AS AN OPERATOR?

YES (4)	NO
<ul> <li>If my UAS weighs more than 250gr;</li> </ul>	<ul> <li>If my UAS weighs less than 250gr and is</li> </ul>
<ul><li>If my UAS weighs less than 250gr and:</li></ul>	a toy
<ul> <li>has a very high speed or</li> </ul>	
o is <b>not</b> a toy and is equipped with a camera or microphone	

### WHERE AM I AUTHORISED TO FLY IN OPEN CATEGORY?

The UAS regulation is applicable in all European Union states, Switzerland, Norway, Iceland & Liechtenstein

Safety principle: the heavier, the further, the safer!

WITH NON "C-MARKED" UAS	WITH "C-MARKED" UAS  ("CE" MARK ONLY IS NOT OK!)
FROM 31 DEC 2020 TO 31 DEC 2023	0=0=0=0=0=
<ul> <li>UAS weighs less than 500gr: A1/A2/A3</li> </ul>	• Class C0/C1*): A1/A2/A3
<ul> <li>UAS weighs between 500gr and 2kg: A2*/A3</li> </ul>	
<ul> <li>UAS weighs between 2kg and 25kg: A3</li> </ul>	(Class C2*): A2**/A3
AS FROM 01 JAN 2024 ON	(class cz. j. r.z. jr.s
<ul> <li>UAS weighs less than 250gr: A1/A2/A3</li> </ul>	
<ul> <li>UAS weighs between 250gr and 25kg: A3</li> </ul>	• (Class C3/C4*): A3

**A1:** operations "close" to people (But never over assembly of people)

A2: operations at reasonable distance from people (At least \*50m/\*\*30m)

A3: operations "far" from people (At least 150m from residential, commercial, industrial areas)

Regardless of the above, if you fly within a geographical zone, please respect the conditions prescribed for this zone

## WHICH TRAINING IS REQUIRED?

FOR A1/A3 OPERATIONS (5)	FOR A2 OPERATIONS (5)
I shall follow the online training and take the associated online examination. If it is successfully passed, I receive my Proof of Completion of the Online Training.	<ul> <li>I shall perform the steps for the A1/A3 first;</li> <li>I shall complete a self-practical training (In A3 conditions until passing the A2 exam);</li> <li>I shall declare its completion and take an additional theoretical knowledge examination (Classroom). If it is successfully passed, I receive my Certificate of Competency.</li> </ul>

#### **IMPORTANT WEBSITES**

- 1. Official Journal of the European Union (European legal texts): https://www.eur-lex.europa.eu
- 2. UAS websites in Europe (Including DAC): https://www.easa.europa.eu/domains/civil-drones/naa
- 3. Occurrence reporting website: <a href="https://www.aviationreporting.eu/AviationReporting/">https://www.aviationreporting.eu/AviationReporting/</a>
- 4. Operator registration for the Grand-Duchy of Luxembourg: https://guichet.public.lu/
- 5. Training courses and examinations: <a href="https://trainingzone.eurocontrol.int/">https://trainingzone.eurocontrol.int/</a>



## DIRECTORATE OF CIVIL AVIATION – GRAND-DUCHE DE LUXEMBOURG

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