

PERMISSION – Small Unmanned Aircraft / Small Unmanned Surveillance Aircraft.

1. The Civil Aviation Authority, in exercise of its powers under articles 94(5) and 95(2)(a) of the Air Navigation Order 2016 ('the Order'), as amended, hereby permits **Joseph Mander** (the SUA operator), to operate small unmanned aircraft (see Note 1) of the class(es) listed in paragraph 2 below, for the purposes of commercial operations and within 150 metres of any congested area.
2. This permission is applicable to the following class(es) of small unmanned aircraft:
 - (a) Multirotor / Helicopter.
3. This Permission is granted subject to the following conditions, namely, that the small unmanned aircraft shall not be flown:
 - (a) Other than by persons employed by or contracted to **Joseph Mander** whilst being holder(s) of an appropriate recommendation issued by a UK National Qualified Entity for remote pilot competency, or an alternative existing aviation qualification determined to be acceptable to the CAA (CAP722 refers);
 - (b) Unless there is insurance cover for the small unmanned aircraft that meets the requirements of EC Regulation No. 785/2004;
 - (c) Unless the small unmanned aircraft is maintained within the direct, unaided Visual Line of Sight (VLOS) of the remote pilot, or a competent observer under the control of the remote pilot who is operating in accordance with procedures specified in the approved Operations Manual, out to a maximum range of 500 metres unless a lesser control link radio range has been specified by the manufacturer;
 - (d) At a height exceeding 400 feet above the surface, unless permitted to do so under article 94B of the Order;
 - (e) Within the flight restriction zone (see Note 2) of a protected aerodrome, unless in compliance with the requirements stated in article 94B of the Order. In addition, if the small unmanned aircraft has a mass of more than 7kg whilst airborne, it shall not be flown:
 - (i) in Class D or E airspace unless the permission of the appropriate air traffic control unit has been obtained (see Note 3); or
 - (ii) within an aerodrome traffic zone during the notified hours of watch of the air traffic control unit (if any) at that aerodrome unless the permission of any such air traffic control unit has been obtained.
 - (f) Over or within 150 metres of an organised open-air assembly of more than 1,000 persons;
 - (g) Within 50 metres of any person, vessel, vehicle or structure that is not under the control of the SUA operator or the remote pilot, except that during take-off and landing this distance may be reduced to 30 metres;
 - (h) Unless it is equipped with a mechanism that will cause the small unmanned aircraft to land in the event of disruption to or a failure of any of its control systems, including the radio link, and the remote pilot has ensured that such mechanism is in working order before the aircraft commences its flight;
 - (i) Unless the remote pilot is reasonably satisfied that any load carried by the small unmanned aircraft is properly secured, that the aircraft is in a safe condition for the specific flight, and that the flight can safely be made taking into account the wind and other significant weather conditions; and

- (j) Unless the flights are conducted in accordance with the current operations manual of the SUA operator, to include a site safety assessment, as well as records of each flight undertaken. The SUA operator must maintain records of each flight made pursuant to this permission, and must make such records available to the Civil Aviation Authority on request.
4. Flights at night shall only be conducted in accordance with the approved Ops Manual procedures. Prior to flying operations, a daylight reconnaissance and site safety assessment including aircraft flight-paths within the surrounding area, shall be undertaken to identify, address and record any hazards, restrictions and obstacles. The launch site shall be provided with adequate illumination and the aircraft shall be equipped with adequate conspicuity lighting. Flights shall only commence when the weather conditions are suitable for continuous VLOS operations.
5. This permission shall have effect from **16/11/2018 until and including 16/11/2019** unless previously varied, suspended or revoked.



for the Civil Aviation Authority

Date: 16/11/2018

Ref: 20181116Joseph ManderPAndEUAS7755

Certificate Number: 1

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Note 1: 'Small unmanned aircraft' means any unmanned aircraft, other than a balloon or a kite, having a mass of not more than 20 kg without its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight.

Note 2: The "flight restriction zone" of a protected aerodrome consists of the following two zones (see ANO 2016 article 94B) -

- (a) the "Inner Zone", which is the area within, and including, the boundary of the aerodrome;
- (b) the "Outer Zone", which is the area between -
 - (i) the boundary of the aerodrome; and
 - (ii) a line that is 1 km from the boundary of the aerodrome (the "1 km line")

Note 3: Such flights will be processed for NATS-administered controlled airspace under either Non-Standard Flight (NSF) or Enhanced Non-Standard Flight (ENSF) approval procedures. These procedures are set out on the NATS website www.nats.aero/nsf/rpas.aspx. Further details of the NSF/ENSF procedures are published at AIP ENR 1.1, section 4, paragraph 4.1.8 which can be found via the following link:

http://www.nats-uk.ead-it.com/public/index.php%3Foption=com_content&task=blogcategory&id=4&Itemid=11.html

If approval is granted, the remote pilot is to fly the aircraft entirely within the limits of the stated lateral and vertical operating area. No safety assurance against other unusual air activities taking place in the same area is given or implied. NATS approval to fly within controlled airspace or an aerodrome traffic zone does not absolve the remote pilot from the responsibility for avoiding all other aircraft.

Note 4: SUA operators and remote pilots should be aware that the collection of images of identifiable individuals, even inadvertently, when using surveillance cameras mounted on a small unmanned surveillance aircraft, may be subject to the General Data Protection Regulation and the Data Protection Act 2018. Further information about these regulations and the circumstances in which they apply can be obtained from the Information Commissioner's Office and website: <https://ico.org.uk/for-the-public/drones/>

Note 5: SUA operators and remote pilots must be aware of their responsibilities regarding operations from private land and any requirements to obtain the appropriate permission before operating from a particular site. In particular, they must ensure that they observe the relevant trespass laws and do not unwittingly commit a trespass whilst conducting a flight.