AV-22031/7/2020-SDIT-MOCA
Government of India
Ministry of Civil Aviation
Rajiv Gandhi Bhavan, New Delhi
13 Aug 2021

ORDER

Subject: Conditional exemption from Unmanned Aircraft System (UAS) Rules, 2021 to National Health Mission (NHM), Mumbai for conducting experimental Beyond Visual Line of Sight (BVLOS) drone flights to deliver essential healthcare items in tribal areas of Jawhar in Palghar district of Maharashtra

1. Whereas, NHM ('the Applicant') had, vide email dated 23 June 2021 sought an exemption from UAS Rules, 2021 for the afore-mentioned purpose.
2. Whereas, based on the undertaking provided by the Applicant, approval of the Standard Operating Procedure (SOP) shall be obtained by the Applicant from Directorate General of Civil Aviation (DGCA) for the afore-mentioned purpose.
3. Now, therefore, the Central Government, in exercise of the powers conferred by Rule 70 of the UAS Rules, 2021, grants conditional exemption from UAS Rules, 2021 to the Applicant for the afore-mentioned purpose. This exemption shall be subject to complete adherence to the conditions as stated in Annexure 1 and the directions/ exemptions issued (or to be issued in future) by the Ministry of Civil Aviation (MoCA). This exemption shall be valid for a period of one year from the date of approval of the said SOP or until further orders, whichever is earlier.

(Amber Dubey)
Joint Secretary to the Government of India

To:

1. All Ministries/ Departments of the Government of India
2. Chief Secretaries/ Administrators of all States/ Union Territories
3. DGPs/ Heads of Police of all States/ Union Territories
4. Additional Secretary (Internal Security), Ministry of Home Affairs (MHA), New Delhi
5. Joint Director, Intelligence Bureau (Shri Janardan Singh), New Delhi
6. Director, G-Wing, Ministry of Defence, New Delhi
7. Gp Cpt K.B. Mathews, Air Headquarters, IAF, New Delhi
8. DG, Directorate General of Civil Aviation (DGCA), New Delhi
9. DG, Bureau of Civil Aviation Security (BCAS), New Delhi
10. Chairman, Airports Authority of India (AAI), New Delhi
11. PS to HMoSCA (IC), Ministry of Civil Aviation, New Delhi
12. Sr. PPS to Secretary, Ministry of Civil Aviation, New Delhi
13. National Informatics Centre (NIC) team, Rajiv Gandhi Bhavan, New Delhi
14. Digital Sky Platform

Annexure 1

Conditions for conducting experimental BVLOS drone flights for delivery of vaccines by National Health Mission (NHM), Mumbai

1. Before the commencement of BVLOS trial flights, NHM, Mumbai shall develop and submit the following documents to DGCA for approval:
    a) Standard Operating Procedures (SOP) for BVLOS operations
    b) SOP for coordinating with Air Traffic Control (ATC) and Indian Air Force (IAF) in normal situations and contingencies such as Command and Control (C2) lost-link.
2. Security clearance of the entities involved (other than Government entities), personnel involved and the proposed airspaces, shall be obtained from the Ministry of Home Affairs (MHA).
3. The maximum permitted height for drone operations is 400 feet Above Ground Level (AGL). To operate above 400 feet AGL, necessary clearance from AAI shall be taken. Energy reserve of 15% of flight time should be provisioned for.
4. Before the commencement of BVLOS flights, NHM, Mumbai should conduct a hazard identification and risk management (HIRM) workshop involving all stakeholders. BVLOS operations should be attempted only after all risks are mitigated to an acceptable level of safety.
5. Drone pilots shall hold a valid certificate of training and have sufficient experience in drone operations. A safe VLOS record of the drone operator and the remote pilot are mandatory requirements.
6. Before commencement of the trials, clearance from Ministry of Defence (MoD) and local administration shall be obtained.
7. NHM, Mumbai shall post a Single Point Coordinator (SPC) at Mumbai ATC for the entire duration of the BVLOS flights to ensure smooth coordination with ATC.
8. A Flight Plan should be filed for each trial BVLOS flight with Mumbai ATC; and Flight Information Centre (FIC) number and Air Defence Clearance (ADC) number shall be obtained.
9. NHM, Mumbai shall initiate a Notice to Airmen (NOTAM) in coordination with Airport Director, AAI, Mumbai.
10. Drone operations shall be limited between local sunrise and local sunset. Visual Meteorological Conditions (VMC) should prevail at take-off and landing sites. Weather limitations stipulated by the drone manufacturer shall be complied with.
11. The drones used for BVLOS flights should satisfy the following requirements:
    a) Type – Micro or Small category rotary wing drone
    b) Valid Drone Acknowledgement Number (DAN).
    c) Sufficient endurance for long-range operations
    d) Capability to withstand adverse weather
    e) Capability to transmit identity and live trajectory information
    f) Carriage of a barometric sensor on-board
    g) Capability to carry out geo-fencing, Return to Home (RTH) and Automatic Flight Termination.
    h) Capability to conduct autonomous operations
    i) Conspicuous with bright colours and flashing strobe lights

j) 360-degrees Collision avoidance system to avoid terrain and obstacles
k) Detect and Avoid System (DAA) to detect and avoid manned and unmanned aircraft
l) Display of drone pilot to provide live trajectory, manned aircraft information, DAA information and First Person View (FPV), with visual/ audio alerts

12. Payload should be restricted to the proposed use-case. During the operation, drone shall not drop or discharge substances and shall not transport any hazardous material.
13. The drone service provider engaged in BVLOS operations should establish basic UAS Traffic Management (UTM) infrastructure for real-time management of the flights and provide situational awareness data to ATC and IAF units, as required.
14. The drone service provider shall ensure that the UAS operations are insured against any accidents leading to injury/ death of uninvolved persons or damage to property.
15. Government of India and its entities shall not be held liable for any loss or damage to any entity whatsoever, during the conduct of such operations.
16. The drone service provider shall indemnify Government of India and its entities from any loss on account of any claim by third party (including but not limited to cost of litigation) which may arise due to any act of the drone service provider during the conduct of such operations.
17. This permission for BVLOS flights shall not be used for any commercial purpose.
18. Upon completion of the operations, NHM, Mumbai shall submit a detailed Proof of Concept to MoCA and DGCA. It is expected that the level of documentation and supporting justification would be proportionate to the level of complexity of the proposed BVLOS drone operation.

(Amber Dubey)
Joint Secretary to Government of India