

## **THE USE OF UNMANNED AERIAL SYSTEMS, DRONES, SMALL UNMANNED AIRCRAFT, QUADROCOPTERS, PILOTLESS AIRCRAFT etc. IN BERMUDA AIRSPACE.**

### **Frequently Asked Questions (FAQs)**

**Q: What is a Small Unmanned Aircraft (SUA)?**

*A: A SUA is just the current name for what is often called a drone, quadrocopter, pilotless aircraft or a UAS. A 'Small Unmanned Aircraft (SUA)' 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. A Small Unmanned Surveillance Aircraft (SUSA) is just a SUA with a camera or other form of data or media recording device attached.*

**Q: Is it legal to fly SUAs in Bermuda?**

*A: Providing you can maintain unaided direct visual contact so that persons, structures, vessels and vehicles can be avoided SUAs may be flown in Bermuda up to a maximum altitude of 400 feet.*

**Q: Can I fly my SUA in the Botanical Gardens or any other Government land area?**

*A: This is not permitted without express permission from the Parks Department.*

**Q Who is the operator?**

*A: That is normally the person in charge at the controls of the machine, but it could mean a consortium or company utilizing the machine with the use of more than one pilot.*

**Q: When does the SUA operator require the Governor's permission?**

*A: Permissions are required when the vehicle becomes what is called a Small Unmanned Surveillance Aircraft (SUSA). This is when you attach a camera or some other data or media recording device to the machine. The SUA operator then requires the Governor's permission to operate a SUA when flying within congested areas or when flying close (within 50m) to persons, vehicles or vessels that are not under the control of the person in charge of the aircraft. The requirement is detailed in Article 73 of the Air Navigation (Overseas Territories) Order 2013 (<http://www.bcaa.bm/Publications/Regulations.aspx>).*

**Q: May I sell the photos and data products that I obtain from flying my SUSAs?**

*A: Yes, but the person in charge or the operator would need to obtain an Aerial Work Permission from the Governor, and the requirement is to be found within the Air Navigation (Overseas Territory) Order 2013 at Article 73.*

**Q: How do I gain the Governor's permission?**

*A: The Governor's permission is granted through an application to the Bermuda Civil Aviation Authority (BCAA), Flight Operations section. The most important consideration in preparing for your Aerial Works Certificate is to demonstrate to BCAA that the operations of the SUSAs will not be placing the public in danger nor will there be any disruption to air traffic. Contact BCAA at 293-1640 for specific requirements.*

**Q. Do I have to have specialist piloting skills to fly my SUSAs?**

*A. Part of the permission process is to demonstrate to a BCAA official, proficiency to complete certain flight manoeuvres in a safe manner. Operators will also be required to successfully pass a test on the Rules of the Air and basic Air Law. Additional details will be provided during the approval process.*

**Q. Do I need to be medically fit to obtain a Governor's Permission?**

*A. It is just common sense that someone flying SUSAs should be able to see and hear to a degree which provides an adequate level of safety. It will therefore be necessary for any applicant to obtain a FAA Class 3 Pilot's Medical Certificate (ICAO Class 2). This is the lowest level of medical certificate and is what is required for a Private Pilot's Licence/Certificate. Contact the BCAA on how to arrange aviation medical.*

**Q: What does it cost to apply for an Aerial Works Permission?**

*A: The BCAA currently requires \$2500 to cover the time spent in processing an application, reviewing documented normal and abnormal procedures and witnessing a flight demonstration which is valid for the first year. The annual renewal fee is \$500. It is worth noting that part of the process for granting an Aerial Work Certificate is the need to take out Third Party Liability insurance to the amount of \$1.1 million.*

**Q. How long does it take to achieve an Aerial Works Certificate?**

*A. The time required to acquire a certificate is dependent on the accuracy of the submission. Adherence to the guidance provided by BCAA, the whole process may take as little as two months. Additional time will be required where the submitted documentation requires significant amendment.*

**Q: Do I need a different Certificate for every SUSA that I own?**

*A: No, the Certificate is issued to the Operator, not the individual SUA.*

**Q: What if I do not abide by these rules?**

*A: In accordance with the Air Navigation (Overseas Territories) Order 2013, BCAA may take enforcement action which could result in a fine of up to \$4000.*

**Q: Why do we have to regulate these things, they are only toys and freely available for purchase?**

*A: They are not toys, they can be lethal weapons if not operated safely and with concern for other airspace users.*

*There have already been deaths and serious injuries attributed to drones crashing.*

*There has been near mid-air collisions with civilian airliners.*

*They invade privacy and can be used for nefarious means.*

*Bermuda is a congested island (lots of dwellings) – very little open space.*

*One third of the airspace is reserved for fixed wing aircraft operating out of L.F. Wade International Airport. Safe procedures with reliable communications procedures with Air Traffic are necessary.*

*There is a need to assess the competency of the “pilot”, as an unskilled operator could cause a lot of damage. You have to pass a test to ride a bike or car, so the same logic applies to these machines.*

*There is a need to ensure that the operator is adequately insured for “third party” claims that may arise. (Injuring or even killing people, damage to property).*

*The pilot needs to have reasonable eyesight and hearing to be able to avoid objects/aircraft, hence a medical report. Just like the driving licence requirement, but to Private Pilot Licence standards.*

*The Air Navigation (Overseas Territories) Order 2013, requires that they be regulated.*

*The Regulatory bodies are playing “catch-up”. FAA and Europe will be introducing appropriate rules shortly.*