

**Remote Pilot Operating Instructions.** The FAA requires a manufacturer to provide remote pilot operating instructions for a small UAS qualified to conduct Category 2 or Category 3 operations upon sale, transfer, or use of the small UAS by someone other than the manufacturer. In addition, the manufacturer should keep the instructions up-to-date to account for any changes it makes to a small UAS.

The remote pilot operating instructions must include, at a minimum, the following information:

1. General information, system description, and system limitations, including the category or categories of operations over people that the small UAS is eligible to conduct. This information must describe whether the small unmanned aircraft must include a specific component on the aircraft in order to fulfill the performance-based requirements of Category 2 or Category 3, or both. For example, if a manufacturer has designed the small unmanned aircraft to have a parachute system or other device affixed to the aircraft and that component is provided separately, the remote pilot operating instructions must clearly identify the component that must be attached. Similarly, the remote pilot operating instructions must list components that are eligible or necessary for inclusion on the aircraft.
2. A statement concerning whether the small UAS can be modified.
  - a. If modifications are permitted, the remote pilot operating instructions must include a complete description of modifications the manufacturer has determined do not change the category of operation over people for which the small UAS has been declared compliant. Such required descriptions of modifications include descriptions of the small unmanned aircraft itself as well as any payload that any person may include on the aircraft.
  - b. Modifications the manufacturer describes in the remote pilot operating instructions must be consistent with the basis for the FAA's acceptance of the Declaration of Compliance. Any person, however, who modifies a small UAS in a way that could affect the eligibility of the small UAS to operate over people under Category 2 or Category 3 is required to submit a new Declaration of Compliance before the small UAS is eligible to operate over people.
3. A statement regarding whether the small UAS has variable modes or configurations. For a small UAS that has such variable modes or configurations, the instructions must describe how a remote pilot can verify what mode or configuration the small UAS is in at any given time, and how to switch between modes or configurations. This information would facilitate a remote pilot's verification that his or her small UAS is in the correct mode or configuration to conduct a certain category of operations over people. Similarly, if a remote pilot chooses to operate in a different category of operations over people, or in a mode or configuration that is not permitted for operations over people but is permitted under part 107, that person must be

able to discern the necessary information from the remote pilot operating instructions.

The remote pilot operating instructions must be specific to the particular small UAS design. A manufacturer may update existing instructions to include the required information with the small UAS, or the manufacturer may create a new set of instructions that are specific to operations over people.

The FAA does not require the manufacturer to provide the remote pilot operating instructions in a particular format. A manufacturer could choose to provide the operating instructions as part of the packaging of a small UAS, make them available electronically, or by any other means. Regardless of the manner in which the manufacturer transmits the instructions to remote pilots, the manufacturer is responsible for ensuring instructions remain up-to-date. Remote pilots in command must be able to discern clearly the set of operating instructions that are in effect at the time of the intended operation of the small UAS over people.

Information contained in the remote pilot operating instructions should provide enough detail to enable remote pilots to understand clearly how to configure the small UAS to ensure compliance with applicable requirements for operating over people. This information informs the remote pilot and aids in decision-making. While the remote pilot operating instructions can aid a remote pilot in operating safely, it is ultimately the responsibility of the remote pilot in command to determine the safe operational parameters for the operation. A description of each of the elements the FAA requires in remote pilot operating instructions follows.

**Required Components and Category Declared.** The remote pilot operating instructions must include general information, a system description, and system limitations of the small UAS. Manufacturer-required components that make up the small UAS must be listed in the remote pilot operating instructions to help the remote pilot ensure that all components of the small UAS are present. This is necessary because, if the small UAS is missing any components, the small UAS may not be in compliance with the category of operations over people for which the manufacturer declared compliance. The remote pilot operating instructions must also include the category or categories of operations over people with which the small UAS manufacturer has declared compliance.

## **Sample Remote Pilot Operating Instructions.**

### **[Small UAS Make and Model]**

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## **INTRODUCTION**

The **[Small UAS make and model]** is a high performance aerial imaging aircraft that the FAA has determined is eligible to operate over people. The system comes fully assembled and includes the aircraft, touch screen ground station and 3-axis gimbal camera capable of 16 megapixel still photos and full HD 60 FPS videos. Operating the **[Small UAS make and model]**, will enable you to capture remarkable photographs and video footage for a wide variety of applications.

## **GENERAL INFORMATION**

**IMPORTANT:** This small UAS is eligible to fly over people in category 2 and category 3 operations provided the remote pilot comply with the instructions contained in this manual. Please take the time to read through this entire instruction manual for more information on operating safety and according to the Federal Aviation Regulations.

**NOTE:** Before any person may conduct operations of the **[small UAS make and model]**, you must create an account online with **[manufacturer's name]**, at **[manufacturer's website]**. This will enable you to receive important updates regarding the small UAS and its eligibility to operate over people, as well as updates, bulletins, instructional videos and more.

## **SYSTEM DESCRIPTION**

### Selection of the FLIGHT MODE

The [small UAS make and model] is programmed with three (3) flight modes. The flight mode can be selected via the Flight Mode Control Selection Switch located just above the left-hand control stick. **IMPORTANT:** Selection of the flight mode determines the category of operations that the [small UAS make and model] may conduct over people. The following selection options are available:

Flight Mode G: Any operation not conducted over people.

Flight Mode 2: Any operation conducted in accordance with category 2 operations over people.

Flight Mode 3: Any operation conducted in accordance with category 3 operations over people.

## **REQUIRED COMPONENTS**

### Category 2 Required Components

- 1) The [small UAS make and model] Airframe
- 2) Transmitter and Ground Station
- 3) USB to Micro USB Cable
- 4) USB Interface/Programmer
- 5) 3400mAh 9.1V LiPo Battery
- 6) 9.1V LiPo Balance Connector Charge Lead
- 7) AC to DC Adapter/Power Supply
- 8) 16GB microSD Card w/Adapter
- 9) CAT 2 Rotor Blades & Guards

### Category 3 Required Components

- 1) The [small UAS make and model] Airframe
- 2) Transmitter and Ground Station
- 3) USB to Micro USB Cable
- 4) USB Interface/Programmer
- 5) 5600mAh 11.1V LiPo Battery
- 6) 11.1V LiPo Balance Connector Charge Lead
- 7) AC to DC Adapter/Power Supply
- 8) 16GB microSD Card w/Adapter
- 9) CAT 3 Rotor Blades & Guards

## **OPTIONAL COMPONENTS**

The [small UAS make and model] is already equipped with a high-definition camera. If you intend to conduct operations over people in accordance with category 2 or category 3, you may replace the camera only with a pre-approved camera listed on the [manufacturer's] website. In addition, for operations over people in accordance with category 2 or category 3, you may not affix any other payload to the [small UAS make and model] unless it is listed on the [manufacturer's] website. Any permissible payload you affix to the small UAS must be securely attached throughout the duration of all operations that occur in accordance with category 2 or category 3. Failure to adhere to these requirements will result in the ineligibility of the [small UAS make and model] to operate over people in accordance with category 2 or category 3.