

# DUAL CONTROLLER PILOT HANDOVER PROCEDURE

## Why is this important

A **Handover/Takeover procedure** (1.1.1.12) is defined in the *Specialised Operations* section of the *RPAS Operational Procedures (Library)* documentation for situations where two pilots are sharing a single remote controller to control an RPA and there is an unavoidable need to safely hand over from one pilot to the other.

Drone technology has advanced where dual remote controllers can now be used to connect to a single RPA. These can be linked either as a Primary or Secondary remote controller. This allows two pilots to use their own controller with independent views of the aircraft's telemetry information. Dual controllers are useful where there is a requirement for a second operator to perform photography using video information displayed on the Secondary controller while the pilot in command is flying the aircraft using "line of sight" (a CASA requirement) on the Primary controller. The pilot using the Primary controller has priority, such that the user of the Secondary controller is unable to control the aircraft's orientation while the Primary pilot is operating the control sticks. Dual controllers are also useful as a redundant failover in case the Primary controller fails for any reason.

## What to expect

Using Dual controllers simplifies procedure 1.1.1.12 as there is now no need to pass a controller between the pilots and both pilots have real-time access to the same telemetry information, thus eliminating any potential issues arising from a manual controller handover.

## Your role as the pilot

Procedure 1.1.1.12 still needs to be followed to maintain safety, however it is now important for each pilot to know exactly who has authority and is "in command" of the aircraft and the following protocol is to be used during the procedure each time there is a handover:

- Instead of passing the controller to the second pilot, the second pilot will take control of the aircraft's orientation using their remote controller's sticks and calls out "**I have the controls**".
- The current *Pilot in Command*, will release the control sticks on their controller and call out "**You have the controls**" (note that 2 seconds of inactivity on the primary will need to elapse before the sticks of the secondary controller become active).
- The second pilot is now the *Pilot in Command*.
- This same protocol will be used to pass control back and forth as required.

Note that the Primary controller has priority over the Secondary, thus control can be taken back (i.e. in training situations) by the pilot with the Primary controller by calling out "I have the controls" and then using the control sticks on the Primary controller.