

LOST COMMUNICATION PROCEDURES

Summary: These procedures outline actions to be taken in the event the Pilot-in-Command (PIC) and Observer(s) lose radio communication.

Case 1. Loss of Communication Prior to or During Launch

Description:

A typical flight will have the PIC and an assistant/Observer at the launch and recovery site, with one or more Observers at the far end of the flight area. This will place the UAV into the line-of-sight of one as it leaves the other, maintaining visual contact with the UAV. Radio communication will be via FRS radios (walkie talkies).

Action:

In the event of a loss of communication prior to or during launch, the PIC and spotter will take these actions:

1. PIC will attempt to communicate using the assistant's radio. If not successful, then:
2. PIC or assistant will contact the spotter via cellular telephone. If this is not successful, then:
3. PIC will abort the launch until communications are restored, or if already launched, the PIC will land the UAV.

Case 2. Loss of Communication During Autonomous Flight

Description:

After launch, the PIC, assistant, and observer(s) will be in radio contact, describing turns, GCS vs. observed positions, and scheduled check-in.

Action:

In the event of a loss of communication during autonomous flight, the PIC and spotter will take these actions:

1. PIC will attempt to communicate using the assistant's radio. If not successful, then:
2. PIC or assistant will contact the spotter via cellular telephone. If this is not successful, then:
3. PIC will abort the flight and send the "return to origin" command to the UAV via the RF link. When the UAV reaches 200 feet AGL and the PIC will land the UAV.

Case 3. Loss of Communications During Recovery

Description:

A typical recovery will have the UAV descend to 200 ft AGL in a large spiral, whereupon the PIC will switch off autopilot on transmitter, announce "Landing," enter landing pattern and land the UAV.

Action:

In the event of a loss of communications during recovery, the PIC and spotter will take these actions:

1. PIC will continue landing procedures as planned.
2. PIC and spotter(s) will investigate the communications problem and suspend further flights until communications have been restored. Additional radios will be on hand as backup.

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