

Video Id: V1

Event Type:

The drone raises a false event.

Explanation Type:

Minimal Natural Language

Description:

Blue Drone misunderstands a white object as a person and raises an event to track it. As the object stays in place, Purple Drone's velocity immediately drops near zero and its altitude remains constant.

Video URL:

https://www.youtube.com/watch?v=h5hvsjCldNs&feature=emb_logo

Video Id: V2

Event Type:

The drone raises a true event

Explanation Type:

Minimal Natural Language

Description:

The Purple correctly identifies mist in the weather and notifies the event. The video stream also shows misty weather conditions. The drone decides to fly lower and slower to enhance visibility of the ground. Although its speed decreases almost close to zero, its altitude increases.

Video URL:

https://www.youtube.com/watch?v=OMvyjn8qUso&feature=emb_logo

Video Id: V3

Event Type:

Two events occur at the same time. One of them is incorrectly reported by drone.

Explanation Type:

Minimal Natural Language

Description:

One drone identifies a mist and the other detects a person on the ground at the same time. The drone's report regarding person detection is accurate and it flies at constant altitude, but it suddenly dropped its velocity.

The drones report regarding the mist is incorrect and there were no signs of mist in the video as well. The drone reports that it is decreasing the velocity and altitude to increase the visibility of the ground but continues to fly at constant speed and altitude. The remote pilot shall be able to understand that the drone's raised an incorrect event but does not need any intervention to change the flying pattern.

Video URL:

https://www.youtube.com/watch?v=OWzxJIRjF3g&feature=emb_logo

Video Id: V4

Event Type:

Two events occur at the same time. One of them is incorrectly reported by drone.

Explanation Type:

Detailed Explanations

Description:

One drone identifies a mist and the other detects a person on the ground at the same time. The drone's report regarding the person detection is correct and a person can be seen in the video as well. The drone continues to fly at the same altitude and velocity while tracking the person. Drone also reported that its mode is changed from "Search" to "Track" and the navigation method is changed from "Waypoints" to "NED".

The other drone incorrectly reports the presence of mist in the environment and indicates to fly slower at a lower altitude to enhance visibility of the ground. However, its speed significantly increased (from 1mph to 12mph) and it continued to fly at the same altitude. The remote pilot shall take over to further investigate the occurrence of the event and manually control to ensure it flies safely.

Video URL:

https://www.youtube.com/watch?v=-AML1qIHRxM&feature=emb_logo

Video Id: V5

Event Type:

Two events occur at the same time. A drone requests human help to continue the mission.

Explanation Type:

Detailed Explanation + Visual Communications

Description:

One drone suffers from a mechanical failure and immediately tries to return to its home location. It also requests human assistance to ensure that it lands safely. The drone changes its flying mode from “search” to “Land” mode and selects the “Nearest” landing station to land. The other drone comes very close to another drone and raises an event to avoid a possible collision. The drone switches to “off board” mode to avoid the collision and frequently changes its altitude. The drone successfully avoids the collision.

Video URL:

https://www.youtube.com/watch?v=0LVVBrO_-U8&feature=emb_logo