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Subject: Unstable flight and loss of GPS caused by having 3DR Solo App running while also having Tower and/or Mission Planner running during flight.

Information:

Mapping missions require the use of either the tablet application called Tower or the Windows ground station application called Mission Planner. As part of the 3DR Solo Checklist, the Solo application is launched on the tablet to verify Solo settings. Following the Before Takeoff checks the operator launches Tower or Mission Planner to load and run the planned mission. After completing Takeoff, if the Solo application remains open while also having Tower and/or Mission Planner running is when unexpected flight characteristics can occur.

There have been numerous trending Solo missions with flight characteristics that have included unstable flight and loss of GPS and may contribute to the aircraft flipping during landing. The single commonality is having multiple applications running at the same time. Additionally there have been several instances of aircraft losing GPS lock when flying in timbered areas or in steep terrain. Operators should remain alert and be ready to take manual control in the event of erratic aircraft behavior.

In order to prevent unexpected flight errors, **operators must insure that the Solo application is closed during the Before Takeoff checks on the 3DR Solo/Ricoh Flight Checklist.** Additionally operators should close any other applications running in the background as well as place all mobile/hotspot devices in airplane mode to prevent radio frequency interference.

Although these additions may help prevent some flight deviations, all operators need to be proficient in their flight training emergency procedures and manual flight to manage unstable flight, loss of GPS, and potentially unpredictable handling that can lead to loss of control as well as the aircraft flipping over on landing.

Signed: _____

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