Field Service Bulletin

Title: Bulletin Notice for Teal 2 Operators

Date: March 30th, 2023

Summary: Field Bulletin, Video Recording and Photo Issue

Affected Units: All Teal 2 Air Vehicles

Firmware Version: 1.5.0

Category: Action required until issue permanently resolved

System Safety Impact: When operating Teal 2 aircraft with firmware version 1.5.0. In some instances, when an SD card is in the air vehicle and the "take photo/record video" button is pressed, the Teal 2 will drop the link with the Ground Station and execute the link loss failsafe. The default link loss failsafe action is to Return to Launch (RTL). Once this issue occurs with a specific Teal 2, it will likely occur again with that same system.

Airworthiness Impact: When the below corrective actions are used, there is no impact on the Airworthiness of the aircraft and SUAS system.

Action to be taken: If the operator encounters the described problem, to avoid triggering this condition and continue using the system, please perform the following:

Remove the Micro SD card from the drone and discontinue using the card in the drone until the issue has been resolved via an update.

Workaround: Below are instructions to avoid the intermittent defect

Recording a Video: On the TAC, exit the Teal Focus kiosk mode on the ground station.
To EXIT KIOSK MODE on the TAC Press and hold the tablet power button (not the TAC battery pack) for 1-2 seconds until 3 system icons appear: POWER OFF, RESTART, and EXIT TEAL FOCUS. Select EXIT TEAL FOCUS. Enter the password teamteal (all lowercase, no spaces, no special characters) in the dialog box at the bottom of the screen. Although there will be no indication of this operation being successful, the TAC is now no longer in kiosk mode and you will be allowed to utilize other Android tools, such as file transfers.
Utilize the built in Android screen recorder rather than recording option on the ground station on the drone by swiping down from the top once to expose the menu bar, and then a second time to expand the tray full of icons. Find the "Screen Recording" option and select the icon. When prompted, please select "no audio" when doing screen recording or the screen recording will not be saved.

You can pull the recorded videos from the ground station by plugging in a USB-C thumb drive and using the My Files App to copy the contents from "/Internal Storage/DCIM/Screen recordings" to the thumb drive. Optionally, you can plug a USB-C cable into the top of the TAC and connect it to a computer to pull the files. The internal storage holds approximately 1.9 Gigabytes worth of storage.

Taking a Photo: In TealQGC, go into the Settings page and select "Download Full Res Image In Flight." Change from Video to Photo mode and proceed to take photos using the QGC Interface. The operator will see a download counter on the right side of the screen indicating that it is downloading a high-resolution copy of the images from the drone to the ground station.

Once it has downloaded the images, you can then retrieve them from "Internal Storage/TealQGC/Photos" on the TAC (ground station) using the same methods as described above.

Note that the photos downloaded to the ground station are only copies and that the internal onboard storage of the drone still contains the images. To clear these files from the internal storage of the drone, you will then need to use the "Delete files" button in the camera settings page in QGC. The settings page can be accessed by clicking the "Slider Settings" icon on the right side of the page while connected to the drone.

Teal Drones Contact Information: Contact Teal Drone Tech Support support@tealdrones.com, Teal 2 Program Manager, or point of contact for further information. We will provide a more detailed update and solution as soon as we can implement and validate it.