TEST CASES

demo for

SPH Engineering

Field	Details
Test Case ID	STC001
Test Case Title	Simulated software reaction on GPR connection loss
Test Steps	1. Start simulation of automated flight with simulated GPR and connected software; 2. Simulate the GPR connection loss with PowerShell; 3. Monitor software behavior.1
Test Data	Script: GPR_connection_close.ps1
Expected Results	1. Software logs the connection loss; 2. Software logs that drone is switched to the safe mode and stopped it in place; 3. Operator receives notification.
Actual Results	Logs collected, dronesimulation stopped and simulated switch to the safe mode, notification received
Status	Pass
Comments	N/A

Field	Details
Test Case ID	STC002
Test Case Title	Software reaction on GPR connection loss during automated flight
Test Steps	1. Start automated flight with GPR and connected software; 2. Simulate connection loss with PowerShell; 3. Monitor software and drone behavior.
Test Data	Script: GPR_connection_close.ps1
Expected Results	1. Software logs the connection loss; 2. Software logs that drone is switched to the safe mode and stopped it in place; 3. Operator receives notification.
Actual Results	Logs collected, drone stopped and switched to the safe mode, notification received
Status	Pass
Comments	N/A

Field	Details
Test Case ID	HTC001
Test Case Title	Stress (Vibration) application to the GPR device for 30 minutes
Test Steps	1. Connected to the software GPR is put on a vibration plate; 2. Stress is applied to the GPR for 30 minutes; 3. Monitoring of visual deformations during the test; 4. Check device inner parts and possible damage after stress application.
Test Data	N/A
Expected Results	1. GPR handles the stress and do not close the connection with software;
Actual Results	GPR handles stress, no mechanical defects detected after applying stress
Status	Pass
Comments	N/A

Field	Details
Test Case ID	HTC002
Test Case Title	Twice as much stress (vibration) application to the GPR device for 30 minutes
Test Steps	1. Connected to the software GPR is put on a vibration plate; 2. Twice more stress is applied to the GPR for 30 minutes; 3. Monitoring of visual deformations during the test; 4. Check device inner parts and possible damage after stress application
Test Data	N/A
Expected Results	1. GPR handles the stress and do not close the connection with software;
Actual Results	Cracks started to appear on the GPR device
Status	Fail
Comments	P.S. Hope that actual GPR can handle such examination, but this fail case is written only for demo purposes :)