

Test Planner and Tracker

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Test No. ID	Related Use case	Pre-conditions	Test Description (steps)	Expected Outcome	R1 Outcome (color code cell background)	Comments (if test case failed)	R2 Outcome (color code cell background)	Comments (if test case failed)
1	Drone Surveillance and Tracking	Drone must establish connection to the device with software via MavLink. Ground radar must establish connection with software.	1. Ensure the software receives drone coordinates through MavLink. 2. Verify ground radar provides coordinates of enemy drones. 3. Check map resizes based on distance between friendly and enemy drones.	The map displays friendly and enemy drone positions accurately within the specified radius.				
2	Status Monitoring and Maintenance	Drone must establish connection to device with software via MavLink.	1. Connect to the drone and check signal strength, remaining ammunition, and battery life. 2. Verify operator can make decisions based on provided information.	1. Connect to the drone and check signal strength, remaining ammunition, and battery life. 2. Verify operator can make decisions based on provided information.		Working on Ammunition, Client Bottleneck - Custom mavlink		
3	User Configuration and Settings	N/A	Grid Lines & Zoom: 1. Toggle grid lines on/off. 2. Zoom in/out using corresponding icons. Updates & No-kill zones: 3. Open settings panel. 4. Check for system updates. 5. Define 'no-kill' zones on map. 6. Verify system encrypts and stores 'no-kill' zones locally.	Grid lines and zoom options are configurable. System updates are checked and 'no-kill' zones are encrypted and stored locally.				
4	Threat Response and Engagement	Enemy drone must be detected by ground radar and information received by the system.	1. Dispatch friendly drone to counter enemy drone. 2. Send kill command to friendly drone. 3. Confirm kill command.	Friendly drone neutralizes enemy drone as commanded.		All front end and backend ready - just custom mavlink is left for kill, client bottleneck		
5	Kill Confirmation	Enemy drone must be authorized to be eliminated.	1. Initiate 'kill' command. 2. Switch to live video feed of drone.	Live video feed displays successful elimination of enemy drone.				
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