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| Flight # | | | **UMD-1** | | | **3DR Iris** | |
| Date | | | July 17, 2017 | | |
| UAS Platform | | | 3DR Iris | | |
| Call-sign | | | IRIS Squad | | |
| Location | | | AMA Field | | |
| Pilot | | | Ryan Henderson(UMD) | | |
| Visual Observer | | |  | | |
| Target Flight Time | | | 0900 | | |
| Actual T/O Time | | |  | T/O Voltage |  |
| Actual Land Time | | |  | Land Voltage |  |
| Actual Flight Time | | |  | Voltage Delta |  |
| Test Objective | | | Take Images to improve the accuracy of the Neural Network | | |
|  |  | **Action** | | | | | **Remarks** |
|  | 1 | Place Marker 1 in Location 2 | | | | | L2:      38°21’54.16”N 76°32’10.42”W |
|  | 2 | Place Marker 2 in Location 3 | | | | | L3:      38°21’54.15”N 76°32’  8.45”W |
|  | 3 | Establish IP Radio Communication with IRIS Squad | | | | |  |
|  | 4 | Launch VR Application | | | | | Application Options  --unity-mode=on  --vlc-mode=on  --matlab-mode=compiled  --unity-build=/d/Files/DroneSwarm/VRBuild |
|  | 5 | Confirm Live Video | | | | |  |
|  | 6 | Takeoff Iris 1 | | | | |  |
|  | 7 | Raise IRIS 1 Altitude to 50’ | | | | |  |
|  | 8 | Move IRIS 1 to Loiter Area | | | | | Loiter: 38°21’54.85”N 76°32’14.91”W |
|  | 9 | Takeoff IRIS 2 | | | | |  |
|  | 10 | Raise IRIS 2 Altitude to 50’ | | | | |  |
|  | 11 | Move IRIS 2 to Location 3 | | | | | L3:      38°21’54.15”N 76°32’  8.45”W |
|  | 12 | Hover IRIS 2 for 60 seconds | | | | | Wait for Application to Confirm Target |
|  | 13 | Takeoff IRIS 3 | | | | |  |
|  | 14 | Raise IRIS 3 to Altitude to 100’ | | | | |  |
|  | 15 | Move IRIS 3 to Location 2 | | | | | L2:      38°21’54.16”N 76°32’10.42”W |
|  | 16 | Hover IRIS 3 for 60 seconds | | | | | Wait for Application to Confirm Target |
|  | 17 | Move IRIS 2 to Loiter Area | | | | | Loiter: 38°21’54.85”N 76°32’14.91”W |
|  | 18 | Hover IRIS 2 for 60 seconds | | | | | Wait for Application to Lose Target |
|  | 19 | Move IRIS 3 to Loiter Area | | | | |  |
|  | 20 | Hover IRIS 3 for 60 seconds | | | | | Wait for Application to lose target |
|  | 21 | Move IRIS 1 to Location 2 | | | | |  |
|  | 22 | Hover IRIS 1 for 60 seconds | | | | | Wait for Application to Lose Target |
|  | 23 | Raise IRIS 1 Altitude to 350’ | | | | | Slowly, over the course of 60 seconds  Operator Look for Loss of Target |
|  | 24 | Land IRIS Squadron | | | | |  |
| Home: 38°21’54.20”N 76°31’11.86”W  Loiter: 38°21’54.85”N 76°32’14.91”W  L1:      38°21’54.70”N 76°32’12.31”W  L2:      38°21’54.16”N 76°32’10.42”W  L3:      38°21’54.15”N 76°32’  8.45”W  L4:      38°21’54.37”N 76°32’  2.89”W | | | | | | | |