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| --- | --- | --- | --- | --- | --- | --- | --- |
| Flight # | | | **UMD-1** | | | **3DR Iris** | |
| Date | | | July 17, 2017 | | |
| UAS Platform | | | 3DR Iris | | |
| Call-sign | | | IRIS 1 | | |
| 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 1 | | | | | L1:      38°21’54.70”N 76°32’12.31”W |
|  | 2 | Establish IP Radio Communication with IRIS 1 | | | | |  |
|  | 3 | Take Off IRIS 1 from Home | | | | | Home: 38°21’54.20”N 76°31’11.86”W |
|  | 4 | Raise Altitude to 25’ | | | | |  |
|  | 5 | Hover over Location 1 | | | | | L1:      38°21’54.70”N 76°32’12.31”W |
|  | 6 | Begin Recording Images | | | | |  |
|  | 7 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 8 | Raise Altitude to 75’ | | | | |  |
|  | 9 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 10 | Raise Altitude to 150’ | | | | |  |
|  | 11 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 12 | Raise Altitude to 300’ | | | | |  |
|  | 13 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 14 | End Recording | | | | |  |
|  | 15 | Land IRIS 1 | | | | |  |
|  | 16 | Confirm Images | | | | | Look for Distortions, Loss of Link, ect. |
|  | 17 | Place Marker 2 to Location 2 | | | | | L2:      38°21’54.16”N 76°32’10.42”W |
|  | 18 | Takeoff IRIS 1 | | | | |  |
|  | 19 | Raise Altitude to 25’ | | | | |  |
|  | 20 | Begin Recording | | | | |  |
|  | 21 | Hover over Location 2 | | | | | L2:      38°21’54.16”N 76°32’10.42”W |
|  | 22 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 23 | Raise Altitude to 75’ | | | | |  |
|  | 24 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 25 | Raise Altitude to 150’ | | | | |  |
|  | 26 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 27 | Raise Altitude to 300’ | | | | |  |
|  | 28 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 29 | End Recording | | | | |  |
|  | 30 | Land IRIS 1 | | | | |  |
|  | 31 | Confirm Images | | | | |  |
|  | 32 | Move Marker 2 to Location 3 | | | | | L3:      38°21’54.15”N 76°32’  8.45”W |
|  | 33 | Takeoff IRIS 1 | | | | |  |
|  | 34 | Raise Altitude to 25’ | | | | |  |
|  | 35 | Hover over Location 3 | | | | | L3:      38°21’54.15”N 76°32’  8.45”W |
|  | 36 | Begin Recording | | | | |  |
|  | 37 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 38 | Raise Altitude to 75’ | | | | |  |
|  | 39 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 40 | Raise Altitude to 150’ | | | | |  |
|  | 41 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 42 | Raise Altitude to 300’ | | | | |  |
|  | 43 | Rotate 360° | | | | | Slowly over 5 seconds |
|  | 44 | End Recording | | | | |  |
|  | 45 | Land IRIS 1 | | | | |  |
| 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 | | | | | | | |