



LEVEL 4 | OBSTRUCTED SCORABLE SCENARIOS

Perform the designated flight paths to triangulate around dual bucket rails in various orientations. Align with perpendicular buckets then angled buckets. Use zoom and exposure control to identify targets inside the buckets.

- All sequences have 1–10 positions with 20 alternating white and black buckets to score:
- Score ALIGNMENT POINTS by capturing a SINGLE IMAGE of the inscribed rings to verify alignments during or after the trial: UNBROKEN RINGS (5 pts), BROKEN RINGS (1 pt).
- Score ACUITY POINTS by identifying and calling out the 5 increasingly small VISUAL ACUITY TARGET GAPS (1 pt each).
- Faults for extreme deviations from the intended flight path or contact with any object ends the trial to ensure safety.
- Timer starts at launch and ends after the last task is completed. Trial time limits are typically set to 5 minutes each (25 minutes to complete all 5 tests) although organizations may set their own trial time limits and passing scores.

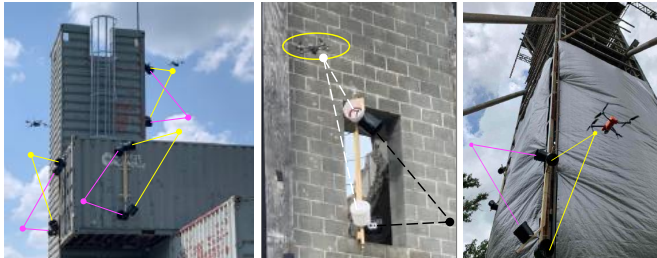
Obstructed Search Scenarios

Day and Night Trials

USE SETS OF 5 “OFFSET” DUAL BUCKET RAILS
HORIZONTALS DISTRIBUTED WITH OBJECTS OF INTEREST



VERTICALS IN ELEVATED WINDOWS AND ON STRUCTURES

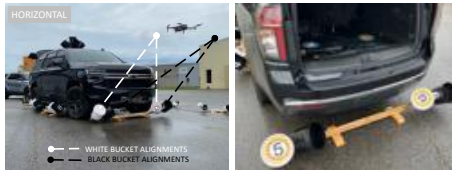
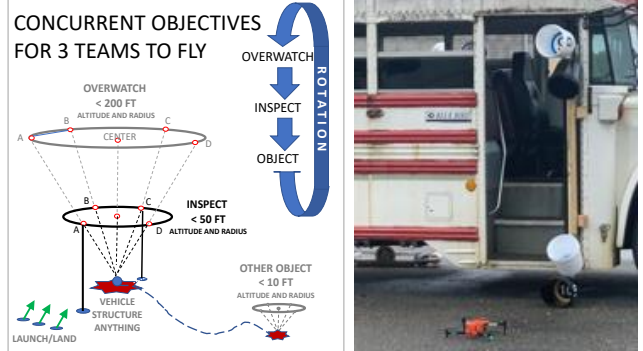


- Teams concurrently fly separate objectives set up at safe distances and/or altitudes apart (with a clearly designated and safe return path).
- Each pilot flies for 15 minutes across 3 different objectives for 5 minutes each. Teams move as necessary to maintain sight lines and communication.
- Scenarios restart with a different rotation of Pilot, Proctor, and VO.

Obstructed Vehicle Inspection Scenarios

Day and Night Trials

USE SETS OF 5 “INLINE” DUAL BUCKET RAILS
DISTRIBUTED THROUGHOUT THE SCENARIO



LEVEL 4 | OBSTRUCTED
SCORABLE SCENARIOS

Pilot LAST Name _____
 Pilot FIRST Name _____
 Pilot Organization _____
 Drone Make _____
 Drone Model _____
 Facility Location _____
 Date (YYYY/MM/DD) _____ Team #: _____



PROCTOR NAME _____

BUCKET DIAMETER 4 IN (10 CM) 8 IN (20 CM) (CIRCLE ONE)		VISIBILITY LIGHTED 300+ LUX DIM 1-300 LUX DARK < 1 LUX (CIRCLE ONE)			WIND AVERAGE _____ GUSTS _____ MPH MPH (FILL IN)		PILOT VIEW LINE OF SIGHT INTERFACE ONLY FACINE LANE BACK TO LANE OPTIONAL V.O. MANDATORY V.O. (CIRCLE ONE)		TIME LIMIT 5 MIN 10 MIN _____ MIN (CIRCLE ONE OR FILL IN)		
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ALIGNMENT SCORE: Circle points for images with UNBROKEN RINGS (5 pts), BROKEN RINGS (1 pt), Draw a line through all incomplete.
ACUITY SCORE: Circle correctly identified GAP DIRECTIONS in the answer key (1 pt each).

		BUCKETS	ALIGNMENT	ACUITY
START TIMER (CAPTURE CLOCK IMAGE)	:	NUMBER	IMAGE POINTS (5 OR 1 POINT)	CIRCLE GAPS (1 POINT EACH)
1	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	1	5 1 0	
2	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	1A		TR B TR L BR
3	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	2	5 1 0	
4	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	2A		L BR T TL R
5	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	3	5 1 0	
6	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	3A	- - -	BR T TL R BL
7	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	4	5 1 0	
8	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	4A		T BL B TR L
9	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	5	5 1 0	
10	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	5A		BL R TL L BL
11	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	6	5 1 0	
12	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	6A		TR B TR L BR
13	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	7	5 1 0	
14	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	7A		L BR T TL R
15	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	8	5 1 0	
16	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	8A		BR T TL R BL
17	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	9	5 1 0	
18	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	9A		T BL B TR L
19	PERPENDICULAR BUCKET: ALIGN AND CAPTURE IMAGE	10	5 1 0	WHILE PERCHED
20	ANGLED BUCKET: CALL OUT ACUITY GAP DIRECTIONS	10A		BL R TL L BL
STOP TIMER. RECORD SCORES AND ELAPSED TIME.			/50	/50
ELAPSED TIME (MM:SS)				

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ELAPSED TIME (MM:SS)				