

LEVEL 5 | CONFINED

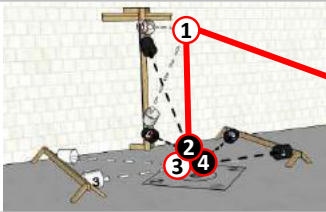
PAYLOAD FUNCTIONALITY

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 10 positions with 20 buckets to score: **1 2 3 4 – 3 2 1 – 2 3 4** (*forward–reverse–forward*)
- 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).
- Start timer at launch and end after the last task is completed. Trial time limits are typically 5 minutes each (25 minutes to complete all 5 tests) although organizations may set their own trial time limits and passing scores.
- Extreme deviations from the intended flight path, or contact with any object, ends the trial to ensure safety.

PERCH

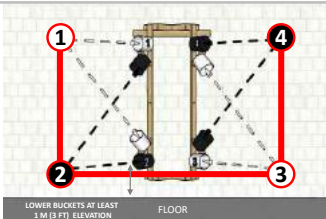
PAY 6



- Land or hover just above the ground within proximity to a wall or obstacle with additional ground obstacles on both sides. Launch and land repeatedly if necessary to score all buckets in the sequence of perch tasks.
- Inspect **vertical** and **horizontal** object features **all around the aircraft**.
- **Complete 10 positions to score up to 50 Alignment points and 50 Acuity points.**

WALL

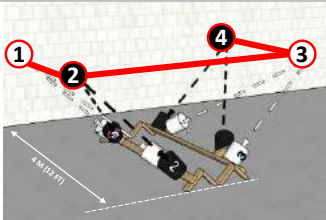
PAY 7



- Fly within proximity to a wall or obstacle at **45 degrees from forward** of the aircraft.
- Inspect **vertical** object features **upward** and **downward**.
- **Complete 10 positions to score up to 50 Alignment points and 50 Acuity points.**

GROUND

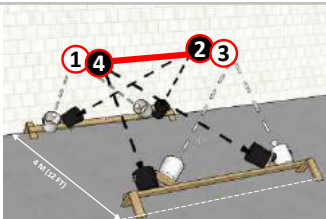
PAY 8



- Fly within proximity to a wall or obstacles at **90 degrees from forward** of the aircraft.
- Inspect **horizontal** object features **leftward** and **rightward**.
- **Complete 10 positions to score up to 50 Alignment points and 50 Acuity points.**

ALLEY

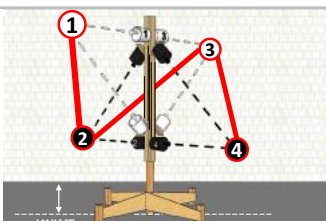
PAY 9



- Fly within proximity to a wall or obstacle in **front of the aircraft (0 degrees)** and **behind the aircraft (180 degrees)**.
- Inspect **horizontal** object features **leftward** and **rightward**.
- **Complete 10 positions to score up to 50 Alignment points and 50 Acuity points.**

POST

PAY 10



- Fly within proximity to a post and wall or obstacle and pass between the post and the wall.
- Inspect **vertical** object features **upward** and **downward** all around the post.
- **Complete 10 positions to score up to 50 Alignment points and 50 Acuity points.**

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PAYLOAD FUNCTIONALITY

Pilot LAST Name _____

Pilot FIRST Name _____

Pilot Organization _____

Drone Make _____

Drone Model _____

Facility Location _____

Date (YYYY/MM/DD) _____ Team #: _____



PROCTOR NAME _____

BUCKET DIAMETER		VISIBILITY			WIND		PILOT VIEW		TIME LIMIT		
2 IN (5 CM)	4 IN (10 CM)	LIGHTED 300+ LUX	DIM 1-300 LUX	DARK < 1 LUX	AVERAGE MPH	GUSTS MPH	LINE OF SIGHT FACINE LANE OPTIONAL V.O.	INTERFACE ONLY BACK TO LANE MANDATORY V.O.	5 MIN	10 MIN	MIN
(CIRCLE ONE)		(CIRCLE ONE)			(FILL IN)		(CIRCLE ONE)		(CIRCLE ONE OR FILL IN)		

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).

PERCH (PAY 6)	WALL (PAY 7)	GROUND (PAY 8)	ALLEY (PAY 9)	POST (PAY 10)
21 IMAGES TO CAPTURE	21 IMAGES TO CAPTURE	21 IMAGES TO CAPTURE	21 IMAGES TO CAPTURE	21 IMAGES TO CAPTURE
<ul style="list-style-type: none"> 1 PRE-LAUNCH 20 ALIGNMENTS WHILE PERCHED 	<ul style="list-style-type: none"> 1 PRE-LAUNCH 20 ALIGNMENTS 	<ul style="list-style-type: none"> 1 PRE-LAUNCH 20 ALIGNMENTS 	<ul style="list-style-type: none"> 1 PRE-LAUNCH 20 ALIGNMENTS 	<ul style="list-style-type: none"> 1 PRE-LAUNCH 20 ALIGNMENTS

ALIGNMENT			ACUITY		
BUCKET SEQUENCE	IMAGE POINTS	CIRCLE CORRECT GAPS (1 POINT EACH)	BUCKET SEQUENCE	IMAGE POINTS	CIRCLE CORRECT GAPS (1 POINT EACH)
1	5	1	1	5	1
1A		TR B TR L BR	1A		TR B TR L BR
2	5	1 WHILE PERCHED	2	5	1
2A		L BR T TL R	2A		L BR T TL R
3	5	1	3	5	1
3A		BR T TL R BL	3A		BR T TL R BL
4	5	1	4	5	1
4A		T BL B TR L	4A		T BL B TR L
3	5	1	3	5	1
3A		BR T TL R BL	3A		BR T TL R BL
2	5	1 WHILE PERCHED	2	5	1
2A		L BR T TL R	2A		L BR T TL R
1	5	1	1	5	1
1A		TR B TR L BR	1A		TR B TR L BR
2	5	1 WHILE PERCHED	2	5	1
2A		L BR T TL R	2A		L BR T TL R
3	5	1	3	5	1
3A		BR T TL R BL	3A		BR T TL R BL
4	5	1	4	5	1
4A		T BL B TR L	4A		T BL B TR L
SCORE		SCORE	SCORE		SCORE
/50		/50	/50		/50

ELAPSED TIME (MM : SS) _____

PASS CIRCLE ONE FAIL