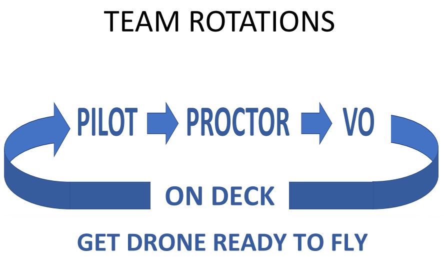
Teams Rotate Through Each Role

Each Pilot flies a 5-minute trial with help from others.
A 3-4 person team completes all 5 tests in 2 hours.



TEAM ROTATIONS

PILOT ➡ PROCTOR ➡ VO

ON DECK

GET DRONE READY TO FLY

VO
PILOT
FACING AWAY FROM THE TEST LANE
PROCTOR

Four person teams always have one person getting their aircraft ready to launch right after the previous lands.

Three person teams work too, but require some time between each rotation to prepare the next aircraft.

PILOT

- Maintain control of the aircraft.
- Call out each intention of movement before doing so.
- Call out each bucket alignment and acuity target gap.

PROCTOR

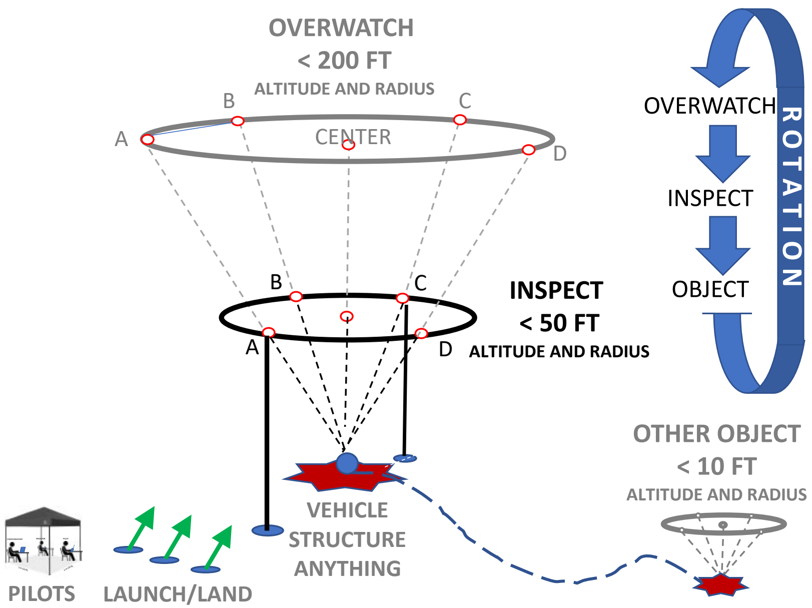
- Fill in the form header.
- Read the test procedures to the Pilot.
- Confirm, record, and attest to scoring after the trial.

VISUAL OBSERVER (VO)

- Maintain sight with the aircraft and surroundings.
- Repeat the Pilot's intention of movement to confirm.
- Call out corrections and warnings as necessary.

Teams Sequence Through Scenarios

Each Pilot flies a 15-minute scenario, sequencing through 3 objectives for 5 minutes each.

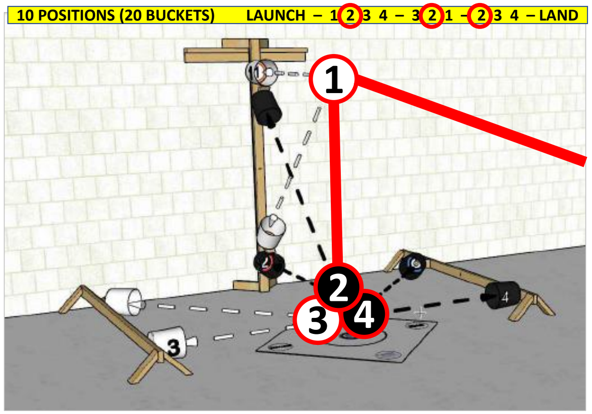

OVERWATCH
< 200 FT
ALTITUDE AND RADIUS
A
B
CENTER
C
D
B
C
A
D
INSPECT
< 50 FT
ALTITUDE AND RADIUS
OVERWATCH
INSPECT
OBJECT
ROTATION
OTHER OBJECT
< 10 FT
ALTITUDE AND RADIUS
VEHICLE
STRUCTURE
ANYTHING
PILOTS
LAUNCH/LAND

- This scenario mechanization enables embedded bucket scoring tasks to be performed similarly by all participating Pilots. So the results are comparable within the same scenario layout. Additional tactics can be overlayed onto these scenarios at your facility.
- Up to 3 teams concurrently fly different scenario objectives from safe distances and altitudes apart.
- Teams move as necessary to maintain sight lines with their aircraft and communications with other teams. The overwatch team leads communications.
- Scenarios restart every 20 minutes with a different rotation of Pilot, Proctor, and VO.

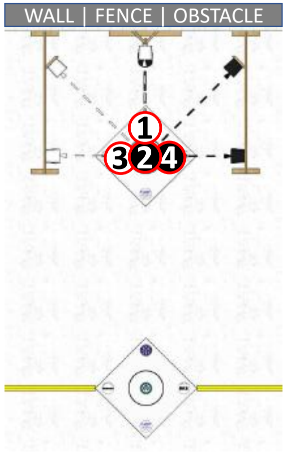
Perch (PAY 6)

Obstructed Test Lane

#2 ALIGNMENT WHILE PERCHED


10 POSITIONS (20 BUCKETS)
LAUNCH – 1 2 3 4 – 3 2 1 – 2 3 4 – LAND
1
2
3
4

TOP VIEW



- Fly and perch near a wall or obstacle in front of the aircraft with ground obstacles on both sides.
- Inspect vertical and horizontal object features upward, downward, leftward and rightward.
- BUCKET #2 MUST BE ALIGNED WHILE PERCHED, but all others can be aligned/identified either while perched or hovering as if inspecting underbody objects of interest.

SCORING

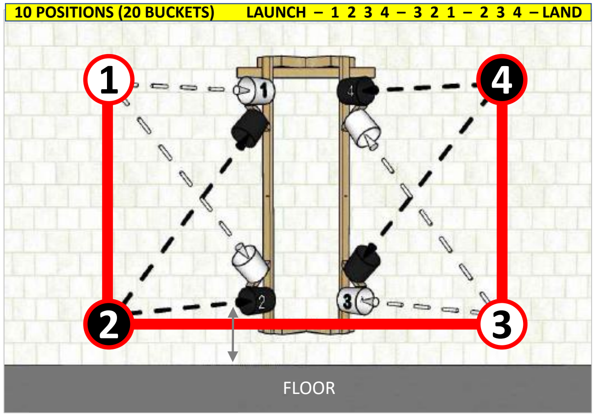
Alignment Points in Perpendicular Buckets (50 Total):
Align with each perpendicular bucket to CAPTURE A SINGLE IMAGE OF THE ALIGNMENT RING for scoring during or after the trial.

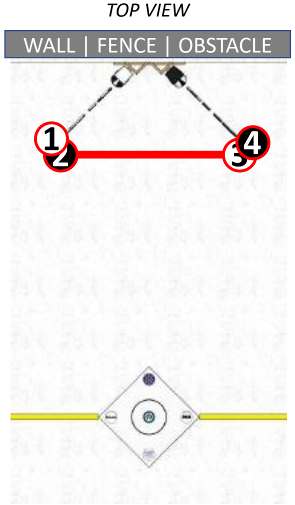
Acuity Points in Angled Buckets (50 Total):
Align with each angled bucket to IDENTIFY ACUITY GAPS through the pilot interface. Images are optional for documentation but use the answer key for scoring..

	OBSTRUCTED | **PERCH**	BUCKETS	ALIGNMENT	ACUITY				
	START TIMER	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	WHILE PERCHED				
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	3	5 1 0					
10	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A		BR	T	TL	R	BL
11	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5 1 0	WHILE PERCHED				
12	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A		L	BR	T	TL	R
13	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	1	5 1 0					
14	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	1A		TR	B	TR	L	BR
15	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5 1 0	WHILE PERCHED				
16	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A		L	BR	T	TL	R
17	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	3	5 1 0					
18	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A		BR	T	TL	R	BL
19	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	4	5 1 0					
20	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	4A		T	BL	B	TR	L
	ELASPED TIME: (MM:SS)	SCORES	/50	/50				

Wall (PAY 7)

Obstructed Test Lane


10 POSITIONS (20 BUCKETS)
LAUNCH – 1 2 3 4 – 3 2 1 – 2 3 4 – LAND
1
2
3
4
FLOOR



- Fly near a wall or obstacle at 45 degrees from forward of the aircraft.
- Inspect vertical object features upward and downward.

SCORING

Alignment Points in Perpendicular Buckets (50 Total):

Align with each perpendicular bucket to CAPTURE A SINGLE IMAGE OF THE ALIGNMENT RING for scoring during or after the trial.

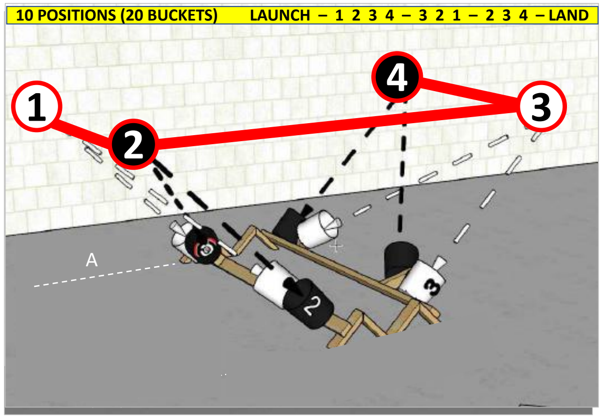
Acuity Points in Angled Buckets (50 Total):

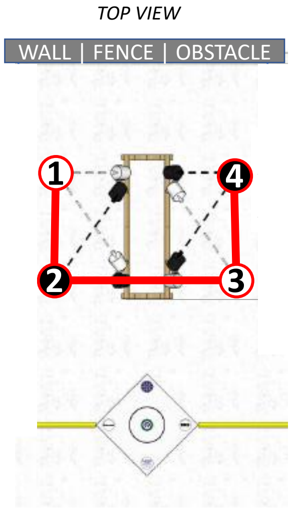
Align with each angled bucket to IDENTIFY ACUITY GAPS through the pilot interface. Images are optional for documentation but use the answer key for scoring.

	OBSTRUCTED | **WALL**	BUCKETS	ALIGNMENT			ACUITY				
	START TIMER	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	3	5	1	0					
10	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A				BR	T	TL	R	BL
11	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5	1	0					
12	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A				L	BR	T	TL	R
13	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	1	5	1	0					
14	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	1A				TR	B	TR	L	BR
15	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5	1	0					
16	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A				L	BR	T	TL	R
17	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	3	5	1	0					
18	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A				BR	T	TL	R	BL
19	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	4	5	1	0					
20	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	4A				T	BL	B	TR	L
	ELASPED TIME: (MM:SS)	SCORES	/50			/50				

Ground (PAY 8)

Obstructed Test Lane


10 POSITIONS (20 BUCKETS)
LAUNCH – 1 2 3 4 – 3 2 1 – 2 3 4 – LAND
1
2
3
4
A
2
3



- Fly near a wall or obstacle at 90 degrees from forward of the aircraft.
- Inspect horizontal object features leftward and rightward.

SCORING

Alignment Points in Perpendicular Buckets (50 Total):

Align with each perpendicular bucket to CAPTURE A SINGLE IMAGE OF THE ALIGNMENT RING for scoring during or after the trial.

Acuity Points in Angled Buckets (50 Total):

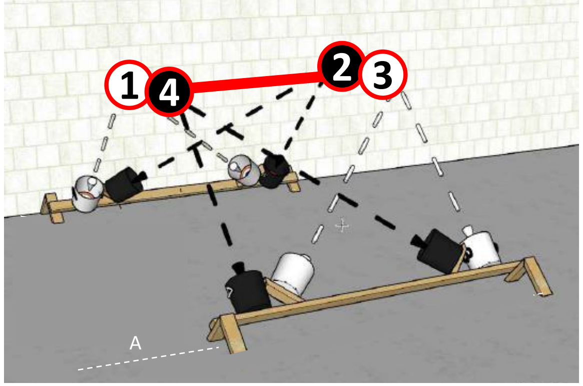
Align with each angled bucket to IDENTIFY ACUITY GAPS through the pilot interface. Images are optional for documentation but use the answer key for scoring.

	OBSTRUCTED | GROUND	BUCKETS	ALIGNMENT			ACUITY				
	START TIMER	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	3	5	1	0					
10	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A				BR	T	TL	R	BL
11	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5	1	0					
12	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A				L	BR	T	TL	R
13	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	1	5	1	0					
14	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	1A				TR	B	TR	L	BR
15	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5	1	0					
16	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A				L	BR	T	TL	R
17	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	3	5	1	0					
18	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A				BR	T	TL	R	BL
19	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	4	5	1	0					
20	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	4A				T	BL	B	TR	L
	ELASPED TIME: (MM:SS)	SCORES	/50			/50				

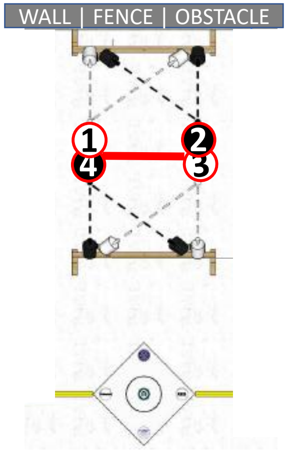
Alley (PAY 9)

Obstructed Test Lane

10 POSITIONS (20 BUCKETS) LAUNCH – 1 2 3 4 – 3 2 1 – 2 3 4 – LAND



TOP VIEW



- Fly near a wall or obstacle in front of the aircraft (0 degrees) and behind the aircraft (180 degrees).
- Inspect horizontal object features leftward and rightward.

SCORING

Alignment Points in Perpendicular Buckets (50 Total):

Align with each perpendicular bucket to CAPTURE A SINGLE IMAGE OF THE ALIGNMENT RING for scoring during or after the trial.

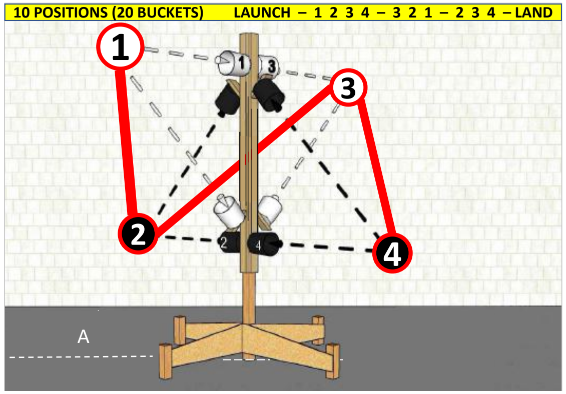
Acuity Points in Angled Buckets (50 Total):

Align with each angled bucket to IDENTIFY ACUITY GAPS through the pilot interface. Images are optional for documentation but use the answer key for scoring.

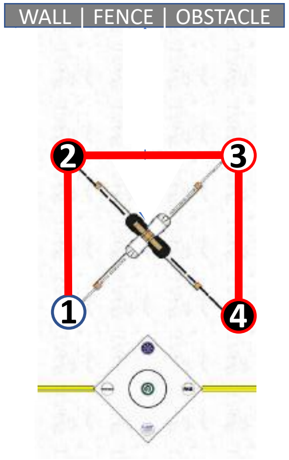
OBSTRUCTED | **ALLEY**		BUCKETS	ALIGNMENT	ACUITY				
START TIMER		NUMBER	IMAGE POINTS (5 OR 1 POINT)	CIRCLE GAPS (1 POINT EACH)				
1	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	1	5 1 0					
2	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	1A		TR	B	TR	L	BR
3	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE 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	3	5 1 0					
10	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A		BR	T	TL	R	BL
11	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5 1 0					
12	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A		L	BR	T	TL	R
13	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	1	5 1 0					
14	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	1A		TR	B	TR	L	BR
15	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5 1 0					
16	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	2A		L	BR	T	TL	R
17	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	3	5 1 0					
18	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	3A		BR	T	TL	R	BL
19	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	4	5 1 0					
20	*ANGLED BUCKET:* CALL OUT ACUITY GAP DIRECTIONS	4A		T	BL	B	TR	L
ELASPED TIME: (MM:SS)		SCORES	/50	/50				

Post (PAY 10)

Obstructed Test Lane


10 POSITIONS (20 BUCKETS)
LAUNCH – 1 2 3 4 – 3 2 1 – 2 3 4 – LAND
1
2
3
4
A

TOP VIEW



- Fly between the post and a wall or obstacle.
- Inspect vertical object features upward and downward.

SCORING

Alignment Points in Perpendicular Buckets (50 Total):

Align with each perpendicular bucket to CAPTURE A SINGLE IMAGE OF THE ALIGNMENT RING for scoring during or after the trial.

Acuity Points in Angled Buckets (50 Total):

Align with each angled bucket to IDENTIFY ACUITY GAPS through the pilot interface. Images are optional for documentation but use the answer key for scoring.

	OBSTRUCTED | **POST**	BUCKETS	ALIGNMENT	ACUITY				
	START TIMER	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	3	5 1 0					
10	*ANGLED BUCKET*: CALL OUT ACUITY GAP DIRECTIONS	3A		BR	T	TL	R	BL
11	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5 1 0					
12	*ANGLED BUCKET*: CALL OUT ACUITY GAP DIRECTIONS	2A		L	BR	T	TL	R
13	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	1	5 1 0					
14	*ANGLED BUCKET*: CALL OUT ACUITY GAP DIRECTIONS	1A		TR	B	TR	L	BR
15	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	2	5 1 0					
16	*ANGLED BUCKET*: CALL OUT ACUITY GAP DIRECTIONS	2A		L	BR	T	TL	R
17	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	3	5 1 0					
18	*ANGLED BUCKET*: CALL OUT ACUITY GAP DIRECTIONS	3A		BR	T	TL	R	BL
19	*PERPENDICULAR BUCKET*: ALIGN AND CAPTURE IMAGE	4	5 1 0					
20	*ANGLED BUCKET*: CALL OUT ACUITY GAP DIRECTIONS	4A		T	BL	B	TR	L
	ELASPED TIME: (MM:SS)	SCORES	/50	/50				