

Drone Tests and Scorable Scenarios for Evaluating Aircraft Capabilities and Remote Pilot Proficiency in Open, Obstructed, and Confined Environments (Levels 1-5)



Test Director

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Website

RobotTestMethods.nist.gov



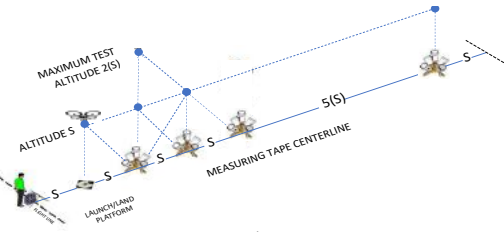

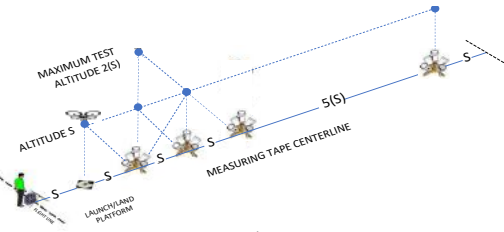

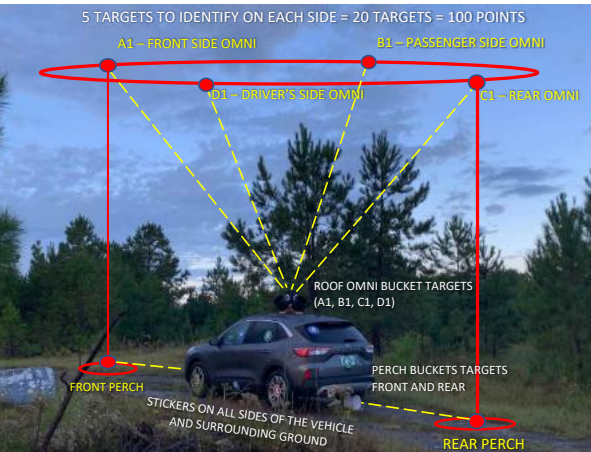

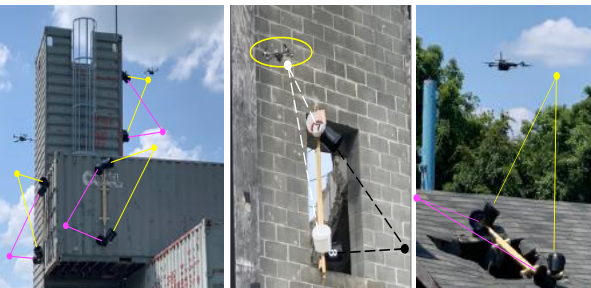




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Levels of Proficiency For Different Missions

<p>LEVEL 1</p> 	<p>OPEN Test Lane Basic Proficiency/Safety Checkride Evaluate positive aircraft control in quick trials for novices and recreational pilots using the first 2 of 5 flight paths.</p> <ul style="list-style-type: none"> • 10 minutes (5 minutes each) • 40 Alignment Points 	 <p>ALIGNED ALIGNED NOT ALIGNED</p> 
<p>LEVEL 2</p> 	<p>OPEN Test Lane Maneuvering Trials Evaluate open area maneuvering around ground objects using all 5 flight paths with no additional pilot workload.</p> <ul style="list-style-type: none"> • 25 minutes (5 minutes each) • 100 Alignment Points 	 <p>5(S) MEASURING TAPE CENTERLINE</p>
<p>LEVEL 3</p> 	<p>OPEN Test Lane Payload Functionality Trials Evaluate open area maneuvering while controlling zoom and exposure to identify ground objects using all 5 flight paths.</p> <ul style="list-style-type: none"> • 25 minutes (5 minutes each) • 100 Alignment & 100 Acuity Points 	 <p>5 TARGETS TO IDENTIFY ON EACH SIDE = 20 TARGETS = 100 POINTS</p> <p>A1 - FRONT SIDE OMNI B1 - PASSENGER SIDE OMNI</p> <p>D1 - DRIVER'S SIDE OMNI C1 - REAR OMNI</p> <p>ROOF OMNI BUCKET TARGETS (A1, B1, C1, D1)</p> <p>FRONT PERCH PERCH BUCKETS TARGETS FRONT AND REAR</p> <p>REAR PERCH</p> <p>STICKERS ON ALL SIDES OF THE VEHICLE AND SURROUNDING GROUND</p>
<p>LEVEL 4</p> 	<p>OBSTRUCTED Test Lane Payload Functionality Trials Evaluate maneuvering in close proximity to objects while controlling zoom and exposure.</p> <ul style="list-style-type: none"> • 25 minutes (5 minutes each) • 50 Alignment & 50 Acuity Points 	
<p>LEVEL 5</p> 	<p>CONFINED Test Lane Payload Functionality Trials Evaluate maneuvering in tight spaces, dealing with the drone's own turbulent air, while controlling zoom and exposure.</p> <ul style="list-style-type: none"> • 25 minutes (5 minutes each) • 50 Alignment & 50 Acuity Points 	 <p>INSIDE VEHICLES OR ROOM-TO-ROOM</p> <p>1</p>