Scenario # in PP and Qualtrics		1	2	3	4	5	6	7	8	9
Scenarios:		Novice Pilot	Novice Pilot	Novice Pilot	Average Pilot	Average Pilot	Average Pilot	Experienced Pilot	Experienced Pilot	Experienced Pilot
(Note: Not all of these need to be filled in for every flight.)		Average drone	Poor Drone	Good Drone	Good Drone	Average Drone	Poor Drone	Good Drone	Poor Drone	Average Drone
Vingette attributes:										
Pilot	**Broad categories**	Poor conditions	Average Conditions	Good Conditions	Poor conditions	Average Conditions	Good Conditions	Poor conditions	Average Conditions	Good Conditions
		Difficult mission	Easy Mission	Average Mission	Easy Mission	Average Mission	Difficult Mission	Average Mission	Difficult Mission	Easy Mission
Actual flight hours	Few/moderate/many hours	Few actual flight hours	Very few actual flight hours	Few actual flight hours	Moderate number of actual flight hours	Moderate number of actual flight hours	Moderate number of actual flight hours	Many actual flight hours	Many actual flight hours	Many actual flight hours
Simulated flight hours	Few/moderate/many simulated flight hours	Few simulated flight hours	Moderate number of simulated flight hours	No simulated flight hours	Moderate number of simulated flight hours	Few simulated flight hours	Many simulated flight hours	Many simulated flight hours	Few simulated flight hours	Moderate number of simulated flight hours
Adverse condition flight experience (weather, controlled airspace, etc.)	Very little/little/some/lots of experience (specifics about what kind of experience	Some experience with windy weather. Little experience flying in busy airspace.	Very little experience with adverse weather. No experience flying in busy airspace	Very little experience with adverse weather. Little experience flying in busy airspace.	Moderate experience with windy and other adverse weather. Moderate experience flying in busy airspace.	Lots of experience with windy and other adverse weather. Little experience flying in busy airspace.	Very little experience with adverse weather. Moderate experience flying in busy airspace.	Lots of experience with windy and other adverse weather. Moderate experience flying in busy airspace.	Moderate experience with windy and other adverse weather. Lots of experience flying in busy airspace.	Lots of experience with windy and other adverse weather. Moderate experience flying in busy airspace.
Pilot incident history	No/one/few/lots of crashes	No reported incidents.	No reported incidents.	One reported incident. Pilot lost control and flew into a house.	Flight in a state park without permission 1 week ago.	Pilot flew in vicinity of airport without permission 2 years ago. No other incidents.	No reported incidents.	Pilot caught flying drone without FAA registration.	One reported crash when drone flew into a flock of geese.	No reported incidents.
Certifications	N/A									
Drone										
Drone flight history (flight time, crashes, successful flights, etc.)	Small/moderate/many	Moderate flight hours; one previous crash at sporting event with no injuries caused by faulty compass; many successful flights.	Small number of flight hours; one reported crash due to (other) pilot error, one reported flight above 400 feet AGL without permission.	Moderate number of flight hours. No previous crashes.	Many previous short flights. No previous crashes.	Small number of flight hours, one crash.	Long flight history, several crashes.	Moderate number of flight hours. No previous crashes	Only a small number of flights. No crashes.	Moderate number of flight hours; many successful flights; no crashes.
Drone physical history (maintenance, repairs, etc.)	Little/semi-regular/regular maintenance	Repaired after crash, compass replaced; normal repair history	Repaired after crashes. Little regular maintenance.	Regular maintenance	Regular maintenance	Repaired after crash, regular maintenance.	Repaired after crashes. Semi-regular maintenance.	Regular maintenance	Semi-regular maintenance.	Regular Maintenance.
Make/Model history	N/A	Standard type of widely used, moderately cheap, small drone.	Self-built drone from online instructions. Of medium size, heavy build.	Standard large drone, often used for commercial filming purposes.	Standard, widely used, moderately small drone.	Standard, widely used, moderately small drone.	Older model of drone. Once popular, is known for some flight instability.	Standard large drone, often used for commercial filming purposes.	Large drone used for deliveries. The drone model has a history of crashes.	Standard type of widely used, small drone.
Available sensors	N/A	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Communication method/quality	N/A	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Software	N/A	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Airspace										
Air traffic	(Description of little/moderate/heavy traffic)	Several other drones in the area. Somewhat near to a small airport.	A few other drones flying nearby in the park.	A few other drones and other airtraffic in local urban area.	Little air traffic in the area.	Moderate other drone traffic.	A small number of drones in the area.	Heavy drone traffic in a city.	Moderate traffic in the area.	Low traffic under 400 feet
Human traffic	(Sparse to crowds)	Crowds of people at a sporting event.	Small crowds nearby.	Normal numan traffic for an urban area	Few people	Many people. Flights will stay far from people.	Some people and rescue workers in the area.	Normal traffic for an urban area.	Rescue workers and people being rescued in area.	Few people, some car traffic.
Flight conditions (weather, temp, lighting)	(Good to poor)	High winds in the forecast.	Light wind gusts, patchy clouds	Light wind, no clouds	High winds, some rain, and low clouds	Low winds, some gusts, moderate low clouds.	Low winds, no clouds. Some smoke in the area.	High winds, especially when flying between buildings.	Occasional wind gusts. Weather otherwise fine.	Low winds, good visibility
Physical area (terrain, buildings)		Some school buildings and trees in the area.	A few trees, not many buildings	A moderate number of urban buildings.	Many houses, lots of trees.	Urban buildings, flights staying well above building height.	Suburban environment. Few trees.	Many buildings and trees.	Few buildings and few trees.	Few buildings and few trees.
Controlled airspace type	N/A									
Communiation issues	N/A									
Mission										
Purpose	(Recreation, delivery, inspection, filming)	Taking videos of a High School soccer game, near and above a lot of people	Getting videos of a wedding in an urban park.	Building inspection in an urban area, flying close to many buildings	Taking videos around a house for a realtor's listing, in an urbanized area.	News footage of a protest in a city, from a distance.	Film and photographs for a news organization near the site of a major railroad derailment	Film shots (b-roll) of flying down city streets and close to buildings	Delivering emergency supplies to rescue workers in an urban area after a large flood	Bridge inspections close to a moderately large airport
Complexity (number of waypoints, Single or multi drone mission, etc.)	(Simple to complex)	Complex mission, moving around to get the best shots, other drones in the area	Simple, few waypoints, some people nearby	A few waypoints, some air traffic, flying near to people	Simple, few waypoints. Some people in the area.	Distant footage, not many waypoints.	Getting footage from many angles, confusing and complex environment.	A few waypoints and some complex movement.	Complex and changing environment, lots of people in the area.	Simple, few waypoints, some people nearby
Flight rules (BVLOS/LOS, altitude, clearance from people/buildings)	N/A	Some BVLOS, flying near to people and buildings.	Limited area and low maximum height. LOS only.	Wide area, some BVLOS, flying somewhat close to buildings and people	Limited area and low maximum height. LOS only.	LOS, staying distant from crowds and buildings.	BVLOS, altitude and distance restrictions from people	BVLOS, around pre-determined path through a city	BVLOS, need to fly close to people.	Limited area and low maximum height. LOS only.
Prior Simulations of this flight	(None to several)	None	Many	Few	Many	Few	None	Many	None	Many