Flight Authorization Request to a Controlled Area

PILOT

Flight Hours:
Few actual flight hours; few simulated flight hours.

Experience with adverse conditions:
Some experience with windy weather; little experience flying in busy airspace.

Pilot incident history:
No reported incidents.
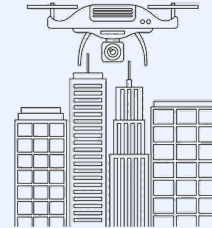
DRONE

Drone flight history:
Airframe has moderate flight hours; it has one previous crash with a different pilot caused by faulty compass.

Maintenance, repairs:
Airframe repaired after crash, compass replaced; reported regular maintenance.

Make/Model information:
Standard type of widely used, moderately cheap, light weight drone; no parachute; has basic Detect and Avoid capability.

CONDITIONS

Air traffic:
Several other drones in the area. Within 1/2 mile of small airport.

Human traffic:
Crowds of people at a sporting event; flight will not overfly people.

Weather conditions:
High winds forecast, at the edge of drone's allowed operating conditions.

Physical obstacles:
Some school buildings and trees in the area.

MISSION

Purpose:
Taking videos of a High School soccer game, near and above a lot of people.

Mission complexity:
Maneuvering for optimal shots amidst other drones.

Mission characteristics:
Some BVLOS; flying near to but not above people and near buildings.

Prior simulations of this flight:
None.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Very few actual flight hours; moderate number of simulated flight hours.

Experience with adverse conditions:
Very little experience with poor weather; no experience flying in busy airspace.

Pilot incident history:
No reported incidents.
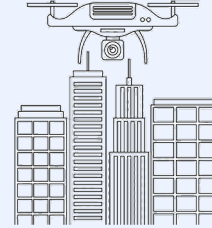
DRONE

Drone flight history:
Airframe has a small number of flight hours; it has one reported crash due to a pilot error, and one reported flight above 400 feet AGL without permission. Both incidents with a different pilot.

Maintenance, repairs:
Airframe repaired after crashes. Little regular reported maintenance.

Make/Model information:
Self-built drone from online instructions. Of medium size, heavy build; no parachute; no Detect and Avoid capability

CONDITIONS

Air traffic:
A few other drones flying somewhat nearby in the park.

Human traffic:
Small crowds nearby; flight will try to avoid overflying people.

Weather conditions:
Light wind gusts, patchy clouds, within drone's allowed operating conditions.

Physical area:
A few trees, not many buildings.

MISSION

Purpose:
Getting videos of a wedding in an urban park

Complexity level:
Somewhat simple flight plan; flight will be close to people.

Mission characteristics:
Limited flight area and low maximum altitude. Line of sight only.

Prior simulations of this flight:
None.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Few actual flight hours; no simulated flight hours.

Experience with adverse conditions:
Very little experience with adverse weather; little experience flying in busy airspace.

Pilot incident history:
One reported incident. Pilot lost control and flew into a house, on a different drone.

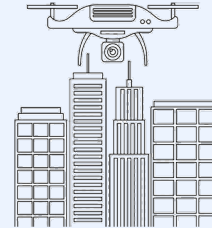## DRONE

Drone flight history:
Airframe has a moderate number of flight hours and no previous reported incidents.

Maintenance, repairs:
Reported regular maintenance.

Make/Model information :
Standard large drone, often used for commercial filming purposes. No parachute. Has active Detect and Avoid capabilities.

CONDITIONS

Air traffic:
A few other drones and other air traffic in local urban area.

Human traffic:
Normal traffic for an urban area.

Weather conditions: Light wind, no clouds; within drone's allowed operating capabilities.

Physical area:
A moderate number of urban buildings.

MISSION

Purpose:
Building inspection in an urban area, flying close to many buildings.

Complexity level:
A few waypoints, some air traffic, flying near to people.

Mission characteristics:
Wide area, some BVLOS, flying somewhat close to buildings and people.

Prior simulations of this flight:
Few.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Moderate number of actual flight hours; moderate number of simulated flight hours.

Experience with adverse conditions:
Moderate experience with windy and other adverse weather; moderate experience flying in busy airspace.

Pilot incident history:
Flight in a state park without permission 1 week ago.
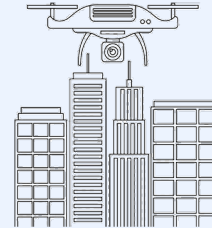
DRONE

Drone flight history:
Airframe has many previous short flights and no previous reported incidents.

Maintenance, repairs:
Regular reported maintenance.

Make/Model information :
Standard, widely used, moderately lightweight drone; no parachute; basic Detect and Avoid capability.

CONDITIONS

Air traffic:
No other air traffic in the area.

Human traffic:
A few people in the area.

Weather conditions:
High winds, some rain, and low temperatures; on the edge of the drone's allowed operating conditions.

Physical area:
Many houses, lots of trees.

MISSION

Purpose:
Taking videos around a house for a realtor's listing, in an urbanized area.

Complexity level:
Simple planned flight, few waypoints.

Mission characteristics:
Limited area and low maximum height. Line of Sight only.

Prior simulations of this flight:
Many.

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PILOT

Flight hours:
Moderate number of actual flight hours; few simulated flight hours.

Experience with adverse conditions:
Lots of experience with windy and other adverse weather; little experience flying in busy airspace.

Pilot incident history:
Pilot flew in vicinity of airport without permission 2 years ago. No other incidents.

DRONE
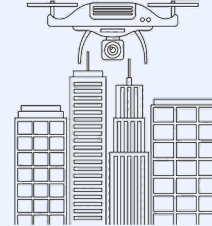
Drone flight history:
Airframe has small number of flight hours; it has one reported fly-away incident in remote area 18 months ago.

Maintenance, repairs:
Airframe repaired after crash; cause of fly-away not determined; regular reported maintenance.

Make/Model information :
Standard, widely used, moderately lightweight drone; no parachute; basic Detect and Avoid capability.

CONDITIONS

Air traffic:
Light drone traffic in the area.

Human traffic:
Many people in the area. Flights planned to maintain distance from people.

Weather conditions:
Low winds, some gusts, moderate low clouds; conditions within the drone's allowed operating capabilities.

Physical area:
Urban buildings, flights staying well above building height.

MISSION

Purpose:
News footage of a protest in a city, from a distance.

Complexity level:
Distant footage, not many waypoints.

Mission characteristics:
Line of sight; staying distant from crowds and buildings.

Prior simulations of this flight:
None.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Moderate number of actual flight hours; many simulated flight hours.

Experience with adverse conditions:
Very little experience with adverse weather; moderate experience flying in busy airspace.

Pilot incident history:
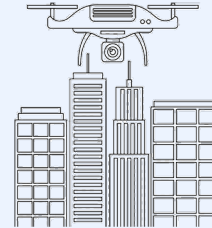No reported incidents.

DRONE

Drone flight history:
Airframe has long flight history; it has several previously reported crashes with different pilots.

Maintenance, repairs:
Airframe reported repaired and recalibrated after crashes; semi-regular reported maintenance.

Make/Model information :
Older model of large drone; is known for some flight instability; no parachute; no Detect and Avoid capabilities.

CONDITIONS

Air traffic:
A small number of drones in the area.

Human traffic:
Some people and rescue workers in the area; drone will avoid overflying people.

Weather conditions:
Low winds, no clouds; Some smoke in the area. Conditions withing drone's allowed operating conditions.

Physical area:
Suburban environment; Few trees.

MISSION

Purpose:
Capturing footage near a major railroad derailment for a news organization.

Complexity level:
Confusing and complex; Getting footage from many angles while avoiding overflying people and smoke.

Mission characteristics:
BVLOS; required altitude restrictions; must stay a certain distance from people.

Prior simulations of this flight:
None.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Many actual flight hours; many simulated flight hours.

Experience with adverse conditions:
Lots of experience with windy and other adverse weather; moderate experience flying in busy airspace.

Pilot incident history:
Pilot once caught flying drone without FAA registration.
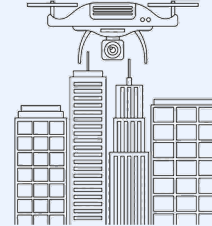
DRONE

Drone flight history:
Airframe has moderate number of flight hours and no previously reported incidents.

Maintenance, repairs:
Regular reported maintenance.

Make/Model information :
Standard large drone, often used for commercial filming purposes; equipped with parachute; has advanced Detect and Avoid capabilities

CONDITIONS

Air traffic:
Heavy drone traffic in a city.

Human traffic:
Normal street traffic for an urban area.

Weather conditions:
High winds, especially when flying between buildings; very hot weather; winds and temperatures may fall outside of the drone's allowed operating conditions.

Physical area:
Many buildings and trees.

MISSION

Purpose:
Film shots (b-roll) of flying down city streets and close to buildings.

Complexity level:
A few waypoints and some complex movement.

Mission characteristics:
BVLOS, around pre-determined path through a city.

Prior simulations of this flight:
Many.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Many actual flight hours; few simulated flight hours.

Experience with adverse conditions:
Moderate experience with windy and other adverse weather; lots of experience flying in busy airspace.

Pilot incident history:
Pilot has one reported crash when drone flew into a flock of geese.

DRONE
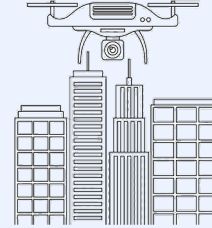
Drone flight history:
Airframe has only a small number of flights and no reported incidents.

Maintenance, repairs:
Semi-regular reported maintenance.

Make/Model information :
Large drone used for deliveries; the drone model has a history of crashes; no parachute; basic Detect and Avoid capabilities.

CONDITIONS

Air traffic:
Moderate air traffic in the area.

Human traffic:
Rescue workers and people in area. Will need to fly close to people.

Weather conditions:
Occasional high wind gusts; weather is near the edge of the drone's allowed operating capabilities.

Physical area:
Few buildings and few trees.

MISSION

Purpose:
Delivering emergency supplies to rescue workers in an urban area after a large flood.

Complexity level:
Complex and changing environment, lots of people in the area.

Mission characteristics:
BVLOS, need to fly close to people.

Prior simulations of this flight:
None.

Flight Authorization Request to a Controlled Area

PILOT

Flight hours:
Many actual flight hours; moderate number of simulated flight hours.

Experience with adverse conditions:
Lots of experience with windy and other adverse weather; moderate experience flying in busy airspace.

Pilot incident history:
No reported incidents.

DRONE
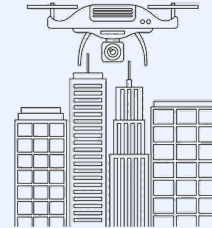
Drone flight history:
Airframe has a moderate number of flight hours with many successful flights; it has no reported incidents.

Maintenance, repairs:
Regular reported maintenance.

Make/Model information :
Standard type of widely used, lightweight drone; no parachute; no Detect and Avoid capabilities.

CONDITIONS

Air traffic:
Little traffic under 400 feet. Near to controlled airspace for a large airport.

Human traffic:
Few people; some car traffic.

Weather conditions:
Low winds; good visibility; well within drone's allowed operating capabilities.

Physical area:
Few buildings and few trees.

MISSION

Purpose:
Bridge inspections close to a moderately large airport.

Complexity level:
Simple, few waypoints, some car traffic nearby.

Mission characteristics:
Limited area and low maximum height; LOS only.

Prior simulations of this flight:
Many.