



Actual flight hours:

Over 200 hours

Special Weather

Condition: 20 hours
in adverse weather
conditions, including
rain, strong winds

**Simulated flight
hours:** 10

Crash history: One
drone crash in windy
weather

Certification: Part 107



Mission:

Photography

Model:

Flight hours: 50

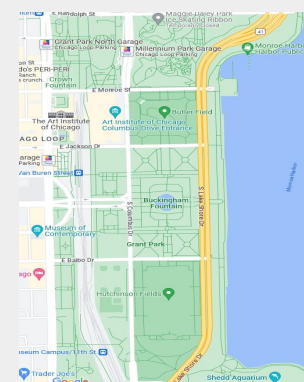
Crash history: no
crashes

**No. of successful
flights:** 70

Equipment:

High-resolution
camera.

Obstacle avoidance
sensor.



Air traffic: Light

Human traffic: Moderate

Flight conditions: Low clouds

Potential for rain showers or gusty winds.

Wind speed is moderate, around 10-15
knots (approximately 11.5-17 mph)

Physical area: Hight trees

At a lively 60th birthday celebration for their best friend, attended by 100 guests on a scenic farm, a skilled drone photographer was invited to capture precious moments and create lasting memories. However, the presence of tall trees and low-hanging clouds posed challenges for the pilot to maintain visual line-of-sight (VLOS) during the flight.

Integrated system's decision: The system sent an alert - Important Safety Advisory - Visual Line-of-Sight Flight may be lost due to terrain, pilot experience, and weather conditions.



Sky Master

Actual flight hours:

Over 200 hours

Special Weather

Condition: 20 hours
in adverse weather
conditions, including
rain, strong winds

**Simulated flight
hours:** 10

Crash history: One
drone crash in windy
weather

Certification: Part 107



Mission:

Photography

Model:

Flight hours: 50

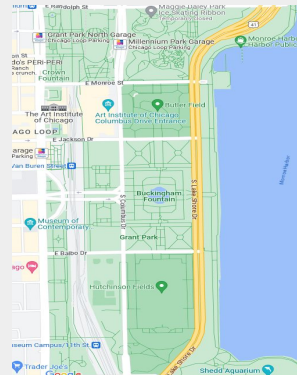
Crash history: no
crashes

**No. of successful
flights:** 70

Equipment:

High-resolution
camera.

Obstacle avoidance
sensor.



Air traffic: Light

Human traffic: Moderate

Flight conditions: Low clouds

Potential for rain showers or gusty winds.

Wind speed is moderate, around 10-15
knots (approximately 11.5-17 mph)

Physical area: Hight trees

At a lively 60th birthday celebration for their best friend, attended by 100 guests on a scenic farm, a skilled drone photographer was invited to capture precious moments and create lasting memories. However, the presence of tall trees and low-hanging clouds posed challenges for the pilot to maintain visual line-of-sight (VLOS) during the flight.

Integrated system's decision: flight denied due to an important safety advisory - Visual Line-of-Sight Flight, based on terrain, pilot experience, and weather conditions.



Novice Flyer

Actual flight hours: 100

Special Weather Cond:
20 hours in mild weather
conditions and light rain

Simulated flight hours:
50

Crash history: no
crashes

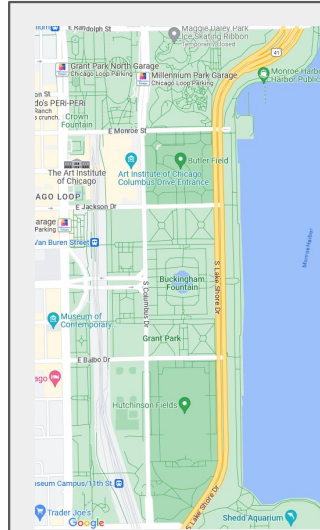
Certification: Part 107
Typically operates in less
complex environments,
such as suburban areas
with open spaces.



Mission: Delivery

Model:

Flight hours: 5,000



Air traffic: Moderate

Human traffic: Light

Flight conditions: Potential wind tunnels
and areas of turbulence

Wind coming from the northwest at 12
knots (approx. 14 miles per hour).

Wind speed is expected to increase to 15
knots (approximately 17 miles per hour) in
next two hours.

Physical area: Sky scrapers

DroneSwift recently experienced significant growth in Metropolis city. Due to a surge in purchases, the organization decided to elevate the skill level of their young drone pilots. Novice Flyer has been entrusted with delivering an urgent package to a customer located in the heart of Downtown Metropolis, a bustling city renowned for its iconic skyscrapers and modern architecture. The delivery address is nestled within a dense cluster of tall buildings, forming what is commonly referred to as an 'urban canyon.' Novice Flyer eagerly embraced the challenge and began planning his flight. However, his limited experience in a large city led him to overlook fast-changing conditions and the possibility of encountering an urban canyon.

Integrated system's decision: flight denied based on the weather conditions, prompting the pilot to come up with a new plan.



PILOT

Actual flight hours: Few

Simulated hours: Some

Adverse Flight Exp.: Very little weather experience

Crash history: None

Certification: Part 107



DRONE

Flight history: Few flights and few successful flights. Two prior crashes

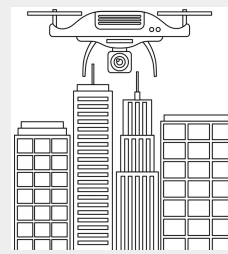
Maintenance, repairs: Repaired after crashes. Little regular maintenance.

Make/Model history: Self-built drone from online instructions. Of medium size, heavy build

Available sensors: Standard

Communication method/quality: Standard

Software: Standard



CONDITIONS

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

Human traffic: Small crowds nearby

Weather conditions: Light wind gusts, patchy clouds

Physical area: A few trees, not many buildings



MISSION

Purpose: Getting videos of a wedding in an urban park

Complexity level: Simple, few waypoints, some people nearby

Flight rules: Limited area and low maximum height. Line of Sight only

Prior Simulations of this flight: Many



PILOT

Actual flight hours: Many

Simulated hours: Lots

Adverse Flight Exp.: Lots of weather experience

Crash history: A few

Certification: Part 107



DRONE

Flight history: Moderate number of flight hours. No previous crashes

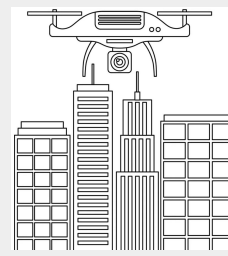
Maintenance, repairs: Regular maintenance

Make/Model history: Standard large drone, often used for commercial filming purposes

Available sensors: Standard

Communication method/quality: Standard

Software: Standard



CONDITIONS

Air traffic: Heavy air traffic in a city

Human traffic: Normal traffic for an urban area.

Weather conditions: High winds, especially when flying between buildings

Physical area: Many buildings and trees



MISSION

Purpose: Getting videos of a wedding in an urban park

Complexity level: Simple, few waypoints, some people nearby

Flight rules: Limited area and low maximum height. Line of Sight only

Prior Simulations of this flight: Many



Actual flight hours: Few.

Simulated hours: Some.

Adverse Flight Exp.: Very little weather experience.

Crash history: None.

Certification: Part 107.



Flight history: Few flights and few successful flights. Two prior crashes.

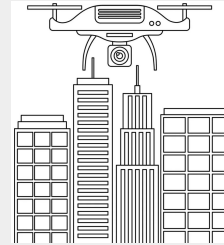
Maintenance, repairs: Repaired after crashes. Little regular maintenance.

Make/Model history: Self-built drone from online instructions. Of medium size, heavy build.

Available sensors: Standard.

Communication method/quality: Standard.

Software: Standard.



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

Human traffic:
Small crowds nearby.

Weather conditions:
Light wind gusts, patchy clouds.

Physical area:
A few trees, not many buildings.



Purpose: Getting videos of a wedding in an urban park.

Complexity level:
Simple, few waypoints, some people nearby.

Flight rules:
Limited area and low maximum height. Line of Sight only.

Prior Simulations of this flight: Many.