ASFAN

ASDRONESIM

Drone Flight Simulation

A PC and VR simulator for drone pilot training and mission rehearsal. Pilots fly accurate aircraft models over Amman, London and Istanbul at 1:1 scale, using the same RC radio they fly with in the field.



Abdali, Amman, in the simulator.

10
aircraft, from cine quads to fixed-wing UAVs

10
training environments, indoor to offshore

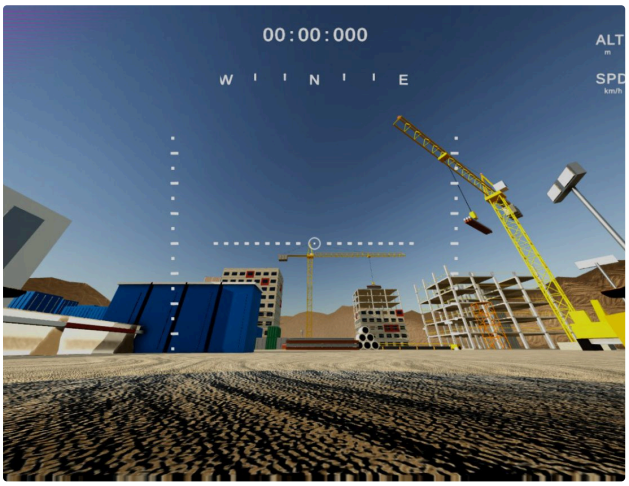
1:1
Amman, London and Istanbul at real scale

PC + VR
Windows 10/11 and Meta Quest

TRAINING

Why train in a simulator

Crashed aircraft, broken propellers and grounded teams are the hidden cost of learning to fly. ASdronesim moves that learning curve onto a PC, so pilots can repeat a manoeuvre as often as they need and arrive at the real aircraft ready.



Pilot view. Live timer, altitude and speed on the HUD.



Timed courses. Race gates through Abdali.

Lower cost

Build flight hours without wearing out aircraft, batteries or spare parts.

True physics

Thrust, drag, battery sag, wind and gusts, modelled for each airframe.

Real controls

A USB RC radio, gamepad, keyboard or Meta Quest headset.

Measurable skill

Timed courses, ghost laps and best scores show who is ready.

TRAINING PATH

1 → 2 → 3 → 4

First hover

Basic handling in Angle mode, with the simulator catching mistakes.

ANGLE MODE

Advanced and FPV

Horizon and Acro flying, timed courses and ghost laps.

HORIZON · ACRO

Mission rehearsal

Real routes over real cities, flown with the ArduPilot autopilot.

AUTONOMOUS

Real aircraft

Scores and lap times show who is ready to fly for real.

FIELD READY

FEATURED CITY

Amman, built to scale

Central Amman on its real hills, built from open map and terrain data and tied to real GPS coordinates. Fly between the Abdali towers, over the Citadel or out to Queen Alia International Airport, by day, at sunset or at night.



Amman at sunset. Abdali towers and the city core.

8 × 4 km
city core on real terrain

23,000
buildings with stone facades

24
detailed landmarks

GPS
real coordinates for missions

Landmarks



Jordan Gate. Twin towers



Le Royal. Landmark hotel



King Abdullah I. The mosque

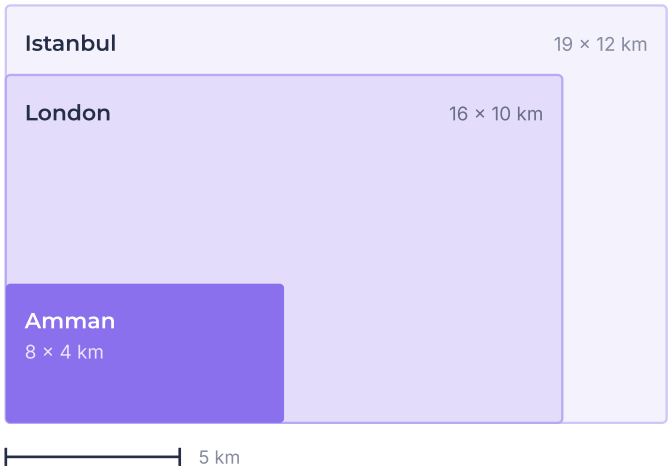


Raghadan. The flagpole

ENVIRONMENTS

Beyond Amman

Two more cities at 1:1 scale, plus offshore, industrial and urban sites built for specific kinds of missions.

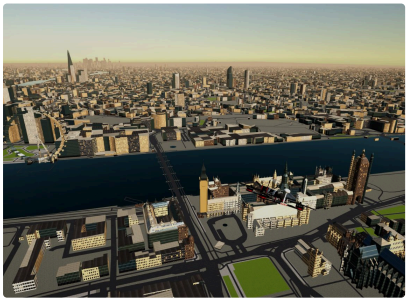


Map sizes, drawn to scale

Each city is modelled at real size on real terrain, so distances, flight times and battery use match the real world.

Istanbul 19 × 12 km	**228 km²**
London 16 × 10 km	**160 km²**
Amman 8 × 4 km city core	**32 km²**

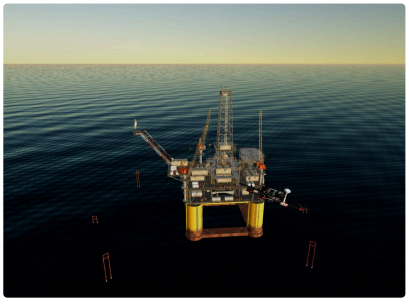
Training sites



London. Thames and city centre, 1:1



Istanbul. Bosphorus and old city, 1:1



Oil rig. Offshore inspection



Power plant. Towers and power lines



Construction site. Cranes and tight gaps



Big City. Street circuit with gates

AIRCRAFT

One simulator. Ten aircraft.

Cine quads, enterprise platforms, FPV racers and fixed-wing UAVs. Each one flies with its own mass, power and handling, so the skill transfers to the real aircraft.



Mavic 3. Cine quad



Avata 2. Cinewhoop



Matrice 300 RTK. Enterprise



Matrice 400. Heavy lift



Nighthawk 200. Race quad



Shaheen. Fixed-wing UAV



Bayraktar TB2. MALE UAV



Kizilelma. Jet UAV

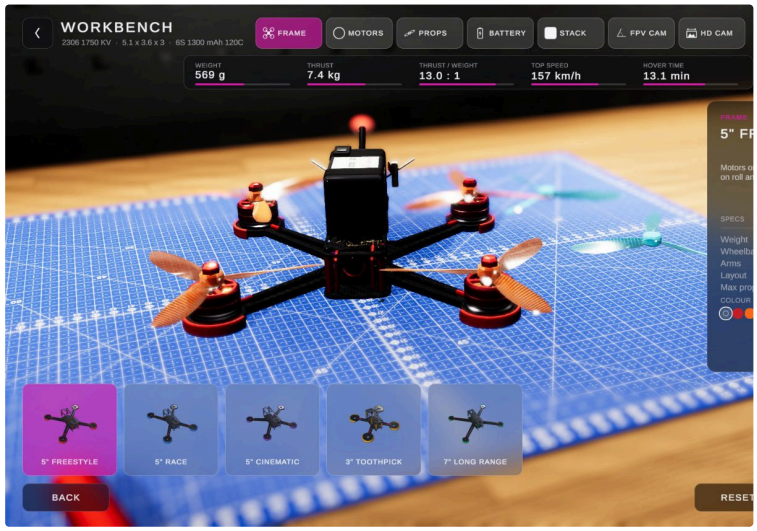
WORKBENCH

Build your own FPV

Choose every part and watch the numbers update, then take your build straight to the field. A ready-to-fly Freestyle 5″ 6S is included.

Frame, motors, propellers, battery

Live weight, thrust and flight time

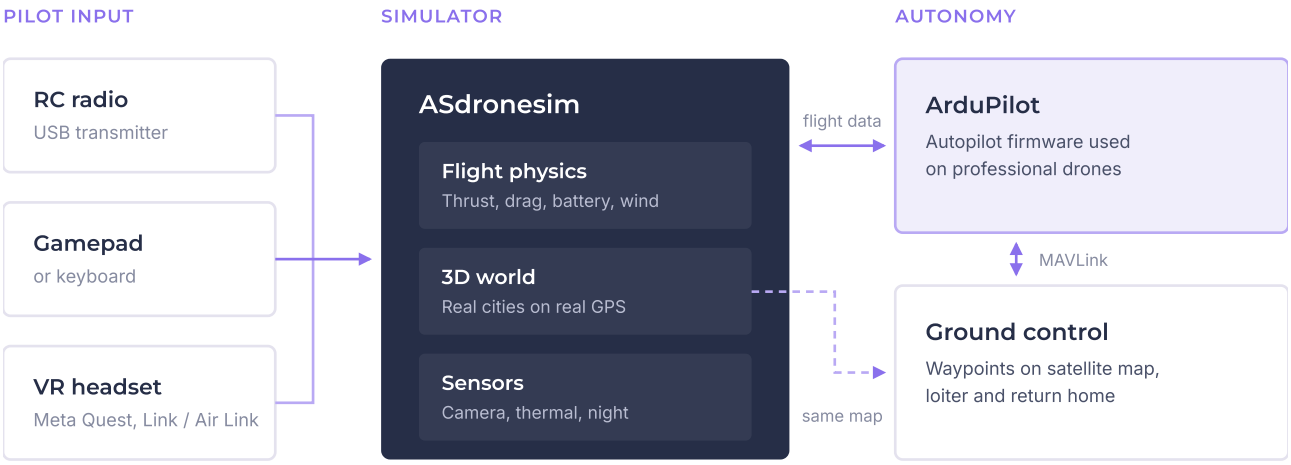


AUTONOMY

From stick skills to full missions

Start with manual flying and move on to autonomous missions. Plan a route over Amman and let ArduPilot, the autopilot firmware used on professional drones, fly it.

How it connects



A mission, step by step

1 → 2 → 3 → 4

Plan

Click waypoints on satellite imagery of the city.

Upload

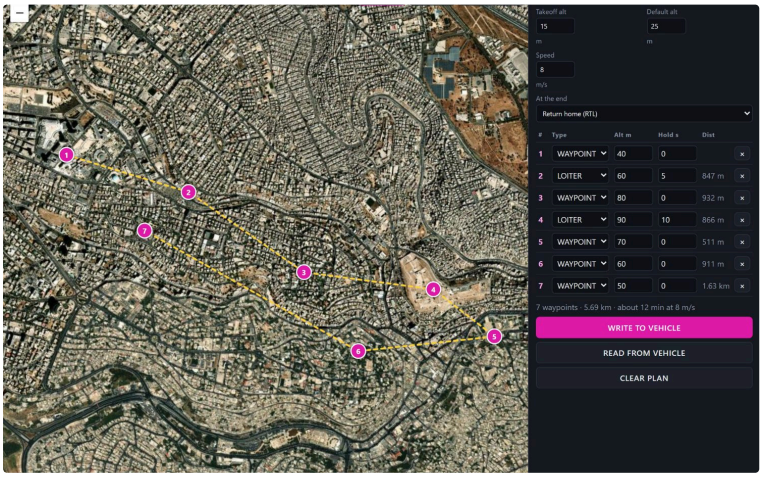
Write the mission to the drone over MAVLink.

Fly

ArduPilot flies the route over the 3D city.

Take over

Loiter, return home or click the map to redirect.



Ground control. A mission from Abdali to the Citadel.

Real autopilot, real missions

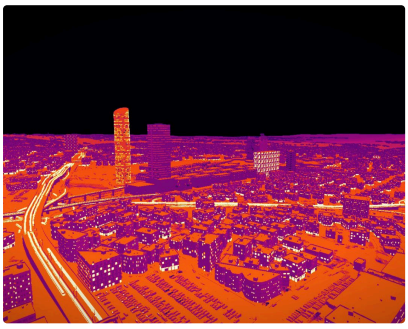
Plan waypoints on satellite imagery, upload them to the drone and watch ArduPilot fly the route in 3D.

- Quadcopters and fixed-wing
- The 3D city matches the map
- Standard MAVLink protocol
- Included in the installer

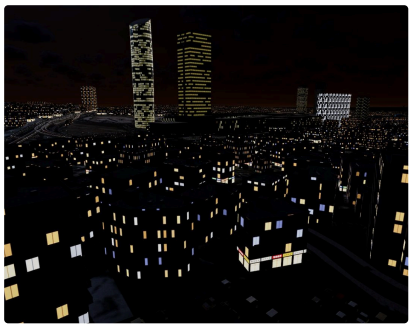
FLIGHT REALISM

Sensors, weather and failures

Train for what makes real flights hard: low light, heat signatures, wind behind buildings and equipment that fails mid-flight.



Thermal camera. Amman in ironbow



Night operations. Amman after dark



Wide-area survey. The whole city core

Wind and turbulence

Stronger at altitude and rough behind buildings.

Battery sag

Available power drops as the battery drains.

Damage mode

Lose a propeller, keep flying, learn to recover.

VR headset

Meta Quest over Link or Air Link for full immersion.

Ghost laps

Race your own best run, or an instructor's.

Your own radio

Plug in a USB RC transmitter and fly as in the field.

Three flight modes

MORE ASSISTANCE — MORE CONTROL

Angle

Self-levelling with limited tilt. Where every new pilot starts.

Horizon

Self-levels near centre stick, rolls and flips at full stick.

Acro

No self-levelling. Full manual control for FPV and freestyle.



MILITARY TRAINING EDITION

Five scenario missions for defence and security forces: reconnaissance, Shaheen ISR overwatch, counter-drone defence and FPV operator training on a frontline range with analog video and thermal view. Available on request to authorised organisations.

WHO IT IS FOR

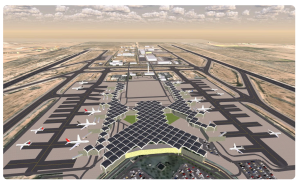
Built for teams that fly

From a pilot's first hover to certified operations, ASdronesim gives every trainee the same safe, repeatable training ground.



Energy

Plants, towers and power lines.



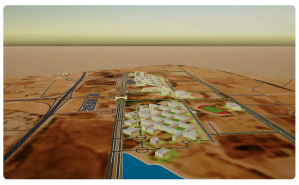
Aviation

Airport operations at Queen Alia.



Public safety

Roads, traffic and response.



Academies

Courses for large groups, JUST campus at 1:1.

How we start

1 → 2 → 3

Live demo

We fly the simulator on your use case.

Trial

Your team flies it on your own PCs.

Rollout

Deployment and instructor onboarding.

What you need

SYSTEM
Windows 10 / 11, 64-bit

GRAPHICS
GTX 1060 / RX 580 or better

MEMORY
8 GB RAM, 16 GB recommended

INSTALL
About 3 GB, no admin rights

CONTROLS
RC radio (USB), gamepad, keyboard

VR
Meta Quest via Link or Air Link

ASFAN

Book a live demo

See ASdronesim flown on your own use case.

ASFAN International Trading Company
www.asfanco.com
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