SKYETON

# Raybird vs Airbus H145

## A Performance Comparison for Serious Surveillance Missions

# Technical Specifications

Side by Side

## Skyeton Raybird

Fixed-wing UAV · Long-endurance ISR

**$560k**

system price + VAT

### FLIGHT PERFORMANCE

| | |
|---|---|
| Endurance | 28+ hours |
| Mission range | 2,500 km |
| Telemetry link | 220 km |
| Cruise speed | 110 km/h |
| Temperature | −35°C to +55°C |

### POWERPLANT & CREW

| | |
|---|---|
| Engine | Gasoline EFI 4-stroke |
| Fuel | AI-95 (regular) |
| Fuel consumption | ~1.5–2 L/hr |
| Pilot licence | Not required |
| Launch | Catapult · 25 min |
| Cost per hour | ~$703 |

## Airbus Helicopters H145

Twin-engine helicopter · HEMS / SAR / Police

**$8-12m**

system price + VAT

### FLIGHT PERFORMANCE

| | |
|---|---|
| Endurance | ~3.5 hours |
| Mission range | ~650 km |
| Telemetry link | Line-of-sight only |
| Cruise speed | 230 km/h |
| Temperature | −40°C to +50°C |

### POWERPLANT & CREW

| | |
|---|---|
| Engine | 2× Safran Arriel 2E |
| Fuel | Jet-A1 (aviation) |
| Fuel consumption | ~220 L/hr |
| Pilot licence | CPL-H / ATPL-H |
| Launch | Certified helipad req. |
| Cost per hour | ~$2,800 |

# 28 Hours vs 3.5 Hours

While Raybird completes 1 sortie, H145 lands and refuels 8 times

Skyeton
**Raybird**

**28** Hours

1 sortie · 0 refuels · 0 crew rotations

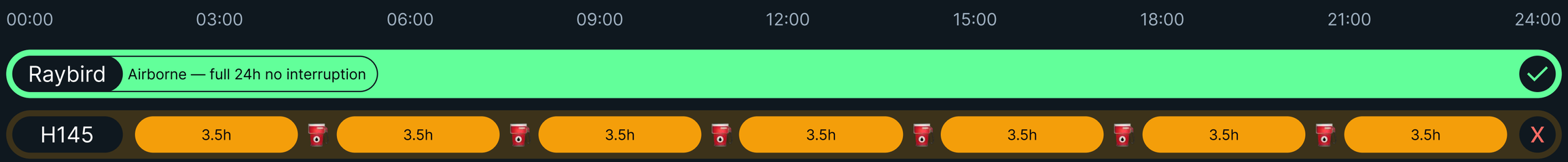
**8×**
LONGER

Airbus Helicopters
**H145**

**3.5** Hours

8 sorties · 8 refuels · 3+ crew rotations

## 24-HOUR OPERATION TIMELINE




**0**
Raybird landings

**6+**
H145 landings in 24h

**~3h**
H145 lost to ground ops

True Cost of Operation

# What helicopter surveillance actually costs

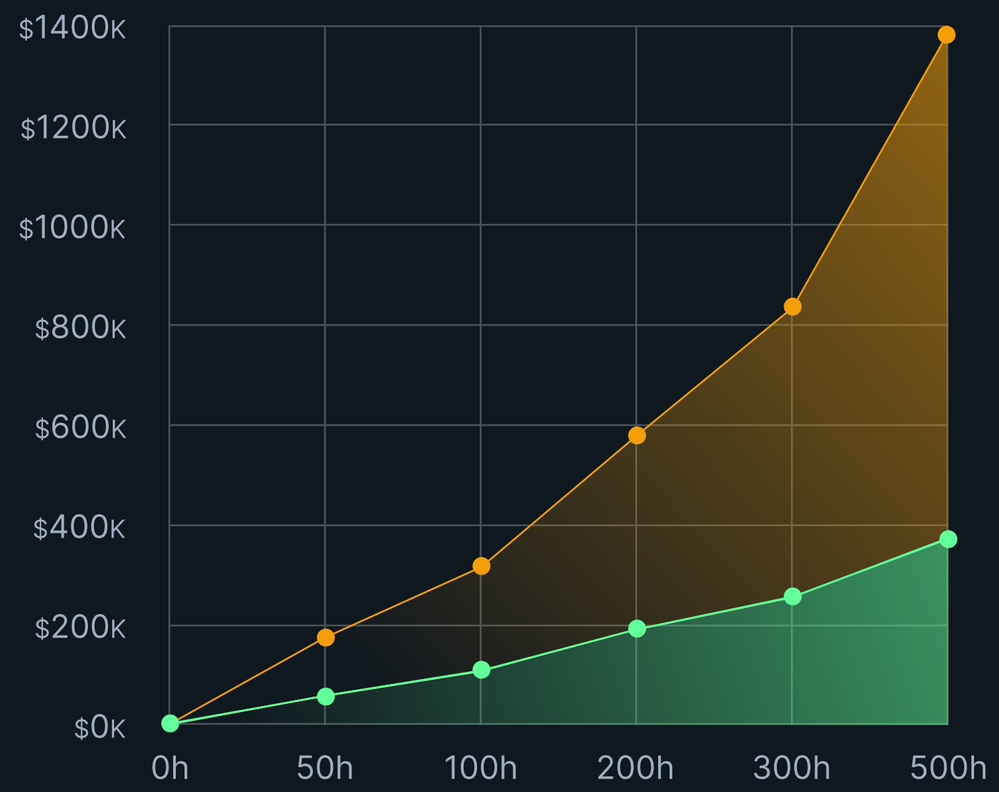
## COST PER FLIGHT HOUR BREAKDOWN

| | Raybird | H145 |
|---|---|---|
| System amortization | $560 | $1,500 |
| Fuel / energy | $3 | $450 |
| Crew (pilots + observer) | $80 | $420 |
| Maintenance | $40 | $380 |
| Insurance & overhead | $20 | $50 |
| TOTAL / HR | **$703** | **$2,800** |

**H145 is more expensive**
per flight hour

**4.0x**

## CUMULATIVE COST — HOURS OF OPERATION




**Annual savings**
(500h ops)

**Save $1.05m**

# The Numbers Don't Lie

Raybird vs Airbus H145 — apples to apples comparison for surveillance missions

**0**

## Crew at Risk

Raybird is flown remotely. No pilot, no observer, no exposure to smoke, fire, or hostile terrain.

H145 requires 2–3 crew in-zone

**8x**

## More Endurance

28 hours continuous flight vs 3.5 hours for the H145. One Raybird sortie covers an entire shift.

H145 needs 8 rotations to match

**4x**

## Lower Cost/Hour

~$703/hr all-in for Raybird vs ~$2,800/hr for the H145. Same mission, fraction of the budget.

H145 burns $2,800 per flight hour

**75%**

## Budget Saved

On a 30-day continuous monitoring mission, Raybird saves ~$1.5M compared to helicopter coverage.

per 30-day monitoring campaign

✅

## Same result

Full-area surveillance, thermal imaging, real-time video stream — at a quarter of the cost and eight times the endurance.

# Value Comparison

What you get

Skyeton

## Raybird

Ground-controlled · 2 operators

**$560k**

platform cost

### 28h endurance

One sortie covers an overnight shift without landing

### ~$703 price for hours

All-in: fuel, crew, amortisation, maintenance

### Night flight is ready

Thermal + EO sensors, autonomous flight in darkness

Airbus Helicopters

## A H145

Manned helicopter · 2–3 crew

**$8-12m**

platform cost

### 3.5h endurance

Must land to refuel creates coverage gaps

### ~$2800 price for hours

Jet-A1 fuel, 2–3 salaries, MRO cycle, hangar costs

### Heavy MRO

EASA CS-27 maintenance cycles add weeks of downtime per year

**$560k** vs **$8-12m**

Same surveillance output. Same thermal imaging. Same real-time video.

**16× cheaper platform**

Real Mission

# 02:17 AM. Who Was There?

A wildfire ignites deep in a remote pine forest. No one on the ground knows yet. The fire spreads fast — every minute counts.

The drone has been on overnight patrol since 19:00. Its thermal sensor flags the heat anomaly instantly. GPS coordinates locked.

The operator wakes up to an alert. Live thermal video streams in real-time. Fire brigade is called with exact coordinates within 60 seconds.


Pilots were called from home, drove to the helipad, ran pre-flight checks. The H145 lifts off 63 minutes after the fire started.


Fire brigade reaches the site in time. Guided by Raybird's live coordinates — before the fire could spread to the next ridge.

# What does it take to launch?

Deployment & Logistics

## Skyeton Raybird

### LOCATION REQUIREMENTS

- ✅ Any flat area 50 × 10 m (field, road, parking)
- ✅ No runway, no helipad, no airport
- ✅ Works in remote wilderness, mountains, coast

### PERSONNEL

- ✅ 2 trained operators (no pilot licence required)
- ✅ Training: weeks, not years
- ✅ Operators work from safe ground station

### FUEL & INFRASTRUCTURE

- ✅ Regular AI-95 gasoline — available at any fuel station
- ✅ ~1.5–2 L/hr consumption
- ✅ Ground control station fits in SUV trunk

## Airbus Helicopters A H145

### LOCATION REQUIREMENTS

- ❌ Certified helipad or open area min. 30 × 30 m
- ❌ Obstacle-free approach/departure paths
- ❌ Permanent base or forward operating base needed

### PERSONNEL

- ❌ Min. 2 certified pilots (CPL-H / ATPL-H)
- ❌ Pilot training: 2–5 years + 1,500+ flight hours
- ❌ Certified A&P mechanic on standby

### FUEL & INFRASTRUCTURE

- ❌ Jet-A1 aviation fuel — special supply needed
- ❌ ~220 L/hr consumption · fuel truck required
- ❌ Maintenance hangar + spare parts inventory

Raybird fits in a standard SUV and launches from any field — H145 needs a permanent base, fuel truck, and certified crew

# About Skyeton

Manufacturing in Ukraine + Slovakia

Deployed across civilian and security sectors in Europe

Active partnerships with European defense

Continuous product development driven by real field mission

Developing next-generation UAV platforms

80% in-house components

Provides operator training and mission planning support

300,000+ mission hours logged

1,000+ UAV systems delivered

Full after-sales support

Produced internally — no third-party dependency

EU manufacturing in Slovakia

Civil protection agencies

Team covering aerodynamics, electronics, and software

Maintenance, spare parts, and system upgrades

# Contact the Skyeton team to discuss your mission requirements and system configuration

📧 Contact Us → skyeton.group/contact

🌐 Explore Product → skyeton.group/product