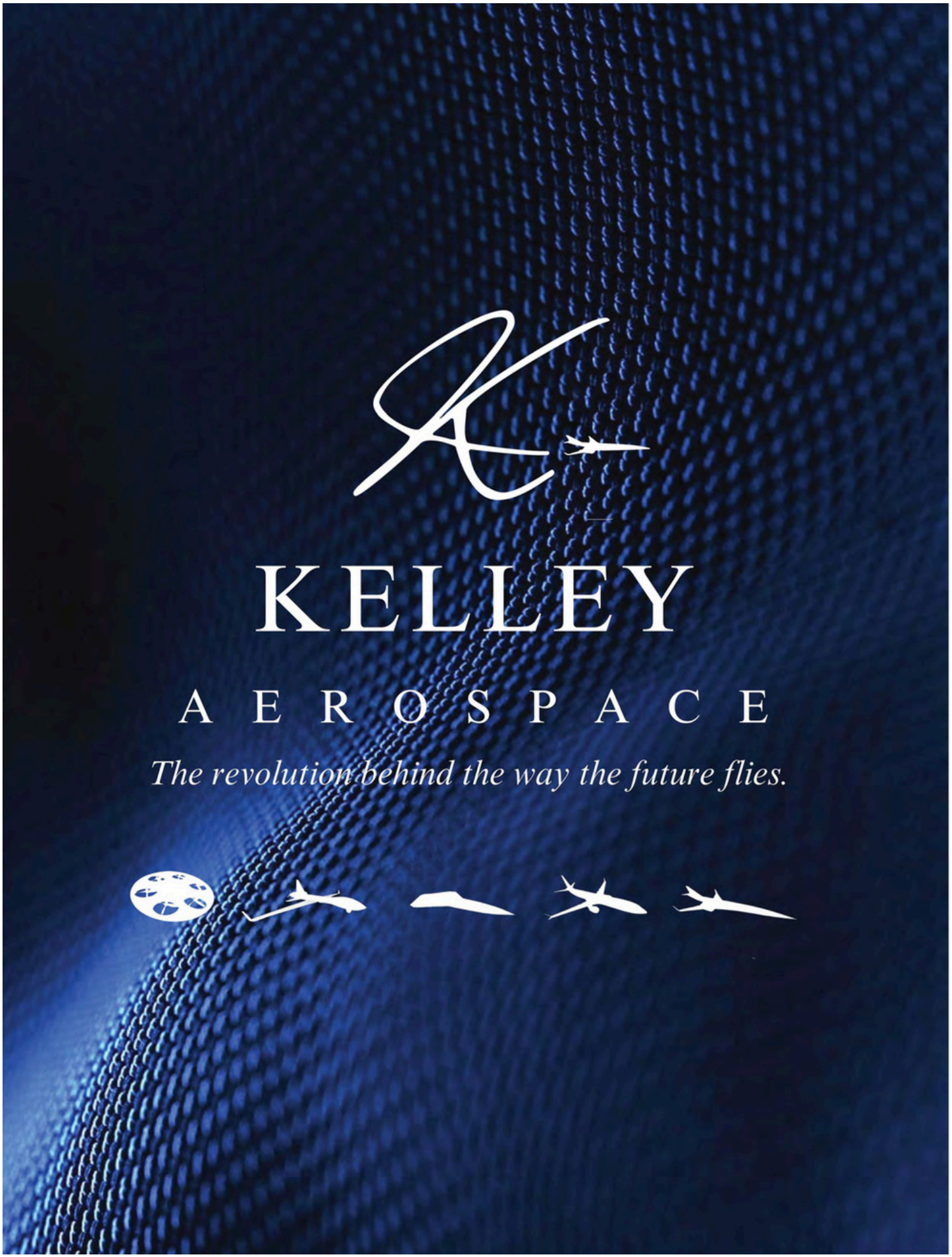

KELLEY
AEROSPACE
The revolution behind the way the future flies.

Composite Manufacturing

Kelley Aerospace stands as an industry pioneer in the realm of advanced carbon fiber manufacturing, setting new benchmarks in strength, lightness, and durability that surpass traditional materials like steel, aluminum, and wood. Our commitment to excellence is exemplified through our in-house carbon fiber production, meticulously crafted to deliver superior strength, heightened stiffness, and a sleek streamlined design.

Our groundbreaking manufacturing process has not only achieved remarkable feats in material properties but has also revolutionized efficiency. The ability to construct three UAV airframes within a mere 24 hours showcases our dedication to pushing the boundaries of what's possible. These airframes boast twice the specific stiffness and an incredible four times the specific strength when compared to their steel or aluminum counterparts.

The incorporation of carbon fiber into UAV airframes is a game-changer, promising a noteworthy 10% or more reduction in weight. This reduction not only enhances overall endurance but also extends the operational range by a remarkable 40%. Kelley Aerospace is constantly evolving and redefining industry standards to ensure our carbon fiber components remain synonymous with unmatched quality, efficiency, and cutting-edge technology.

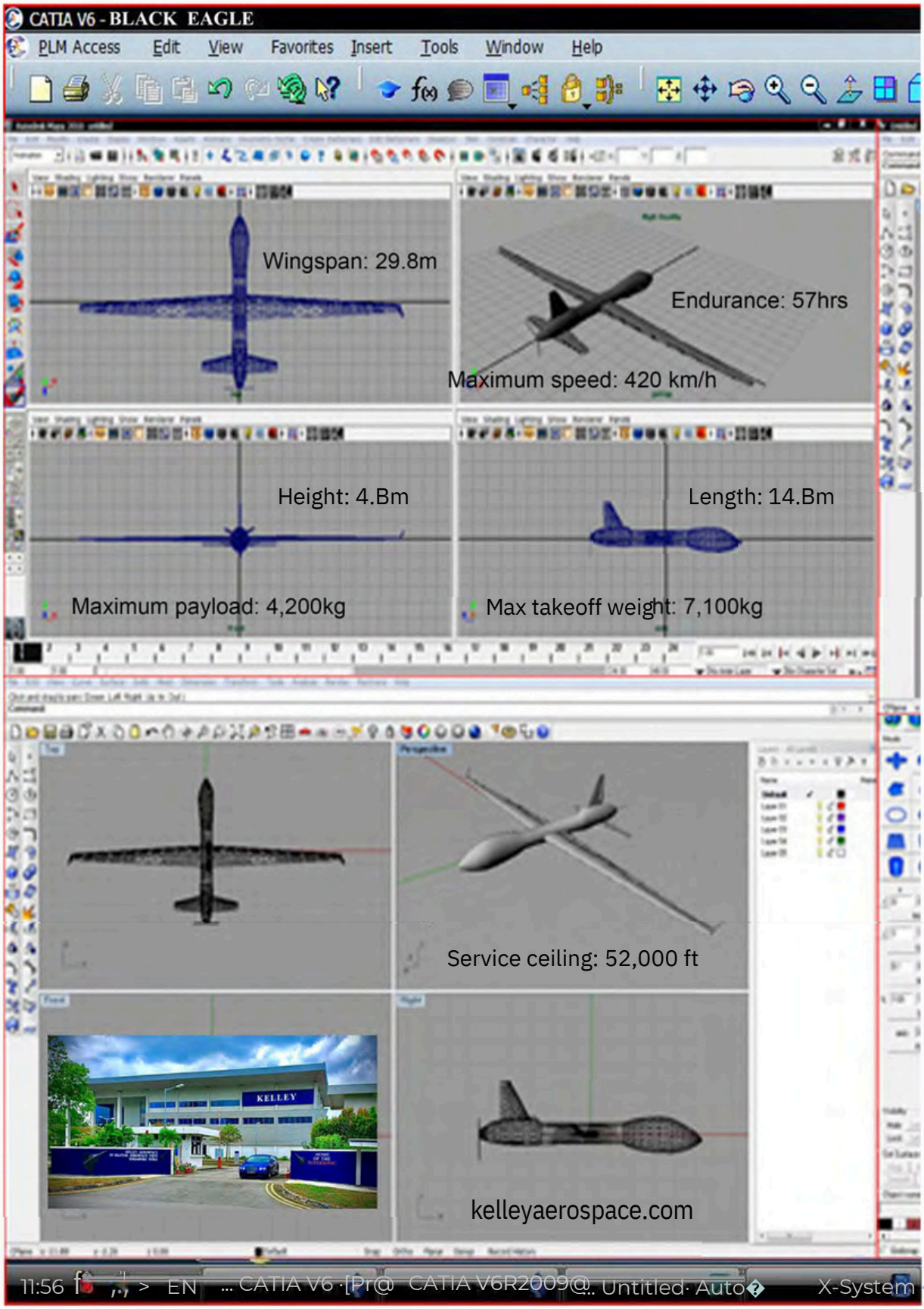
The Black Eagle

The Black Eagle, a flagship model, distinguishes itself as one of the most enduring UAVs available today, boasting an impressive flight endurance of over 57 hours. Not only does it push the boundaries of endurance, but it also features a generous payload capacity, boasting three different powerplant configurations including piston,turbine,and turbo-prop Engines, making it a versatile and high-performing option in the market.

What sets the Black Eagle apart is its advanced integration of multi-sensors and autonomous flight logic. This sophisticated technology empowers the UAV to execute its designated objectives with precision, efficiency, and, most importantly, safety. The Black Eagle capabilities make it a preferred choice for various applications, ranging from surveillance and reconnaissance to strategic missions.

In a testament to its success, Kelley Aerospace has secured a substantial order for 257 units of the Black Eagle UAV, reflecting the industry's recognition of its excellence. This order translates into a significant revenue milestone, amounting to 1.8 billion USD. Kelley Aerospace's commitment to pushing the boundaries of UAV technology positions it as a key player in the dynamic landscape of unmanned aerial systems.

Wingspan	29.8 M
Length	14.8 M
Endurance	> 57 Hours
Max Speed	350 Km/h
Max Operating Height	40,000 feet


CATIA V6 - BLACK EAGLE
PLM Access
Edit
View
Favorites
Insert
Tools
Window
Help
Wingspan: 29.8m
Endurance: 57hrs
Maximum speed: 420 km/h
Height: 4.Bm
Length: 14.Bm
Maximum payload: 4,200kg
Max takeoff weight: 7,100kg
Service ceiling: 52,000 ft
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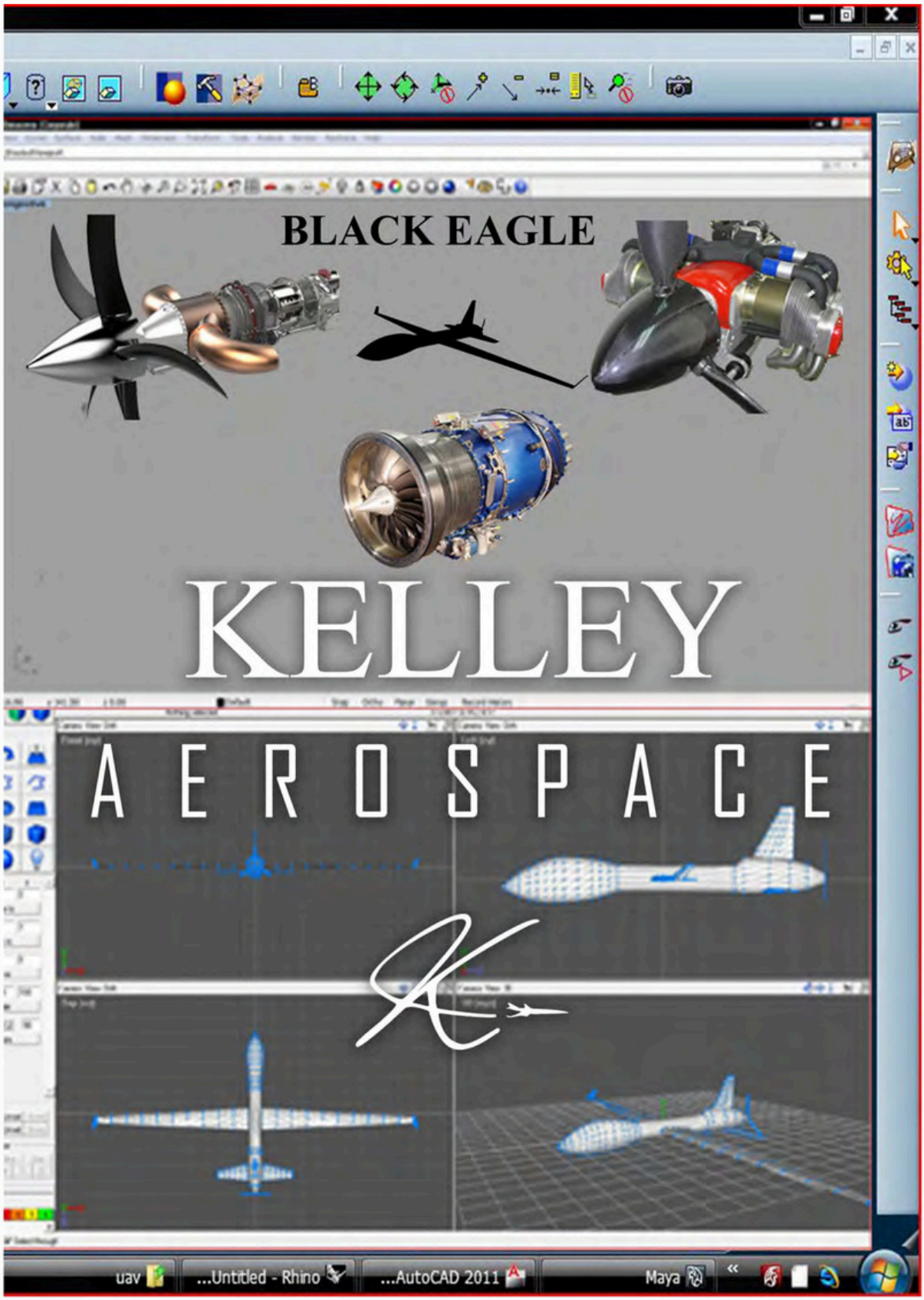
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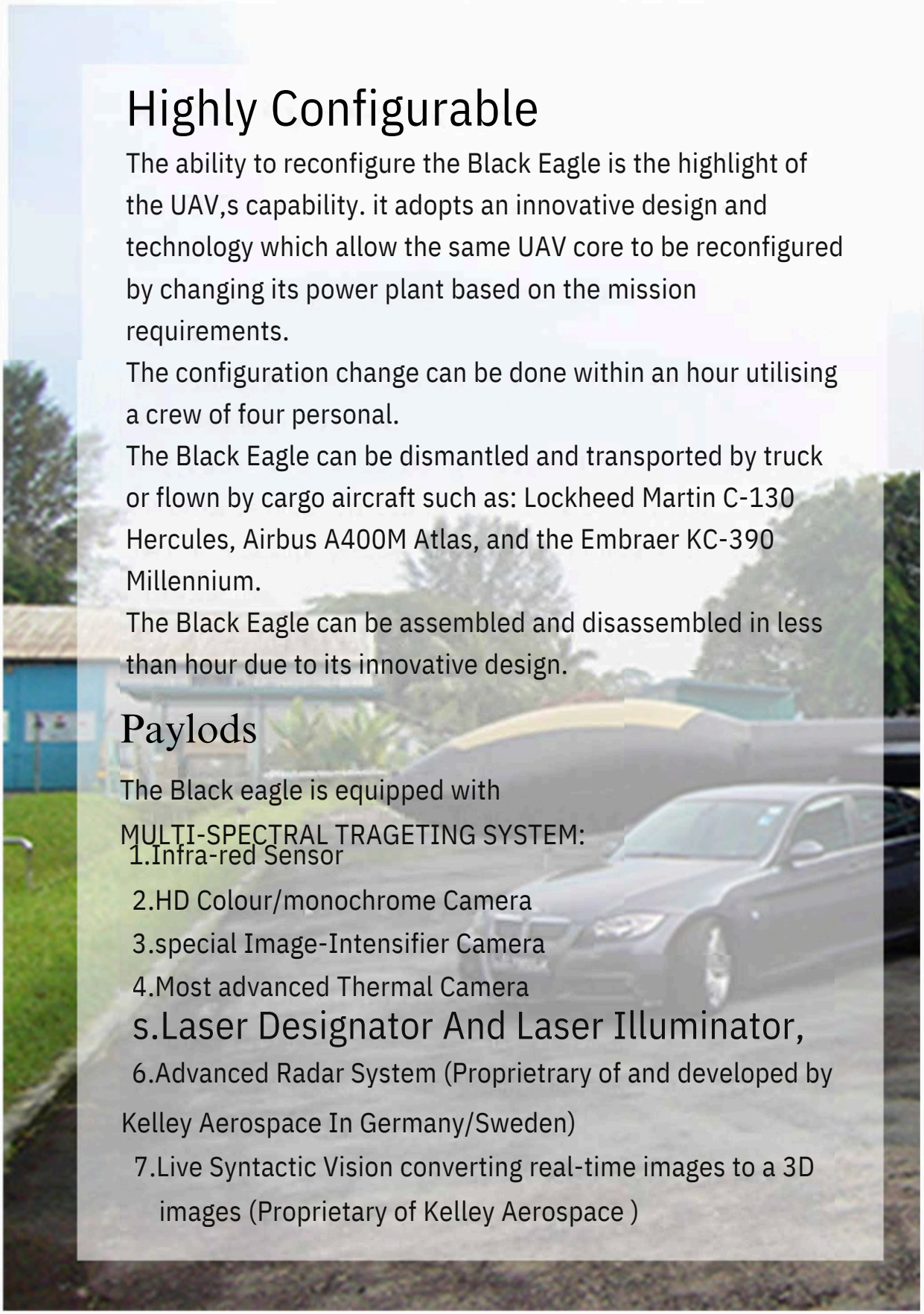


Highly Configurable

The ability to reconfigure the Black Eagle is the highlight of the UAV,s capability. it adopts an innovative design and technology which allow the same UAV core to be reconfigured by changing its power plant based on the mission requirements.

The configuration change can be done within an hour utilising a crew of four personal.

The Black Eagle can be dismantled and transported by truck or flown by cargo aircraft such as: Lockheed Martin C-130 Hercules, Airbus A400M Atlas, and the Embraer KC-390 Millennium.

The Black Eagle can be assembled and disassembled in less than hour due to its innovative design.

Paylods

The Black eagle is equipped with

MULTI-SPECTRAL TRAGETING SYSTEM:

1.Infra-red Sensor

2.HD Colour/monochrome Camera

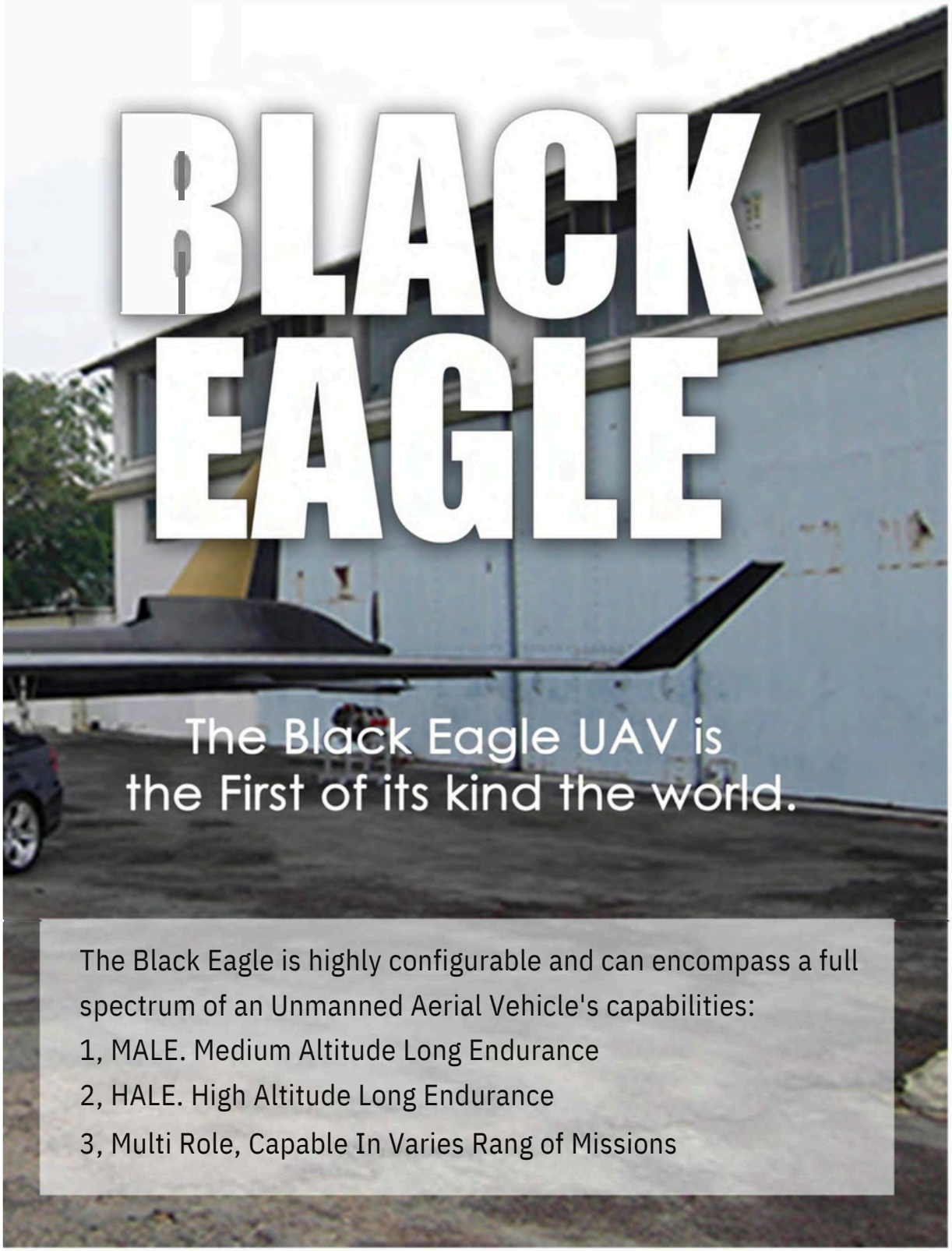
3.special Image-Intensifier Camera

4.Most advanced Thermal Camera

s.Laser Designator And Laser Illuminator,

6.Advanced Radar System (Proprietrary of and developed by Kelley Aerospace In Germany/Sweden)

7.Live Syntactic Vision converting real-time images to a 3D images (Proprietary of Kelley Aerospace)

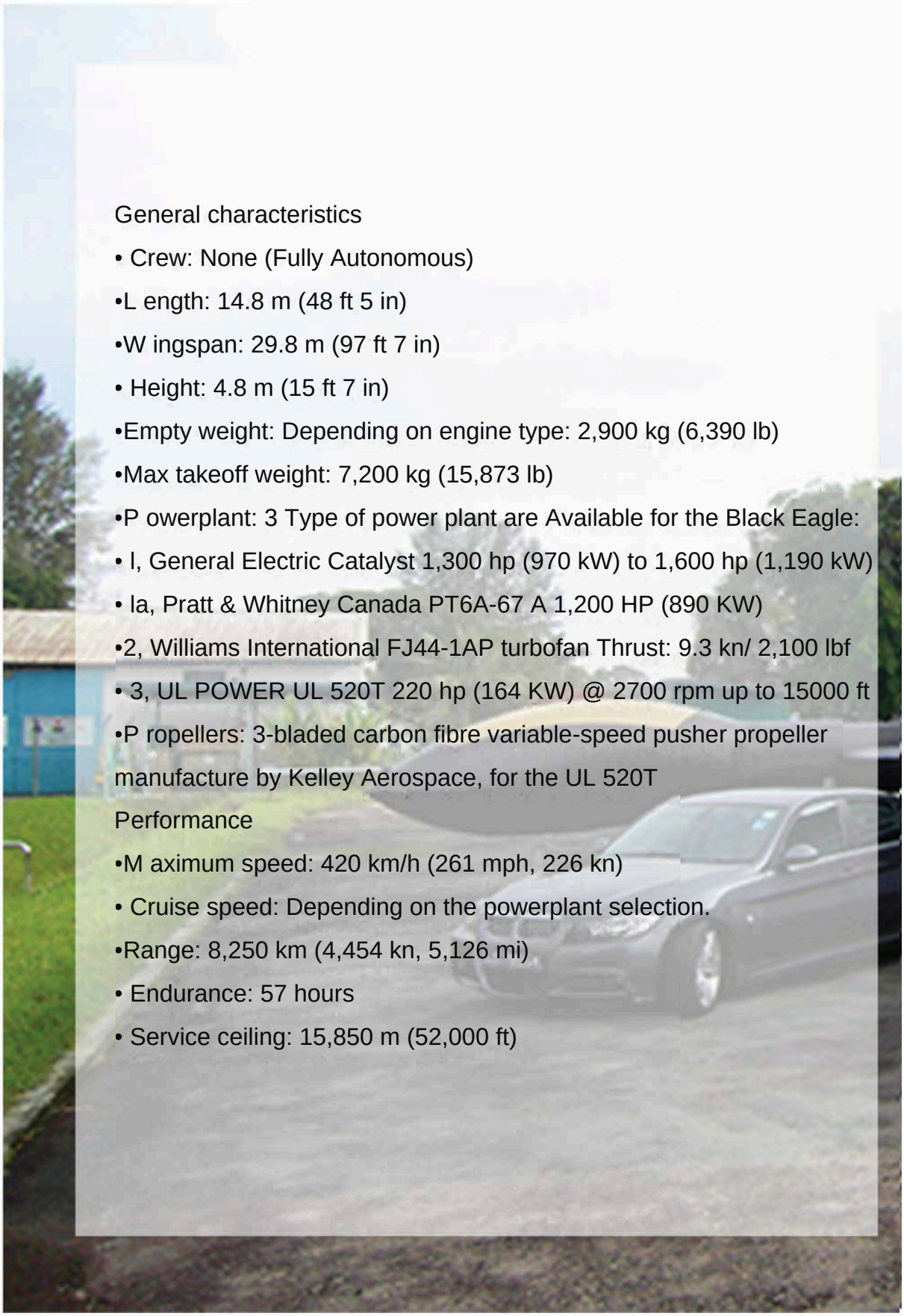


The Black Eagle is highly configurable and can encompass a full spectrum of an Unmanned Aerial Vehicle's capabilities:

1, MALE. Medium Altitude Long Endurance

2, HALE. High Altitude Long Endurance

3, Multi Role, Capable In Varies Rang of Missions



General characteristics

• Crew: None (Fully Autonomous)

•L ength: 14.8 m (48 ft 5 in)

•W ingspan: 29.8 m (97 ft 7 in)

• Height: 4.8 m (15 ft 7 in)

•Empty weight: Depending on engine type: 2,900 kg (6,390 lb)

•Max takeoff weight: 7,200 kg (15,873 lb)

•P owerplant: 3 Type of power plant are Available for the Black Eagle:

• I, General Electric Catalyst 1,300 hp (970 kW) to 1,600 hp (1,190 kW)

• Ia, Pratt & Whitney Canada PT6A-67 A 1,200 HP (890 KW)

•2, Williams International FJ44-1AP turbofan Thrust: 9.3 kn/ 2,100 lbf

• 3, UL POWER UL 520T 220 hp (164 KW) @ 2700 rpm up to 15000 ft

•P ropellers: 3-bladed carbon fibre variable-speed pusher propeller manufacture by Kelley Aerospace, for the UL 520T

Performance

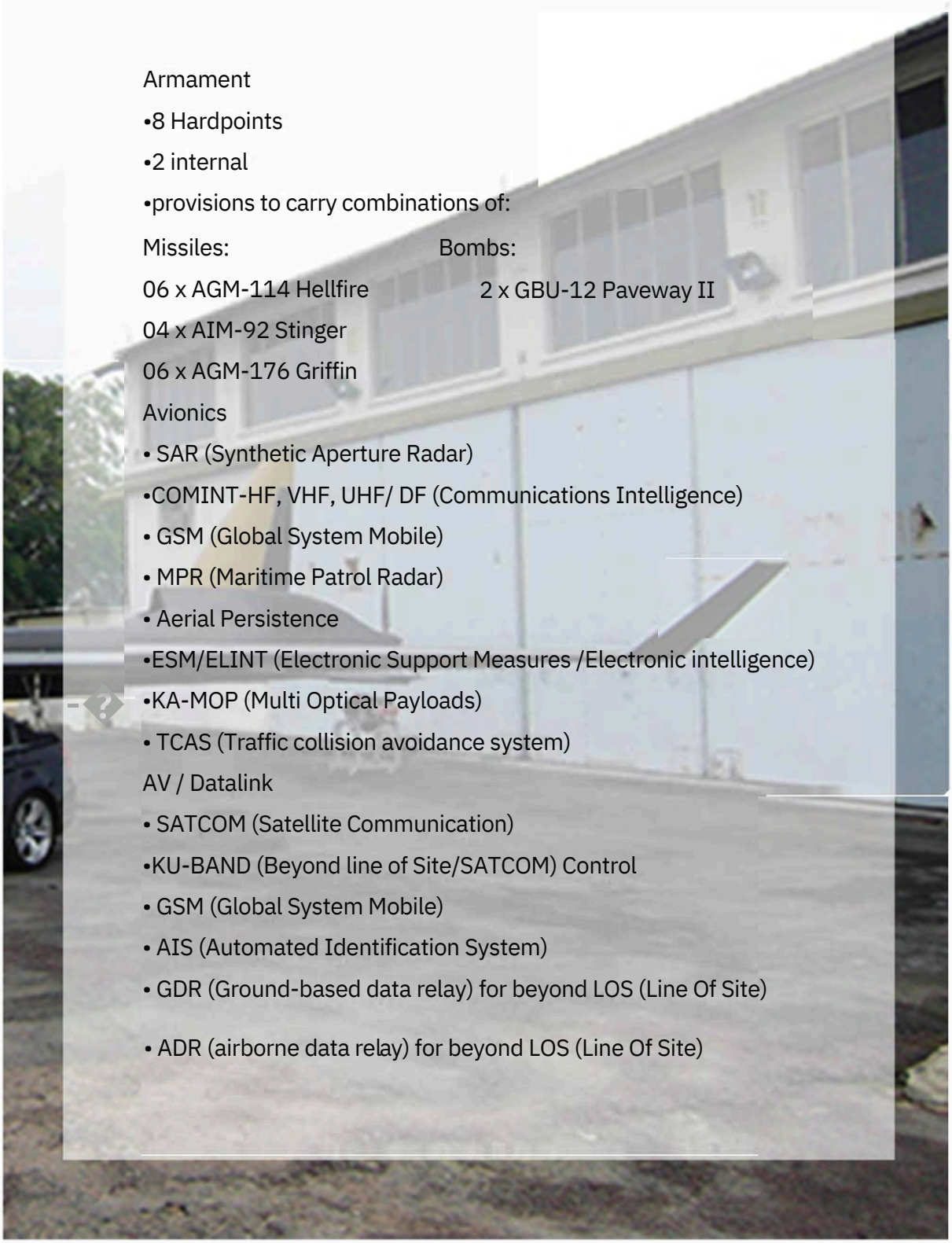
•M aximum speed: 420 km/h (261 mph, 226 kn)

• Cruise speed: Depending on the powerplant selection.

•Range: 8,250 km (4,454 kn, 5,126 mi)

• Endurance: 57 hours

• Service ceiling: 15,850 m (52,000 ft)



Armament

•8 Hardpoints

•2 internal

•provisions to carry combinations of:

Missiles:	Bombs:
06 x AGM-114 Hellfire	2 x GBU-12 Paveway II
04 x AIM-92 Stinger	
06 x AGM-176 Griffin	

Avionics

• SAR (Synthetic Aperture Radar)

•COMINT-HF, VHF, UHF/ DF (Communications Intelligence)

• GSM (Global System Mobile)

• MPR (Maritime Patrol Radar)

• Aerial Persistence

•ESM/ELINT (Electronic Support Measures /Electronic intelligence)

•KA-MOP (Multi Optical Payloads)

• TCAS (Traffic collision avoidance system)

AV / Datalink

• SATCOM (Satellite Communication)

•KU-BAND (Beyond line of Site/SATCOM) Control

• GSM (Global System Mobile)

• AIS (Automated Identification System)

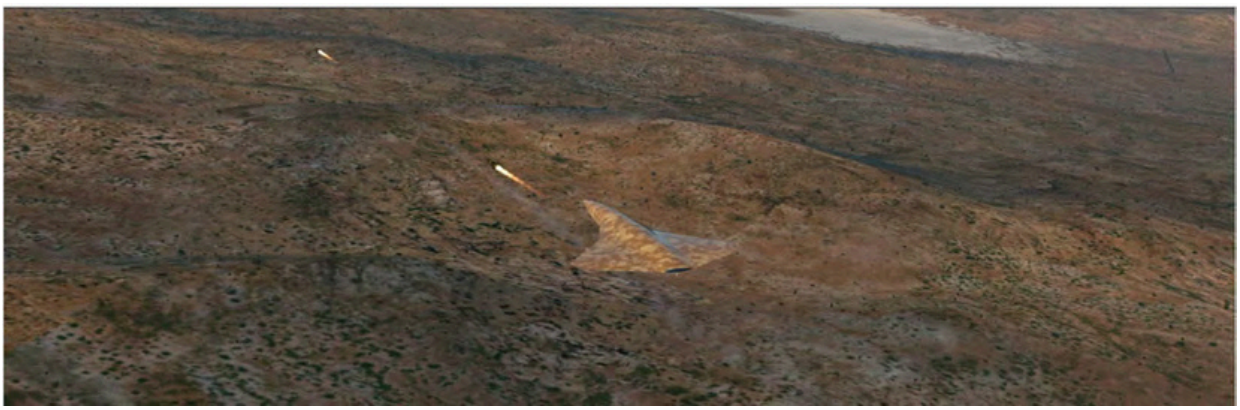
• GDR (Ground-based data relay) for beyond LOS (Line Of Site)

• ADR (airborne data relay) for beyond LOS (Line Of Site)

The Arrow

The Arrow, an advanced supersonic UAV, excels with 35% more payload than F16/F35 due to the absence of a pilot and ejection seat. monocoque design(one piece) Its innovative design, lacking a vertical stabilizer, and high-quality materials make it stealthy and cutting-edge. Equipped with an advanced flight control system, the Arrow outperforms in response time and virtualy unlimited G-loading, proving superior in airstrikes.

In swarm operations, it achieves success with a 50% attrition rate, endorsed by 12 air force generals world wide. Customizable for roles like electronic warfare, it enhances strike efficiency and disrupts SAM systems. Flexible flight formations counters various SAM capabilities, reducing system effectiveness. Prices starting at $18 million/unit with rapid production, it's a cost-effective alternative for border defense, The Arrow stands out as an advanced and economical choice in the UAV landscape.




ARROW
Length 14.8M
Wingspan 9.2M
Max Ceiling .....>55,000FT
Max speed .....>2.1 MACH
Engine thrust class .....>35,000LBS/15,876KG

ARROW

The Arrow is a multi-role unmanned aerial vehicle that is capable of flying at the speed of sound and carrying multiple payloads.

Payload

Compared to il6 or F35, the Arrow is able to carry 35% more payload due to the absenee of having a pilot ejection seat of the same aircraft size.

Radar Signature

Unlike typical conventional aircraft design, the arrow does not require vertical stabilizer, which significantly reduce radar signature. Coupled with the use of the highest quality in the composite material used to manufacture the airframe, the arrow is the most advanced and stealthiest unmanned aerial vehicle today.

Flight Control

The Arrow is equipped with an advance flight control system that is able to outperform conventional flight control in two key areas: response time and gloading. The arrow is not limited to human physical limit, thus enable the aircraft to response faster to changes in the environment, as well as not limiting the g-loading when executing maneuver to negate missiles attack.

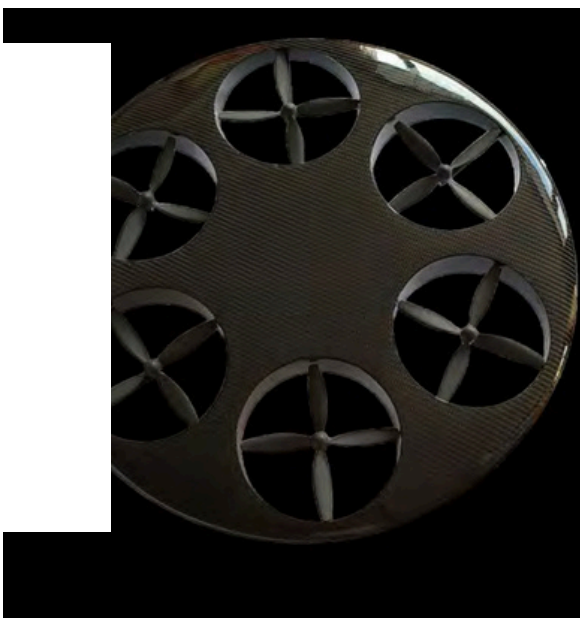
Superior Strike Platform

The SAM program has clear advantage and superiority over conventional aircraft. From the lesson learnt in the US simulation of air strike over Iran, it is evident that no one would authorize an air strike into area heavily guarded by SAM when the simulation results showed huge number of aircraft taken down by the SAM. Considering the huge potential loss of life for such mission, this is where the Arrow stands out as a superior strike platform. The Arrow outperformed conventional manned platform in many aspects .

The K2 Anti-Drone Program

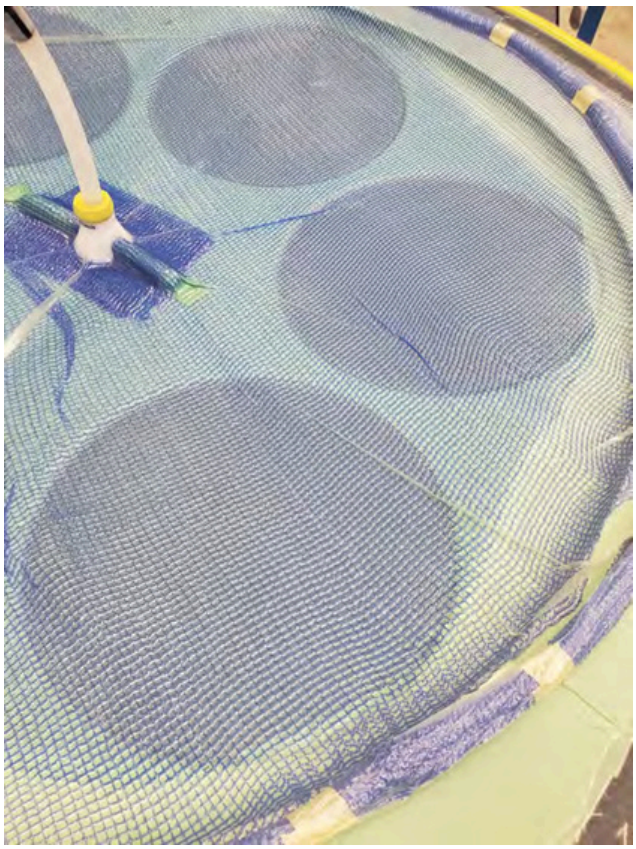
The "K-2" UAV stands at the forefront of technology, boasting the title of the largest multi-worker drone, equipped to launch two independent drones and serve as a mother ship. With a robust 3-meter diameter frame crafted using Kelley Aerospace's exclusive technological mold process, it stands out with its one-piece monocoque frame with rapid producing 3-4 per day,

This drone, tailored for the American border and DEA, demonstrated remarkable midair collision resistance during testing. Its unique in-house design, incorporating top-notch materials and components, has garnered overwhelming capabilities and integrating cutting-edge sensors like radar, lidar, and electro-optical cameras. Powered by machine learning algorithms, it swiftly identifies and categorizes incoming UAVs, utilizing advanced threat assessment to prioritize responses and minimize false alarms. Equipped with non-lethal deterrents such as radio frequency jamming and GPS disruption, the K-2 neutralizes unauthorized UAVs, safeguarding restricted areas.



Beyond its defensive role, K-2 boasts high-resolution cameras and sensors for effective reconnaissance, enhancing situational awareness. The system's real-time monitoring, adaptive flight control, and seamless integration with existing security infrastructure create a robust anti-drone defense mechanism. In an era where drone threats are on the rise, the K-2 emerges as a comprehensive solution, ensuring not only deterrence but also effective response and reconnaissance capabilities for enhanced security.

Manufacturing



Kelley Aerospace's k-2 drone garners acclaim for its unparalleled efficiency, producing an impressive 3-4 frames daily. This remarkable feat stems from the application of Kelley aerospace’s cutting-edge manufacturing process. Beyond sheer quantity, this process elevates the K-2 performance and functionality to exceptional levels. The K-2 stands out as a testament to precision engineering, showcasing versatility that extends across diverse operational landscapes. In the realm of unmanned aerial vehicles, it emerges as a reliable and advanced asset, capable of meeting the demands of various scenarios with its robust design and technological prowess.