# GREEN BIRD SYSTEMS



### TANK



# **Knut**

Advanced Kamikaze Drone

**Systems That Win** www.greenbirdsystems.com

## An Introduction to Knut

#### **Technical Specifications**

Fuselage	Glass fibre
Payload Capacity	2.5 kg
MTOW	5.0 kg
Battery Type	Li-Ion
Kamikaze Flight Time	60 minutes
Reconnaissance Flight Time	300 minutes
Cruise Speed	60 km/h
AI Detection Range	700 - 1000 m
Vertical Take-Off (VTO)	Yes
Automatic Landing	Yes
Wingspan	2.4 m
Autonomous Flight	Yes, full
Al Capabilities	Target identification and engagement
Navigation	Inertial navigation
Mission Planner	Yes, in UI



## The Evolving Battlefield

Today's battlefields are significantly more complex than anticipated. The evolution of combat, particularly with the integration of drones, has driven our adversaries to advance their electronic warfare capabilities. They now possess the ability to spoof GNSS, jam GNSS signals, and intercept our analog video links. These developments have effectively diminished the substantial advantage that drone warfare initially provided to Western forces.

#### **Countering Electronic Warfare**

When we developed Knut, our primary objective was to counteract these enemy advancements in electronic warfare. To achieve this, we equipped Knut with a target AI utilizing a matrix based on the CARVER methodology, which demonstrated significant success during the Vietnam War in identifying and prioritizing high-value targets. Additionally, we aimed to entirely neutralize the advantages gained by our adversaries through GNSS spoofing and jamming. Consequently, Knut does not rely on GNSS; instead, it employs inertial navigation enhanced by proprietary algorithms to minimize drift. Coupled with an advanced search pattern, this system maximizes the probability of locating enemy targets.

#### **Mission Success with Advanced UI**

With our custom-developed UI, we ensure that real-time and accurate combat intelligence is seamlessly integrated, thereby enhancing mission success. This UI also simplifies the drone launch process, increasing safety for pilots operating in active warzones.

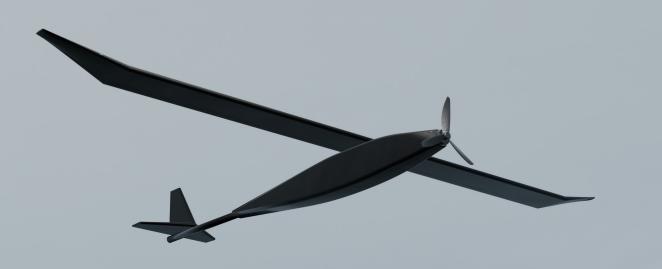
#### **Prioritizing Pilot Safety**

In engineering Knut, pilot safety was a paramount consideration. We designed a unique single-propeller fixed-wing drone capable of VTOL (Vertical Takeoff and Landing) remotely. The payload is securely stored within Knut, further enhancing pilot safety by minimizing exposure during deployment.

#### Multi-Purpose Configurations

Knut can be configured for either reconnaissance missions or Kamikaze missions, making it a game changer on the battlefield. In its Kamikaze configuration, Knut is capable of flying for up to one hour at a cruise speed of 60 km/h, carrying a 2.5 kg payload. In reconnaissance configuration, Knut replaces the weaponized payload with additional batteries, extending its flight time to five hours under optimal weather conditions. The Knut Al is then employed to quickly and accurately identify objects in the captured video, greatly streamlining and accelerating the intelligence-gathering process.





### Use Cases

#### **Offensive Operations**

Knut serves as a force multiplier in offensive operations, conducting precision strikes against adversary assets to disrupt enemy operations and seize strategic objectives. Its autonomous targeting system enables rapid engagement of high-value targets with minimal risk to friendly forces, enhancing mission success and operational effectiveness.

#### **Counterinsurgency and Counterterrorism**

In the realm of counterinsurgency and counterterrorism, Knut emerges as a decisive asset for targeting and neutralizing insurgent threats. Leveraging its autonomous targeting system, Knut swiftly identifies and engages hostile elements, disrupting adversary operations and bolstering security in volatile regions. From precision strikes against insurgent strongholds to preemptive strikes against terrorist cells, Knut provides indispensable support to military forces in asymmetric warfare environments.

#### Force Protection and Close Air Support

Knut's versatility extends to force protection and close air support missions, furnishing critical fire support to ground forces in need. With its rapid response capability and pinpoint accuracy, Knut enhances the survivability and effectiveness of friendly units operating in contested environments. Whether delivering suppressive fire during troop movements, executing precision strikes against adversary positions, or conducting reconnaissance and surveillance operations, Knut serves as a force multiplier and strategic enabler on the modern battlefield.

#### **Defensive Operations and Fortified Position Defense**

In defensive operations, Knut proves to be a valuable asset, particularly when fighting from fortified positions against an advancing enemy. With its rapid response capability and precision targeting, Knut can effectively engage advancing enemy forces, neutralizing threats and providing critical support to defending units. By leveraging its autonomous capabilities, Knut enhances the defensive posture of fortified positions, ensuring the timely and accurate engagement of enemy targets, thereby bolstering overall defensive capabilities.