RC DIRECTION

SKY FORWARD

STRATEGIC PARTNERS

ABOUT THE COMPANY

Founded in 2022

- Developing highly capable UAVs for the military purpose
- Scientific research approach in priduction
- Manufacture system can be easily constructed anywhere within 2 months
- Engineering and constructing modifications
- Decentralized productions model
- Pilot school
- Production area of more than 1200 m^2

STRUCTURE

- Production department
- Design and development department
- Procurement and supply chain department
- Finance department
- Testing department
- Pilot school

MoD TRUST US

The Chaklun drone has been **officially approved for operation by the Ministry of Defense** and is being actively investigated by the AFU from 2022.

NATO TRUST US

Our unmanned aerial vehicles (uav's) have a unique **NATO codification number,** which confirms their high technical performance and compliance with international standards.

HISTORY

2018

Establishment of the federation of model aircraft sports in ukraine

2020

Development of infrastructures of aeromodeling sport

2022

LLC RC Directipon foundation

2023

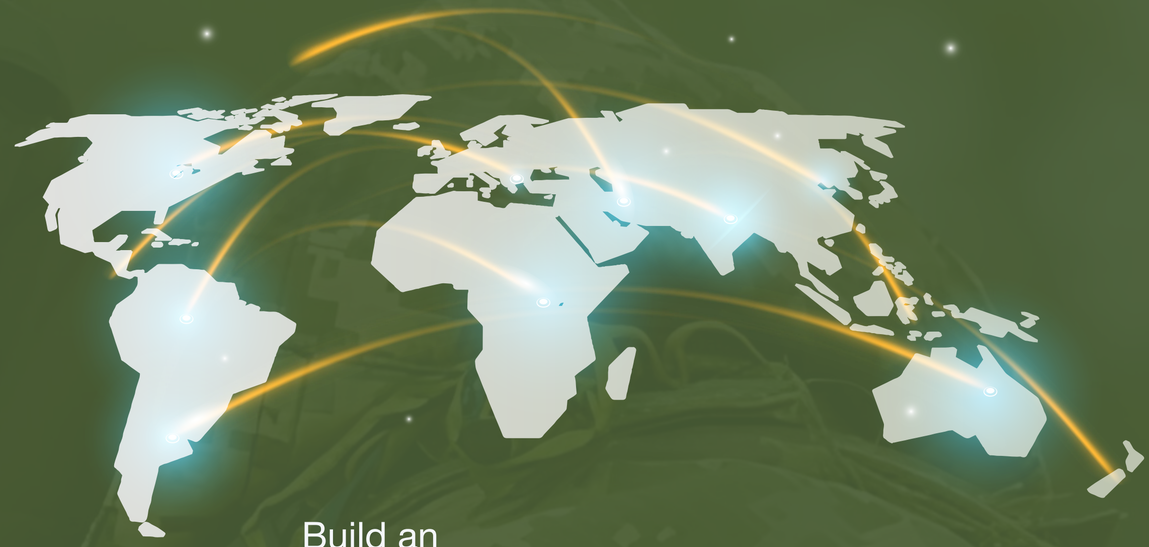
Serial production line creation

2024

Scaling up - modification integration

Transfer of UAS to the military after graduation from the pilot school

ROAD MAP



2025

Foreign market integration

2026

Production decentralization and scaling

2027

Advanced R&D initiatives

2028

Build an international reputation

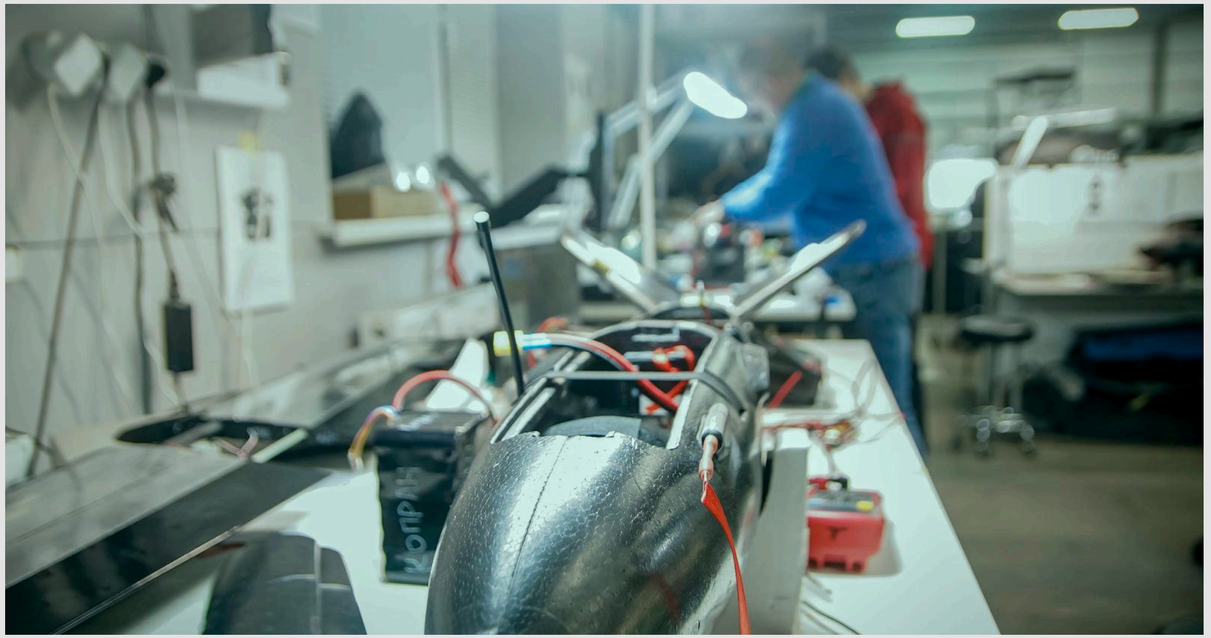
2030

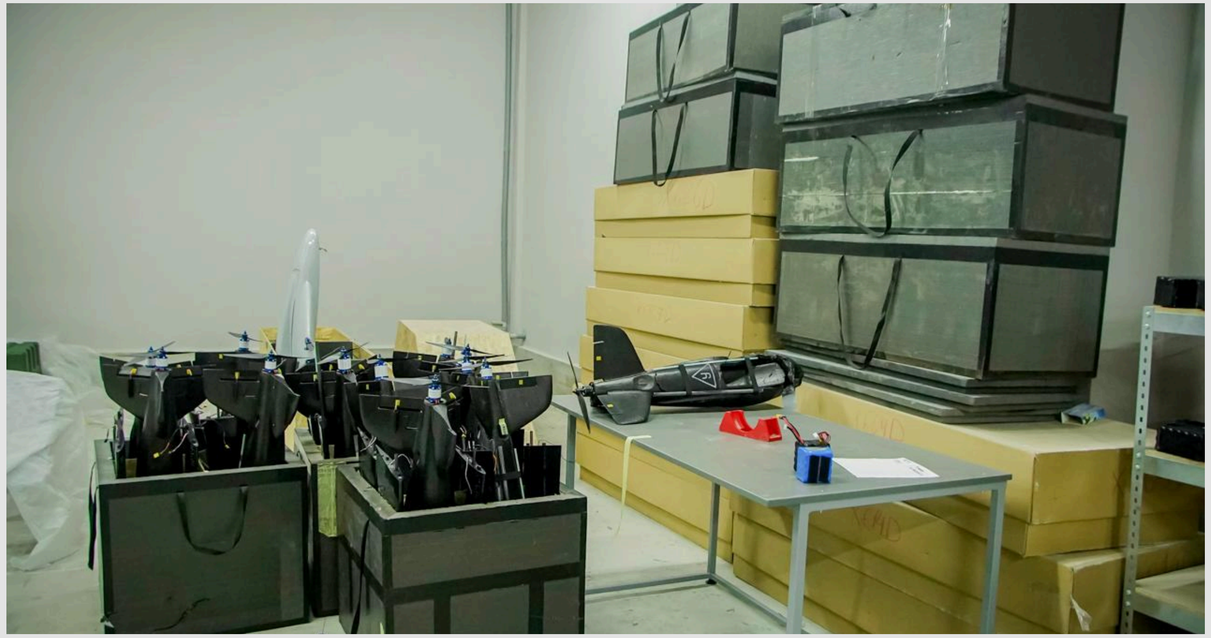
Operate in 5+ international markets

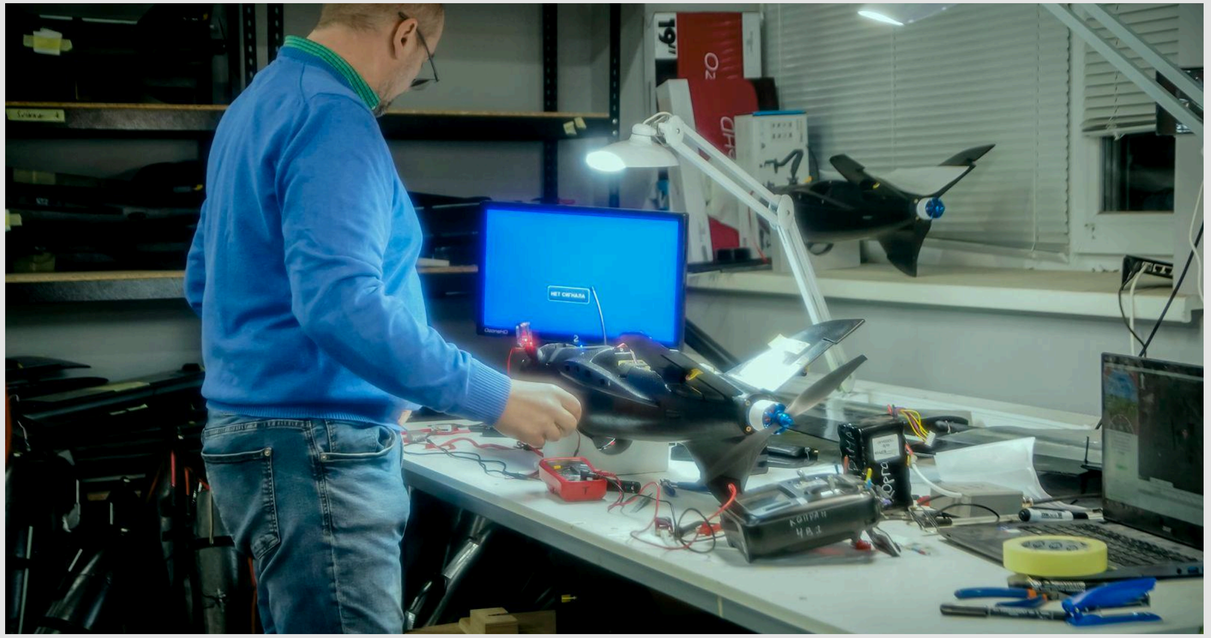
MANUFACTURING

- The production capacity is easily scalable to requirement quantity based on the contract agreement
- We have more than 1200 m²

We have launched **manufacture system** in that way that it may be **easily constructed** in any place in the world **within 2 months**







QUALITY CONTROL

INPUT CONTROL

- Supplier Certification
- Material Inspection
- Batch Testing

PROCESSING

- Frame Construction
- Electronics Installation
- Software Integration

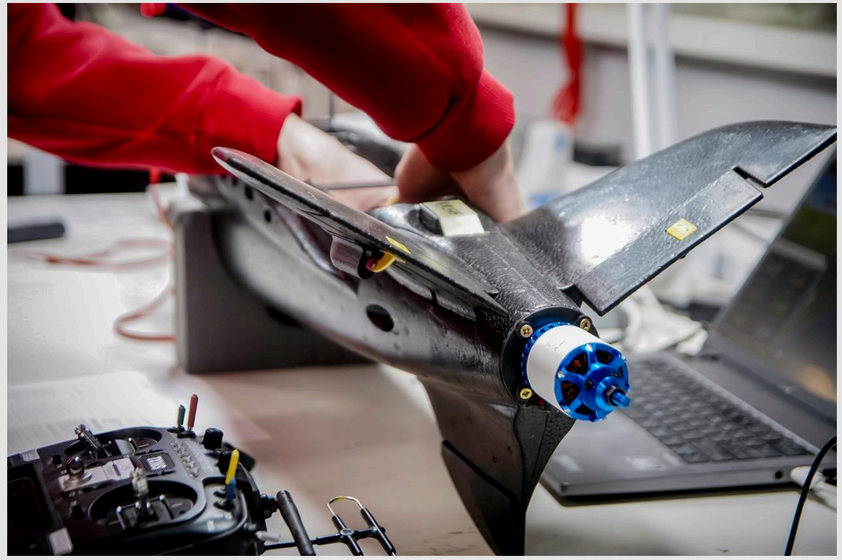
OUTPUT CONTROL

- Functional Testing
- Quality Assurance
- Standart Check

QUALITY CONTROL

Each aircraft undergoes an overflight procedure by an expert team of pilots

- Functional Testing
- Safety And Fail-Safe Testing
- Aerodynamic Testing
- Enviremental Stress Control
- Communication And Software Testing



SUPPLY CHAIN

- Electronics (controller, speed sensor, GPS)
- Servo drives
- Video communication (video transmitter, camera video receiver)
- Laptop
- Control panel

- Hull (fuselage, tubes, components)
- Control and telemetry system

- Propulsion part (motor, regulator, propeller)

Other components of the ground station (catapult, telescopic masts, wires) are made by our company from materials available on the local market.

UAV'S MODIFICATION

- Improving FHSS communication
- Autonomy and ai integration
- Increased range
- Increased payload capacity
- Jet engines intergation
- Systems development and refinement
- Stealth features integrations
- Aerodynamics improvements
- Development of reusable airplanes

CHAKLUN

A small reconnaissance drone built in an airplane configuration. The aircraft can perform reconnaissance, patrol, and search operations. due to its small size and radio-transparent hull material, the aircraft is almost invisible on radar, allowing it to pass unnoticed deep behind enemy lines.

The flight can be performed:
- in automatic mode along the specified route
- in a controlled mode, which allows the pilot to change the flight course if necessary

Photo/video recording of the terrain with coordinates and recording to the onboard storage device.

Return to the takeoff point:
- return home system in case of signal blocking
- inertial redundant navigation system

UAV composition
- Unmanned aerial vehicle - 2 units
- Ground station - 1 unit
- Launching device

TACTICAL AND TECHNICAL CHARACTERISTICS (TTC)

LENGTH OF THE AIRFRAME
960 mm

WINGSPAN
1390 mm

TAKEOFF WEIGHT
2.8±0.5 kg

MAXIMUM WIND SPEED
up to 12 m/s

FLIGHT DURATION
up to 2 hours

MAXIMUM FLIGHT SPEED
125 km/h

CRUISE SPEED
80 km/h

COMMUNICATION RANGE
75 km

MAXIMUM FLIGHT ALTITUDE
up to 3000 m

ENGINE TYPE
electric motor powered by battery

CONTROL
automatic/remote

OPERATING TEMPERATURE
-15...+30 °C

CHAKLUN-K

Over **2 000** successful neutralization of enemy targets

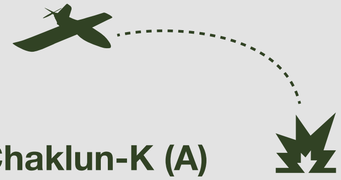
The UAV complex "Chaklun-K" is a mobile strike system designed for transporting payloads (up to 1 kg) to pre-identified ground or moving air targets. the system is highly versatile, allowing the uav to perform tasks both on the ground and in the air, with different technical specifications. its advanced control and telemetry transmission system ensures a range of **up to 30 km,** while a secure communication channel allows it to maintain control even in areas affected by enemy electronic warfare (EW) systems.

AVAILABLE IN TWO MODIFICATIONS

Day

Night

Ground operations



Chaklun-K (A)

Air-to-air operations

Chaklun-K (M)

UAV composition

- Unmanned aerial vehicle - 6 units
- Ground station - 1 unit
- Launching device

TACTICAL AND TECHNICAL CHARACTERISTICS (TTC)

LENGTH OF THE AIRFRAME
960 mm

WINGSPAN
1300 mm

TAKEOFF WEIGHT
4,3±0,1 kg

ENGINE TYPE
electric motor powered by battery

MAXIMUM RANGE IN CONTROLLED MODE
at least 50 km

UAV CREW
3 persons

FLIGHT DURATION
1 h ±10 m

MAXIMUM FLIGHT SPEED
120-175 km/h

CRUISE SPEED
80 km/h

LAUNCH METHOD
from the launch device

LANDING METHOD
free descent (aircraft-type landing)

RADAR CREW (RLS)
-/3 persons

MAXIMUM FLIGHT ALTITUDE
up to 4000 m

OPERATING FLIGHT HEIGHT
300/4000 m

MAXIMUM WIND SPEED
up to 12 m/s

OPERATING TEMPERATURE RANGE
-15...+30 °C

PAYLOAD
must not exceed 1.5/1 kg

CHAKLUN 2.0

The "Chaklun-2.0" UAV is a multifunctional mobile complex designed for aerial visual reconnaissance. Thanks to the unmanned aerial vehicles that make up the complex, it is possible to perform reconnaissance, patrol, correction and search operations. due to their small size and radio-transparent hull material, the aircraft are almost invisible on radar, allowing them to pass unnoticed deep behind enemy lines.

The ChaklunLRS software is a hardware and software complex developed by our programmers in cooperation with the military, which allows full control and management of the uav and its autopilot.

The UAV communication system operates at the expense of pseudo-random frequency hopping (FHSS) in the range of 410-490 mhz, which allows to maintain control in the area of enemy electronic warfare. **The maximum communication distance is 75 km.**

Video communication is provided through the use of in-house manufactured antennas that are precisely tuned in frequency, which ensures a stable signal strength and data transmission **up to 55-65 km.** the main frequencies are in the range of 1.2 - 1.3 mhz.

UAV composition

- Unmanned aerial vehicle - 2 units
- Ground station - 1 unit
- Launching device

TACTICAL AND TECHNICAL CHARACTERISTICS (TTC)

LENGTH OF THE AIRFRAME
1000 mm

WINGSPAN
1800 mm

TAKEOFF WEIGHT
4,5 kg

MAXIMUM WIND SPEED
up to 12 m/s

FLIGHT DURATION
up to 3 hours

MAXIMUM WIND SPEED
150 km/h

CRUISE SPEED
80 km/h

OPERATING FLIGHT ALTITUDE
500 m

MAXIMUM FLIGHT ALTITUDE
up to 4000 m

ENGINE TYPE
electric motor powered by battery

CONTROL
automatic/remote

OPERATING TEMPERATURE
-15...+30 °C

INTERCEPTOR

The "Interceptor" UAV system is designed exclusively for neutralizing airborne targets (enemy reconnaissance and strike UAVs). The aircraft's design allows it to stay airborne for **more than 2 hours** (in patrol mode) and to pursue targets at **maximum speeds of 250 km/h.** It is equipped with two cameras, providing a wide field of view, and can also be fitted with a thermal imaging camera for night operations.

An additional feature is an automatic target acquisition system (with an accuracy of 20-30 meters), with final guidance and target engagement carried out visually by the pilot. the advanced control and telemetry system provides a range of **up to 75 km.** Its secure communication channel allows it to maintain control in areas affected by enemy electronic warfare (EW).

The UAV is equipped with analog video transmitters that can be easily switched during operation, making it undetectable by electronic intelligence systems and preventing operator tracking. if no targets are detected, the aircraft can be safely returned and reused after replacing the battery.

The effectiveness of the uav increases to 100% when operated in tandem with the radar statrion.

MODIFICATIONS

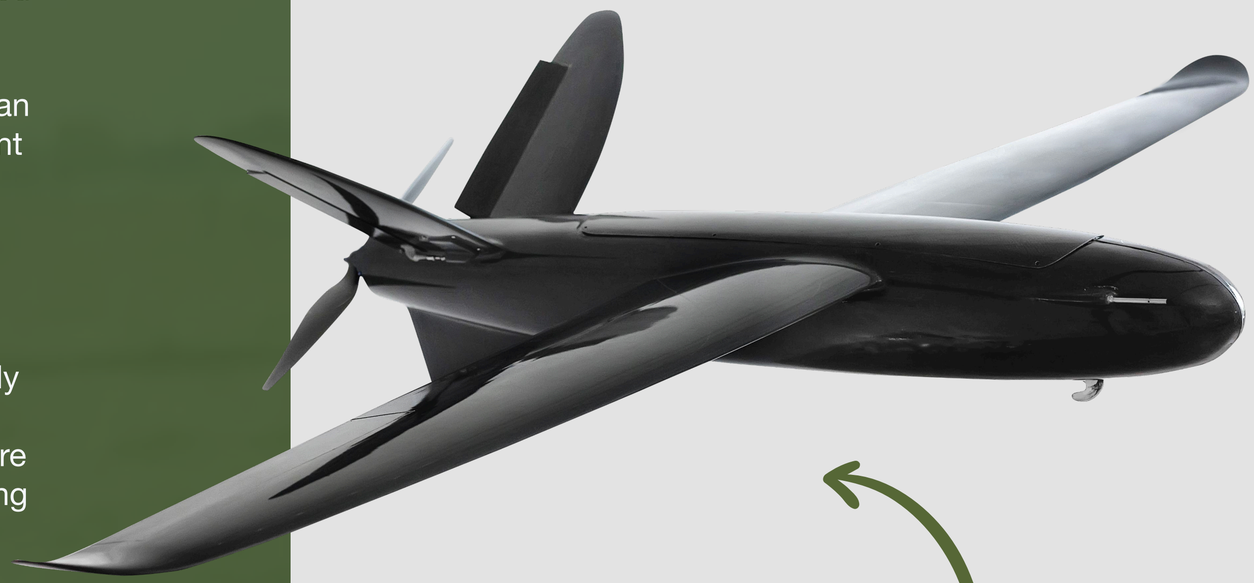
Day

Night

Shot

>1,000

successful intercepts of enemy targets



UAV composition

- Unmanned aerial vehicle - 10 units
- Ground station - 1 unit
- Launching device

TACTICAL AND TECHNICAL CHARACTERISTICS (TTC)

LENGTH OF THE AIRFRAME
1000 ± 6 mm

FLIGHT DURATION
from 20 to 120 m

MAXIMUM FLIGHT ALTITUDE
up to 6500 m

WINGSPAN
1706 ± 6 mm

MAXIMUM FLIGHT SPEED
250 km/h

LANDING METHOD
launching device

TAKEOFF WEIGHT
6 kg

CRUISE SPEED
90 km/h

PAYLOAD
up to 800 g

MAXIMUM WIND SPEED
up to 12 m/s

MAXIMUM RANGE
up to 30 km

OPERATING TEMPERATURE
-10...+30 °C

CHAKLUN-B

- Built using a conventional **aircraft design**, it can remain airborne for approximately **6 hours** while caring a payload **up to 15 kg**
- An integrated **internal system,** along with the **software** developed specifically for this UAV, ensures stable flight in **automatic mode** based on **predetermined coordinated.**

UAV composition
- Unmanned aerial vehicle - 1 unit
- Ground station - 1 unit
- Launching device

TACTICAL AND TECHNICAL CHARACTERISTICS (TTC)

LENGTH OF THE AIRFRAME
2200 mm

WINGSPAN
3100 mm

TAKEOFF WEIGHT
uo to 45 kg

MAXIMUM WIND SPEED
up to 12 m/s

FLIGHT DURATION
up to 6 hours

MAXIMUM FLIGHT SPEED
155 km/h

CRUISE SPEED
130 km/h

MAXIMUM RANGE
600 km

MAXIMUM FLIGHT ALTITUDE
up to 3000 m

ENGINE TYPE
internal combustion engine

PAYLOAD
10-15 kg

OPERATING TEMPERATURE
-10...+30 °C

CHAKLUN-B 2.0

- Built using a conventional **aircraft design**, it can remain airborne for approximately **8 hours** while caring a payload **up to 20-25 kg**
- An integrated **internal system,** along with the **software** developed specifically for this UAV, ensures stable flight in **automatic mode** based on **predetermined coordinated.**

UAV composition

- Unmanned aerial vehicle - 1 unit
- Ground station - 1 unit
- Launching device

TACTICAL AND TECHNICAL CHARACTERISTICS (TTC)

LENGTH OF THE AIRFRAME
2500 mm

WINGSPAN
3500 mm

TAKEOFF WEIGHT
uo to 65 kg

MAXIMUM WIND SPEED
up to 12 m/s

FLIGHT DURATION
up to 8 hours

MAXIMUM FLIGHT SPEED
155 km/h

CRUISE SPEED
130 km/h

MAXIMUM RANGE
900 km

MAXIMUM FLIGHT ALTITUDE
up to 3000 m

ENGINE TYPE
internal combustion engine

PAYLOAD
20-25 kg

OPERATING TEMPERATURE
-10...+30 °C