

GHOST-NET X

STRATEGIC AUTONOMOUS DOMINANCE SYSTEM

DECISION SUPERIORITY IS NO LONGER **HUMAN-LIMITED.**



**NOT A PLATFORM.
NOT A WEAPON.
A DOMINANCE ARCHITECTURE.**

GHOST-NET X is a distributed autonomous warfare architecture designed to redefine how modern battles are executed, controlled, and concluded.

By fusing real-time battlefield intelligence, autonomous decision systems, and multi-domain effects, it transforms isolated assets into a self-optimizing, mission-adaptive combat network.

THE SYSTEM THAT **DECIDES** BEFORE YOU CAN REACT.

Operating across more than **1,000** distributed nodes, executing engagement decisions in under **300** milliseconds, tracking over **5,000** simultaneous entities, and sustaining mission continuity beyond **40%** node degradation.

**ENGAGEMENT DECISIONS EXECUTED ACROSS DISTRIBUTED NODES
FASTER THAN ADVERSARY DETECTION-RESPONSE CYCLES.**

ENEMY DECISION CYCLES **COLLAPSE** UNDER DISTRIBUTED AUTONOMOUS PRESSURE.





	MTOW	2,350 kg
	PAYLOAD CAPACITY	520 kg
	ENDURANCE	42 h (STD) / up to 48 h (ECO)
	SERVICE CEILING	37,000 ft
	CRUISE SPEED	135 - 145 knots
	MAX SPEED	220 - 240 knots
	OPERATIONAL RADIUS	2,500+ km
	FERRY RANGE	5,000+ km
	POWERPLANT	220 - 260 HP
	SWARM CONTROL (OPERATIONAL CLUSTER)	500+ nodes

01 ARCHITECTURAL FOUNDATION

GHOST-NET X is engineered as a distributed system-of-systems architecture where sensing, processing, and execution operate as parallel, continuous states.

- There is no central command dependency.
- System integrity is maintained through real-time synchronization across all nodes, ensuring uninterrupted mission execution under contested conditions.

02 DISTRIBUTED EXECUTION MODEL

Each airborne unit functions simultaneously as a sensor, processor, and execution element.

- Operational clusters dynamically scale from 100 to over 1,000 nodes.
- Coordination is not hierarchical. It emerges through continuous data exchange and shared system logic.
- No node is critical.
- No node is redundant.

03 NETWORK CONTINUITY

The communication architecture is self-forming and self-healing.

- Primary connectivity is maintained through an adaptive RF mesh network.
- Routing paths continuously evolve based on node availability, signal integrity, and mission priority.
- Under disruption, the system reorganizes - not reconnects.

04 INTELLIGENCE SYNTHESIS

Sensor inputs from EO/IR, RF detection, radar, and environmental sources are fused within a distributed intelligence layer.

- More than 5,000 concurrent tracks are processed in parallel.
- Fusion cycles complete in under 150 milliseconds.
- The system does not only detect. It models and predicts.

05 AUTONOMOUS DECISION CORE

Decision-making is distributed across all active nodes.

- Target prioritization, resource allocation, and engagement sequencing are continuously recalculated.
- Mission-level decisions execute in under 300 milliseconds.
- The system does not wait for commands. It generates action.

06 SWARM CONTROL LAYER

GHOST-NET X functions as an airborne swarm command node.

- It coordinates ISR, strike, EW, relay, and decoy elements.
- Swarm logic includes leaderless coordination, dynamic role redistribution, cluster-based execution, and resilience under node loss.

07 EW & PERCEPTION DISRUPTION

The system actively degrades adversary perception.

- RF signal interference
- Decoy signal generation
- False-target behavior
- Radar saturation
- Decision latency injection
- Sensor confusion layering

Enemy systems receive conflicting inputs, reducing reliability and increasing response time.

08 SYSTEM RESILIENCE

There is no single point of failure. Operational coherence is maintained under severe degradation through:

- Distributed fault-tolerant architecture
- Adaptive network restructuring
- Role redistribution
- Continuous decision-layer integrity

The system does not degrade linearly. It reorganizes.

09 STRUCTURAL DOMINANCE

Conventional systems rely on sequential command chains. GHOST-NET X removes this dependency.

- Sequential decision chains collapse under distributed execution.
- Decisions occur in parallel.
- Execution is continuous.
- System behavior adapts in real time.

KILL SHOT

SYSTEM DECISIONS OUTPACE ADVERSARY PERCEPTION. ENEMY OPERATIONAL COHERENCE DEGRADES BEFORE ENGAGEMENT CAN STABILIZE.

STRATEGIC OUTCOME



PERSISTENT
BATTLEFIELD
PRESENCE



DECISION-CYCLE
COMPRESSION



NETWORK-LEVEL
DOMINANCE



OPERATIONAL
SATURATION OF
CONTESTED ENVIRONMENTS



	MTOW	2,350 kg
	PAYLOAD CAPACITY	520 kg
	ENDURANCE	42 h (STD) up to 48 h (ECO)
	SERVICE CEILING	37,000 ft
	CRUISE SPEED	135 - 145 knots
	MAX SPEED	220 - 240 knots
	OPERATIONAL RADIUS	2,500+ km
	FERRY RANGE	5,000+ km

01 FLIGHT PERFORMANCE



- Maximum Takeoff Weight: 2,350 kg
- Payload Capacity: 520 kg
- Endurance: 42 h / up to 48 h (ECO)
- Service Ceiling: 37,000 ft
- Cruise Speed: 135 - 145 knots
- Maximum Speed: 220 - 240 knots

02 OPERATIONAL BEHAVIOR



- Multi-role ISR + strike capability
- Simultaneous mission execution
- Autonomous mission adaptation
- GPS-denied operational capability
- Multi-target tracking & prioritization

03 FLIGHT CONTROL SYSTEM



- Triple-redundant fly-by-wire architecture
- AI-assisted stabilization & control
- Real-time aerodynamic correction
- Autonomous return-to-base capability
- Adaptive control under stress conditions

04 PROPULSION & ENERGY



- Hybrid propulsion architecture
- Turbocharged heavy fuel engine
- Electric assist (low signature mode)
- AI-based load balancing
- Adaptive power distribution & management

05 ENVIRONMENTAL PERFORMANCE



- High-altitude low-density operation
- High-temperature desert capability
- Turbulence adaptive flight control
- Continuous environmental recalibration
- Multi-condition day/night operational capability

06 SYSTEM ADVANTAGE



- Reduced thermal signature through controlled propulsion load
- Low acoustic profile through hybrid-assist mode
- Extended operational radius
- Persistent ISR presence
- High-altitude stability & endurance
- Sustained endurance-driven mission continuity

PERFORMANCE STATEMENT

PERSISTENCE OUTLASTS ADVERSARY CAPABILITY.
OPERATIONAL PRESENCE CONTINUES BEYOND ENEMY ENDURANCE LIMITS.

STRATEGIC OUTCOME



CONTINUOUS
ISR DOMINANCE



EXTENDED
MISSION PRESENCE



HIGH-ALTITUDE
OPERATIONAL CONTROL



SUSTAINED
BATTLEFIELD VISIBILITY



	MTOW	2,350 kg
	PAYLOAD CAPACITY	520 kg
	ENDURANCE	42 h (STD) up to 48 h (ECO)
	SERVICE CEILING	37,000 ft
	CRUISE SPEED	135 - 145 knots
	MAX SPEED	220 - 240 knots
	OPERATIONAL RADIUS	2,500+ km
	FERRY RANGE	5,000+ km

01 ISR DOMINANCE



- Long-endurance surveillance missions
- Persistent ISR coverage
- Multi-target tracking capability
- Real-time target recognition
- Continuous data acquisition

02 PRECISION STRIKE EXECUTION



- Precision-guided micro munition deployment
- Simultaneous ISR + strike capability
- Laser designation support
- Target confirmation & engagement sequencing
- Low-collateral strike logic

03 MULTI-DOMAIN INTEGRATION



- Integrated operation with ground command systems
- Network-based data sharing
- Real-time mission coordination
- Cross-platform synchronization
- Air-ground-network unified execution

04 CONTESTED ENVIRONMENT OPERATIONS



- GPS-denied operational capability
- Anti-jamming navigation architecture
- Autonomous mission adaptation
- Secure communication resilience
- Degraded-mode operational continuity

05 PERSISTENT AREA DOMINANCE



- Extended endurance operational capability
- High-altitude stability
- Continuous surveillance presence
- Dynamic re-tasking capability
- Long-duration mission persistence

06 SWARM-LEVEL MISSION CONTROL



- Multi-node swarm coordination
- ISR, strike, EW node integration
- Leaderless swarm execution
- Dynamic role distribution
- Cluster-based mission control

MISSION LOGIC

GHOST-NET X does not operate within predefined mission boundaries. It continuously redefines mission scope based on:

- evolving target conditions
- network-level intelligence
- operational priorities

MISSION EXECUTION EVOLVES FASTER THAN BATTLEFIELD CONDITIONS CAN STABILIZE.

THE SYSTEM RESHAPES THE BATTLESPACE WHILE REMAINING CONTINUOUSLY PRESENT.



KILL SHOT

MISSION EXECUTION EVOLVES FASTER THAN BATTLEFIELD CONDITIONS CAN STABILIZE. THE SYSTEM RESHAPES THE BATTLESPACE WHILE REMAINING CONTINUOUSLY PRESENT.

STRATEGIC OUTCOME



PERSISTENT
ISR DOMINANCE



PRECISION
STRIKE CONTROL



MULTI-DOMAIN
OPERATIONAL
SUPERIORITY



CONTINUOUS
MISSION
ADAPTABILITY



	MAXIMUM TAKEOFF WEIGHT	2,350 kg
	PAYLOAD CAPACITY	520 kg
	ENDURANCE	42 h (STD) up to 48 h (ECO)
	SERVICE CEILING	37,000 ft
	CRUISE SPEED	135 – 145 knots
	MAXIMUM SPEED	220 – 240 knots
	OPERATIONAL RADIUS	2,500+ km
	FERRY RANGE	5,000+ km
	ENGINE POWER	220 – 260 HP

01 GENERAL PLATFORM DATA

Platform Class	MALE+ Hybrid Autonomous Warfare Platform
Configuration	Wide-body semi-blended fuselage
Tail Design	Inverted V-tail
Propulsion Layout	Rear-mounted pusher configuration
Mission Roles	ISR / Strike / EW / Multi-Domain
Automation Level	Human-supervised autonomous execution

02 DIMENSIONS

Length	8.8 – 9.4 m
Wingspan	21 – 23 m
Height	2.6 – 3.1 m
Wing Area	35 – 41 m ²
Fuselage Width	1.25 – 1.40 m
Propeller Diameter	2.6 – 2.8 m
Ground Clearance	0.55 – 0.65 m

03 MASS PROPERTIES

Maximum Takeoff Weight	2,350 kg
Empty Weight	1,220 – 1,300 kg
Payload Capacity	520 kg
Fuel Capacity	450 – 650 kg
Max Payload Fraction	~22 %
Wing Loading	61 – 67 kg/m ²
Power Loading	0.094 – 0.11 HP/kg

04 FLIGHT PERFORMANCE

Endurance	42 h (STD) up to 48 h (ECO)
Service Ceiling	37,000 ft
Cruise Speed	135 – 145 knots
Max Speed	220 – 240 knots
Stall Speed	65 – 70 knots
Climb Rate	1,500 – 1,800 ft/min
Max Operating Altitude	37,000 ft

05 PROPULSION SYSTEM

Engine Type	Turbocharged heavy fuel engine
Power Output	220 – 260 HP
Configuration	Pusher propeller
Propeller Type	Constant speed, 4-blade composite
Hybrid Assist	Electric low-signature module
Control	FADEC + Hybrid management unit
Fuel Type	Jet A / JP-8 / Dissel

06 FUEL & ENERGY SYSTEM

Fuel System	Internal fuel distribution architecture
Fuel Capacity	450 – 650 kg
Fuel Optimization	AI-assisted consumption control
Energy Management	Adaptive power management system
Energy Architecture	Dual-layer energy distribution
Hybrid Mode	Extended endurance support in ECO mode

07 AVIONICS & SENSOR SUITE

EO/IR System	Multi-spectral stabilized turret
Day Camera	HD optical imaging
Thermal Camera	MWIR (3-5 μm)
Laser Designator	Class 1M / Class 3B
Radar (Optional)	SAR / GMTI
RF Detection	Passive RF detection module
Other Sensors	AHRS / INS / Air data / Magnetometer

08 COMMUNICATION SYSTEM

Network Type	Adaptive RF mesh network
SATCOM	Multi-band SATCOM integration
Line-of-Sight	Dual-band data link
Encryption	AES-256 / Military grade
Data Link	Real-time wideband data transmission
Relay Capability	Multi-node relay architecture

09 CONTROL & NAVIGATION

Flight Control	Triple-redundant fly-by-wire
Navigation	Inertial + Terrain referenced
GNSS	Anti-jamming GNSS architecture
GPS-Denied	Full GPS-denied operation capability
Autonomy	Autonomous return-to-base (RTB)
Mission Management	AI-based mission execution manager

10 AI & COMPUTE SYSTEM

Compute Power	40 – 80 TOPS class
Processor Architecture	Heterogeneous multi-core
AI Functions	Target recognition, tracking, classification
Mission Modeling	Predictive mission modeling
Decision Support	Distributed decision support system
Data Processing	Edge + distributed processing

11 PAYLOAD SYSTEM

Internal Bay	Modular mission bay
Bay Dimensions	2.2 x 0.9 x 0.8 m (L x W x H)
External Stations	4 – 6 hardpoints
Payload Capacity	Up to 520 kg
Electrical Interface	MIL-STD-1760
Data Interface	High-speed payload bus
Payload Types	ISR / Strike / EW / Comms / Multi-role

12 STRUCTURAL & MATERIAL

Structure	Composite primary structure
Surface Treatment	Radar-absorbent materials
IR Signature	Infrared signature suppression
Aerodynamics	Semi-blended low-drag geometry
Durability	High fatigue resistance
Corrosion Protection	MIL-STD-810G compliant

13 OPERATIONAL ENVIRONMENT

Operating Temp.	-40°C to +55°C
High Altitude	Up to 37,000 ft
Desert Operation	High-temperature capable
Turbulence	Turbulence adaptive control
Humidity	Up to 95% RH
Icing Protection	De-icing / Anti-icing capable
Storage Temp.	-55°C to +70°C

ENGINEERING STATEMENT

All specifications reflect system-level integration of structure, propulsion, avionics, and mission architecture. Every parameter is derived from measurable design data, validated through engineering analysis, simulation, and operational logic.

PERFORMANCE IS DERIVED FROM DESIGN, NOT ASSUMPTION.

	MTOW	2,350 kg
	PAYLOAD CAPACITY	520 kg
	ENDURANCE	42 h (STD) up to 48 h (ECO)
	SERVICE CEILING	37,000 ft
	CRUISE SPEED	135 - 145 knots
	MAX SPEED	220 - 240 knots
	OPERATIONAL RADIUS	2,500+ km
	FERRY RANGE	5,000+ km
	ENGINE POWER	220 - 260 HP

PERSISTENT ISR
WIDE-AREA SURVEILLANCE

MULTI-MISSION EXECUTION
PARALLEL OPERATIONS

NETWORK CONTROL
DISTRIBUTED COMMAND

TARGET ACQUISITION
REAL-TIME DETECTION

PRECISION STRIKE
TIME-SENSITIVE ENGAGEMENT

MARITIME ISR
COASTAL MONITORING

EW OPERATIONS
SIGNAL DISRUPTION

01 PERSISTENT BATTLESPACE PRESENCE



- Continuous ISR coverage across extended durations
- High-altitude persistent monitoring capability
- No operational gap between mission cycles
- Continuous situational awareness

02 DECISION CYCLE ADVANTAGE



- Sub-300 ms mission-level decision execution
- Real-time target prioritization
- Continuous data-driven adaptation
- Decision superiority over sequential command systems

03 MULTI-MISSION EXECUTION



- ISR, strike, EW, and relay operations in parallel
- Simultaneous multi-target engagement support
- Dynamic mission switching without downtime
- Real-time mission reconfiguration

04 CONTESTED ENVIRONMENT DOMINANCE



- GPS-denied navigation capability
- Anti-jamming communication resilience
- Autonomous execution under degraded conditions
- Mission continuity under electronic warfare pressure

05 NETWORK-LEVEL CONTROL



- Distributed command architecture
- Multi-node relay extension
- Swarm coordination capability
- Real-time network restructuring

06 ADAPTIVE OPERATIONAL BEHAVIOR



- AI-driven mission recalibration
- Target behavior prediction
- Environmental adaptation logic
- Dynamic operational response

OPERATIONAL LOGIC

GHOST-NET X maintains continuous operational presence while adapting mission execution in real time.

IT DOES NOT REACT TO THE BATTLEFIELD. IT DEFINES IT.

KILL SHOT

OPERATIONAL CONTINUITY EXCEEDS ADVERSARY RESPONSE CAPABILITY.

IMPACT

THE SYSTEM REMAINS PRESENT, ADAPTIVE, AND DECISIVE ACROSS ALL MISSION PHASES.

STRATEGIC OUTCOME

- Continuous battlefield dominance
- Decision cycle compression
- Multi-domain operational control
- Persistent mission execution

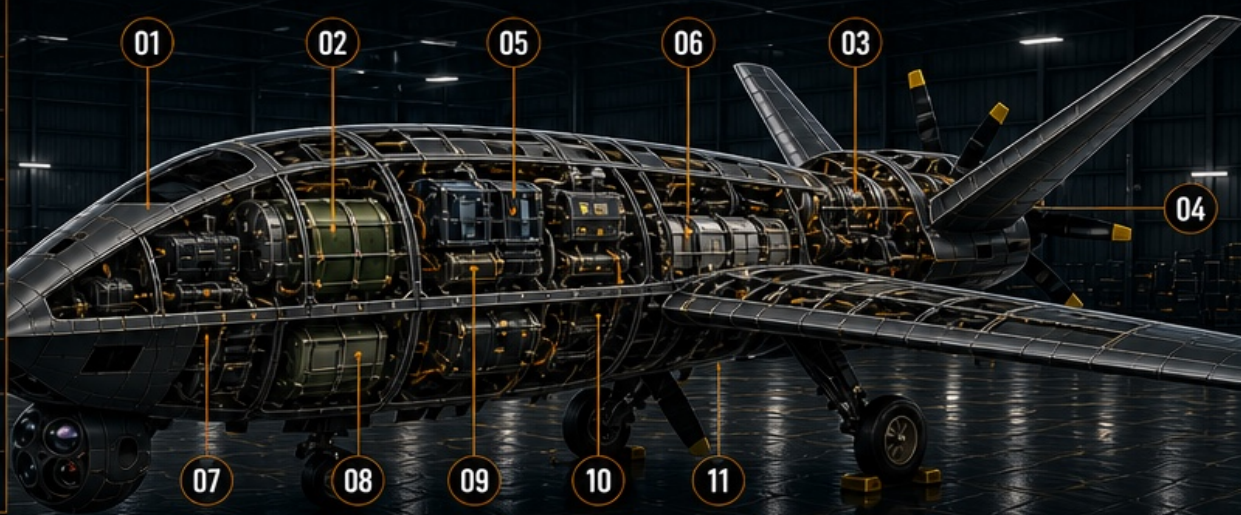
SYSTEM COMPONENTS & INTERNAL ARCHITECTURE

INTEGRATED DESIGN ACROSS STRUCTURE, PROPULSION, AVIONICS, AND MISSION SYSTEMS.

GHOST-NET X

STRATEGIC AUTONOMOUS
DOMINANCE PLATFORM

	MTOW	2,350 kg
	PAYLOAD CAPACITY	520 kg
	ENDURANCE	42 h (STD) up to 48 h (ECO)
	SERVICE CEILING	37,000 ft
	CRUISE SPEED	135 – 145 knots
	MAX SPEED	220 – 240 knots
	OPERATIONAL RADIUS	2,500+ km
	FERRY RANGE	5,000+ km
	ENGINE POWER	220 – 260 HP



01 AIRFRAME STRUCTURE



- Composite primary structure
- Reinforced load-bearing sections
- Semi-blended aerodynamic geometry
- Structural weight optimization

02 FUEL STORAGE SYSTEM



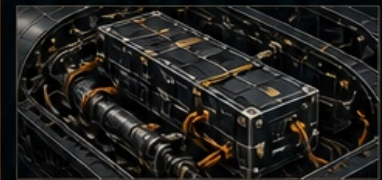
- Distributed internal fuel tanks
- Center-of-gravity balanced layout
- High-density fuel packaging
- Fuel routing channels integrated into structure

03 PROPULSION MODULE



- Rear-mounted turbocharged engine
- Integrated cooling system
- Vibration isolation mounting
- Direct shaft propulsion linkage

04 HYBRID ENERGY SYSTEM



- Electric assist module
- Auxiliary power distribution
- Low-signature operation mode
- Energy redundancy architecture

05 AVIONICS CORE



- Central flight computer cluster
- Redundant control units
- Real-time data bus architecture
- Flight-critical system isolation

06 AI COMPUTE MODULE



- Edge processing units
- Distributed compute architecture
- Real-time inference layer
- Data fusion processing nodes

07 SENSOR INTEGRATION



- EO/IR turret (nose integrated)
- Radar module positioning
- RF detection array
- Multi-sensor alignment

08 COMMUNICATION MODULE



- RF communication array
- SATCOM module placement
- Antenna distribution across airframe
- Shielded signal routing

09 MISSION BAY SYSTEM



- Internal modular payload bay
- Rapid payload integration slots
- Thermal isolation
- Shock-resistant mounting

10 CONTROL SYSTEM



- Triple-redundant flight control
- Sensor feedback loops
- Real-time control correction
- Fail-safe flight management

11 POWER DISTRIBUTION



- Central energy bus
- Dual-layer power routing
- Redundant supply channels
- Load balancing control

12 STRUCTURAL INTEGRATION LOGIC



All components are integrated into a unified architecture where structural, electrical, and mission systems operate without separation boundaries.

ENGINEERING LOGIC

GHOST-NET X is not assembled as independent subsystems. It is engineered as a unified structure where:

- load distribution
- energy flow
- data processing

are interdependent.

KILL SHOT

SYSTEM PERFORMANCE IS DEFINED BY INTEGRATION, NOT COMPONENTS.

IMPACT

EVERY SUBSYSTEM CONTRIBUTES TO A CONTINUOUS OPERATIONAL ARCHITECTURE.

KEY INTEGRATION BENEFITS

- Reduced system weight and volume
- Enhanced reliability and redundancy
- Lower latency in data and control loops
- Improved thermal and energy efficiency
- Optimized mission adaptability



01 BORDER SECURITY OPERATIONS



- Continuous border surveillance
- Unauthorized movement detection
- Real-time threat classification
- Autonomous patrol execution
- Persistent monitoring across terrain

02 URBAN ISR & TARGET TRACKING



- Dense urban environment monitoring
- Real-time target tracking
- Pattern-of-life analysis
- Time-sensitive target identification
- Low-altitude adaptive observation

03 MARITIME DOMAIN CONTROL



- Coastal surveillance operations
- Vessel tracking and classification
- Maritime ISR integration
- Port and offshore monitoring
- Extended sea-area coverage

04 STRIKE & ENGAGEMENT SUPPORT



- Precision strike coordination
- Target designation
- ISR-to-strike transition
- Engagement confirmation
- Multi-target engagement sequencing

05 ELECTRONIC WARFARE SUPPORT



- Signal detection and monitoring
- RF environment analysis
- Communication disruption support
- Electronic battlefield awareness
- Adaptive EW coordination

06 DISASTER RESPONSE & CIVIL SUPPORT



- Search and rescue operations
- Area scanning and mapping
- Emergency communication relay
- Infrastructure damage assessment
- Rapid deployment capability

DEPLOYMENT MODEL

GHOST-NET X deployment is structured for rapid operational readiness. System deployment includes:

- Mobile ground control units
- Rapid launch capability
- Minimal infrastructure requirement
- Multi-platform integration



OPERATIONAL LOGIC

The system adapts to mission environments without requiring structural reconfiguration.

Deployment is not scenario-dependent.

It is system-driven.

STRATEGIC OUTCOME

- Rapid deployment capability
- Multi-environment adaptability
- Continuous operational presence
- Real-time mission execution



KILL SHOT ONE SYSTEM. MULTIPLE OPERATIONAL REALITIES.



IMPACT

Deployment flexibility ensures continuous mission readiness across environments.



OSAN
DEFENSE INDUSTRY



**ENGINEERING POWER.
OPERATIONAL CONFIDENCE.
GLOBAL EXECUTION.**

OSAN Defense Industry operates as a high-capability defense engineering platform integrating autonomous systems, advanced manufacturing, system-level integration, and global operational deployment.



MISSION READY.

Mission-ready platforms engineered for real-world operations.



GLOBAL REACH.

Active operational presence and execution capability across multiple regions.



ENGINEERED TO WIN.

Advanced engineering, integrated systems and proven performance.



TRUSTED PARTNER.

Delivering reliable solutions with integrity, accountability and long-term commitment.

OUR COMMITMENT

All systems are developed under strict engineering validation processes ensuring

PERFORMANCE RELIABILITY | OPERATIONAL CONSISTENCY | MISSION READINESS



USA FACTORY

7347 Lockport Place
Lorton, VA 22079
United States

✉ usa@osanholding.com



HEAD OFFICE – DUBAI

1 Sheikh Mohammad Bin Rashid Blvd.
Burj Khalifa No:287, Downtown Dubai
United Arab Emirates

✉ executive.office@osanholding.com



**TURKEY OFFICE
(ISTANBUL – MASLAK)**

Maslak Mah. Meydan Sok. No:1
Beybi Giz Plaza No:55
Sariyer, Istanbul, Türkiye

✉ info@osanholding.com



GEORGIA OFFICE

Khelvachauri District
Village of Feria, 9th VI Lane No. 4
Georgia

✉ georgia@osanholding.com



**CAPABILITY DEFINES OUTCOME.
EXECUTION DEFINES DOMINANCE.**



OSAN DEFENSE INDUSTRY
BUILT FOR DECISIVE SUPERIORITY.

www.osandefense.com

FINAL PAGE

09