



**ADVANCED TECHNOLOGY and ENGINEERING Inc.**

**FOCUS AT&E Inc.**

**Presentation**

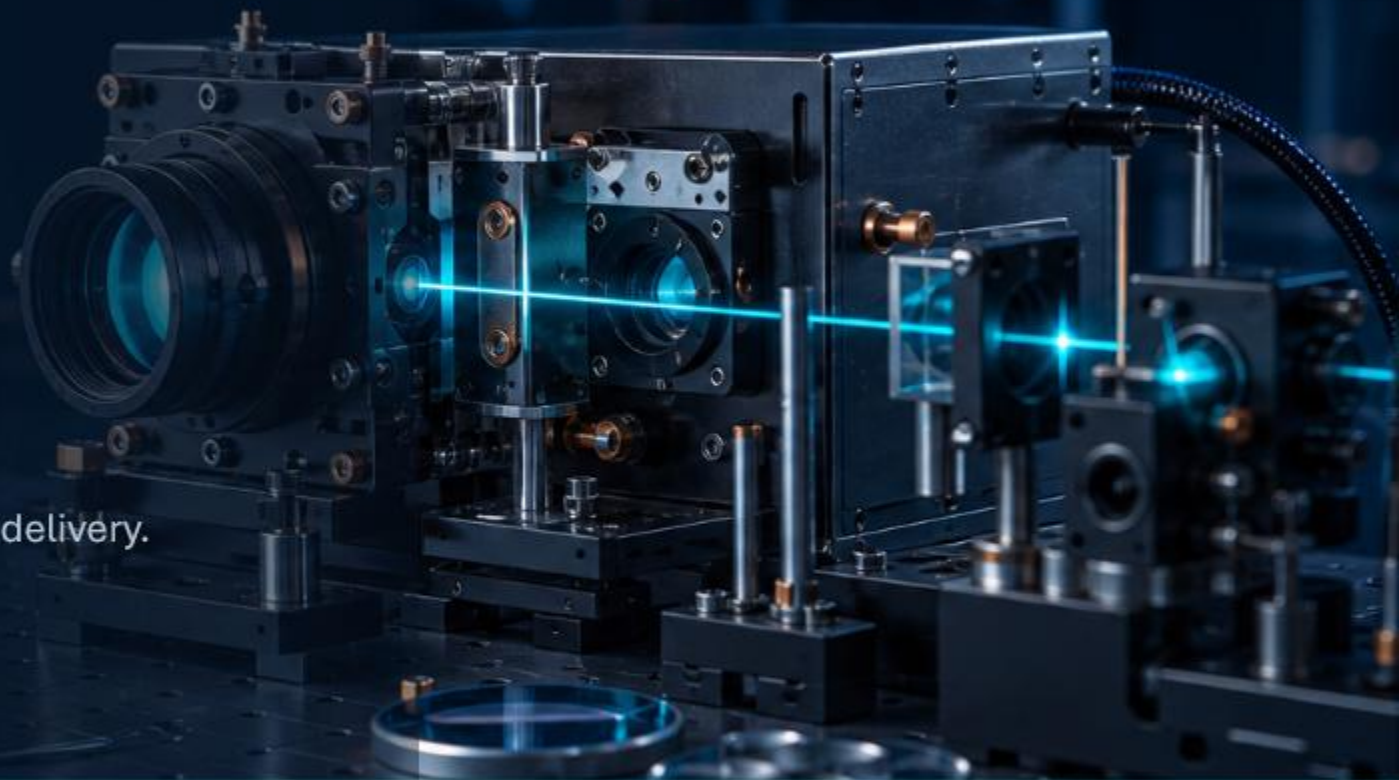
# FOKUS AT&E Inc.

**2003**

**Established as a local-investment  
Turkish defense industry company**

Local investment. Proprietary technology. Mission-grade delivery.

FOCUS develops customer-specific laser and electro-optic solutions—from R&D and system design to manufacturing, technology transfer, training, and production support.



## CAPABILITY SPECTRUM



**SYSTEM DESIGN  
& INTEGRATION**



**LASER  
ENGINEERING**



**RESEARCH &  
DEVELOPMENT**



**MANUFACTURING**



**TECHNOLOGY TRANSFER  
& TRAINING**



**RF ENGINEERING**

# Qualified technology. Cleared for Secured Military Programs

## PECKER™ FAMILY

**FOCUS** laser target designators are ITAR-free, tested and qualified for guided missiles.

ITAR-FREE

TESTED • QUALIFIED

## QUALITY & SECURITY CREDENTIALS



**ISO 9001**

Quality Management  
System



**NATO Confidential**

Facility Security  
Clearance



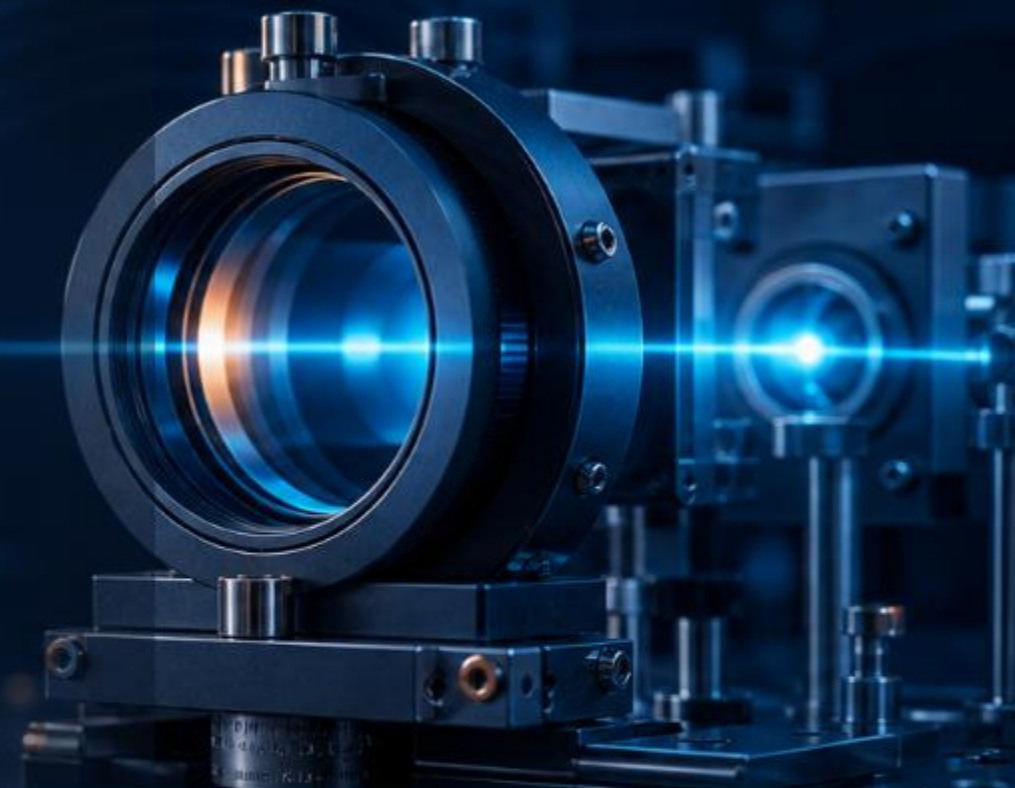
**National Confidential**

Facility Security  
Clearance



**Controlled Items**

Production Permit



## R&D AND PRODUCTION LINE

FOKUS Laser Technologies combines advanced research in photonics and electronics with precision manufacturing capabilities to deliver reliable, mission-critical solutions across all platforms.



ADVANCED  
RESEARCH



PRECISION  
ENGINEERING



RIGOROUS  
TESTING



QUALITY  
ASSURANCE



LASER LAB



HIGH ENERGY LASER SYSTEM LAB



LASER LAB

## LASER QUALIFICATION AND TESTING LABS

Our fully equipped laboratories ensure precision testing, performance validation and environmental qualification of laser systems and subsystems.



PERFORMANCE  
VALIDATION



ENVIRONMENTAL  
TESTING



SYSTEM  
INTEGRATION



MISSION  
RELIABILITY



LASER QUALIFICATION LAB



LASER TEST LAB



RADIO FREQUENCY LAB



SIGNAL LAB



ELECTRO OPTIC LAB



PHYSICS LAB



Military Applications



Laser Target Designators



Electro-Optics



Avionics



Test Systems



Laser Guidance Systems

## OUR FIELD OF INTERESTS & ACTIVITIES

Modernization >>>



Production



General Instrumentations



Integration



Seeker Heads



Gimbal Systems



Laser Jammer Systems



Gyro Systems



Engineering Solutions



Application



Laser Mine Detections



LIDAR



Electronics



Command and Control Systems



Consultancy



Training



Embedded Software Design





**LASER TARGET  
DESIGNATORS**



**LASER SEEKER  
GUIDANCE SYSTEM**



**EO/IR MULTI-SPECTRAL  
PAYLOAD SYSTEMS**



**LASER JAMMER  
SYSTEMS**



**ESTABLISHMENT OF  
CENTER OF EXCELLENCE**



**LASER MINE  
DETECTIONS**

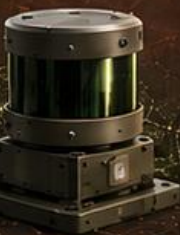


**LASER IFF**



# fokus

**AVIONICS**



**LIDAR**

**GENERAL  
INSTRUMENTATIONS**



**ENGINEERING  
SOLUTIONS**



**ELECTRO-OPTICS**



**OPTO-MECHANICAL  
DESIGN**



**ELECTRONIC  
HW & SW DESIGN**



**TRAINING**



**EMBEDDED  
SOFTWARE DESIGN**



**TEST  
SYSTEMS**



**MODERNIZATION**



**PRODUCTION**



**INTEGRATION**



**APPLICATION**



**CONSULTANCY**

TURNKEY LOCALIZATION PROGRAM

# CENTER OF EXCELLENCE

LASER & ELECTRO-OPTIC SYSTEMS

## 01 INFRASTRUCTURE

Labs Instruments • Workstations



## 02 TECHNOLOGY TRANSFER

IP • Data Packs • Know-How



## 03 WORKFORCE TRAINING

Advanced MSc-Level Program



## 04 PRODUCT DEVELOPMENT

Design • Prototyping • Qualification



## 05 MANUFACTURING CAPABILITY

Production • Testing • Jigs & Fixtures



SOVEREIGN CAPABILITY



LOCAL VALUE CREATION



SCALABLE PRODUCTION

## Advanced Laser Solutions

FOKUS Laser Technologies designs and manufactures high-performance laser systems and electronic solutions for defense, security, industrial and medical applications. We deliver innovative, reliable and field-proven technologies that empower our customers to detect, track and neutralize threats with precision.



### C-UAS & ANTI-DRONE SYSTEMS

Multi-sensor detection, tracking and neutralization of UAV threats.



Radar, EO/IR, SWIR, LIDAR and RF detection



High-precision tracking and AI-powered classification



Jamming and soft/hard kill solutions



Swarm detection and defense



### HIGH-ENERGY LASER WEAPONS

High power laser systems for precise engagement and cost-effective defense.



High power laser output



Fast, precise and silent neutralization



Effective against UAVs, rockets, mortars and more



All-weather, day & night operation



### ELECTRONIC WARFARE SOLUTIONS

Detect, disrupt and deny hostile communications and navigation.



Wideband surveillance and signal intelligence



Electronic attack and jamming systems



Anti-drone and RF countermeasures



C2 disruption and spoofing solutions



### LASER TARGET DESIGNATORS

Compact and robust laser designators for all platforms and missions.



High accuracy laser marking



Seamless integration with all mission systems



Long range performance and reliable targeting



Rugged, lightweight and battlefield proven

### PLATFORMS



Land Vehicles

Naval Platforms

Airborne Systems

Fixed Installations

Man-Portable

### KEY CAPABILITIES



Detect



Track



Identify



Decide



Neutralize

### OUR ADVANTAGE



Proven Technologies



Modular & Scalable



Field Tested & Reliable



Cost-Effective Solutions

### BUILT FOR THE FUTURE

Continuous innovation, engineering excellence and customer focus to deliver mission-critical advantage.

# C-UAS

## MULTI-SENSOR TRACKING SYSTEM

DETECT. TRACK. IDENTIFY.



**MULTI-SENSOR FUSION**  
Radar, EO/IR, SWIR, LIDAR & RF



**ADVANCED TARGET DETECTION**  
Long range, day & night



**HIGH-PRECISION TRACKING**  
AI-powered recognition & classification



**PLATFORM INTEGRATION**  
Can be integrated both soft-kill and hard-kill defence mechanisms



**MODULAR & SCALABLE**  
Adaptable to evolving threats



**NETWORKED & INTEGRATED**  
Seamless C2 and data link integration



**RAPID RESPONSE**  
Engage threats in seconds



**SWARM DEFENSE**  
Effective against multiple UAV threats



**COST-EFFECTIVE**  
Low cost per engagement and minimal collateral damage



**PROTECT WHAT MATTERS MOST**  
Military bases, airports, critical infrastructure

# HIGH-ENERGY LASER SYSTEM

## SOLUTIONS

Detect. Track. Neutralize.  
Protect what matters most.



C-UAS • SWARM DEFENSE



DETECT • RECOGNIZE • TRACK • NEUTRALIZE



HIGH OUTPUT LASER POWER



MODULAR • SCALABLE • COST-EFFECTIVE



### ADVANCED SENSORS

Radar, EO/IR, SWIR, LIDAR  
and multi-sensor fusion



### HIGH-SPEED TRACKING

Precision tracking with  
HD imaging & thermal SWIR



### MULTI-ROLE CAPABILITY

Air defense, counter threats,  
and land mine neutralization



### INTEGRATED SOLUTION

Seamless integration into  
existing defense networks



# ELECTRONIC WARFARE SOLUTIONS

Advanced EW solutions for threat detection, protection, jamming and electronic attack – ensuring mission advantage in contested environments.



THREAT DETECTION & IDENTIFICATION



ELECTRONIC PROTECTION



JAMMING & DECEPTION



SIGINT & ELINT CAPABILITIES



MODULAR & SCALABLE SOLUTIONS



**WIDE BAND  
THREAT DETECTION**

Detects and classifies radar, RF and communication threats across a wide frequency range.



**PROTECT  
& SURVIVE**

Electronic protection solutions that safeguard platforms and critical assets.



**SMART JAMMING  
TECHNOLOGY**

Adaptive jamming techniques to disrupt, deceive and neutralize enemy systems.



**MODULAR  
ARCHITECTURE**

Open architecture design for easy integration and future mission growth.



**MULTI-DOMAIN  
OPERATIONS**

Effective in land, sea, air, space and cyber electromagnetic domains.





# UAV SYSTEM SOLUTIONS

Lightweight, high-performance laser designation payloads for ISR, targeting and surveillance platforms.



PRECISE TARGET ACQUISITION



LIGHTWEIGHT & LOW SWAP



RUGGED & RELIABLE



EASY INTEGRATION



MULTI-PLATFORM COMPATIBLE



## ENHANCED ISR CAPABILITIES

Detect, identify and track targets with superior situational awareness.



## ON-BOARD LASER DESIGNATION

Precise and stable laser designation for joint fires and guided munitions.



## COMPACT & LIGHTWEIGHT

Low SWaP design ensures maximum payload capacity and endurance.



## EASY SYSTEM INTEGRATION

Designed for seamless integration with a wide range of UAV platforms.





# AIR OPERATIONS

Integrated laser designation solutions for helicopters, fixed-wing aircraft and mission systems.



LONG-RANGE DESIGNATION



HIGH ACCURACY & STABILITY



PLATFORM INTEGRATION



ITAR-FREE SOLUTIONS



## HELICOPTER INTEGRATION

Seamless integration with rotary-wing platforms for precise target designation.



## FIXED-WING SOLUTIONS

Mission-ready solutions for fighter, attack and special mission aircraft.



## UAV COMPATIBLE

Lightweight solutions designed for UAV and ISR platforms.





# GROUND OPERATIONS

Advanced laser designation solutions for dismounted troops, armored vehicles, JTAC, artillery and forward observers.



PRECISE TARGETING



ENHANCED SURVIVABILITY



SEAMLESS INTEGRATION



MISSION READY



## DISMOUNTED OPERATIONS

Lightweight and portable designators for infantry and special forces.



## ARMORED PLATFORMS

Integrated solutions for tanks and armored fighting vehicles.



## JTAC & FORWARD OBSERVERS

Reliable targeting for air and artillery with secure communication.



## ARTILLERY SUPPORT

Precision designation for indirect fire and long-range engagements.

# FOKUS PECKER FAMILY

## LASER DESIGNATION SOLUTIONS

### FOR ALL PLATFORMS

**AIRCRAFT**  
Precision Targeting

**UAV**  
Precision Targeting

**HELICOPTERS**  
Day & Night Operations

**NAVAL PLATFORMS**  
Maritime Targeting

**GROUND VEHICLES**  
Mobile & Rugged Solutions

**GROUND VEHICLES**  
Mobile & Rugged Solutions

**SOLDIERS**  
Man-Portable  
Laser Designators



**PRECISE TARGETING**  
High Accuracy



**MULTI-PLATFORM**  
Seamless Integration



**RUGGED & RELIABLE**  
Battle Proven

ELECTRONIC WARFARE

TURNKEY SOLUTIONS

# fokus

## LASER TARGET DESIGNATORS AND LASER SOLUTIONS FOR ALL PLATFORMS

### ELECTRONIC WARFARE SYSTEMS

LASER GUIDED  
MISSILES SEEKER  
BLINDING

LASER GUIDED  
MISSILES SEEKER  
JAMMING

ELECTRONIC  
ATTACKS  
WITH  
LASER  
SYSTEMS

HIGH ENERGY  
LASER  
SYSTEMS

HIGH POWER  
LASER  
SYSTEMS

ESTABLISHMENT of  
INFRASTRUCTURE

PROGRAM  
MANAGEMENT

TECHNOLOGY  
TRANSFER

TRAINING

MANUFACTURING

CENTER of  
EXCELLENCE

LASER  
ELECTRO-OPTICS  
BASE

COMBAT-1000



COMBAT-1020



COMBAT-2000



MACRO-1070



MACRO-1080



MACRO-1115



handheld

gimbal

GBLD-2000



GBLD-3000



land type

Code Generator & Decoder Modules



modules

MINI-GL-1000



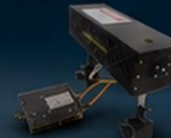
IR-100-LS



IR-100-OA



BURNER CW



SLEDGEHAMMER



CW1064



mini

industrial, scientific and medical products

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**Military Applications,** Laser Target Designators, **Laser Guidance Systems,** Laser Jammer Systems, Gimbal Systems, Gyro Systems, Laser Mine Detections, **LIDAR,** Laser IFF, Avionics, Command and Control Systems, General Instrumentations, **Engineering Solutions,** Electro-Optics, Opto-Mechanical Design, Electronics, **Embedded Software Design,** Test Systems, Modernization, Production, **Integration,** Application, **Consultancy**

IDEF 2019

## FOKUS HAND HELD LASER TARGET DESIGNATOR

Man portable and body wearable laser targeting device, provides reduced sensor-shooter loop time for Troops in Contact (TIC), Joint Terminal Attack Controller (JTAC) and Joint Forward Observer (JFO) operations.

HLTD-A offers unique and effective solutions for laser guided munitions precision target engagement to Close Air Support (CAS).



### PRECISE TARGET DESIGNATION

High accuracy laser marking



### SEAMLESS INTEGRATION

Fully compatible with Laser Guided Ammunition



### FIELD PROVEN SOLUTION

Designed for special forces operations



### COMPACT & RUGGED DESIGN

Lightweight, durable and reliable



**PECKER COMBAT-1000**  
**25 mJ.**  
**LASER DESIGNATOR**



HAND HELD LASER TARGET DESIGNATOR



PRECISE LASER TARGETING



LASER GUIDED AMMUNITION



MISSION SUCCESS

# PECKER™ COMBAT SERIES

## HANDHELD LASER TARGET DESIGNATORS



**Man portable and body wearable laser targeting device**, provides reduced sensor-shooter loop time for Troops in Contact (TIC), Joint Terminal Attack Controller (JTAC) and Joint Forward Observer (JFO) operations. HLTD-A offers unique and effective solutions for laser guided munitions precision target engagement to Close Air Support (CAS).



# PECKER™ MACRO SERIES

GIMBAL-TYPE LASER TARGET DESIGNATORS



# PECKER™ FAMILY

## LASER TARGET DESIGNATORS

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**Thank You**