

GUARDIUM™: A New Dimension in Controlled Area Defense

**Security Officer,
Now You Can**



**Eliminate Threats
on the Fence**

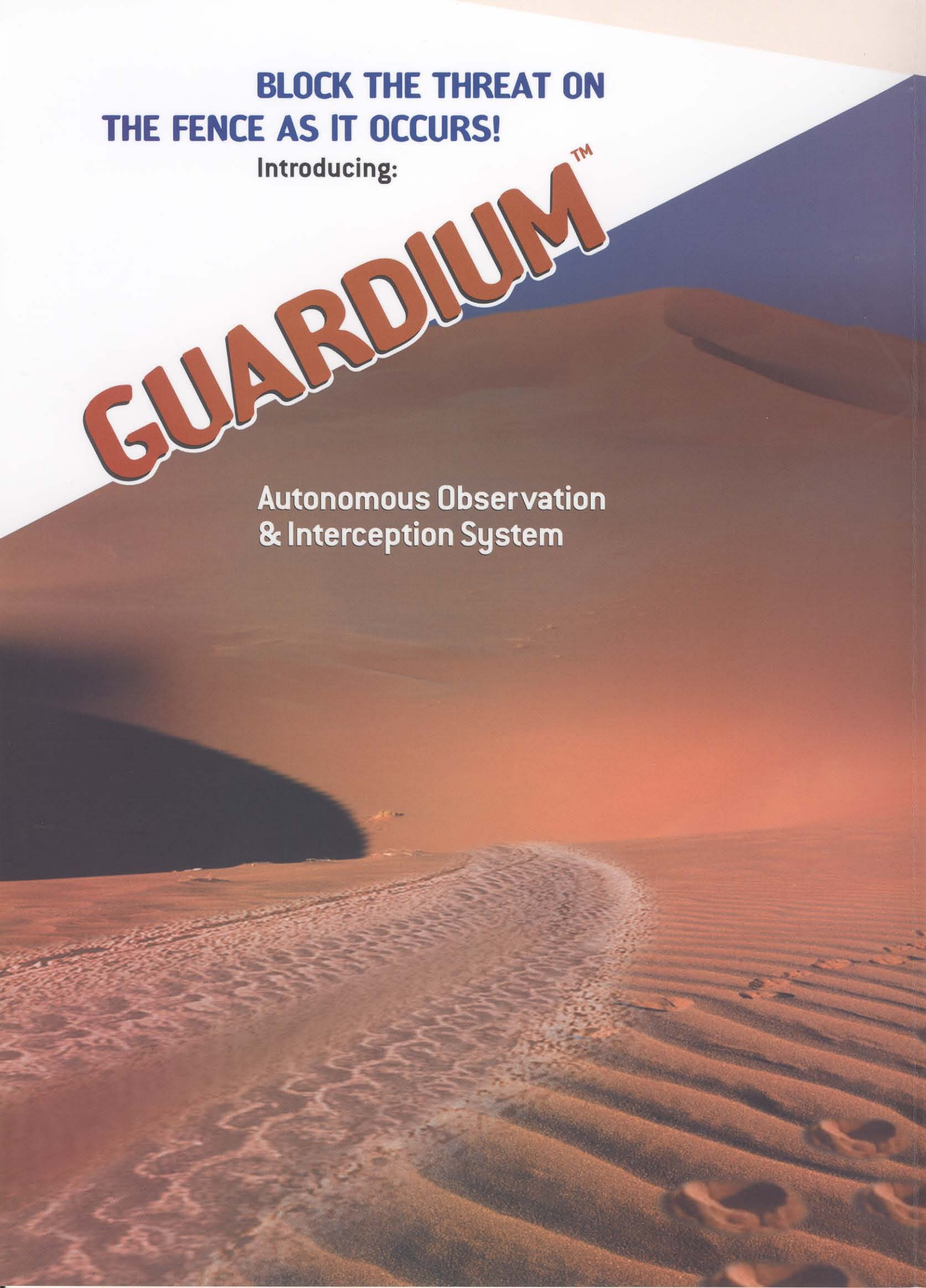
- In Real-Time
- At No-Risk
- Cost-Effectively

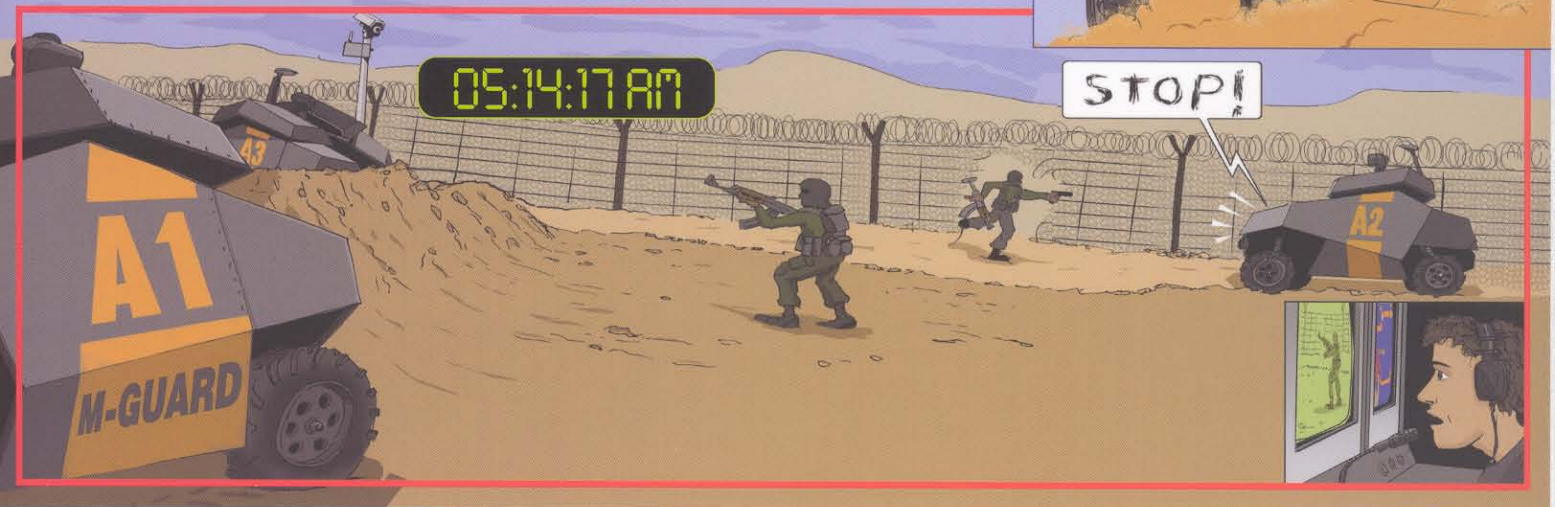
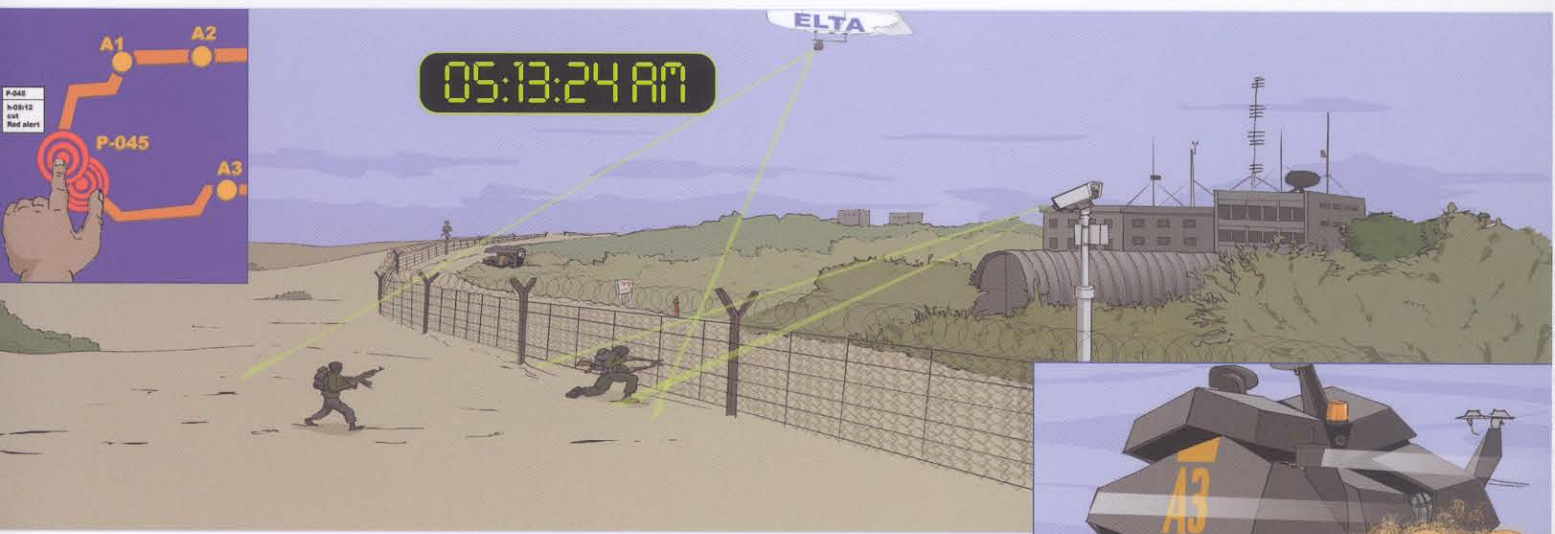
**BLOCK THE THREAT ON
THE FENCE AS IT OCCURS!**

Introducing:

GUARDIUM™

Autonomous Observation
& Interception System





OPERATIONAL SCENARIO

ROUTINE

- Decrease in required human resources
- Constant presence guarantees highly efficient deterrence
- Unmanned Security Vehicle (USV) omnipresence: automatic random patrols, ambush capability and standby forces
- C⁴I input types: intelligence, fleet status, sensors, doctrine, operational scenarios generator and terrain (3D map data base)

THREAT/INTRUSION WARNING

- Immediate efficient response to warning
- Instant compilation of operational order: global and per USV
- Automatic tactical zone definition by terrain, doctrine and intelligence
- USV automated launching through C⁴I
- Combat picture buildup

SYSTEM OPERATIONAL RESPONSE

- Fast, autonomous USV tactical positioning
- Operational camera auto target acquisition and capture
- USV becomes forward intelligence tactical sensor
- Commander solely controls operational means actuation
- Containment of threat expansion
- Combat picture distribution to collaborative combat network members

HUMAN RESPONSE /BATTLE OUTCOME DETERMINATION

- Human response: secondary security ring
- Involved USVs local control and command transfer to field response commander
- Dramatic reduction in security forces vulnerability
- Event conclusion and resumption of routine

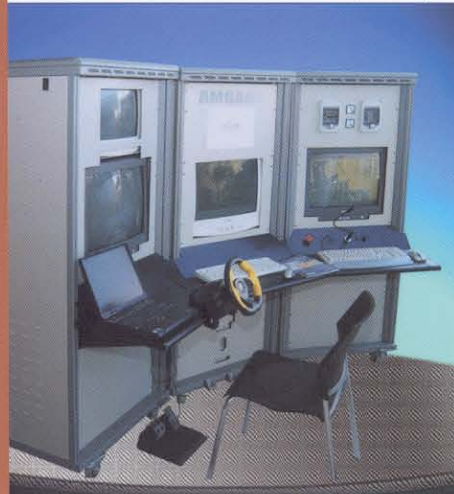
THE SYSTEM

M-GUARD™ - Unmanned Security Vehicle (USV)



- Unmanned autonomous vehicle, TomCar based
- Automated tactical positioning
- Operational speed - 80 Km/H
- Operational payload - 250-300 Kg
- Wide range of potential operational payloads
- Bullet-proof protecting shields

Main Control Center (MCC)



- Automatically controlled USV fleet operation routine: patrols, standby kennels, ambushes
- Interface with Early Warning system
- C⁴I input types: Intelligence, fleet status, sensors, doctrine, operational scenarios generator, terrain (3D map data base)
- C⁴I automated operational order generator
- Automatic tactical area definition by terrain, doctrine and intelligence

Local Control Unit (LCU)



- Field commander receives local USV control
- Optional tactical USV relocation and operational means actuation

Operational Payloads



- Operational camera auto-target acquisition and capture
- Two-way field communication: microphone and speaker
- Additional sensors



System Highlights

- Comprehensive operational capability - from prevention of threat expansion (until arrival of ground forces) up to total threat elimination
- The system bridges over the gap between the first warning and the eventual manned operational reaction
- The system retains the added value of man-in-the-field, without endangering lives
- Highly efficient deterrence capabilities
- Field omnipresence
- Tailored cost-effective solutions for protection of:
 - Airports and sea ports
 - Borders and separation lines
 - Strategic installations such as: nuclear plants, fuel, gas or ammunition depots, etc.
 - Pipelines, electrical high-tension lines, railways
 - Large industrial complexes
 - Large scale private properties: ranches and estates
- Patent pending

IAI-LAHAV Business Innovation

- Adaptation to customer needs and flexibility in product selection
- Non-biased optimal and most cost-effective solutions
- Local industry participation enabling independent after-sale support
- Commitment to on-time and within budget program completion
- Commitment to multi-year support



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