APPLIED ENERGETICS

Directed Energy, Anywhere

MAY 2026

Company Presentation

SAFE HARBOR STATEMENT

This document is not, and nothing in it should be construed as, an offer, invitation, or recommendation in respect of the securities of Applied Energetics, Inc. or a solicitation of an offer to buy such securities in any jurisdiction. Neither this presentation nor anything in it shall form the basis of any contract or commitment. This presentation does not constitute advice to potential investors nor does it take into account the investment objectives, financial situation or needs of any potential investor.

The documents in this presentation (or directly accessible herefrom) may contain forward-looking statements. These statements relate to future events or Applied Energetics, Inc.'s future financial performance. Any statements that are not statements of historical fact (including, without limitation, statements to the effect that the company or its management "believes", "expects", "anticipates", "plans," and similar expressions) should be considered forward-looking statements. A number of important factors could cause Applied Energetics, Inc.'s actual results to differ materially from those indicated by the forward-looking statements, including the impact of economic conditions, national or global emergencies, political conditions, or other unforeseen events or circumstances. Applied Energetics, Inc. disclaims any obligation to update any forward-looking statement.

ADDITIONAL INFORMATION

Applied Energetics, Inc.'s internet address is www.appliedenergetics.com The company makes available, free of charge, all SEC filings at www.appliedenergetics.com. Its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8- K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, are available as soon as reasonably practicable after they are electronically filed or furnished to the SEC. You also may request a copy of each document at no cost, by writing or calling us at the following address or telephone number:

Applied Energetics, Inc.
9070 S. Rita Road, Suite 1500
Tucson, AZ 85747
(520) 628-7415
appliedenergetics.com

PROBLEM

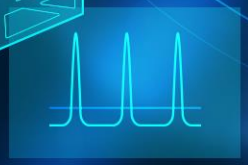
Widely proliferating threats

APPLIED ENERGETICS

Directed Energy, Anywhere

USPL SOLUTION

Optimal size, weight, and power



High value effects

LOCATION

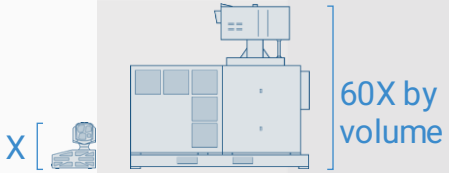
Mobile

Deployed

Fixed
(critical infrastructure)

APPLIED ENERGETICS

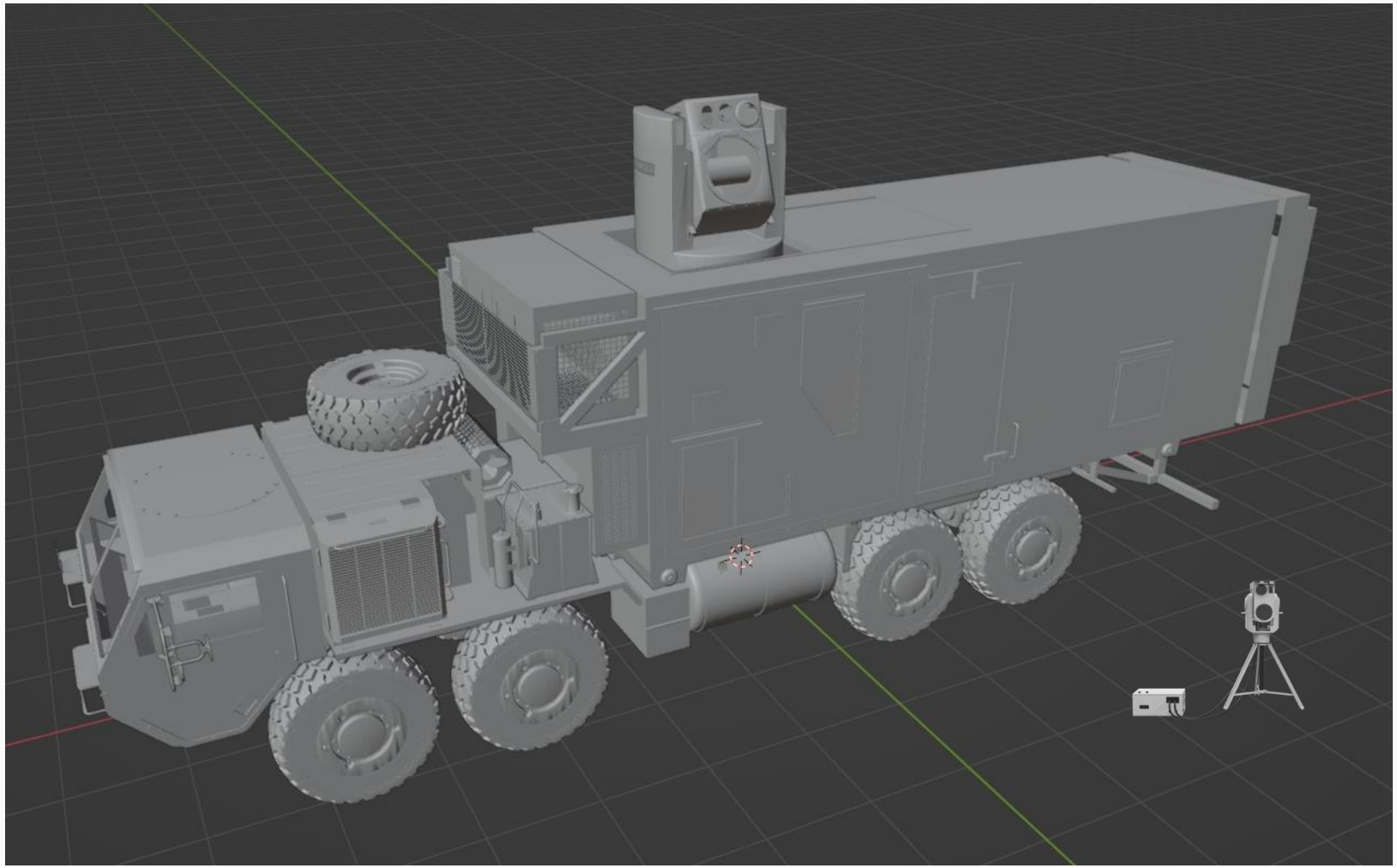
USPL OFFERS SIZE WEIGHT AND POWER ADVANTAGE



ULTRASHORT PULSE		CONTINUOUS WAVE (CW)
On-the-move	MOTION	Stationary
Uninterrupted	BATTERY	Limited
Compact and modular	FOOTPRINT	Extensive footprint
Peak 10^{10} W	LASER POWER	Peak 20,000 W
~1 kW	POWER CONSUMED	~100 kW
~10s lbs.	WEIGHT	~1,000s lbs.

ARMY HELMTT VS. AE USPL

AE's Pulsed Laser Air Defense system (PLAID) has a substantial size, weight and power advantage, enabling a distributed deployment of capability with sub-second engagement performance



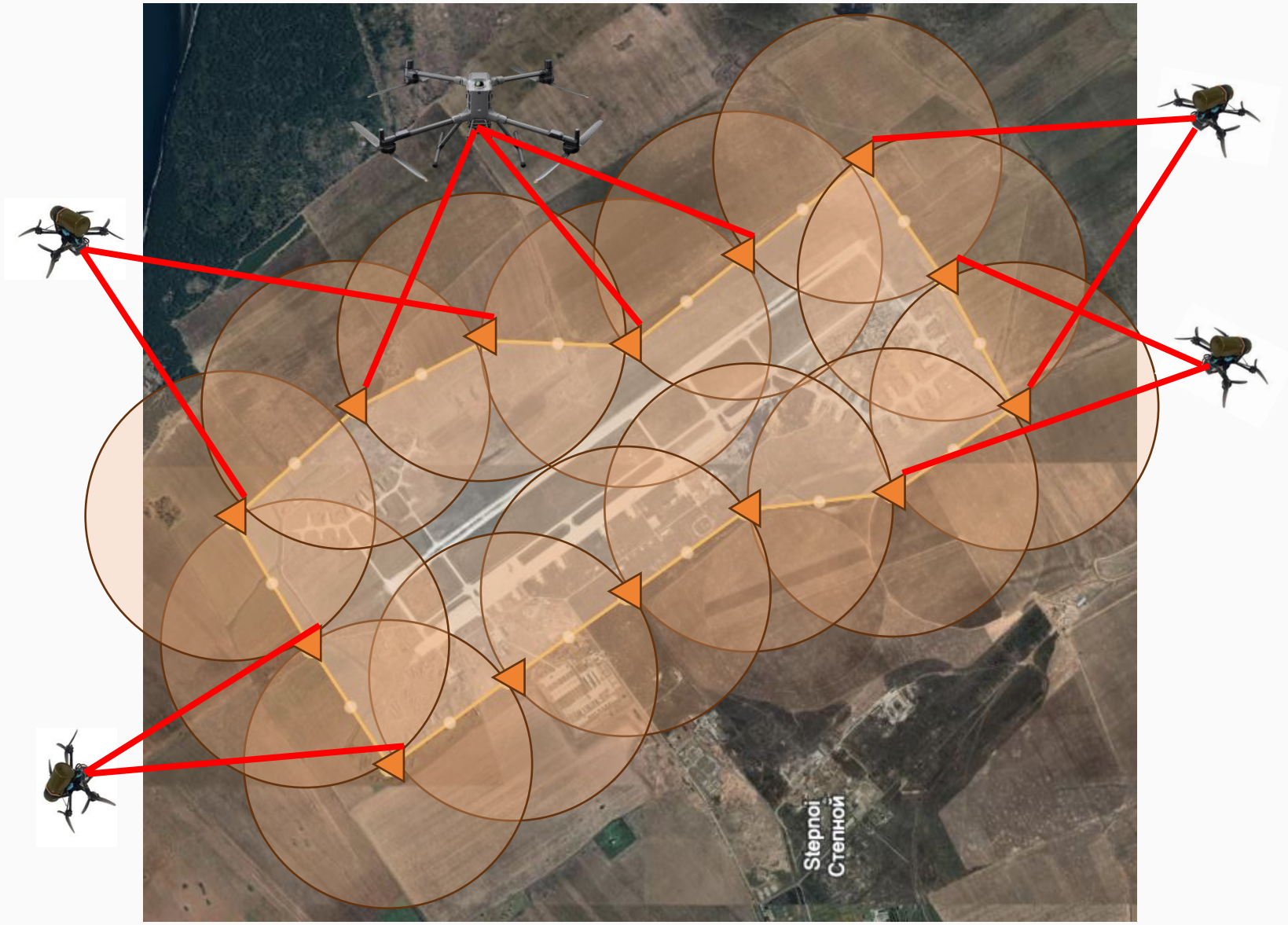
BELAYA AIR BASE, RUSSIA, OPERATION SPIDER'S WEB

- Belaya is a significant Russian Aerospace Forces Long-Range Aviation base in Usolsky District, Irkutsk Oblast, Russia
- The base's bomber fleet, consisting at various times of Tupolev Tu-16, Tupolev Tu-22, and Tupolev Tu-22M aircraft, played a considerable role in Asian strategy.
- On 1 June 2025, the Security Service of Ukraine (SBU) claimed to have damaged "more than 40" aircraft at Belaya and three other air bases (including Olenya) by using drones. The aircraft included an unspecified number of A-50, Tu-95 and Tu-22 M3 type aircraft. They released footage of the drones striking aircraft on the runway.

AE PULSED LASER AIR DEFENSE (PLAID™) EMPLACEMENTS

- Belaya has a roughly 14 km perimeter
- 14 PLAID-L (low altitude) would be placed at 1 km spacing between units to ensure overlapping fields of fire

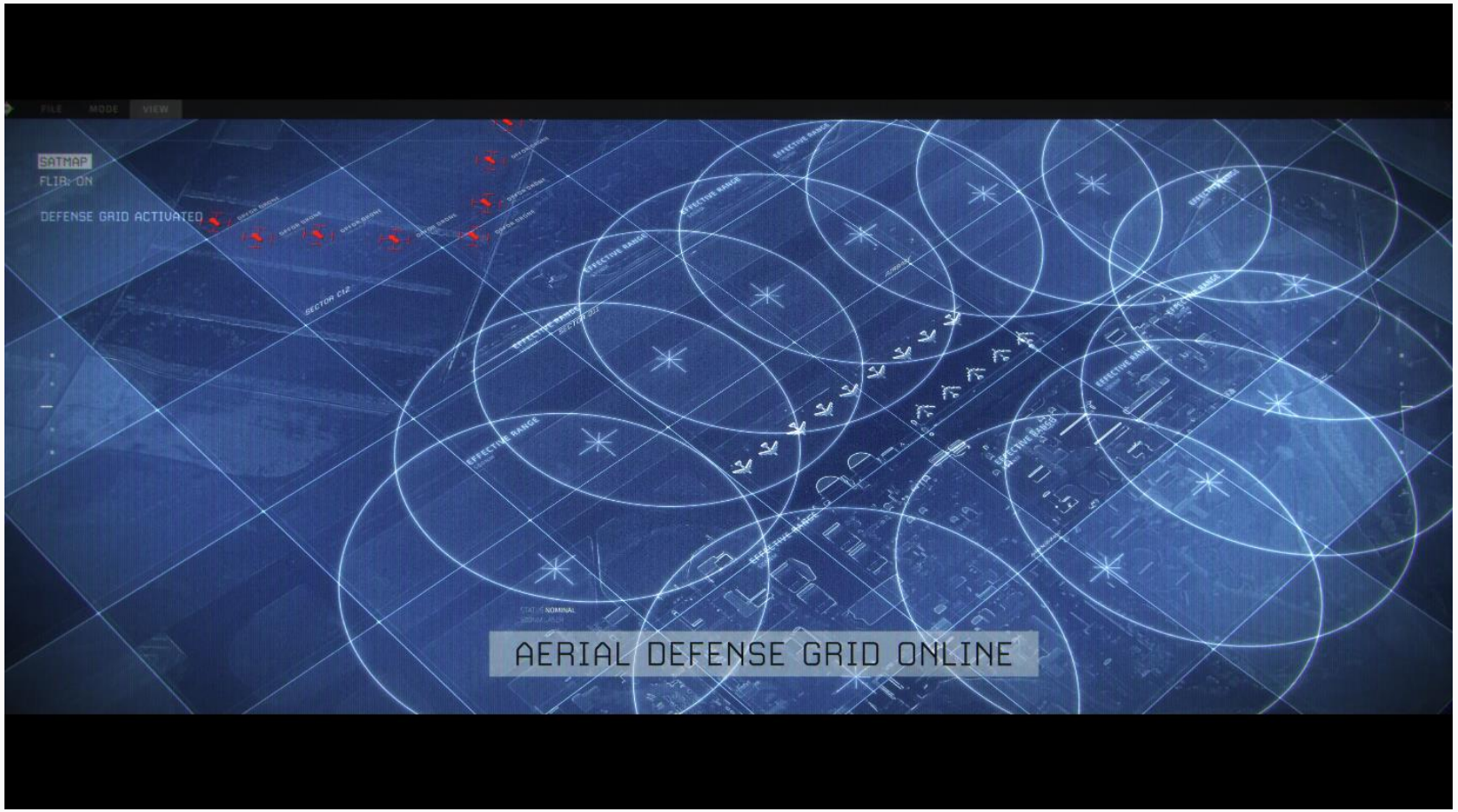
PLAID ENGAGEMENT AGAINST DRONES



- Overlapping fields of fire plus sub-second sensor kill allows for a robust engagement scenario where multiple PLAID systems can engage single drones to ensure mission kill.

CONOP VIDEO

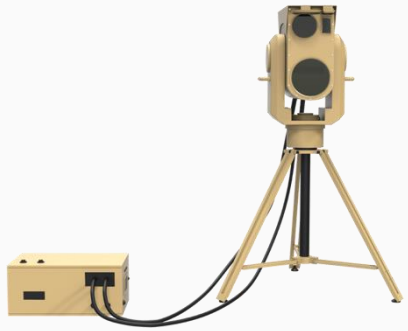
What you see in the video:
The video shows an animation of a deployed installation of Applied Energetics' Pulsed Laser Air Defense (PLAID™) system in a network, proliferated architecture. The CONOP video is based on a domestic deployment of the system around Minot Air Force Base.

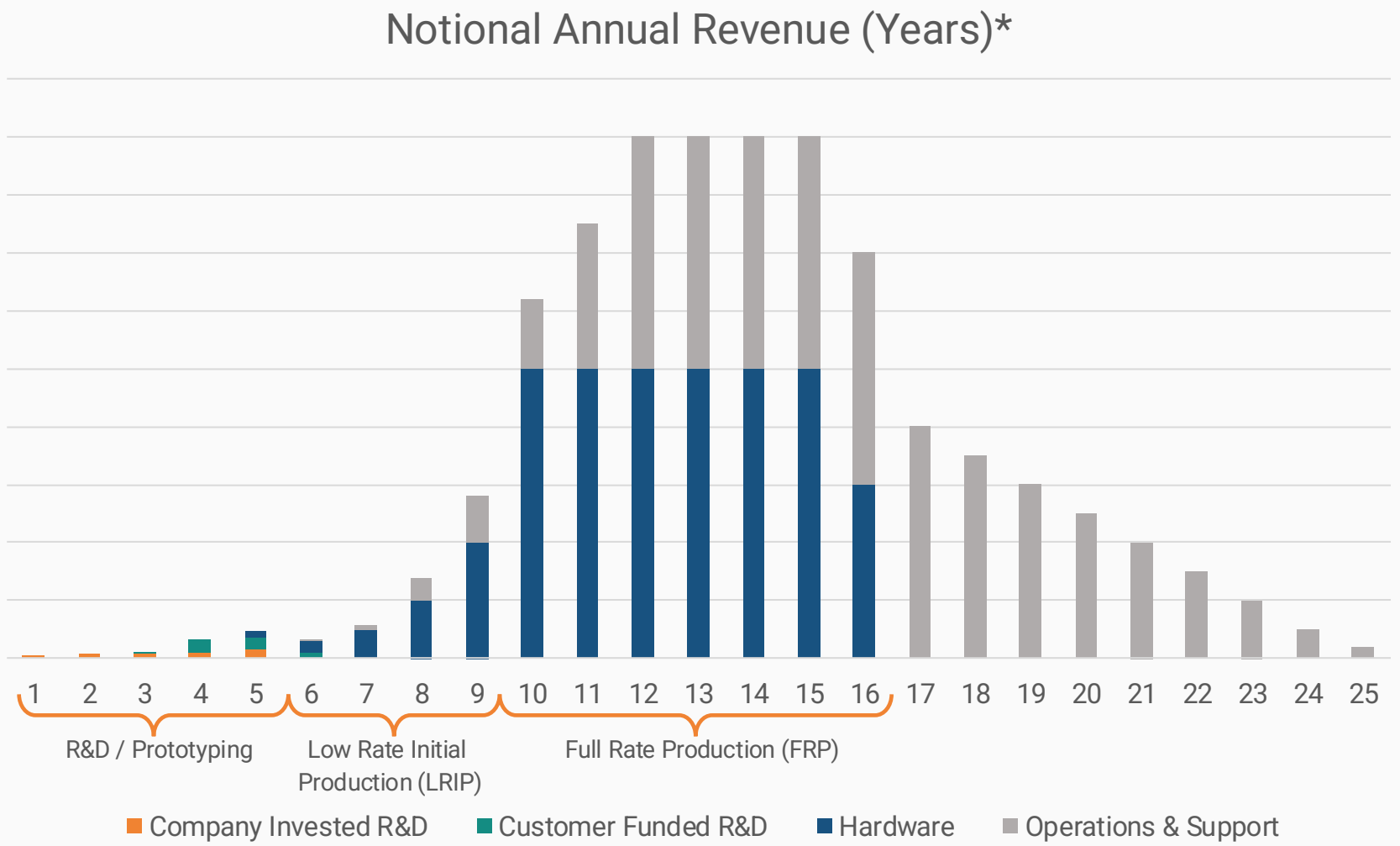


Video link: https://www.youtube.com/watch?v=le8aybJtpIQ

DOD PROGRAM: NOTIONAL REVENUE PROFILE

- Example program deploying counter-UAS to Defend Deployed and Permanent Facilities (2,000 units)





*This chart represents a possible forward-looking scenario to illustrate the typical life cycle of a product produced for and procured by one or more DoD customers and is not intended as a specific projection of future events. An actual product revenue profile could differ due to unforeseen variables.

WHY INVEST IN APPLIED ENERGETICS?

Emerging ISR threats ideally countered by Ultrashort Pulse Lasers

Unmanned semi-and fully-autonomous threats are dramatically increasing in number and capability. These threats are vulnerable to USPL effects with limited time required to defeat ISR sensors.

Unmatched IP portfolio

More than $50 million in public and private capital invested, 26 issued patents, 11 applications held under government secrecy orders, and 6 additional patents pending.

Defense applications open door to commercial markets

Defense applications open doors to commercial markets such as advanced manufacturing, pathogen detection and neutralization, and imaging of biological tissue.

High value directed energy effects at best size, weight, and power in market

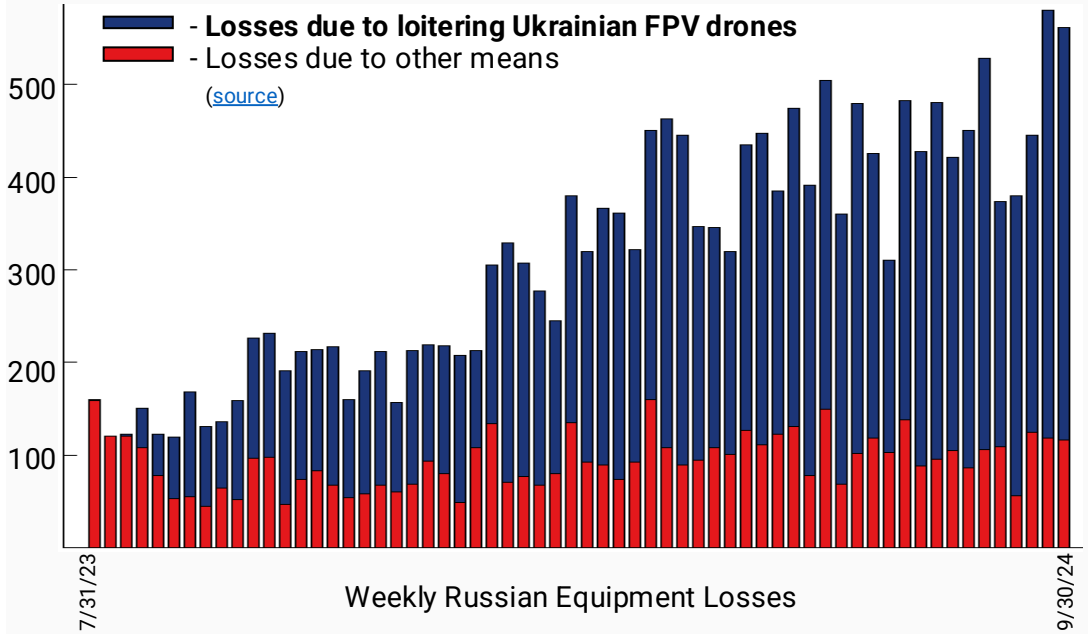
Only national-security focused USPL pure-play; USPLs deliver high-value counter-ISR effects in a SWaP footprint that allows deployment on almost any military platform.

Accelerating addressable market

Global directed energy weapons market expected to grow at 16% CAGR to $32.1 billion by 2033; Counter-Unmanned Aerial Systems (UAS) market expected to grow at 25% CAGR to $11.7 billion by 2032.

Elite management team; state of the art facilities

More than 100 years of combined executive team experience; 26,800 sq. ft. laser-dedicated development and manufacturing facility in the University of Arizona Tech Park.



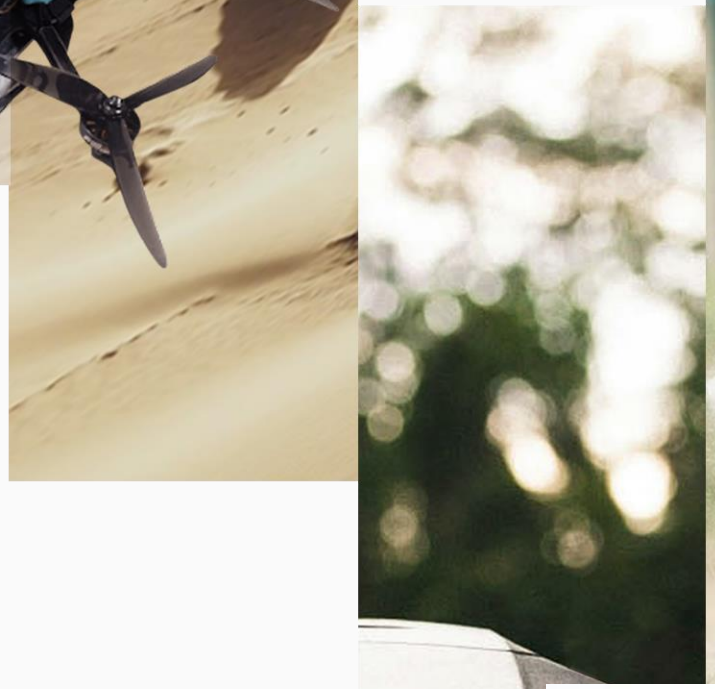
PROBLEM STATEMENT

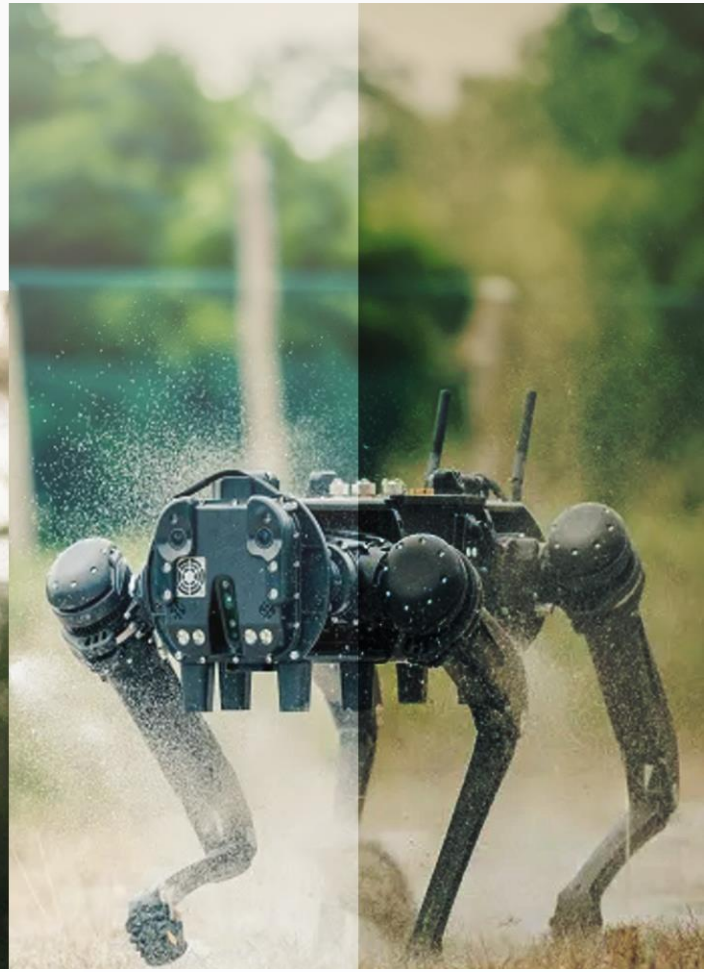
Unmanned semi- and fully-autonomous aerial, ground, and surface vehicle threats are dramatically increasing in number and capability. As unmanned systems increasingly augment humans, sensors will saturate the battlefield.

"The United States defense establishment does not appear equipped, technically or psychologically, to respond to this looming [unmanned systems] threat. I must emphasize—in the starkest terms—**that the comparative advantage in modern weaponry has fundamentally and perhaps permanently shifted toward small, cheap, attritable, evolutionary systems.**"

Dr. Paul Schwennesen

Written testimony before the U.S. House of Representatives Subcommittee on Counterterrorism, Law Enforcement, and Intelligence, Dec 10, 2024 (source)

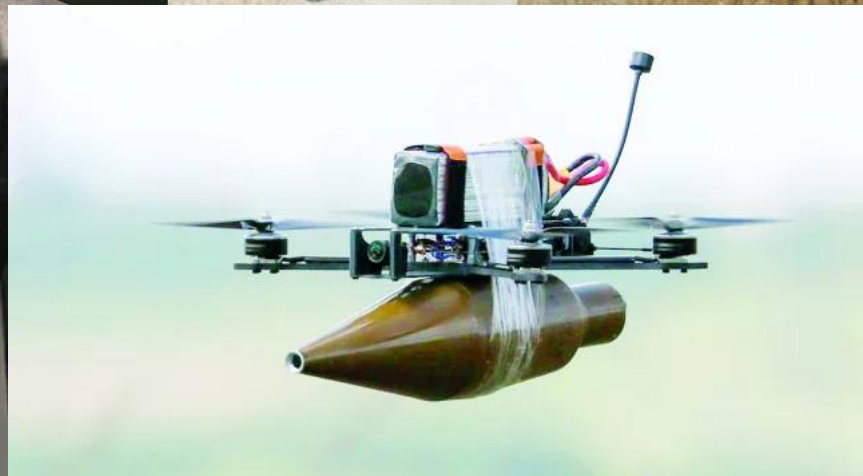




EMERGING THREATS IDEALLY SUITED FOR DIRECTED ENERGY EFFECTS

The proliferation of commercial-off-the-shelf sensors and unmanned systems are providing both traditional and asymmetric forces with **improved intelligence gathering and improvised threat capabilities enabling low-cost and low-tech solutions against high value targets.**

Most of these threats are piloted through cameras mounted on the vehicle.



SOLUTION: ULTRASHORT PULSE LASERS

Objective: Defeat sensors of all kinds across a broad range of enemy threat platforms.

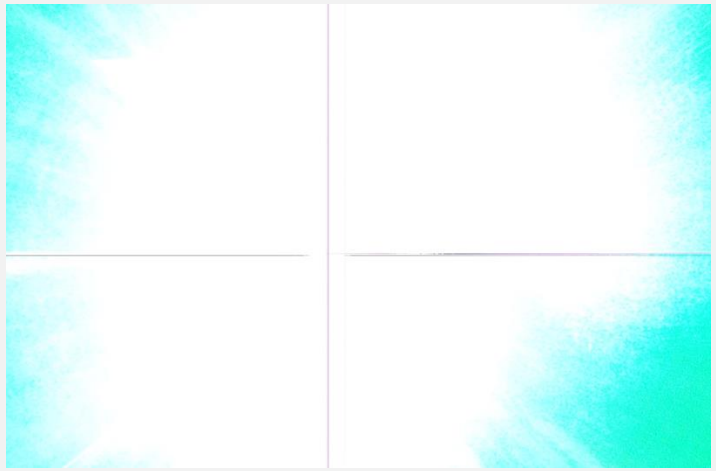
1. High peak power allows for sub-second sensor kills
2. Laser wavelength can be matched to sensor wavelength
3. Common underlying architecture across all counter-ISR applications
4. Efficient, compact, and ruggedized optical fiber-based architectures

ULTRASHORT PULSE LASER EFFECTS: COUNTER-ISR SENSORS

(Effect on common commercial sensor)

JAM

Temporarily blind the sensor

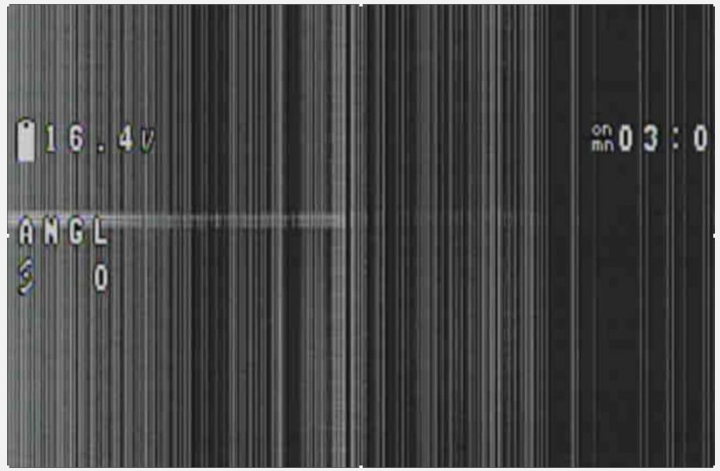


DAMAGE

Permanently damage pixels and control lines

DESTROY

Sensor fails to operate



Increasing energy on target

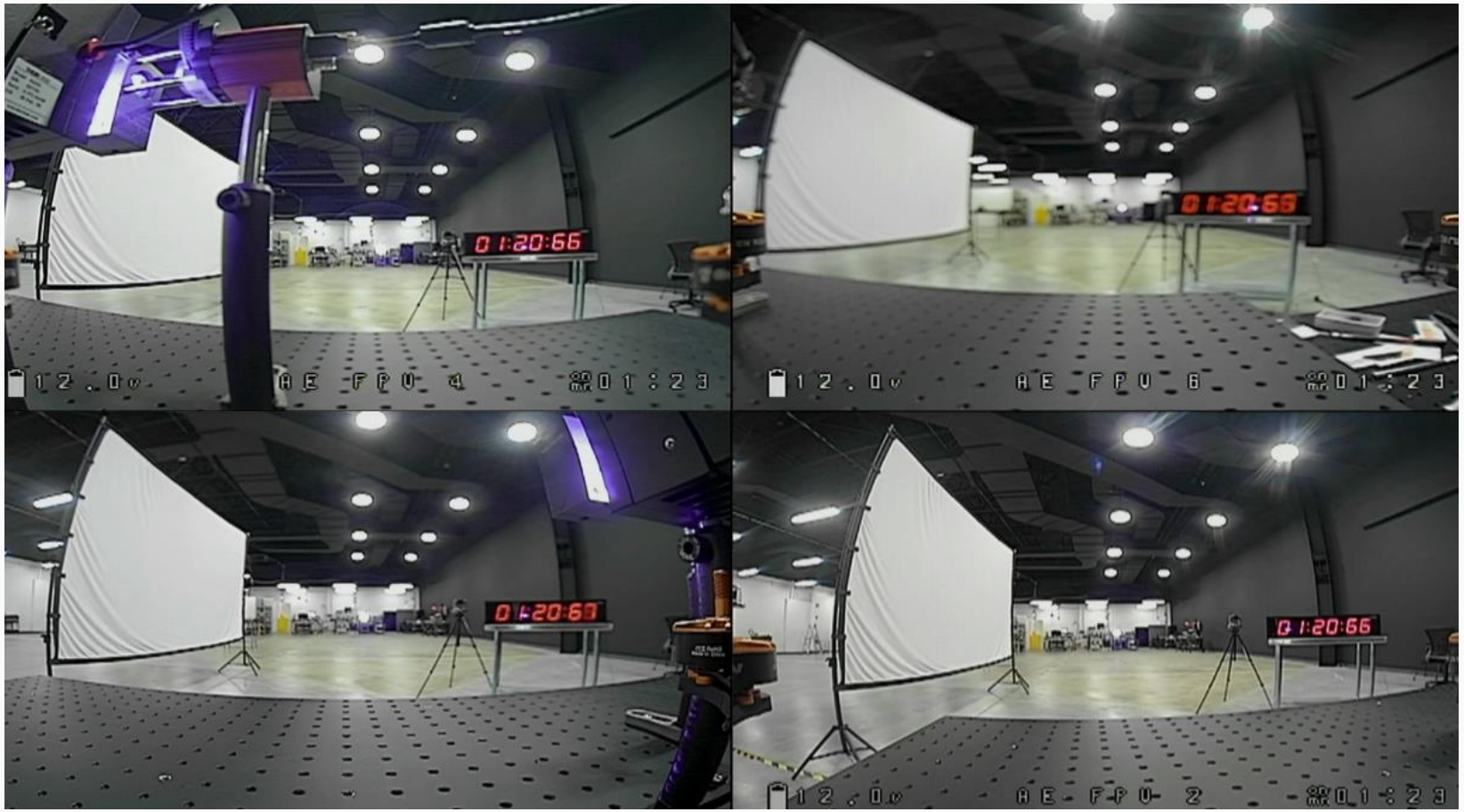
DEMO 1: SUB-SECOND SENSOR KILL OF FOUR DRONE CAMERAS

USPLs enable sub-second sensor kills, measured in milliseconds. No dwell time required.

What you see in the video:
The video shows four FPV drone camera outputs in Applied Energetics' indoor laser test range.

Each camera is targeted sequentially from camera 1 to 4 with a single laser 70 ft downrange. The laser does not target the sensor directly, but rather uses a 200 ms raster pattern over the region where the camera is.

Each camera is permanently destroyed within milliseconds of exposure to the ultrashort pulse laser light. All four cameras are defeated in less than one second.



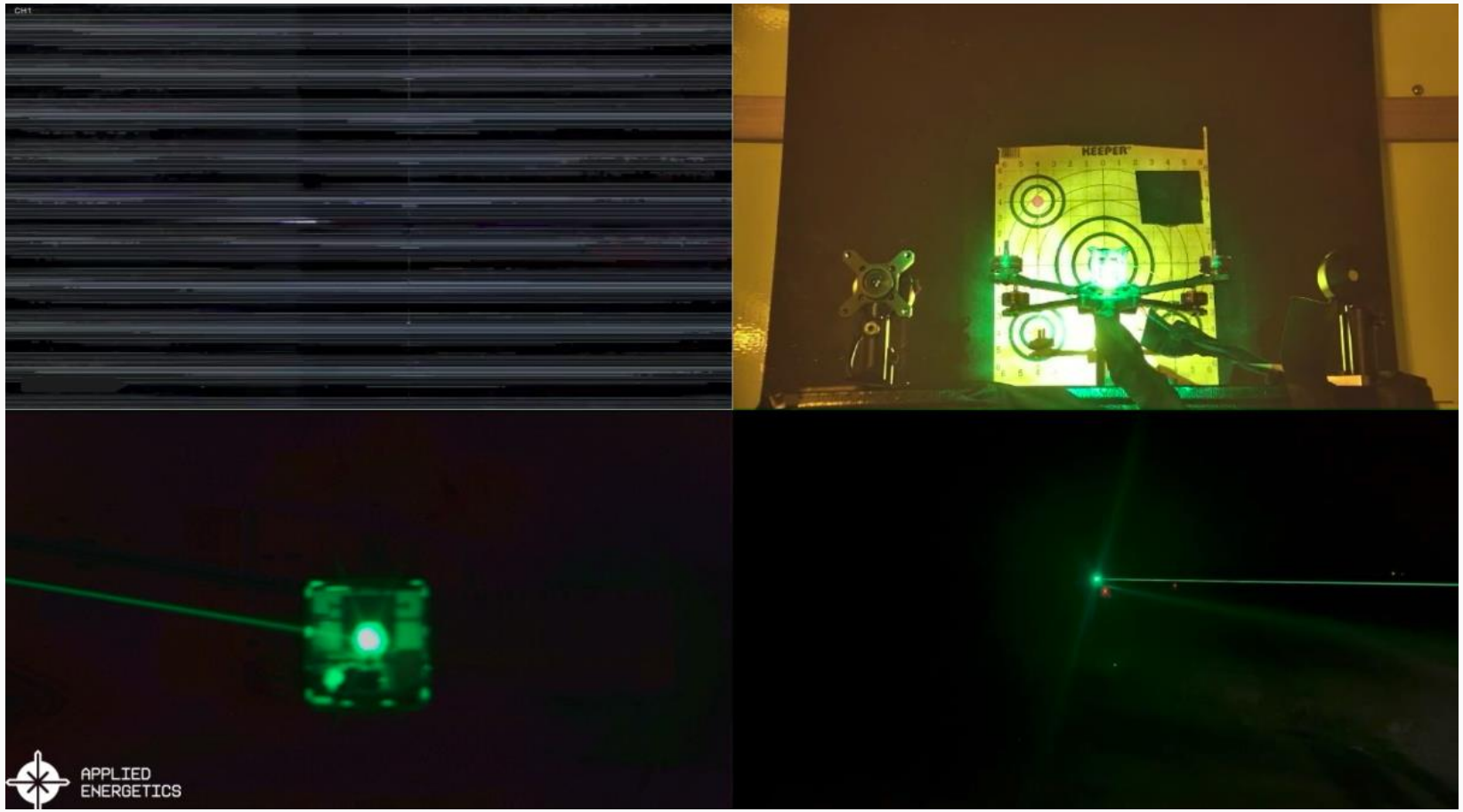
Video link: https://www.youtube.com/watch?v=4AQRdkyjG7w

DEMO 2: AE'S LASERS HAVE BEEN DEMONSTRATED IN THE REAL WORLD

AE's USPL system has been demonstrated in an outdoor relevant environment; transition-ready to production within months

What you see in the video:
The video shows a synchronized view from four perspectives of a March 2026 outdoor test of Applied Energetics ultrashort pulse laser demonstrator at roughly 1/3 objective power of first production laser.

The FPV drone camera dies within 6 frames of laser illumination (roughly 200 ms).



Video link: https://www.youtube.com/watch?v=cnszPyDYnh0

OUR FACILITIES

Applied Energetics' corporate headquarters is in the **University of Arizona Tech Park**

4,830 sq ft.
Class 1000 cleanroom

Multiple integrated laser labs

26,800 sq ft. facility

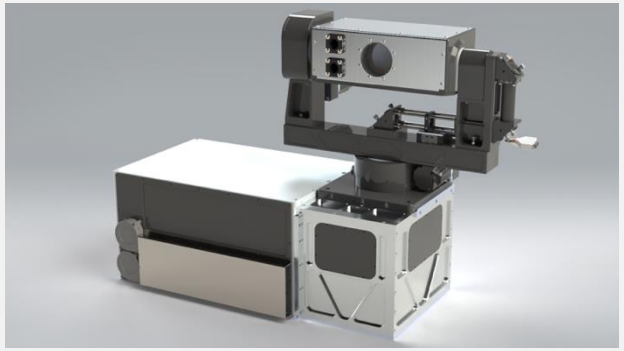
- Secure server room with network capability
- Dedicated inventory, shipping and receiving areas
- ITAR, DCSA, and NIST compliant
- Shop assembly area (outside of cleanroom)
- New space for manufacturing and advanced laser/drone test range

APPLIED ENERGETICS

CEO Update

2025 PROGRESS: FROM R&D LAB TO DEMONSTRATOR HARDWARE

- Completed first outdoor test at Energetic Materials Research and Testing Center in New Mexico
  - Outdoor testing is a technology maturity inflection point

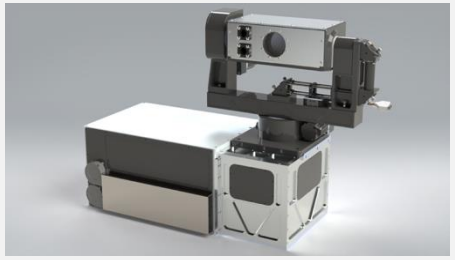


Outdoor laser demonstrator

- Ability to conduct on-demand demonstrations in AE's Battle Lab
  - 2 x 1.5 billion-watt peak power laser demonstrators available
  - New class of LIDAR for drone ranging and detection demonstrated
  - Ongoing multi-drone and single drone sensor kill demonstrations in Battle Lab
- Accelerated Pulsed Laser Air Defense (PLAID™) prototype build
  - Significant size, weight and power reduction from ~10 ft^3 to ~3.5 ft^3
- Continued Team Buildout: Chief Product Officer, VP of Finance, Mechanical Engineer, Optical Engineer, Laser Technician
- Awarded 2 New Patents and trademark for PLAID

2026 PRIORITIES: FROM DEMONSTRATOR HARDWARE TO PROTOTYPE SYSTEMS

- **Product:** Prioritize and focus current team on laser productization; increase staff for systems integration, software development, and beam director design.
  - Potential for spinoff of lower power backpackable system



Outdoor laser demonstrator

Prototype PLAID Node

PLAID Network

- **Program:** Increase market awareness and credibility; Convert business development pipeline into active contracts
- **Partner:** Continue to cultivate ongoing partner conversations into active teaming agreements for specific programs, layered systems integration architectures, and co-development agreements
- **Test, Test, Test; Demo, Demo, Demo**

LARGE ADDRESSABLE MARKETS

NATIONAL SECURITY DOMAIN

Directed energy weapons. *Source*

$32.1B
By 2033
15.7% CAGR

Counter UAS *Source*

$11.7B
By 2032
24.7% CAGR

Directed infrared counter measures *Source*

$10B
Over next
10 years

COMMERCIAL DOMAIN

Commercial ultrashort pulse laser *Source*

$5.2B
By 2030
15.0% CAGR

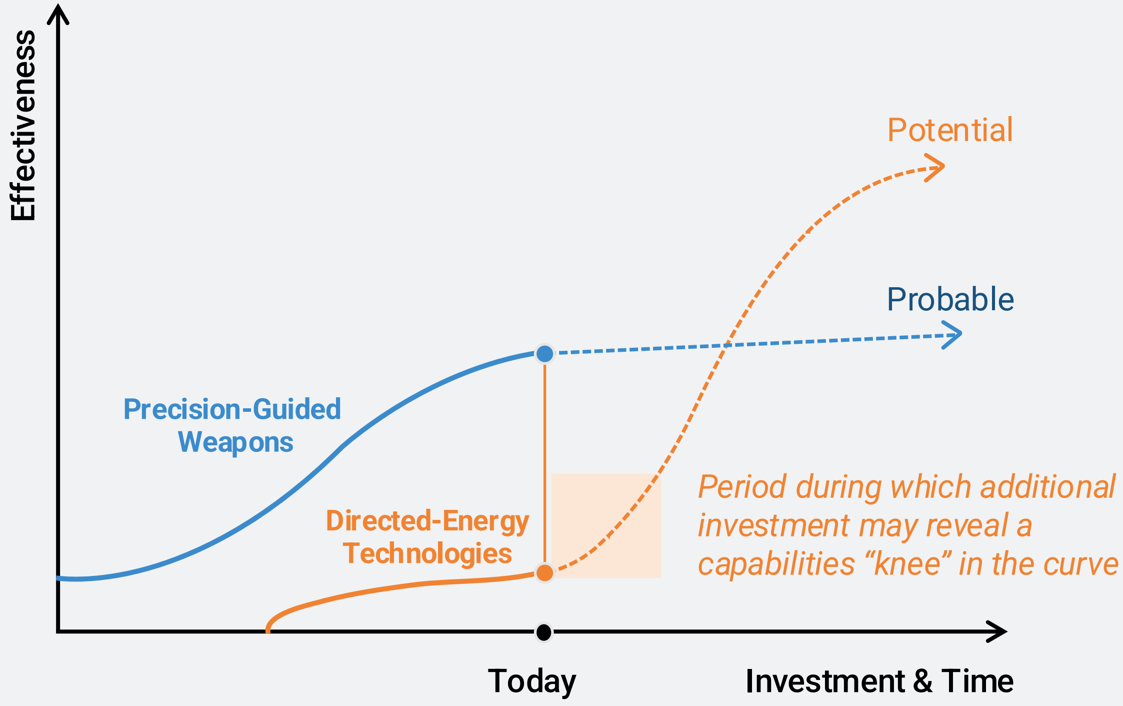
Additive manufacturing *Source*

$95.6B
By 2032
20.4% CAGR

Medical laser market *Source*

$19.9B
By 2032
14.5% CAGR

A NOTIONAL MILITARY TECHNOLOGICAL "BREAKOUT"



DIRECTED ENERGY STILL IN EARLY STAGES OF DEVELOPMENT AND ADOPTION

What is needed to finally cause the inflection point in the adoption of directed energy?

- A widely proliferating threat uniquely suited to being countered by directed energy weapons
- A directed energy system that delivers both
  - High value effects against the threat
  - At a size, weight, and power that makes it widely deployable across multiple platform types and fixed sites.

AE is well positioned to be a catalyst to "bend" the adoption curve of directed energy

GOLDEN DOME FOR AMERICA OPPORTUNITY

A successful Golden Dome for America implementation requires an entire pillar of capability specifically built to “take out the eyes” of the things that stare at you. **USPLs are ideally suited to achieve this**

Why Ultrashort Pulse Lasers?

- **Unique Effects:** USPLs deliver high-peak power, enabling disruption of EO sensors through plasma formation or ablation with minimal collateral effects.
- **Compact and Scalable:** Fiber-based USPL technologies support low SWaP footprints and deployment on land-based mobile, high- to very high-altitude platforms.
- **Wavelength Agility:** Effective across visible to LWIR bands enhancing sensor denial capability.
- **Low Thermal Signature:** Unlike CW or long-pulse lasers, USPLs maintain a low thermal footprint
- **Speed-of-Light Engagement:** Instantaneous targeting of fast-moving threats with sub-second dwell times required to neutralize the target.
- **Difficult to Counter:** Extremely short pulse durations and tunable wavelengths challenge traditional filtering and hardening strategies.

WHY INVEST IN APPLIED ENERGETICS?

Emerging ISR threats ideally countered by Ultrashort Pulse Lasers

Unmanned semi-and fully-autonomous threats are dramatically increasing in number and capability. These threats are vulnerable to USPL effects with limited time required to defeat ISR sensors.

Unmatched IP portfolio

More than $50 million in public and private capital invested, 25 issued patents, 11 applications held under government secrecy orders, and 10 additional patents pending.

Defense applications open door to commercial markets

Defense applications open doors to commercial markets such as advanced manufacturing, pathogen detection and neutralization, and imaging of biological tissue.

High value directed energy effects at best size, weight, and power in market

Only national-security focused USPL pure-play; USPLs deliver high-value counter-ISR effects in a SWaP footprint that allows deployment on almost any military platform.

Accelerating addressable market

Global directed energy weapons market expected to grow at 19% CAGR to $17.8 billion by 2028; Counter-Unmanned Aerial Systems (UAS) market expected to grow at 17% CAGR to $6.8 billion by 2030.

Elite management team; state of the art facilities

More than 100 years of combined executive team experience; 21,300 sq. ft. laser-dedicated development and manufacturing facility in the University of Arizona Tech Park.

APPLIED ENERGETICS

Thank you

TECHNOLOGY MATURITY DISCUSSION AND WHY IT MATTERS