Securing Critical Infrastructures

with

Laser Radar Sensors

IHLS 25 May 2016

We Detect the Intruder

http://bit.do/DFSL-HLS-LIDAR

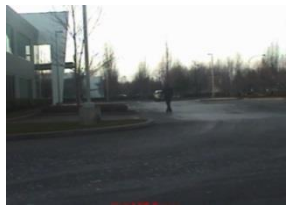
r. Frucht Systems Ltd.

Advantages of LADAR Technology

- **Enable defining sharp and accurate detection borders .**
- **Detection non depending on clutter / background.**
- **Detection not depending on the temperature & lightning.**
- **Detection not depending on inclination to the ground.**
- **High Resolution.**

Dr. Frucht Systems Ltd (DFSL) Laser Radar – How it Works ?

- Time of Flight Technology.
- Builds a “map” of the environment.
- The algorithm continuously asses the changes in the environment and adapts the detection thresholds *(Specific to DFSL).*
- Target is detected when the detection thresholds are exceeded *(Specific to DFSL).*
- Coping with moderate fog .
- Technology Superiority relative to competitors (Smooth Tracking with PTZ, Higher Sensitivity, Control and Change Sensitivity from Control Room and more).



Tactical Threats Against Critical Infrastructure

- **Human Intruders: walking, running, crawling and swimming**
- **Small Ground and Sea manned and unmanned vehicles**
- **Aerial Penetration by Low Radar / Optical Signature objects: Mini Drones and Parachutes**

DFSL LADAR Sensors can detect all of the threats

Typical Infrastructure Sectors where LADAR Sensors offer High Level of Security

- **Power Plants : Nuclear and Conventional.**
- **Highly Sensitive Sites : Institutions, Chemical Plants.**
- **Drilling Platforms.**
- **Airports and Sea Ports.**
- **Transportation: Rail Tracks, Large Cargo Ships.**

DFSL LADAR Sensors are installed in most of the above type of sites.

Area Surveillance of Critical Infrastructures

Chemical Plants

Power Plant

Airport

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Securing Fences of Power Plants and Sensitive Bunker

Sea Ports, Airport and Space Missile Site

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Transportation

Securing Rail Tracks

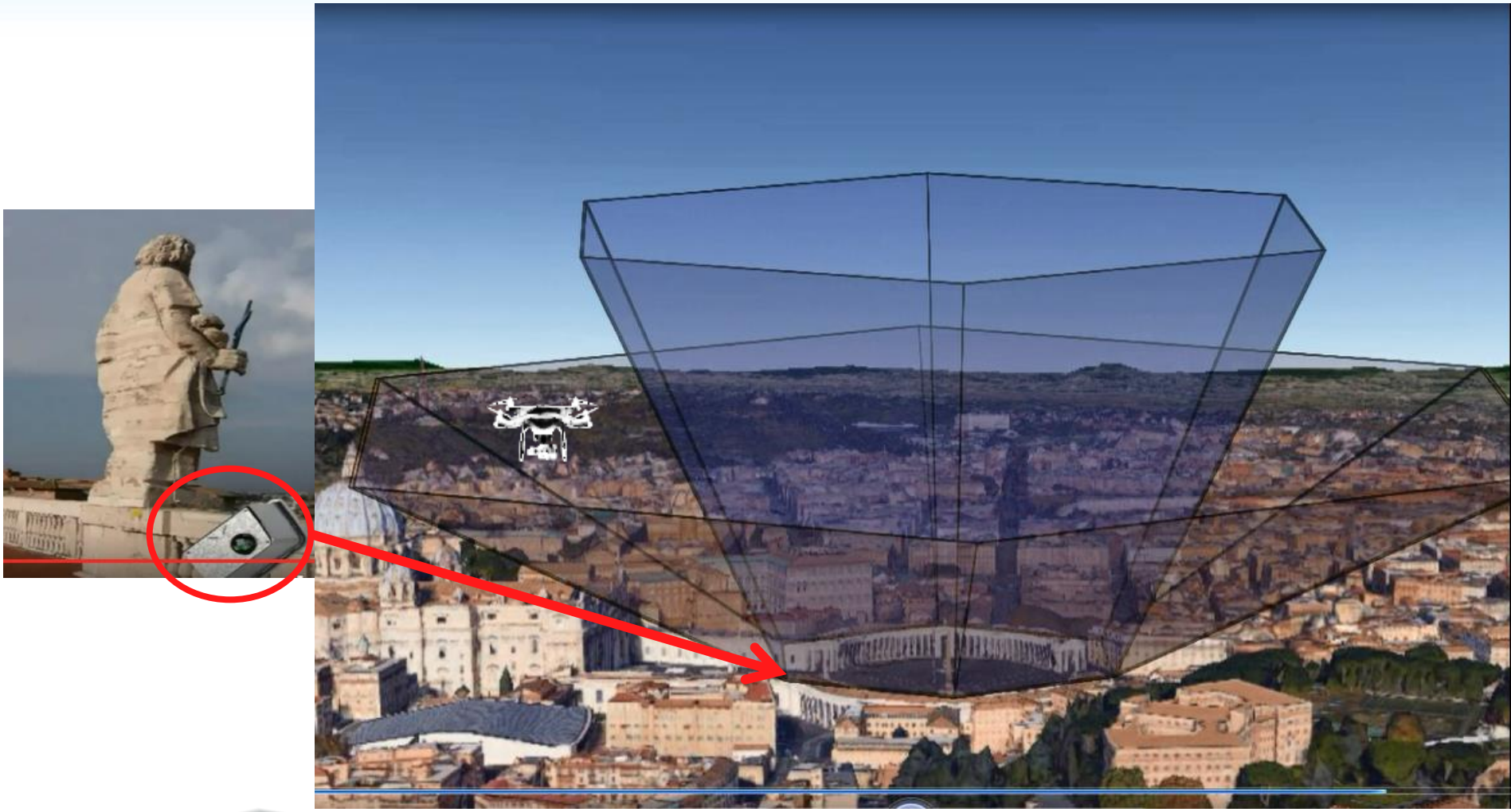
Securing Large Cargo Ships

Securing Water Reservoirs

LADAR Sensor

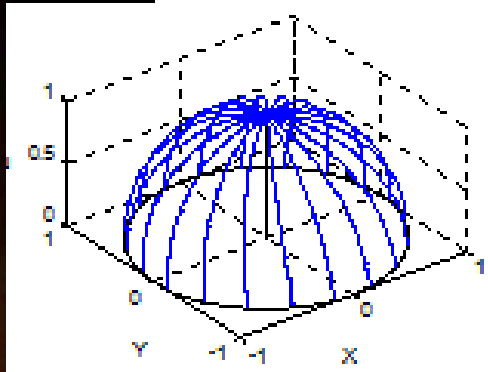
DFSL 2D Mini Drone Detector

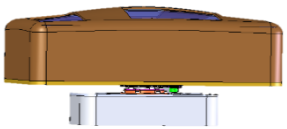
Mini drones are detected when penetrate the “Detection Wall” at max 300 m



The Next Phase - 3D Laser Radar

- **Dome Drone Detector – 3D Laser Radar for detecting and tracking mini drones**
- **Developed under a H2020 European Funding**
- **Prototype scheduled for November / December 2016.**





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Thank You