

**15
MAY
26**

09:00-17:30

**SOFITEL
ATHENS
AIRPORT
HOTEL**

Organised by
 **MANAGEMENT
FORCE Group**
Risk Management & EHSS Services

**Day 2 | Delphi
Interactive Workshops**

18 SAFETY GALA

The Int'l ESG Conference

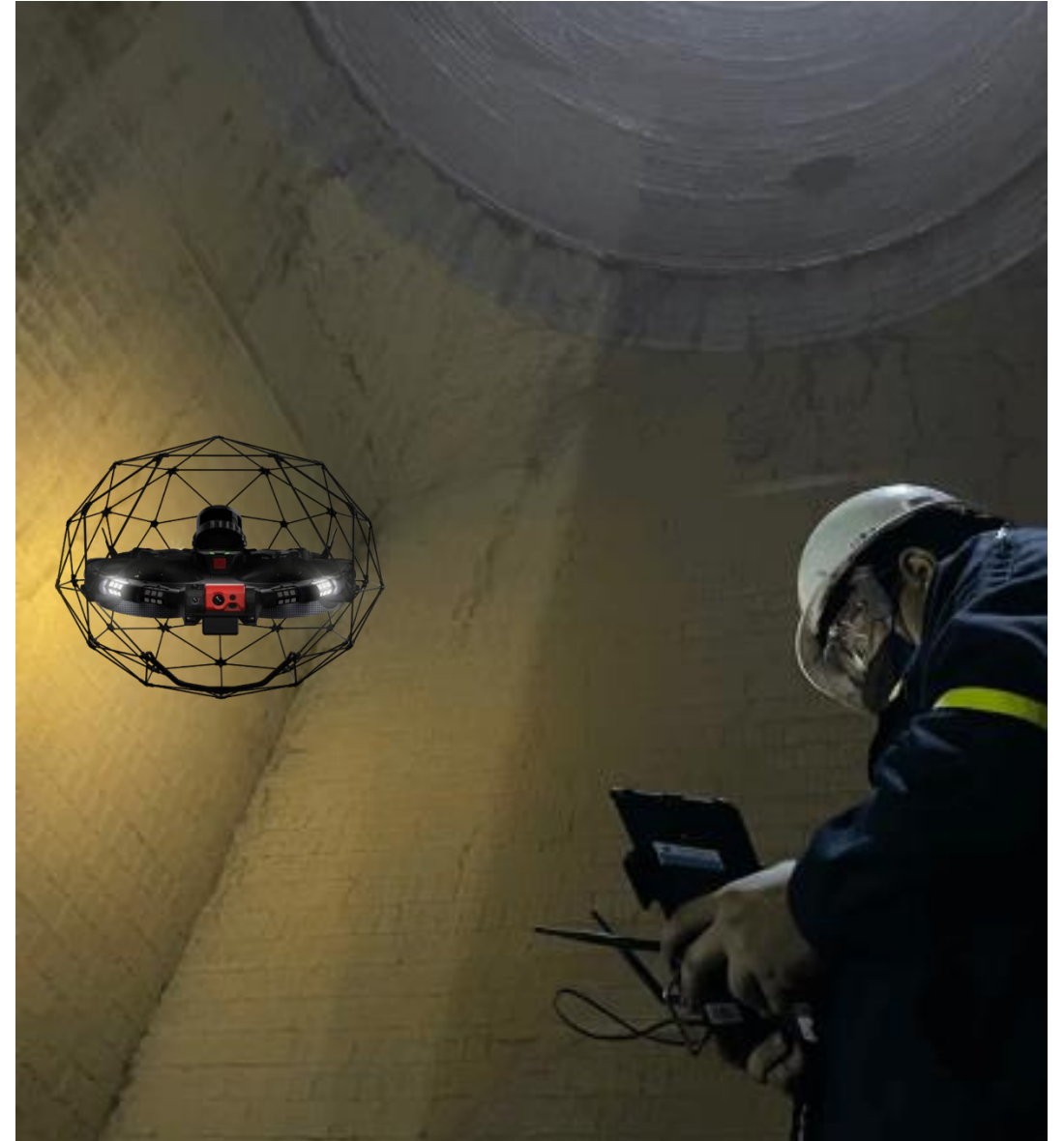
**Visionary Leadership & Governance for
Safety at
Workplaces and Beyond**

Drones in High-Risk Inspection Environments

A practical safety technology for confined spaces, work at height and industrial asset integrity

18th Safety Gala | International ESG Conference

presented by ORBIDRON with AEGEAN ROBOTICS



TECHNOLOGY, ESG AND SAFETY CULTURE AT THE CENTER OF WORKPLACE RISK REDUCTION

Why do drones belong at the Safety Gala

1

ESG is not only
reporting

it is how risk exposure is
removed from work

2

Safety culture
improves

when teams are given
safer tools, not just
stricter procedures

3

Drones add value to
ESG initiatives

by turning hazardous entry
into remote assessment,
documented evidence and
better decisions



Drone narrative:

0

unnecessary
entries

4K

visual evidence

3D

spatial
awareness

THE TRADITIONAL METHOD OFTEN STARTS BY PUTTING PEOPLE INSIDE THE HAZARD

The legacy inspection problem



1

Work
at height

scaffolding, rope access,
ladders, cherry pickers

2

Confined
Spaces

tanks, silos, tunnels,
boilers, ship
compartments

3

Unknown atmosphere

gases, oxygen deficiency, poor
visibility

4

Downtime Disruption

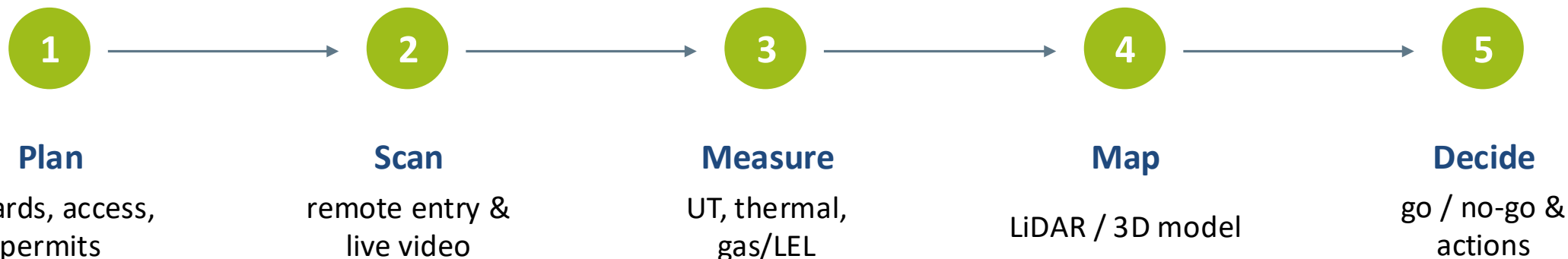
permits, staging, access
windows, off-hire

Risk is multiplied by access

The asset may be hazardous — but the access method often creates the highest exposure

BEFORE HUMAN ENTRY, ESTABLISH VISIBILITY, ATMOSPHERE AWARENESS
AND STRUCTURAL CONTEXT

The drone-first safety model



Remote assessment → informed human action → safer execution

ELIOS 3: DESIGNED FOR GPS-DENIED, DARK, CLUTTERED AND CONFINED INDUSTRIAL ASSETS

Technology: Enclosed space drone platform

Indoor
inspection &
mapping
drone

Tunnels, water
tanks, silos,
mines, oil tanks,
ships, industrial

Collision
resilient

Multi-Sensor
Data Capture

4K video
imaging

Thermal
imagery

3D Digital
Twins

LiDAR
precision

Carbon fiber
case

Ultra light
payloads



48x38cm
dimensions



2350g
weight



16000
lumens



-10° to +50° C
operating temp



4096dpi
photo res



4K Ultra
video res



±90°
cam tilt



LIDAR
IP44 - IP68
water resistance

Small platform. Large safety impact.

DRONE DEPLOYMENT SUPPORTS MEASURABLE LEADING INDICATORS — NOT ONLY BETTER INSPECTION IMAGES

Safety benefits that HSE leaders can measure

The value is not the drone flight. It is the verified, location-linked inspection record.

Data outputs:
 evidence for decision improvement

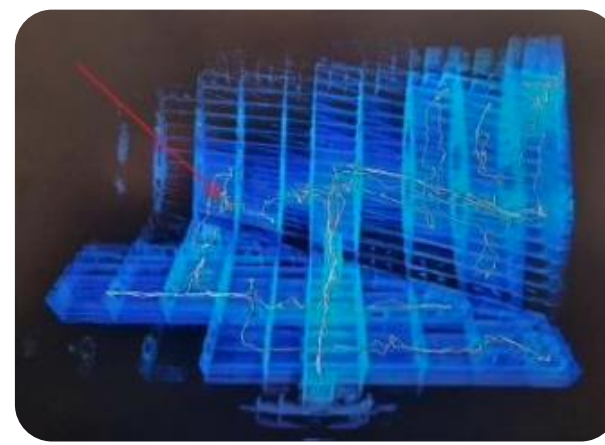
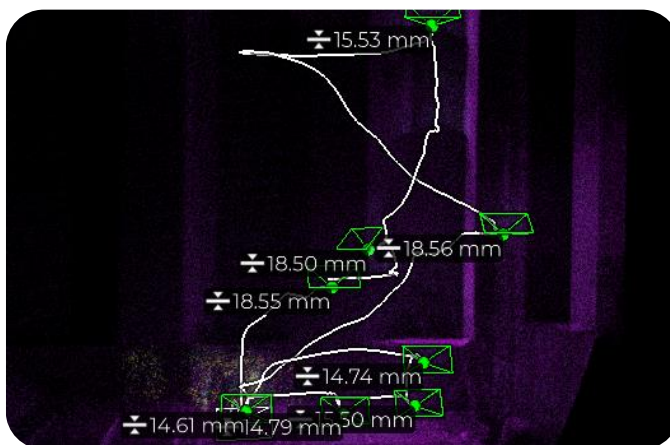
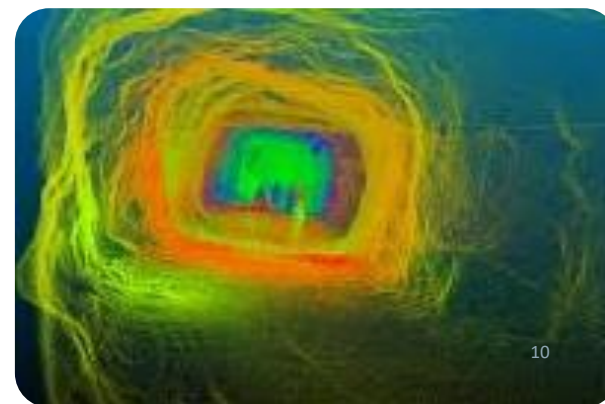
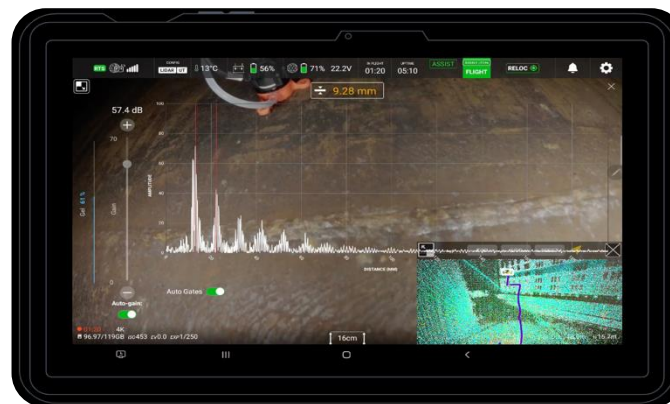
4K photo/video library

UT readings with
 calibration evidence

3D / LiDAR point clouds

Tagged points of interest

Defect register and
 repair priorities



THE SAME RISK PATTERN APPEARS IN MARITIME, ENERGY, INFRASTRUCTURE AND HEAVY INDUSTRY

Applications across hazardous sectors



Oil & Gas

Storage tanks
 Process units
 Flare stacks
 Pipelines



Power Generation

Boilers
 Stacks / chimneys
 Cooling towers
 Confined ducting



Maritime

Ballast tanks
 Cargo tanks / holds
 Voids & cofferdams
 Class-ready UTM /
 close-up



Tunnels

Structural lining
 Water ingress
 Rockfall / cracks
 Post-blast or
 emergency checks



Mines

Stopes & shafts
 Unsupported areas
 Ventilation raises
 Convergence /
 instability mapping



Cement

Silos
 Preheater towers
 Kilns / ducts
 Cyclones & hoppers

TECHNOLOGY BECOMES SAFETY CULTURE WHEN IT CHANGES THE DEFAULT DECISION

From compliance to commitment

Old default

Send people in/up/down to find out

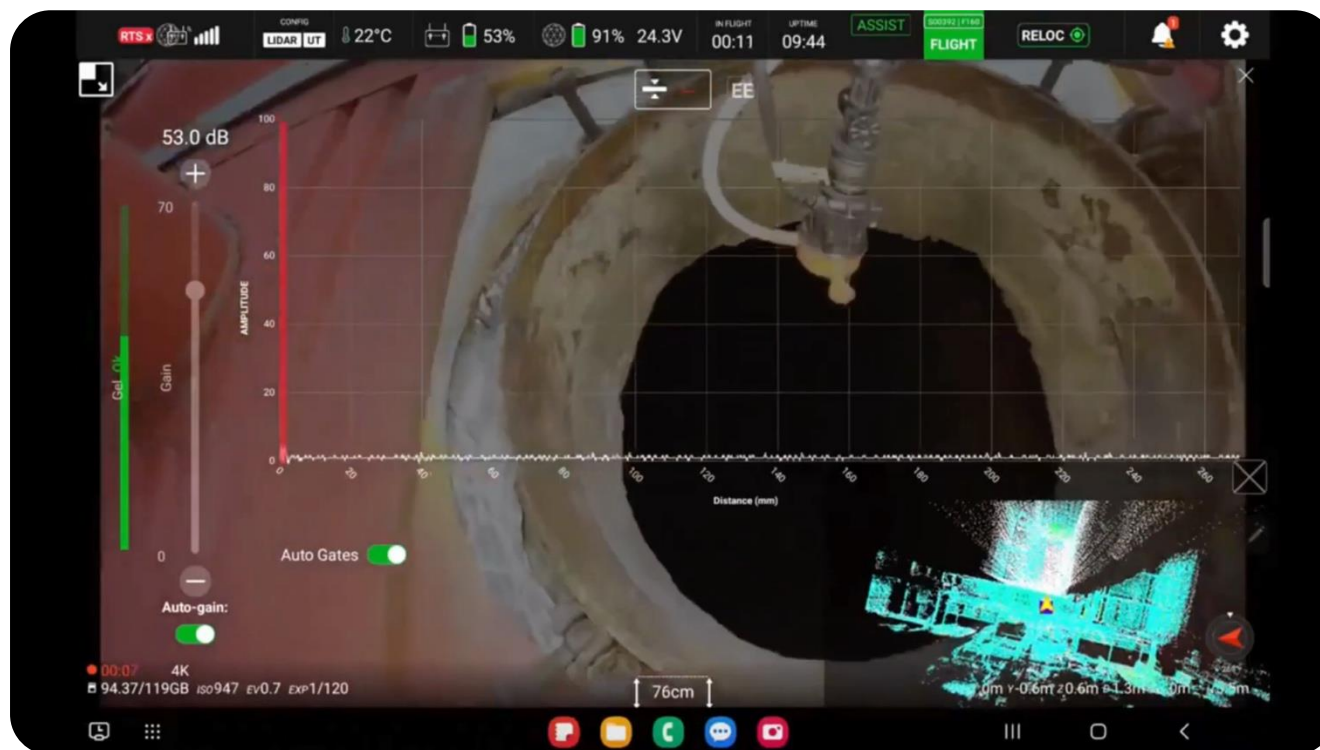
New default

**Send the drone first; send people only
when needed, with better information**



POWER GENERATOR | OIL & GAS TANK | SHIP BALLAST TANK | MINE | CEMENT SILO

Drone deployment / inspection demo



THE BEST SAFETY IMPROVEMENT IS NOT BETTER ACCESS TO THE HAZARD –
IT IS REDUCING THE NEED FOR ACCESS IN THE FIRST PLACE

The safest inspection is the one where people enter last — with evidence already at hand

ORBIDRON & Aegean Robotics help industrial and maritime operators replace hazardous access with remote, data-rich inspections



ORBIDRON

www.orbidron.com



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