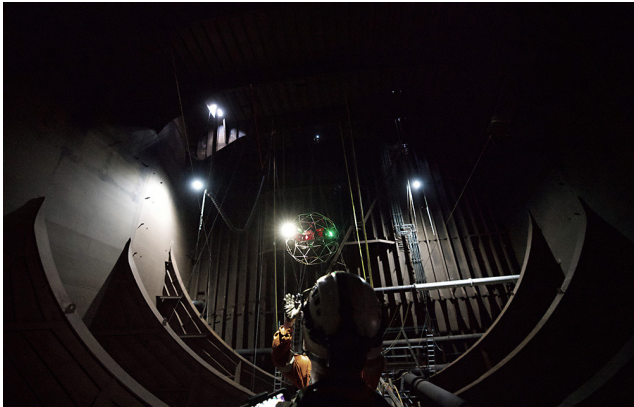


CASE STUDY

VERTECH GROUP

19 Walters Drive, Osborne Park
6017, WA, Australia
P: +61 8 6168 7600
E: Info@vertechgroup.com.au

UAV CARGO TANK INSPECTION



1 / Introduction

When it comes to inspecting hard-to-reach areas of cargo tanks, traditional methods can often be time-consuming and may expose personnel to health and safety risks. Veritech was commissioned

to tackle such a challenge, exploring innovative means to inspect sections of the hull that were otherwise inaccessible.

2 / Innovation

The primary focus of the project was the inspection of the 6 Centre Cargo Oil Tank (6CCOT) on an FPSO, under the guidance and supervision of Lloyd's Register. Two initial inspection campaigns revealed significant challenges in accessing crucial parts of the tank. Given the internal conditions of the tank – temperatures ranging between 35-45 Celsius and nearly 90% humidity – accessing these areas presented undeniable risks.

In response to these challenges, Veritech incorporated the use of the Elios 2 UAV from Flyability. This UAV was a recent addition to Veritech's arsenal, and its usage marked the first of its kind on-site. There were initial reservations about how the drone would navigate within a moving vessel and whether it would maintain stability.



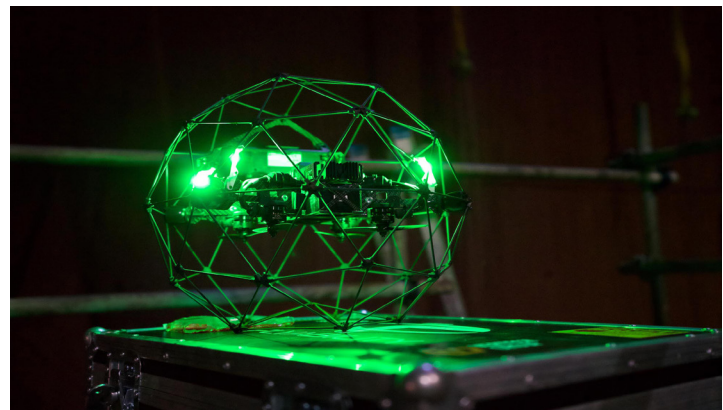
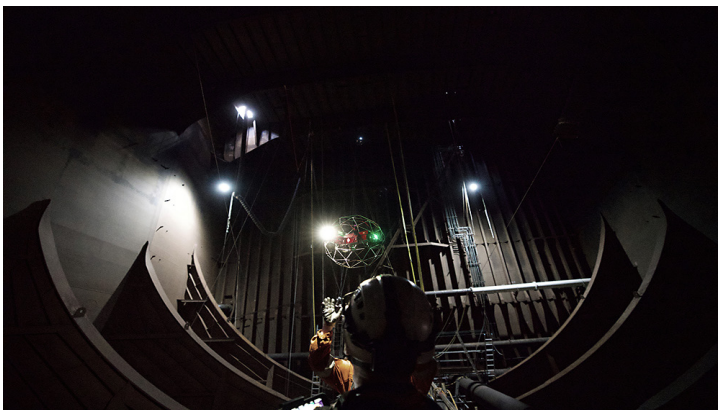
3 / Project Summary

Initial reconnaissance flights were conducted to ensure the UAV's functionality within the tank and to identify any potential hazards. The performance of the UAV exceeded expectations. Equipped with sensors that locked onto the surrounding structure, the UAV was able to automatically adjust for the vessel's movement. Enhanced lighting features on the drone allowed for clearer visuals, lending depth and dimension to the inspected objects.

The entirety of the visual inspection requirements in 6CCOT was accomplished using the UAV. Its performance was witnessed by a Lloyd's surveyor and several core crew members, all of whom provided positive feedback on its utility and efficacy. The adoption of the UAV not only expedited the inspection process but also presented a more cost-

effective solution. More importantly, it considerably diminished the risk factor associated with Confined Space Entry (CSE) for technicians.

Concluding, the introduction of the Elios 2 UAV has ushered in promising possibilities for future inspection projects. With its proven capabilities and the endorsement from Lloyd's, this innovative tool stands out as an indispensable asset in the field of inspection.



CONTACTS

Vertech Group

T: +61(8) 6168 7600

E: Info@vertechgroup.com.au

Sonomic AUS

T: +61(8) 6240 2450

E: Sales@sonomatic.com.au

Geo Oceans

T: +61(8) 6168 7611

E: Info@geoceans.com.au

AUAV

T: 1300 738 521

E: Contact@auav.com.au

Blue Ocean Marine Services

T: +61(8) 6263 8785

E: Info@blue-ocean.com.au

APS

T: +61(3) 9466 1887

E: Info@apsystems.net.au

Abseil Access

T: +64(4) 801 5336

E: Info@abseilaccess.co.nz

