

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



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#### **USING OF DRONE INSPECTION IN ENSURING FIXED EQUIPMENT MECHANICAL INTEGRITY**

The Technical revolution in Unmanned Aerial Vehicle (UAV) sector drives many companies worldwide within Oil and Gas industry to start using this technology. This paper highlights the different uses of UAVs in Oil and Gas industry to ensure the asset integrity. It elaborates on the benefits of this technology comparing to the other Non-Destructive methods in aspects of safety, cost, and productivity. This will be a power point presentation with various photographs and video of the inspection findings from different UAV's inspection conducted with lessons learnt collected. The author will share their successful experience in using UAV to perform Internal inspection for Braze Aluminum Heat Exchanger (BAHX) and close visual inspection for flares. Additionally, the presentation will illustrate the overall process of UAV inspection, starting with exploring various inspection techniques before choosing UAV, the pre assessment conducted to identify the challenges, and finally the critical inspection findings. The presentation then provides various benefits of this inspection technique and deliberate on safety/redundancy of the UAV system. Moreover, the key limitations to utilizing UAV will be highlighted as well. As the presentation progresses, it demonstrates the effectiveness of this technology for performing inspection which can be adopted by other oil and gas industries to substitute conventional inspection methods.

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>