Intel Falcon™ 8+ Drones Improve Oil and Gas Inspection Workflows

Intel and Cyberhawk demonstrate how the Intel Falcon™ 8+ drone changes aerial inspection workflows at gas terminal in Saint Fergus, Scotland

At a Glance:
Commercial drones address a range of real-world concerns. Aerial inspection and surveying with drone technology has key advantages:

• Reduce employee risk
• Scalable access for hard-to-reach locations
• Limit facility shutdowns with in-operation inspections
• Increase inspection accuracy and improve asset maintenance decisions

Intel and Cyberhawk, a global leader in aerial inspection and surveying, have come together to demonstrate the power of commercial drone technology to drive business transformation by inspecting flare stacks at a gas terminal in Saint Fergus, Scotland. Inspecting with the Intel Falcon™ 8+ system, instead of conventional methods, reduces employee risk, increases speed and accuracy, and can save $1 to $5 million per day in potential production loss.

Challenge
Traditional inspections of oil and gas assets of this scale require either full or partial facility shutdowns. This could take days to weeks to bring the plant offline and accessible for inspection workers. Traditionally, they would rely on harnesses and cable equipment to hang mid-air while manually collecting information on the structure. Facilities are under pressure to reduce the number of shutdowns and reduce the cost while increasing the safety, efficiency, and accuracy of asset inspection.

Solution
Unmanned aerial vehicle (UAV) technologies allow for large and complex facilities to be inspected while in operation, capturing accurate and precise data to better inform business decisions on asset maintenance. Drones are an important tool for the Oil and Gas industry, and the Intel Falcon™ 8+ system delivers reliable performance and best-in-class safety, especially critical when faced with challenging environments or dangerous situations.

"Flying in Scotland, the devices have to withstand strong winds," said Chris Fleming, Cyberhawk CEO. "The Intel Falcon is perfect for that because it has the highest wind tolerance and the best power-to-weight ratio of any platform on the market." Fleming went on to state, "In the last 20 years that I've worked in the inspection industry, drones are the biggest single change we've seen to-date."

Result
The Intel Falcon 8+ drone deployed for this mission captured 1,100 images in 10 flights. This translated to 12GB of data over the span of one to two days. This inspection would typically take a three-man team three days to complete. This data can be used for asset maintenance including pre-maintenance inspection, repair work, resource planning and more.

"The way we conduct inspections is changing," said Anil Nanduri, vice president and general manager within Intel's New Technology Group. "Drones make inspection workflows faster, cheaper, and safer. The technology is mature enough to be adopted into the workflows of our customers."
More Information

For more information on the Intel Falcon 8+ system visit:
intel.com/commercialdrones

To learn more about Cyberhawk, visit:
www.thecyberhawk.com