

# Oil Review

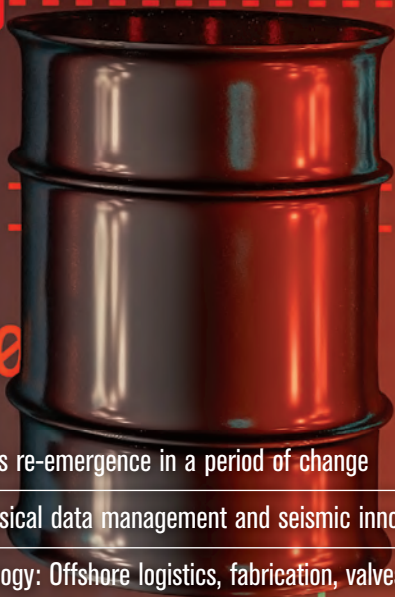
Oil · Gas · Petrochemicals

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# AUTONOMOUS DRONES: QUARANTINE-PROOF

The impact of the coronavirus can be mitigated by autonomous technology, such as drones. Ariel Avitan, co-founder and chief commercial officer at Percepto explains how this technology could prove cost-effective and productive during challenging times.

**T**HE CORONAVIRUS HAS exposed the soft underbelly of critical infrastructure and industrial sites worldwide – workforce availability. As more and more companies implement business continuity plans to deal with the outbreak, fewer and fewer employees are able to fully function. When facilities don't know who can and will show up for work, both planning and operations are seriously impeded. In Western Australia, for example, the coronavirus is potentially affecting some 60,000 fly-in, fly-out (FIFO) workers at remote mine sites and onshore and offshore oil and gas plants.

And this challenge is compounded by a flagging demand for commodities – oil, natural gas, ore, and other resources – as global industries and economies slow down or even grind to a halt. Given the ongoing price war between Saudi Arabia and Russia and the resulting price drops, the oil industry is particularly hard-hit, with companies bracing for lower revenues, diminished investment, and even large-scale layoffs.

Thus, even as companies are unable to produce at full capacity, they are also unable to sell at full capacity – leading many to take a much closer look at current and future operational expenses and efficiency.

This is leading many companies to rethink the role that autonomous technology – and specifically autonomous drones – can and should be playing in their operations.

Large industrial sites are high-value assets that require constant maintenance and monitoring – independent of both production volumes and market conditions. Even when production is slowed or stopped, and when maintenance



*Ariel Avitan,  
co-founder and chief  
commercial officer, Percepto.*

Image Credit: Percepto

changing operational demands. This makes them a force multiplier – since a single person operating autonomous drones can replace multiple security, safety and inspection employees.

Moreover, autonomous drones can be controlled remotely, from anywhere in the world. This means that – as long as companies have suitable regulatory permits – employees can work from home, yet operate autonomous drones as if they were on site.

Finally, even when a near-pandemic is not sweeping the globe – multi-mission, on-site autonomous drones have been proven to increase efficiency and reduce operational costs. By delivering consistent visual asset monitoring, autonomous drones provide true data-driven maintenance, which according to one study can result in up to 45 per cent less downtime and up to 60 per cent greater output or production. Without costly human pilots, autonomous drones provide a massive boost to existing efforts to

improve preventative maintenance and reduce unexpected downtime – which can dramatically affect the bottom line in the best of times and help organisations better deal with the loss of revenues in the worst.

Although coronavirus will not, thankfully, be the new normal – it should be a business continuity wake up call. To adapt to the fluctuations of a truly global marketplace, companies need to prepare for all contingencies – including those where human employees cannot fulfill their roles on-site. Investment in autonomous technology today can help critical infrastructure and industrial companies smooth operational and financial bumps in the road both today and in the future. ♦

personnel are unable to function or even show up at work – critical components still need to be closely monitored, security perimeters need to be maintained, and scheduled maintenance needs to be conducted. The alternative to such monitoring and maintenance can be not only costly but also deadly.

Autonomous drones are an essential part of the contingency plans that support business continuity. Drones are always available, even if operators are under quarantine, and can help alleviate the challenges associated with volatile market trends and workforce availability.

Multi-mission autonomous drones can conduct security, safety and inspection missions – and be quickly and flexibly re-tasked to meet