Sellafield Ltd plays key role in drone development challenge

Sellafield Ltd has a key role in a consortium of industrial, aerospace and aviation giants that has won a share of a £30 million government challenge fund to develop and test a remotely operated drone system.

The futuristic system will enable remote inspection and monitoring of nuclear sites and has a range of other applications including on construction sites, oil and gas installations, road, rail and telecoms infrastructure and in providing live support to emergency services.

Led by the specialist drone command and control solution developer, Sees.ai, the consortium includes BAE Systems, Atkins, Skanska, NATS, Vodafone and a host of other organisations with unique specialisms and perspectives.

Mark Foster, Head of Specialist Equipment Services, Sellafield Ltd, said:

> The specialist equipment services team provides engineering and maintenance support to the whole of Sellafield and we continually seek out areas of innovation to improve services on our complex and congested site.
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> This new technology has huge potential for our future operations; making our work safer, faster and more cost effective.
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> We're proud to be at the forefront of a national challenge and our experienced team, together with our local supply chain partners, is demonstrating every day how we can truly make a difference for our mission and beyond.

The funding comes from the Future Flight Challenge, Phase 2 competition, part of the Industrial Strategy Challenge Fund delivered by UK Research and Innovation (UKRI).

UKRI is a non-departmental public body sponsored by the Department for Business, Energy and Industrial Strategy that works in partnership with universities, research organisations, businesses, charities, and government to create the best possible environment for research and innovation to flourish.

As a publicly funded organisation itself. Sellafield Ltd will not receive any of the challenge fund but the Sellafield site offers a unique testbed for the use of this technology on nuclear licensed sites and already has its own team of highly skilled and experienced drone pilots.

The drone system, which uses similar technology to autonomous cars, enables autonomous drones to be flown under tight human supervision by pilots based

in a central control room hundreds of miles away.

The challenge put the drone system through a series of increasingly complex tests to see how it would respond in a range of circumstances, demonstrating significant potential for inspections and maintenance of congested and hazardous areas.

Peter Allport, Remote Handling Lead for Specialist Equipment Services, Sellafield Ltd Engineering and Maintenance said:

> This technology has the potential to revolutionise how we use drones at Sellafield, increasing the operational envelope and transforming the way in which drones are piloted.
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> It also closes the loop between our engineering and maintenance and robotics and artificial intelligence programme; ensuring we are always using the best available technology so we can continuously improve our service to the Sellafield site and the rest of the NDA Group.