



video transcript

innovating through robotics

human energy®

Russell Brown
Reliability Engineer, Chevron Energy Technology Company

The Innovate UK energy game-changer project is a partnership between Innovate UK, Chevron and OC robotics and we've taken robotic technology that was developed for inspection in the onshore environment and adapting it for use in the offshore environment. So, it's a world first for this snake arm technology to be used in this offshore environment.

Jim O'Donnell
Alba Asset Manager, U.K. Operated Assets

Chevron here in the North Sea is keen to look outside our own silo in the North Sea and the oil and gas industry. There's exciting technologies being developed in aerospace, manufacturing, nuclear industry that we can apply to our business.

Joel Devine
Offshore Inspection Engineer, TRAC

As part of my role as the offshore inspection engineer, vessel inspection is key. The challenges are the access and egress to the vessel.

Ken Gillan
Offshore Installation Manager, Alba Northern Platform

The best thing with the trial happening on an offshore facility is it provides the technology development companies an opportunity to actually see the work environment, the challenges that presents and so they can help them develop the tool going forward.

Kalypso David
Software Engineer, OC Robotics

This snake is the longest planar snake that we have so far. It's around 3.5 meters and it has an articulated wrist at the end. At the end of the wrist we can put any type of tool. Also, two sets of lights, the lights with the camera can help us have very good inspection inside any vessel.

Russell Brown

Once we had it deployed in to the vessel the concern then really for us was how well could we capture video and still images within that environment, would we have enough light in the vessel, would it be able to see far enough, what was the focus like.

Kalypso David

The software is designed to be user-friendly. So, you have the 3d model and the point of reference on that point you can attach pictures, you can put notes, you can put any type of file you can attach to even video if you want to.

Joel Devine

What you can see inside the vessel is pretty much everything what you could see if you were to enter it yourself. The quality of the picture being able to zoom right into defects, not only can you see what you're looking at in that one image, but you can also see in a wider image where you are inside the vessel which makes the reporting side of things so much easier for someone to review the report and simply view a defect.

Russell Brown

We want to reduce the amount of confined space entry that inspectors have to do when they go inside pressure vessels to do inspections. We believe that by using technology it allows us to keep people safe and also it allows us to operate with more efficiency, reduce costs and then also extend the life of those assets.