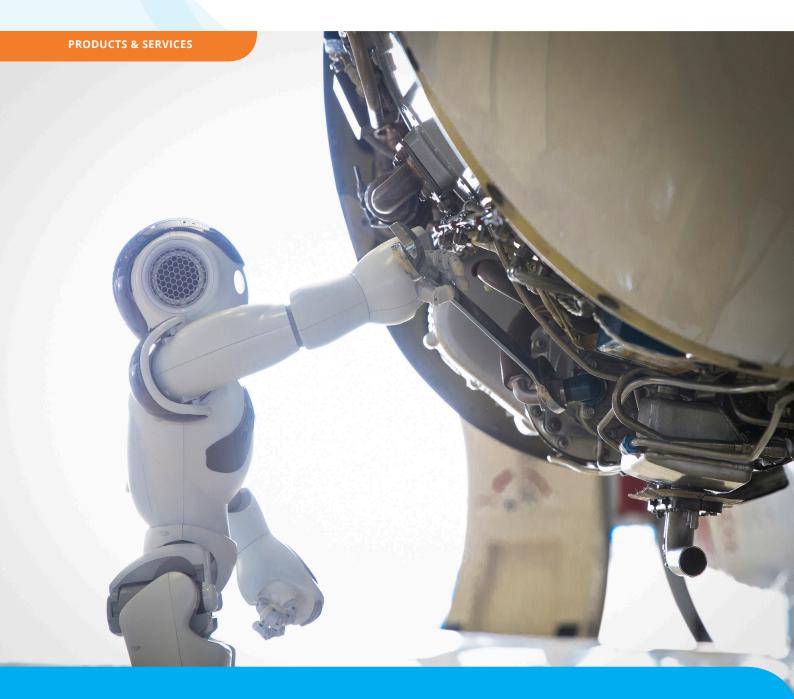
AEROSPACE ELECTRONICS & QUALIFICATION



Dedicated to innovation in aerospace

Improving your MRO productivity with robots?



What if your next apprentice aircraft mechanic is a robot, performing visual inspections?

NLR develops an autonomous robot for visual inspections. It's called ARVI. The robot comprises of a clever sensor system and an autonomous vehicle to move the sensor through the hangar and the aircraft.



WHAT YOU NEED

Visual aircraft inspections are time consuming. So, what if we can automate visual inspections? Will it help you improve your productivity and personnel shortages?

WHAT WE DELIVER

NLR develops an autonomous robot for visual inspections. The robot, we call her ARVI, comprises of a clever sensor system able to map inspection areas and identify defects such as dents, scratches, broken wires, arcing, corrosion, dirt, leakages and many more.

We use an autonomous vehicle to move the sensor system to the inspection areas, whether it is a zone or a system component. ARVI can navigate through the hangar and through aircraft just like human technicians. She avoids collisions and positions the sensor system autonomously.

ARVI has a modular design what makes it easy to configure the robot for specific areas. We may need different movement systems for work in fuel tanks and on top of the fuselage. Our modular approach means that these adoptations will have a minimal effect on the other modules.

ARVI is an apprentice aircraft technician, and it will take time to train her, just like it takes time to train her human colleagues. But she will be good at her work. Wait and see.

OUR CAPABILITIES

If you are maintaining aircraft or if you are looking for innovative maintenance technologies to improve the availability of your aircraft or to reduce costs, NLR can support you with standard and tailored solutions, aimed at civil and military maintenance organisations, operators and Original Equipment Manufacturers.

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