



# PRESS RELEASE

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## **Ricardo, NW UAV and XRDi form alliance to provide superior UAV heavy-fuel engine solutions**

**Ricardo, Inc., the U.S. subsidiary of Ricardo plc, today announced the formation of a strategic business alliance with XRDi Inc. (XRDi) and NW UAV to design, develop and manufacture a family of heavy-fuel engine solutions for unmanned systems**

Branded Wolverine, the new engine line combines Ricardo's engineering expertise with XRDi's propriety combustion technology and NW UAV's advanced manufacturing capabilities. The result is the industry's most capable, dependable and flexible heavy-fuel engines available. "This partnership allows Ricardo to offer unmanned propulsion solutions from concept design to development, and prototype to production and support," said Kent Niederhofer, president of Ricardo, Inc. "We are now in the unique position to offer a range of heavy-fuel engines, desperately needed for military and homeland security tactical unmanned systems."

The Wolverine engine line ranges in size from three to more than 50 horsepower with the potential to significantly reduce the logistics footprint by utilizing many common parts. XRDi's Mechanically Compressed Direct Injection (MCDI) system is a proprietary technology that allows two-stroke engines to run on multi-fuels, greatly improving the Wolverine engines fuel-efficiency, and has been tested in accordance with the Federal Aviation Administration's Federal Aviation Regulation Part 33 (airworthiness standards, aircraft engines).

"XRDi views the alliance with Ricardo and NW UAV as an evolutionary step forward within the marketplace, a step that promises engineering solutions and superior products which are designed and manufactured in America," said Forrest Bowen, president of XRDi.

The Wolverine engines, currently under consideration for several military programs, meet the U.S. Army's "One Fuel Forward" initiative and will be manufactured by NW UAV, one of the largest UAV engine manufacturers in the United States.



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“A robust series of heavy fuel engines is a tool our warfighters have asked for several decades,” said Chris Harris, President of NW UAV. “This alliance combines the skills needed to build fuel efficient, purpose-built engines, for the small engine market. NW UAV is excited to be part of this innovative teaming approach.”

“There’s no question that increased surveillance time in theater saves lives,” said Dr. Ron Storm, director of military business development at Ricardo. “This partnership brings together the industry’s predominate heavy-fuel engine leaders to provide immediate, market ready solutions to the unmanned systems industry.”

Ricardo is already accepting orders for the Wolverine engine and anticipates announcing its first order within weeks. Ricardo first launched the Wolverine family of engines in May 2010, with the unveiling of the Wolverine3, a 3.1 horsepower engine. Less than six months later, Ricardo announced the Wolverine3 successfully powered a small tactical UAV in October 2010 at the National Nuclear Security Administration’s Nevada National Security Site.

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## NOTES TO EDITORS:

**Ricardo plc:** With technical centres and offices in the UK, USA, Germany, the Czech Republic, China, Japan, India and Korea, Ricardo is a leading independent technology provider and strategic consultant to the world's transportation sector industries. The company's engineering expertise ranges from vehicle systems integration, controls, electronics and software development, to the latest driveline and transmission systems and gasoline, diesel, hybrid and fuel cell powertrain technologies. Its customers include the world's major vehicle, engine and transmission manufacturers, tier 1 suppliers and leading motorsport teams. Ricardo is committed to excellence and industry leadership in people, technology and knowledge; approximately 70 per cent of its employees are highly qualified multi-disciplined professional engineers and technicians. A public company, Ricardo plc posted sales of £162.8 million in financial year 2010 and is a constituent of the FTSE techMark 100 index – a group of innovative technology companies listed on the London Stock Exchange. For more information, visit [www.ricardo.com](http://www.ricardo.com).

**NW UAV Propulsion Systems** is one of the largest UAV Propulsion Systems manufacturers in the United States. NW UAV has been building systems for the aerospace industry since 2005 and has proven to be a reliable and capable supplier of land, sea or air – if it can be designed, NW UAV can build it. Visit NW UAV's family of companies at: [www.nwuav.com](http://www.nwuav.com), [www.rpadvancedmobilesystems.com](http://www.rpadvancedmobilesystems.com) and [www.nwrapidmfg.com](http://www.nwrapidmfg.com).

**XRDI Inc. (XRDI)** is a technology-driven company with technical capabilities in the field of multi-fuel engine and development. XRDI is one of a very few companies in the world devoted to the development of technologies to create robust, lightweight, efficient, emission friendly, lightweight, multi-fuel engines for today's market. For more information visit [www.xrdi.com](http://www.xrdi.com).

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