

# Ucore's Pat Ryan on Defense Grade Rare Earths for North America

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When Pat Ryan speaks about rare earths, he doesn't talk about rocks—he talks about control. "Samarium is the most critically vulnerable rare earth, or the most critically vulnerable critical mineral," said Ryan, CEO and Chairman of [Ucore Rare Metals Inc.](#) (TSXV: UCU | OTCQX: UURAF), in an interview with *InvestorNews.com* host Tracy Hughes. "That's important to the Vacuumschmelze relationship."

At a time when global supply chains are being redrawn under the shadow of China's export bans, Ucore has positioned itself as a linchpin in the West's bid for rare earth independence. Its recently signed [Memorandum of Understanding](#) with Germany's **Vacuumschmelze GmbH & Co. KG (VAC)** and **eVAC Magnetics LLC** represents what Ryan calls "an alliance between Canada, the USA, and Germany – three countries connecting." The partnership, timed for the G7 summit, links Ucore's rare earth refining technology with one of the world's most established magnet producers – one that supplies critical materials for defense systems, electric vehicles, and renewable energy applications.

VAC's U.S. subsidiary, eVAC Magnetics, has just completed construction of a permanent magnet facility in Sumter County, South Carolina, backed by the **U.S. Department of War** and a **\$111.9 million Advanced Energy Project Tax Credit**. Ucore's role is to supply these plants with high-purity rare earth oxides—materials separated using its proprietary **RapidSX™ technology**, which Ryan says is "70% faster than solvent extraction and done with 60% less footprint." The system's

agility allows Ucore to shift production targets in hours instead of weeks. “If you’re looking to target something specific like samarium or gadolinium, you can actually do that economically,” he said. “You can chase that particular group of vulnerable rare earth minerals and make it happen for someone like Vacuumschmelze.”

For Ryan, this is not about incremental progress but strategic autonomy. “We’re funded by the Department of War, and they are as well – so it makes a good connection,” he explained. “It’s about rebuilding the Western supply network.”

That network is also backed by Canada. Following China’s April export restrictions on rare earths including samarium and gadolinium—elements essential for high-temperature magnets used in **F-35 fighter jets** and **Virginia-class submarines**—the Canadian federal government [announced](#) a **C\$36.3 million grant** to Ucore. “It culminated with a program announced at the G7,” Ryan said. “Minister Hodgson signed the agreement with Ucore right on center stage.” The funds—C\$26 million from Natural Resources Canada and C\$10 million from FedDev Ontario—will support a samarium-gadolinium production line in Canada. “It’s a full grant, not a loan,” Ryan emphasized. “So, yes, we’re feeling good about it.”

As Washington and Ottawa divide responsibilities—Louisiana focusing on heavy rare earths, Canada on samarium-gadolinium—Ucore is also cementing upstream alliances. The company has [re-engaged](#) with **Hastings Technology Metals Ltd. (ASX: HAS)**, an Australian rare-earth producer now free of prior Chinese entanglements. “Hastings aligning with Ucore brings together Canadian technology and U.S. manufacturing in Louisiana,” Ryan said. “We’re moving quickly... to get it into play by 2027.”

Ryan's tone is calm but unmistakably strategic. "To build a supply chain, you've got to have nodes that connect," he said. "You can't have one-off MOUs that don't bring a full solution." With facilities advancing in **Alexandria, Louisiana**, and **Kingston, Ontario**, and downstream partners like VAC and eVAC, Ryan sees Ucore's role as more than just a participant. "If 'command center' means delivering product and solving deficiencies in the supply chain to rebuild the Western supply network," he said, "then we'll take that title."

The phrase hangs in the air—a reminder that the rare earth race is no longer about who can dig the deepest, but who can connect the dots fastest.

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