

A soldier system that is not afraid of modern warfare

Soldier Modernisation interview with Alain Tremblay, Rheinmetall Canada's vice-president of business development

The battlefield can be an extremely chaotic place. Not only are soldiers frequently scattered across various locations, but environmental challenges like hard-to-navigate terrain, choppy radio networks, and unpredictable weather can present a number of operational and communication-related issues.

For dismounted agents in particular, the ability to remain connected to their chain of command while on the ground can be the difference between mission success and mission failure. Soldiers that move on foot do not have access to traditional in-vehicle communication systems: instead, they require an agile solution that can be taken on-the-go to maintain constant situational awareness. That is where the soldier system comes in.

In the complex environments of modern warfare, Rheinmetall Argus system provides the user with a highly intuitive, smartphone-like interface that is packed with mission-critical capabilities. It is engineered to act as a hub that relays real-time information to facilitate seamless cohesion – even in the toughest of environments, where its ruggedized and waterproofed hardware is an indispensable asset.

The operator-focused system features blue force tracking and a suite of mission planning features like waypoint plotting and map reconnaissance, among other dynamic functions. Simply put, Argus lifts a weight off of soldiers' shoulders: both literally thanks to its ultra-lightweight casing, and figuratively as it streamlines comms and ops processes.

"Argus provides a unique situational awareness enhancement to any dismounted soldiers deployed in today's complex battlespace," said Alain Tremblay, Rheinmetall Canada's vice-president of business development. "Its modular and open architecture makes for a formidable ability to adapt to various user requirements, while being able to grow and evolve as the environment changes."

From the world's highest mountaintops to remote foreign locations, Argus' open architecture engineering is the gateway to no-fail connectivity, featuring a network-agnostic framework that can take soldiers absolutely anywhere. Users have the option to connect to radio, Edge, GSM, and LTE networks to ensure every one of their time-sensitive updates is received loud and clear.

The system is also hardware-agnostic and multi-platform compatible for an unparalleled degree of interoperability: it can be used with any radio that is currently in service within NATO, and loaded on any mobile device powered by Android, Windows, or Linux.

To complete the compatibility trifecta, Argus is entirely hardware-system-independent. Its software can be loaded onto a PC, tablet, smartphone, or rugged PDA – the latter being a particularly attractive option for those who need a damage- and shock-resistant tool that can withstand harsh environments.

Whether you are engaging in a routine training exercise or a real-life battle scenario, every operation requires a specific combination of systems, personnel, and equipment that must coexist in perfect harmony. With so many moving pieces, soldiers need a communications platform that can tie these elements together with ease.

Picture Argus as the central component of a bicycle wheel, surrounded by spokes that represent each piece of field equipment that can be integrated with the soldier system: these connections include laser rangefinders, tactical night vision goggles, GPS units, remote secure receivers, biometric sensors, UGV's (including Rheinmetall Mission Master), and UAV's.

Each one of these integrations has been tested and proven in real-life national and multinational situations, so you can go forth with confidence no matter the mission at hand. The system also meets all of the industry's most stringent quality standards, from NATO's ruggedization



Argus can control the Mission Master UGV and receive data from its many sensors. Using the "follow me" mode, the UGV can roll alongside other soldiers, who can ensure the area is secure.

specifications to full MILSPEC compliance for its hardware and software components.

Argus is currently in service and deployed with the Canadian Armed Forces. In addition, Argus battle-proven software is being used by the German army's Gladius soldier system, further highlighting its ability to integrate seamlessly with other NATO and coalition members' operations – all while meeting, and often exceeding, interoperability protocol requirements.

One of the most groundbreaking things about the Rheinmetall Argus is that its communications capabilities and ultra-tough hardware are just the tip of the iceberg. Thanks to its open architecture and compatibility with NATO data exchange and communication protocols, it can be coupled with UAV and UGV platforms for remote operations that keep soldiers at a safe distance. Just last month, the Mission Master – Rheinmetall's modular unmanned ground vehicle – successfully completed a remotely operated mission controlled by a single soldier through Argus soldier system.

In the field, Argus can control the Mission Master in any one of its many modes: it can pre-program waypoints for the UGV to follow, or tell it to autonomously travel to the operator, follow the operator at a distance, or retrace its path back to the origin.

The soldier system can also remotely control UAV's, including the ultra-compact FLIR Black Hornet, a tiny helicopter-like drone that can fit in the palm of your hand. As your eye in the sky and ear to the ground, these types of integrations are a major advantage for any military user that needs a single device to tackle multiple tasks at once, without compromising the safety of their personnel.



Argus provides constantly updated situational awareness.

It is exceedingly rare to come across a military tool that can claim to have it all – and mean it. Argus is one interface, one unit, and one central point for any communications, planning, and operational capability you will ever need. It provides constantly updated situational awareness between dismounted soldiers and all levels of command, no matter how far away they are, creating a battle ecosystem unlike anything the world has seen before. ■

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