Finnish Defence Technology Overview

FrontLine Associate Editor, Patrick Meikle, recently visited Finland to observe their safety and defence technology innovations and concepts. His itinerary presented some of the finest examples of innovative and profitable companies and organizations which are focused entirely on defense and safety technologies. He gives us an overview of his visit and will be offering additional reports in future issues.

The World Economic Forum (WEF) ranks Finland *1st* in the world in "networked readiness" in its recent *Global Information Technology Report* (www.weforum.org). It ranks Finland *2nd* (after the U.S.) in the general competitiveness and growth opportunities of 80 leading economies worldwide in its *Global Competitiveness Report* 2002-2003. In addition, the International Institute for Management Development (IMD) placed Finland in *2nd* position in its *World Competitiveness Yearbook for 2002*, again only behind the United States.

While these rankings may be a surprise to many, a visit to the companies and organizations outlined below, made it apparent that Finland takes a back seat to no one when it comes to defence technology.

Sisu Auto Oy (www.sisuauto.com/)

Sisu Auto has been making trucks and military vehicles for more than 60 years. It is a full service truck house providing its customers a range of trucks covering all transportation assignments in over 5-ton gross vehicle load classes. The factory, situated in Karjaa about one hour north of Helsinki, is manufacturing heavy-duty Sisu trucks quickly and flexibly to meet the transportation needs of its customers.

The Sisu HMTV (High Mobility Tactical Vehicle) range is based on commercial truck design and components that have been further developed and tested to meet the requirements of the armed forces. The Sisu High Mobility 8X8 Vehicles is designed to operate under varying transport conditions, high top speed and high average speed in convoys.

Sisu Auto has increased the Sisu truck exports considerably. For example, it recently started the production of a total of 110 Sisu E12 tank carriage mounts supplied to the French Army.

Patria (www.patria.fi)

Patria is an internationally operating Aerospace and Defence Group with significant positions in the Nordic and Baltic Sea countries. Patria's main business areas are armoured wheeled vehicles, mortars and field gun systems and their life cycle support as well as life cycle support of military aircraft and helicopters.

The latest successes, the 4th generation Patria Armoured Modular Vehicle (AMV) vehicle and the Advanced MOrtar System (AMOS) double barreled mortar system are remarkable evidences of successful concepts resulting in European solutions to global markets.

Patria was founded in 1997, and the current Group is the result of subsequent company reorganization. Patria's roots date back over 80 years. Net sales totaled EUR 259.1 million and the number of employees was 2 019 in 2003

Finnish Defence Forces (www.mil.fi/)

A personal highlight on this Finnish tour was a visit to the famous and most powerful Brigade in Finland, the Panssariprikaati or Armoured Brigade where we were presented with a brief history of the Brigade and the proud achievements of the Finnish army during the *"Winter War"* and the *"Continuing War."* A follow-up visit the Finnish National Military Museum, offered further evidence of the country's trials and tribulations during *"the wars."*

National Defence College (www.mil.fi/)

Finland is not yet a member of NATO, but thanks to the knowledge and assistance of Dr. Tomas Ries (right), senior researcher at the *National Defence College* in Helsinki, we were updated on aspects of the technical readiness of the Finnish Armed Forces related to NATO, and entered into discussions as to whether Finland should join.

Sako Ltd. (www.sako.fi/)

Sako Ltd is a leading manufacturer of quality rifles, cartridges and accessories for military and law enforcement needs. Sako produces the TRG 21/41 Sniper Rifle and accessories including muzzle break, silencer, folding bipod, slings, hard carrying case, soft carrying case and butt spacers cleaning kit.

Sako TRG is a total accuracy concept designed to fulfill the needs of special forces and law enforcement long-range marksmen around the world. The TRG is designed to meet individual demands and adjusts to each shooter's personal style, build and posture. The trigger, cheek piece and butt plate, practically all features, are fully adjustable.

Sako TRG is available in two models: TRG-22 and TRG-42. Configurations include matte black and military green stock with different finishes on barrel and action. Also available in all-black Stealth configuration featuring black stock and bolt with phosphatized barrel and action.

Robonic UAV Launching Systems (www.robonic.fi/)

Robonic is an independent engineering company, focused on the technology of Pneumatic Unmanned Aerial Vehicles (UAV) Launching Systems. With twenty years in the field, it supplies various UAV systems and products for the global market.

Robonic provides a complete product range for various UAV types, weights starting from 100 kg up to 1,000 kg, and for the maximum launching power of 8,500 kW. The system is fully tested both with propelled and jet engine high performance target UAV's. Modular designs cover all the main applications including trailer and truck mounted, semi mobile and fully stationary concepts. The units can be folded according to standard container adaptations for easy transportation by ground vehicles or air carriers. The Robonic system is a flexible launching method meeting the requirements of the current tactical UAV market.

Supplies for the tactical UAV market commenced in 2000, after the Finnish Defence Forces decided to purchase the RANGER UAV system. The final choice went in Robonic's favour after the site testing of several products available on the market. The test was made in North Finland in the polar circle, under severe climatic conditions during the winter.

The benefits of pneumatic UAV launching system over runway base are obvious. The system meets the tactical requirement, under the improvised circumstances typically faced, such as free choice and easy camouflage of launch location, quick setup and silence. The launcher is practically silent and is overridden by the noise of UAV. It is also smokeless and fireless. Besides tactical aspects, lower costs are of significance; less ground personnel and air base logistics are needed in order to make UAV airborne and under immediate guidance of ground control station. Free choice of launch location also means direct flight route to the targeted location and avoidance of possible problems with airworthiness regulations.

Associate Editor, Patrick Meikle (right), is formerly a member of the RCMP Security Service.