



COLOMBIAN ARMOURED VEHICLES OVERVIEW

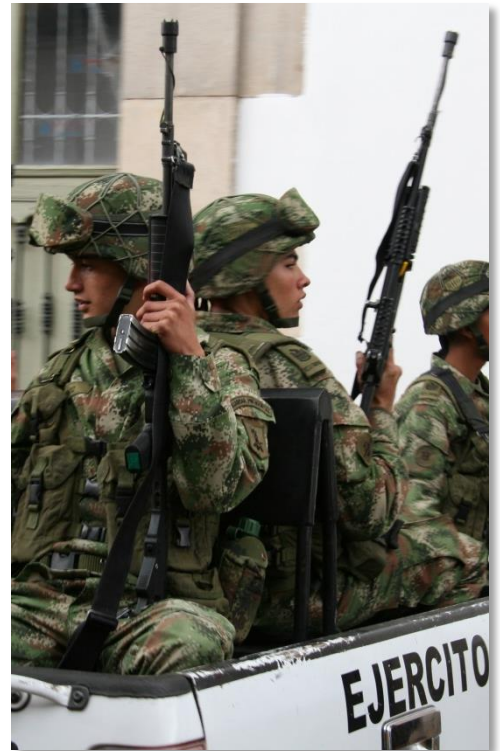


ARMoured VEHICLES LATIN AMERICA 2015

This June, the **Armoured Vehicles Latin America** conference will be taking place in Bogota, Colombia. Not only will the forum be chaired by Major General (ret'd) Victor J. Alvarez Vargas (Colombian Army), but will also involve **Major General Luis Gomez Vasquez** (Naval High Command, Colombian Marine Corps), **Major General (ret'd) Ricardo Rubianogroot** (Former Chief of Intelligence, Colombian Air Force) and **Brigadier General (r) Ruben Dario Alzate** (Former Commander of Joint Task Force Titan, Colombian Army). They will be speaking alongside senior military and representatives from Peru, Brazil, El Salvador, Chile, Honduras, the United States, and more.

WHY COLOMBIA?

- Colombian defence expenditure registered a growth rate of 7.70%, increasing from US\$5.2 billion in 2010 to US\$7.1 billion in 2014
- Colombia's military expenditure, valued at US\$7.5 billion in 2015, is expected to increase to US\$9.4 billion by 2019, registering a CAGR of 5.64% over the forecast period
- Colombia's military expenditure will be driven by the threat from Venezuela, threat from rebel groups and development of domestic industry
- The Defence Ministry is expected to procure fighters and multi-role aircraft, transport and utility aircraft, main battle tank, infantry fighting vehicles and armoured personnel carriers





RECENT EVENTS

2015 has reinforced the dynamic of operational demands that Colombian Armed Forces are currently facing. In January, it was announced that 32 8x8 wheeled combat vehicles would be purchased in order to enhance security measures along the Venezuelan border. Defense Minister Juan Carlos Pinzón told the press that the nation's military is now "stronger, more modern, and more capable" than ever when it comes to dealing with present and emerging threats.

The purchase of these (General Dynamics) APCs – at a cost of US\$84m – represents a level of investment not seen in Colombia for decades. They will form part of the Army's Combined Medium Arms Task Force based in the town of Distracción, La Guajira, and will take up a "defensive posture" to bolster protection of Colombian infrastructure.

Violence from rebel groups continues to prove a major threat to security forces and although peace talks with the Revolutionary Armed Forces of Colombia (Farc) have been underway, some analysts see a risk that negotiations are being employed as an "offensive strategy".

In February, a Colombian Army M1117 Pegaso 4x4 armoured security vehicle (ASV) was destroyed by an improvised explosive device (IED) in Sardinata, Norte de Santander, killing three soldiers and wounding two more. The attack was claimed by the National Liberation Army (Ejercito de Liberacion Nacional, ELN).

The M1117 was part of the No.5 Mechanized Cavalry Group, deployed to provide protection for a medical support operation to the town of San Martin de Loba, 30 miles from the Venezuelan border.

Colombian armoured vehicle solutions are likely to continue facing a situation of low-cost but effective weapons employed by the adversary, to which security forces will need to counter with advanced protection equipment. Should guerrilla groups be pressured to dissipate, possible power vacuums within these groups present the risk of reignited violence.





GENERAL OUTLOOK

In January 2013, the Colombian Ministry of National Defence awarded a \$65.3 million contract to **General Dynamics Land Systems-Canada**, for 24 of the firm's double-V hulled LAV-III's with add-on armour. In the USA, this LAV-III is known as the M1126 Stryker DVH, but Colombia's new armoured personnel carriers won't have the same internal electronics fit-out. They'll also swap in **RAFAEL's** Samson RCWS weapon station up top. The contract was signed through the Government of Canada's CCC export agency, and deliveries will be complete by May 2014.

The Ejercito Nacional de Colombia operates a reasonably extensive mix of APCs, including M1117 ICVs from US-based Textron, Russian BTR-80s, Brazilian EE-9 and EE-11s, and old M113 tracked vehicles. None have the LAV-III DVH's ability to survive land mine blasts. That's becoming a bigger part of Colombia's defense planning lately: Oshkosh's Sand Cat vehicle was picked as a light patrol MRAP in December 2012.

Commando

The Colombian Army recently (Spring 2014) began receiving the 28 Commando wheeled armoured vehicles ordered from the United States (for \$1.13 million each) in 2013.

The Commando is a larger version of the older American M1117 ASVs (Armoured Security Vehicles). All of the armoured vehicles in the Colombian Army are on wheels, to better control the roads in areas where FARC or drug gangs are active. The army has about 300 armoured vehicles, a growing number of them armoured hummers. Colombian troops have found the Commando handles most of the bombs and weapons used by the local drug gangs and leftist rebels.

Back in 2009 Colombia bought its first 39 American Commando vehicles, which is officially known as the ICV (Infantry Carrier Variant) of the M1117. The ICV is 61 cm (24 inches) longer than the original ASV, weighs 18 tons, and carries a crew of 3 and 8 passengers. Instead of the turret it has a cupola mounting a 12.7mm machine-gun or 40mm automatic grenade launcher.

The USD 31.6 million order was announced in August 2013 and includes repair services for two damaged vehicles from the original batch, which entered Colombian service in May 2010.

Rippel Effect Systems

(10 December 2014)

- South African company Rippel Effect Systems has landed another contract for IGS-4S day/night sights for the Colombian Army which has now standardised on this item of equipment from Rippel for all its cavalry requirements.
- The company expects to complete installation on the whole Colombian Cascavel armoured combat vehicle fleet during next year.
- The IGS-4S was launched as a Rippel product two years ago and the technology is licensed from South African firm Vision 24 Observation Systems.
- The model selected by Colombia is the IGS-4S compact video sighting system, which can be utilised in conjunction with various vehicle-mounted weapons in calibres ranging from 7.62 mm to 125 mm. The system provides the operator with a 24/7 below-armour observation and ranging capability to fire the weapon in all weather conditions, low visibility and darkness.





GENERAL OUTLOOK [cont]

INKAS® Huron

INKAS Huron is a tactical attack and defence vehicle, which is able to protect its passengers in high threat environments within any climate condition. The vehicle is designed and equipped to operate in police and military tactical missions, convoy protection and border control all over the world. INKAS® Armored Vehicle Manufacturing will supply the first four vehicles to the National Police of Colombia.

General Dynamics Land Systems-Canada

Colombia has incorporated 32 Canadian-built bulletproof combat vehicles into a new tactical unit stationed close to the border with Venezuela, the Defense Ministry said on Thursday 22nd January 2015.

The government paid \$84 million for the 8x8 military vehicles as part of its bid to modernize its armed forces. It is the first purchase of such hardware in 30 years, the statement said, without identifying the manufacturer.

The tank-like vehicles can transport as many as 11 heavily equipped soldiers and have a remote-controlled weapons system and anti-mine technology. The vehicles will be used against illegal armed groups and to protect oil pipelines and other infrastructure in northern La Guajira province.

"The Colombian armed forces are today stronger, more capable, more modern and able to face the challenges of the present and those of the future," Defense Minister Juan Carlos Pinzon said.

Colombia has fought a five-decade war with leftist rebels and right-wing paramilitaries that has killed more than 200,000 and displaced millions. Peace talks are currently underway with the Revolutionary Armed Forces of Colombia and the government may soon announce similar negotiations with the National Liberation Army.

Modernization of Colombian Army M113-A2 fleet

Over the first week of January, the Colombian Army completed field and lab tests on the road wheels and suspension systems for the FMC-BAE M113 -A2 armored personnel carriers.

The tests were overseen by the Army and the Ministry of Defense and conducted in the northern department of La Guajira with a contingent of fifteen vehicles.

The APC, put together by the X Armored Brigade of the Army, were modernised and updated with components supplied by Star Defense Logistic Engineering of Spain (Military Logistics Solution), which has long-running experience in the maintenance, repair and supply of parts and components for military vehicles.

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SPOTLIGHT PROGRAMME

Commando 4x4: Colombia

The Colombian Army signed a \$31.6m agreement with US-based Textron Marine & Land Systems (TM&LS) for 28 Commando advanced APC high mobility 4x4s in July 2013. The \$31.6m contract also included repair services for two previously acquired vehicles. The first vehicle was received in December of that year and the last 8 were delivered in April 2014, with the Army now looking to make a deal for a follow-on order for additional vehicles and a logistic support service.

All of the APCs are equipped with the TM&LS 40 mm/.50 standard protected manned turret, armed with a 12.7 mm heavy MG and 40 mm Mk 19 AGL, while 16 smoke grenade rounds can be added to help disperse hostile crowds.

Commando is powered by a Cummins 6CTA8.3 diesel engine with 260 BHP, which is coupled to a 6-speed automatic transmission by Allison Transmission. The vehicles purchased for Colombia feature additional ballistic armour and digital communications.



The Colombian Army has been impressed enough with the Commando 4x4 APC to consider a follow-on order

Source: Textron

The Commando fleet complements an initial 39 similar vehicles purchased in December 2009 through an FMS contract worth \$54.6m and fielded since May 2010. Those vehicles were equipped with OGPK (Objective Gunner Protection Kit) protected cupola armed with 12.7 mm MGs or Mk 19 GLs. Twelve of those vehicles have been retrofitted with the 40 mm/.50 turret acquired in 2013 for \$5.5m.

Colombian firm Corporación de Alta Tecnología para la Defensa (CODALTEC) developed and delivered the MARKAB simulation system for the vehicle in December 2013.

Company: Textron Marine & Land Systems

Armed Force: Colombian Army

Crew: 3 + 7

Length: 6.26 m

Width: 2.56 m

Height: 2.59 m

Combat weight: 16,329 kg

Armament: 40 mm/.50 turret; 12.7 mm heavy MG; 40 mm Mk 19 AGL; smoke grenades

Armour: V-hull and protection from direct/indirect

weapons, mines, and IEDs

Speed: 105 km/h+ (max. road)

Range: 644 km

KNOWING THE COLOMBIAN INDUSTRY

Among the Colombian companies which are developing innovations in technology related to security are INDUMIL (Military Industry of Colombia), COTECMAR (Science and Technology Corporation for the Development of the Naval, Maritime, and Fluvial Industry), CODALTEC (High Technology Corporation), and CIAC (Colombian Aerospace Industry Corporation).

Some of these companies are now well-known worldwide. For example, military industry analysts consider INDUMIL to be a cutting edge technology company with more than 57 years of experience in the production and sale of ammunition, explosives, and other weapons.

The company is known for developing the assault rifles Galil SAR and Galil AR, the production of smart munitions for the Colombian Air Force, and the maintenance of the Army's infantry vehicles. It also developed the Colombian Cordova handgun. Paraguay, Chile, Peru, and Ecuador are among the first countries to purchase the semi-automatic handgun.

Indumil (Military Industry)

Colombia is not just exporting people and know-how – it has also started to sell military hardware overseas. Indeed, Indumil, the state-run military arms manufacturer, is considered the crown jewel of Colombia's military weaponry sector. In recent years, the company has developed a new generation of the Israeli Galil ACE assault rifle. The weapon was initially conceived for use by the Colombian armed forces, and last year almost 750,000 rifle parts were exported from Colombia back to Israel.

High Technology Corporation/Corporación de Alta Tecnología

The High Technology Corporation was legally established in December 2012. Its main objective is the development, promotion and implementation of activities in science, technology and innovation, in order to strengthen technological scientific capabilities of the country's defence sector, and support the creation of industrial developments at the national level for both, the Defence Sector and for other sectors of the domestic industry as a result of the dual use of applicable technological scientific capabilities.

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Colombian commercial military plans for 2015-2018

A broad look into the progress of the nation's defence industry

Iñigo Guevara

Colombia's state-run Defence industrial Group – *Grupo Social y Empresarial de la Defensa (GSED)* – is undertaking an evaluation of their 2011-2014 strategic development programme, and planning its next quadrennial development programme for 2015-2018. GSED is composed of 19 companies, the most prominent of which are the COTECMAR shipyards, CIAC aerospace industry, Indumil armory and the most recent company, the CODALTEC high technology corporation.

CODALTEC began operations in 2012 and has initially focused on the development of full-motion simulators. As of June 2014 CODALTEC has

delivered three types of simulators to the Colombian armed forces: SIMART, a UAV training simulator based on the Boeing Scan Eagle; MARKAB, a 4x4 Textron M1117 Guardian armoured security vehicle-based simulator; and SIMAER, a Cessna Grand Caravan light transport aircraft-based simulator. For the 2015-2018 period, CODALTEC plans to become a leader in simulator development partnering with local and international private companies. A \$26 million international tender to establish a multi-tier simulator centre for the Colombian armed forces through an innovative Public-Private-Partnership





(PPP). During 2015-2018 CODALTEC will also concentrate on a new programme to develop sensor technologies with dual civilian and military applications for which international cooperation with Spanish and South Korean companies is underway.

During the 2011-2014 period, COTECMAR shipyards have experienced one of the largest expansions to date. COTECMAR laid down the second BDA amphibious landing vessel, which will join its sister, the 625-ton *ARC Golfo de Tribuga* which was delivered in May 2014. COTECMAR also managed the export of four of its LPR-40 river patrol boats to Brazil. Construction of the initial three CPV-46 class coastal patrol vessels is underway at STX Offshore & Shipbuilding in South Korea, with deliveries scheduled during 2014. For the 2015-2018 period, COTECMAR will begin to build the fourth CPV-46 in Cartagena, with plans for up to fourteen CPV-46's to join the Colombian Navy. Each CPV-46 will be armed with a 25 mm gun and 2D surveillance radar. In 2014 COTECMAR's Cartagena shipyard finished a major upgrade with assistance from MTU, Thales and DCNS of its Almirante Padilla-class light frigates, and laid down the third of its Fassmer-designed OPV-80 ocean patrol vessels. For 2015-2018, COTECMAR will further develop its ship building capability with an aim to launch construction of a new class of frigates from 2025.

Under the 2011-2014 development plan CIAC's three main goals was to consolidate its level III maintenance capabilities, build and upgrade aircraft, and develop its own UAV project. As of June 2014, the CIAC has delivered 19 out of the 25

Lancair Legacy FG primary trainers it has on order under project T-90 Calima. It has also re-delivered the first modernised version of the EMB-312 Tucano, upgraded with new avionics and landing gear. CIAC's certification by EMBRAER to upgrade Tucanos, was part of Colombia's offset agreement for the 2006 purchase of the EMB-314 Super Tucano fleet, and CIAC expects to offer its Tucano upgrade services internationally. CIAC was to have produced six IRIS tactical UAVs by 2014, but the project has run into some development delays and CIAC is looking at partnering with foreign companies to enhance the project.

The Army-run Industrias Militares (Indumil) is the main producer of Galil assault rifles in the world, exporting them to Chile, Ecuador, Israel, Paraguay and Peru; in October 2013 Indumil added the 9mm Cordova pistol to its product line, and expects to market the Cordova to neighbouring countries. The company expects to increase sales by 11% during 2014, a large part of which will be driven by a rise in exports. Indumil therefore joins its GSED partners in beginning to look beyond Colombia's domestic market, and at its centre, the 2015-2018 plan will be preparing these companies for a post 2018 focus on exports.

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June 30 - July 02, 2015: Bogotá, Colombia

What is the future of Armoured Vehicles in Latin America?

Discover the answer by joining **Defence IQ** at the 4th annual Armoured Vehicles conference in Latin America. This event offers an unrivaled opportunity to engage with the most important issues for the procurement, sustainment, training and operational use of armoured vehicles in Latin America.

Armoured Vehicles Latin America: the premier regional forum for protected mobility is delighted to announce that the 2015 conference will be chaired by Major General (ret'd) Victor J. Alvarez Vargas, Colombian Army.

Bringing together senior officers responsible for current and future requirements from across the region this is the essential forum to share expertise, build contacts and establish long-lasting relationships.

Benefits of Attending:

- Gain insight and expertise from serving military officers at the forefront of acquisition along with the local industries that support them
- Understand the latest procurement requirements for armoured vehicles in the region including Colombia, Brazil, Chile, Ecuador and Peru
- Discuss the latest in modernisation programmes and through life sustainment for your vehicle assets
- Consider the solution to SWaP trade-offs in the context of increasing operational demand, budgetary pressure and enhanced technological capability
- Learn how to become a thought leader in the Latin American armoured vehicle market
- Share candid discussion opportunities with the key stakeholders from military and industry focussed on meeting the requirements for armoured vehicle capabilities across Latin America

Download the agenda [here](#) for the full speaker and session line up.

To register you place, simply complete the form below and email it to enquire@defenceiq.com:

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