

Spain's Armor Force Modernizes

*From U.S. M48s and M60s
To the Leopard Family
and a New IFV,
Spain's Armored Force
Is in Transition*



Spanish Army Leopard 2 A4s parade in Madrid on Spanish Armed Forces Day.

by Lieutenant Colonel Antonio J. Candil

The Armor - 2000 Program

The Spanish armored force's ambitious modernization program started in 1991-92, when redundant American equipment became available as a result of the TLE (Transfer of Limited Equipment) Treaty. The redundant American equipment, deployed in stocks all over Germany, was to be transferred to some of the less well-equipped NATO armies. Spain received some 400 M60A3 MBTs, a big improvement for an armored fleet then mainly composed of M48A5s and upgraded AMX-30s. While the M60s were a significant improvement, they were not considered adequate for the 21st century. The Spanish Army made its case to the Ministry of Defense, which was the origin of the Armor 2000 program. It calls for Leopard 2 A5 MBTs, with a plan to introduce them by the end of the century.

The Birth of a Project

The acquisition of the Leopard 2 weapons system grew into a Spanish Army General Staff program to integrate modern armor into the Spanish Army. "Programa Coraza - 2000" (Program Armor - 2000) was created in March 1995 by order of the Army Chief of Staff and after approval of the Defense Minister.

Coraza - 2000 has not yet reached its maturity, but has already managed not only the beginning of the Leopard 2 ac-

quisition, but also other important developments as well, like the procurement of the newly developed Ascod infantry/cavalry combat vehicle, nicknamed "Pizarro" in Spain. This new tracked armored vehicle, jointly designed by the Spanish company SBB (Santa Barbara Blindados) and Steyr, the well known Austrian manufacturer, promises to become a successful product and could likely be adopted by other armies in Europe and elsewhere.

Since its creation, Coraza - 2000 has focused on the initial steps needed for the integration into the Spanish Army of the Leopard 2 A4 tanks received from surplus stocks of the German Bundeswehr, while preparing the industrial and military effort required to produce the Leopard 2 A5 tank, or Leopardo 2E as it will be called by the Spanish Army.

Coraza - 2000 grew out of the previous and existing program that, since 1992, had been managing deliveries, reception, and integration of the M60A3 MBTs, M110A2 8-inch, self-propelled howitzers, and other various armored vehicles, such as M113 APCs and M548 cargo/ammunition carriers. The program is responsible not only for procurement of all this equipment, but also for support, including logistics, training, allocation of resources, and budget management. As anyone familiar with these issues can imagine, a day at work within Coraza - 2000 can be a hectic and thrill-

ing experience. The program is organized as a management directorate with authority to submit instructions and directions to all the Army subunits concerned. It includes general management, logistics and general support, training, technical specifications, budget control, administration, and personnel.

Logistics and general support takes into account transportation and, in particular for those involved in the Leopard 2 Project, procurement of spare parts and maintenance support. It is also involved in the definition of technical and general criteria for the maintenance of the Leopard 2 A4 tanks recently issued to operational units. Training refers to the general organization of courses, preparation of technical and field manuals, procurement of training aids and simulators, and support to training centers.

These days, all this activity focuses on three main weapons systems: the Leopard 2 MBT, the Ascod/Pizarro AIFV, and the Auxiliary Armored Vehicles projects, which include the combat engineer vehicle, a new armored bridge-launching vehicle, and an armored recovery vehicle, all based on the M60.

Coraza - 2000 works under direct orders and supervision of the Director for Procurement of Equipment and Armament (DIAM) at the Army Logistics Command (MALE), a two-star general. The program is led by a brigadier gen-



The Leopard 2 A5s, above, will be the backbone of the Spanish Armored Force. Also joining the force will be the new Pizarro AIFV, a joint Spanish-Austrian project, armed with a 30mm autocannon.



eral belonging to the combat arms, assisted by a chief of staff with the rank of lieutenant colonel or full colonel, also from the combat arms. Officers and NCOs working at the program belong either to combat arms — mainly Armor and Infantry — or to the Technical Engineers Corps, which is equivalent to U.S. Army Ordnance.

The LEOPARD 2 Project

The aim of the Leopard 2 Project is to guarantee the smooth integration into the Army of the Leopard 2 A5 as the main battle tank of the Spanish Army in the next century. Under a leasing agreement, the German Army has provided the Spanish Army with 108 Leopard 2 A4 tanks. So far, these tanks have equipped two mechanized infantry brigades integrated into the mechanized division that is Spain's contribution to the multinational army corps-size unit, EURO-CORPS, formed by France, Germany, Belgium, Spain, and Luxembourg, with its headquarters presently located in Strasbourg, France.

The leasing of these 108 tanks is linked to an agreement calling for Spain to start production in 1998 of at least 200 new Leopard 2 A5 tanks. The Army has received approval from Spain's Ministry of Defense to procure a total of 320 MBTs, along with 23 Buffel 3 armored recovery vehicles. These tanks are going to be produced by Krauss-Maffei of Munich, under some kind of industrial cooperation agreement with Spanish companies. Negotiations have been taking place for several months and a formal contract is due to be signed.

The Ascod/Pizarro AIFV Project

On February 9th, 1996, the Spanish Council of Ministers finally gave the green light to the procurement of the Ascod Pizarro, a newly developed infantry and cavalry combat vehicle. More than 400 will be provided in the next ten

years, completely replacing old M113 APCs in the mechanized infantry units and cavalry formations.

This new armored combat vehicle will form the backbone of the main defense forces, together with the Leopard 2 A5, well into the next century. Several different versions of the Pizarro are expected to be developed, including a CP version, a mortar and fire support vehicle, and an ambulance, all due in the short run.

The Austrian Army has already selected this vehicle for its mechanized units as well, and an initial batch of 112 Ascod vehicles will be procured to start replacement of the Saurer 4K4E/F APCs still in service. Recently, the Austrian Army has also started procuring surplus Leopard 2 A4 MBTs from the Dutch Army to replace M60A3 tanks.

The Ascod/Pizarro AIFV has a combat weight of 24 metric tons, is armed with a Mauser 30 mm cannon, and carries up to six infantrymen. It took part in a recent competition organized by the Norwegian Army, together with the U.S. M2 Bradley and the Swedish CV 90, and performed very well, even though the Swedish vehicle won the contract.

Auxiliary Armored Vehicles Projects

As M60A3 TTS tanks will still remain in service for several years, in second-line units or mobilization forces, Coraza - 2000 will continue keeping an eye on their status and operational readiness. Nevertheless, as the combat value of the M60 has faded, several projects have begun to adapt them into a family of auxiliary armored vehicles, always very much needed by the combat forces.

Started already is the development of a new armored vehicle launching bridge

(AVLB), based on the M60A1 chassis and equipped with the new MLC 70 class Leguan bridge, which is capable of supporting the new Leopard 2 A5 tanks, as well as any other tanks and armored vehicles in the Spanish inventory. For the time being the Army has contracted for an initial 12 vehicles. A new combat engineer vehicle based on the M60A1/A3 tank is also being developed; this has an external appearance similar to the U.S. M728 CEV, but without the 165mm demolition gun, to be replaced by a special backhoe. It will also have a front-mounted dozer blade. An initial batch of 38 vehicles is being procured now. Both projects are conducted in close liaison with Engineers at the Army Logistics Command.

An armored recovery vehicle has been developed, also using the chassis of upgraded, but old, M47 E2 tanks, (these tanks in fact were upgraded to M60 conditions and most of its parts are interoperable with M48A5 and M60 parts), thus obtaining a cheap and efficient recovery vehicle capable of working with most light armored vehicles and MLC 60 vehicles. It can also haul self-propelled artillery howitzers and guns of the M109 and M110 types, but is not capable of hauling the new Leopard 2 A5 tanks, which is the reason the Leopard 2 project will procure an initial batch of 23 "Bergepanzer 3 Buffel" of MLC 70, that will be coproduced in Spain, too.

In the longer run, other projects could come as well, including self-propelled armored antiaircraft vehicles, with both guns and missiles, and a new SP artillery, based on 155/52 long-range guns.

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Program Coraza - 2000 has just started its life, but a full potential for development lies ahead. The commitment is there, and the challenge, too, which is nothing less and nothing more than the full modernization of Spanish Armor up to the same levels as other Allied partners in the task of collective defense and security. *Program Coraza - 2000* is full of possibilities with a big potential for development, and most likely will remain in operation to deal with whatever new armor projects the Spanish Army undertakes.

Lieutenant Colonel Antonio J. Candil graduated from the Spanish Military Academy in 1972 and was commissioned in Armor. He has served as a tank platoon commander in the Spanish Western Sahara in 1973-76, and is experienced as an XO and company commander. A graduate of the Armor Officer Advanced Course at Fort Knox, he is also a graduate of the Spanish Army Command and Staff School, and the Italian Army's War College. He has been assigned to several posts abroad, in Belgium, Italy, the UK, and Germany, and is now director of Program Leopard within the Spanish Army Logistics Command.