

# ARMORED CAR

The Wheeled Fighting Vehicle Journal

Issue #12

July 1992

\$2.00

## BACKGROUND

On October 1st of 1960, Cyprus became an independent state and member of the British Commonwealth. The new state soon established a small army which was called the National Guard (or Ethniki Froura). Its equipment came mainly from surplus British stocks, most of which had been used against the Cypriots during the protracted struggle for independence.

The first armored vehicles used were a small number of (probably no more than 20) Marmon-Herrington MK IVf armored cars. These vehicles most likely came from Greek sources (see AC #8) sometime during the early to mid-sixties.

The Marmon-Herrington's were all in their original state without modifications and were finished in an overall dark green, each originally carrying a three digit number.

In the late sixties or early seventies 20 to 30 Soviet built BTR-152 APCs were procured. These were armed with a heavy machinegun fitted with a small shield above the driving compartment.

The BTR-152's were finished in an overall dark green and some had a square Greek flag of blue with a white cross (sometimes outlined in white) on the lower part of their front doors. They also carried four digit numbers in white prefixed by the initials E I of the National Guard and a small Greek flag. This appeared on the front bumper and probably also on the rear of the vehicle as well.

*Below: One of the approximately 120 plus Engesa EE-9 armored cars in service with the Greek Cypriot National Guard. Color is sand and medium green.*

## ARMORED CARS OF THE CYPRUS NATIONAL GUARD

by T. Metsovitus  
photos Stelios Markidis

...continued on page 2





...continued from page 1

During the 1974 Turkish invasion of the island, all of these vehicles saw action, even though (as was the case with most National Guard equipment) they were hopelessly outdated.

The Marmon-Herringtons by this time probably carried the new type number plates on their nose armor. These plates were as for the BTR-152 but numbers and letters were in black on a white background. At least two Marmon-Herringtons and one BTR-152 were captured by the Turks and are currently on display at an open air museum in Kyrenia in the northern Turkish occupied portion of Cyprus. (*Wheels & Tracks No. 39 page 48 has photos of these three machines -ed*)

DEVELOPMENT OF A MODERN FORCE

The vehicles that survived the war remained in service for more than a decade before being placed in reserve. The war left Cyprus with 43% of its territory under Turkish occupation; a huge refugee problem, its economy in ruins and the threat of forty thousand well equipped Turkish troops in the north.

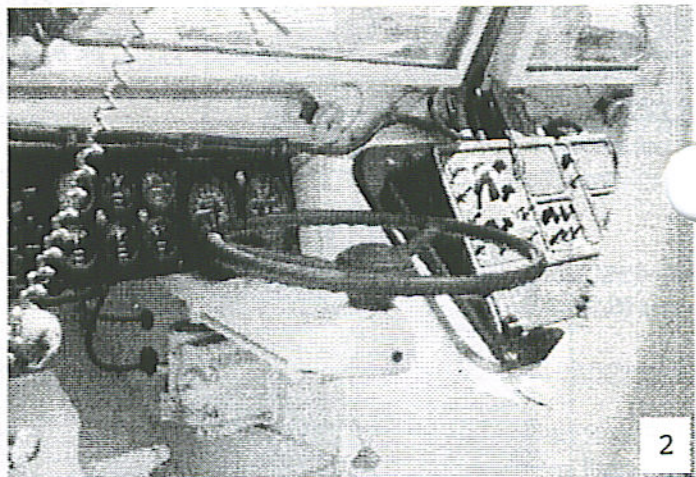
The National Guard had to re-equip with modern weapons and the first armored vehicles purchased in the late seventies were a number of Brazilian Engesa EE-9 Cascavel armored cars. Eventually 126 EE-9s were purchased. At first the EE-9 was the only AFV in service apart from the aging Marmon-Herringtons and a handful of T-34/85 tanks. They remained the National Guard's main armored asset until the '90s when AMX-30B2 tanks were acquired from France.

The Cypriot EE-9s are the standard Mk IV/V version as covered in *ARMORED CAR #5*, their only difference being a large storage frame on the front hull. The Cascavels were joined by 36 four-wheeled Engesa Jararaca EE-3 scout cars, 24 of which carry the Milan anti-tank missile launcher.

The Milan is mounted to the side of the commander's cupola which is the same mount as on the Cascavel. A .50 caliber machinegun is also located to the center in front of the commander. There are no side doors fitted on the hull, instead there is a large roof hatch behind the driver's position. All these vehicles arrived in a factory camouflage scheme of sand and green which was retained. In service the vehicles received number plates on the hull front and rear as well as the National Guard badge on the rear to the left of the radiator armor.



1



2



4



3



1. Insignia of the Ethniki Froura (National Guard). Shield is in yellow with black design. Letting is in white with a medium blue and white Greek shield.

VAB-VTT driver's compartment. The VABs have left drive, even though on Cyprus (like Great Britain) vehicles are driven on the left side of the road. Interior of compartment is white.

3. VAB-VCI with 20mm turret. Color is sand and brown and carries the registration EO 1256. An oblong Greek flag in blue and white is on the left fender.

4. VAB-VTT with .50 caliber machinegun mount. Small rectangle on fender contains Greek Cypriot flag of white, a yellow gold map of Cyprus and crossed green branches. See page 5 for detail of marking. Registration number is EO 1238.

5. EE-3 Jararaca with anti-tank turret.

6. VAB-HOT with four missile turret. Two registration numbers include EO 2558 and EO 2567. For some reason while the National Guard badge is present, none of the vehicles had national insignia applied.

7. Engesa EE-9 Cascavel.

8. VAB-VTT with .50 caliber machinegun turret. The two horizontal bars across the rear doors are florescent orange (above) and florescent red (below). These are probably a safety measure for civilian traffic.

The Cascavel also carries national insignia on the turret sides; this being an oblong Greek flag of blue and white on the port side; and the flag of the Republic of Cyprus in white, green and gold on the starboard side (see drawings -ed). Bridging class markings are applied to the front and consist of the usual British (NATO) style yellow circle with the weight in tons in black. Apart from the number plates all other markings are in the form of self-adhesive vinyl stickers. Both the Cascavel and the Jararaca retain the "snake" badges as applied by Engesa at least until they are repainted.

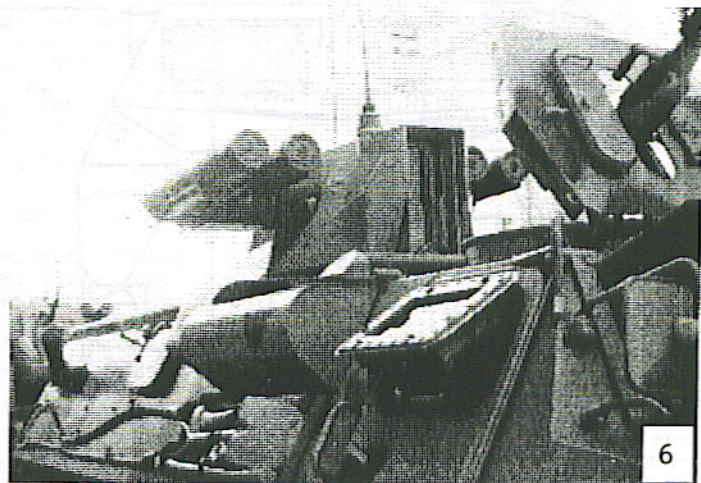
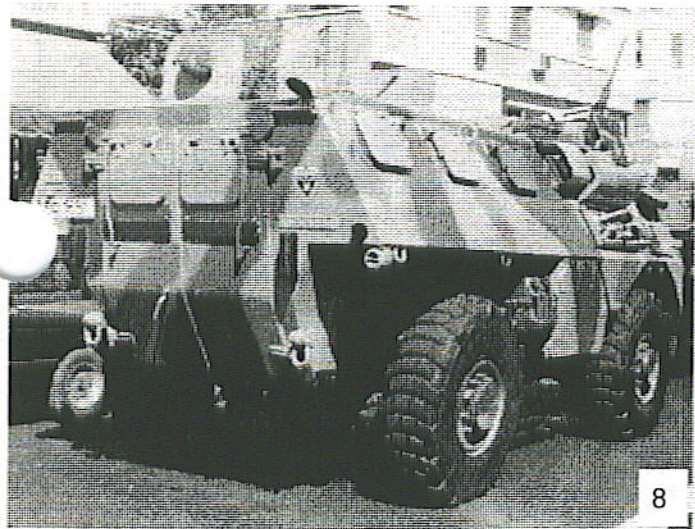
VEHICULE DE L'AVANT BLINDE (VAB)

In 1982 orders were placed for 127 French built VAB APCs. Of these 100 were of the Vehicule Transporte de Troupes (VTT) (APC) version and 27 were the Vehicule de Combat d'Infanterie (VCI) (IFV) version armed with a 20mm cannon in a one man turret. The VTT is armed with a 7.62mm machinegun above the co-driver's position. These are all four wheeled and have no amphibious capability, since it was decided that there was no need for such ability on the island.

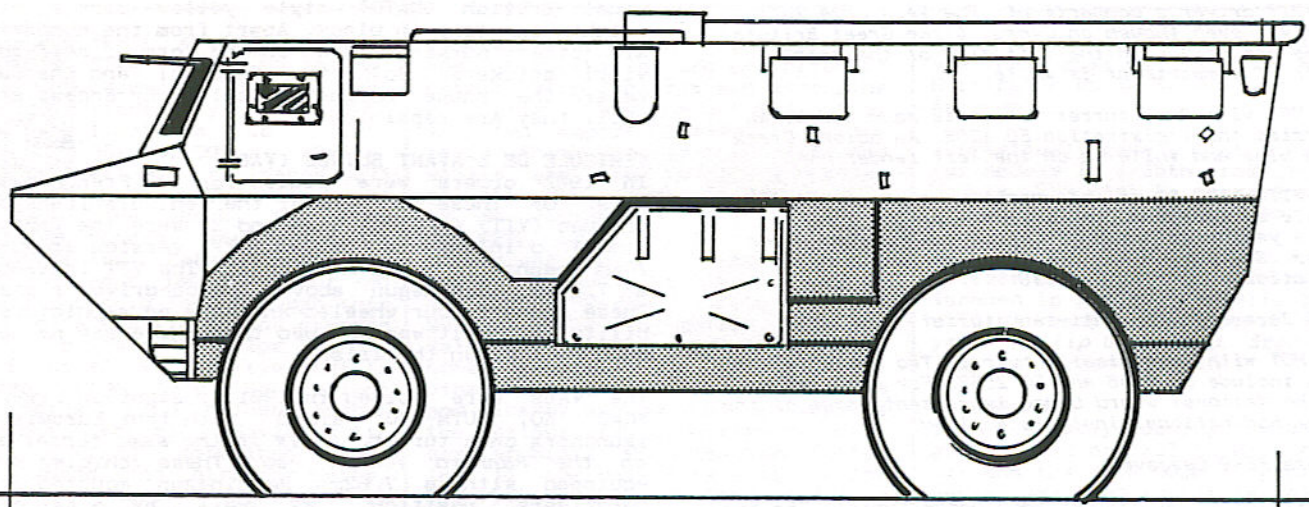
The VABs were joined in 1991 by eighteen six-wheeled VCAC HOT UTM-800 armed with four Euromissile HOT launchers on a turret. (This is the same turret mounted on the Panhard VCR-TH -ed.) These vehicles are also equipped with a 7.62mm machinegun mounted over the co-drivers position, as well as a set of smoke launchers at the rear of the hull.

All of the VABs have a factory applied camouflage scheme of sand, light olive green and light pinkish tan. All markings are as those described for the Cascavel with the addition of two day-glo orange-red panels on the rear doors. The locations of all these can be seen on the photos.

At least one standard VTT is in service with the police for airport security. This vehicle has civilian number plates and the police badge appearing on both sides, as well as the front and rear. In all other ways, including its color, it is identical to the Army vehicles.



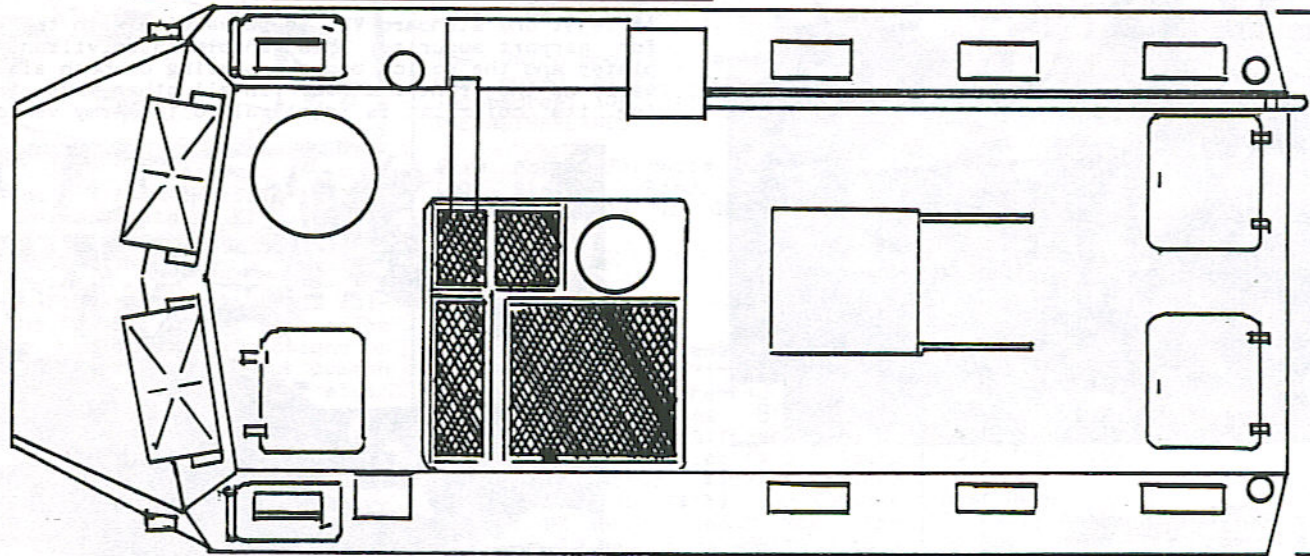




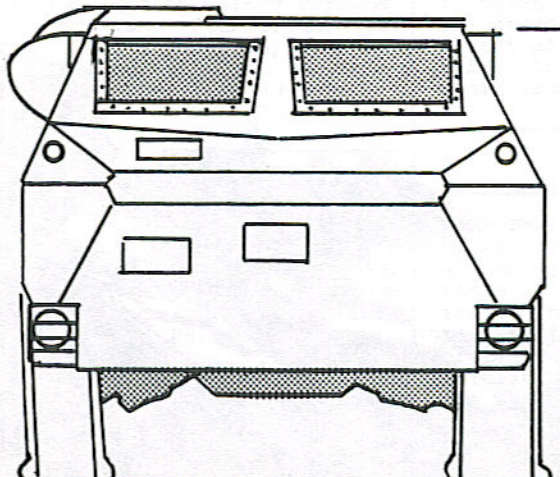
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**RENAULT**  
Véhicules Industriels

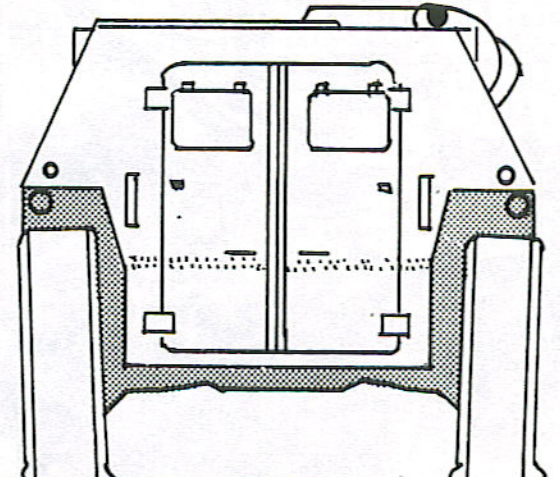
VAB-VTT



2490

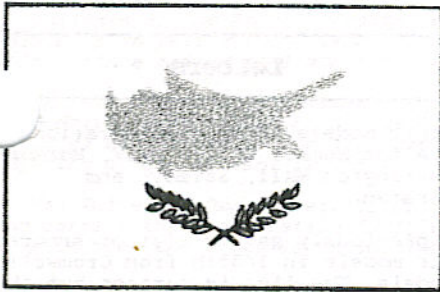


2060



Drawing by David R. Haugh - Scale 1/35th - July 1992





**BACKGROUND TO CYPRUS**  
by David R. Haugh

Located in the Mediterranean off of the Turkish coast, Cyprus is a large island of some 3500 square miles. The majority of the island's population is of Greek origin, with the remainder of Turkish extraction and language.

Under British influence since the mid-1800's, after the Second World War, Cyprus began to push for separation from the British Empire, with the Greek majority favoring union with Greece, and the Turkish minority leaning toward partition. Both sides did agree they wanted the British out.

Beginning in the mid-fifties armed conflict between the British and separatist factions broke into open conflict. In 1959 an agreement was reached by British, Greek, Turkish and Cypriot leaders for the formation of an independent nation.

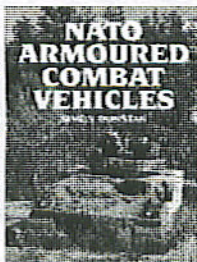
In 1974, Greek Cypriots moved for closer ties to Greece, setting off a reaction from Turkey with an airborne and sea landing invasion of northern Cyprus by Turkish forces on 20 July 1974. Fighting broke out around the city of Nicosia spreading to include the whole of the northern portion of the island. By the time a cease fire went into effect on 16 August 1974, almost the entire northern half of the island was under Turkish control.

A year later in 1975 Turkish Cypriots voted for a separate state, with a unilateral declaration of independence being decreed in 1983. To date, this new republic hasn't been recognized by the UN.

As a result of the fighting and changes of administration, some 200,000 Greek Cypriots were forced into refugee status in the southern part of the island.

**TABULATED DATA ON GREEK CYPRIOT NATIONAL GUARD**

Type	Vehicle Summary	Number/Service
AMX-30B2 (Tank)	(?)	1990-present
ATR-152 APC	(30)	1970-80
esa EE-3 ARV	(24)	1980-present
esa EE-9 AC	(126)	1978-present
H Mk IVf AC	(20)	1965-80
Renault VAB VCI	(27)	1982-present
Renault VAB VTT	(100)	1982-present
Renault VCAC	(18)	1991-present
T-34/85 (Tank)	(8)	1965-80



**Reviews**

**POLISH WZ 34 ARMORED CAR.**  
Manufacturer: Certi. Scale: 1/35th.

This model from Poland is a normal plastic injection moulded kit made up of 70 plastic pieces and 7 rubber tires. Optional parts parts are included for alternate turret armament (either the 37mm Puteux gun or a Hotchkiss machinegun) as well as alternate cupola tops. Quite a bit of sanding and filling is needed but the result is a pleasant little model.

One obvious mistake is that the hinges on the hatch on the left side of the car are placed on the wrong side of the hatch. Instructions are supplied (as well as the car's history) but... in Polish only. Hopefully a new instruction sheet will be supplied in later models. The price is very moderate, around US \$6. I don't know about postage and handling but write to the following address for more information. Zaklad Produkcji Zabawek "AGA", A. Bojanowski 1 SKA Bialystok, Pietrasze 12, POLAND.

Other models planned include the Renault FT17, TKS and TK3 light tanks and the Bofors 37mm antitank gun. Reviewed by Erik Ahlstrom, Malmo SWEDEN

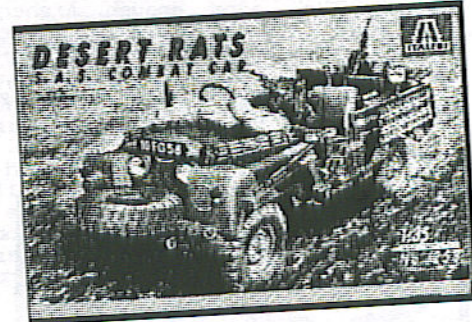
**DIORAMA ACCESSORIES**

I received a great collection of diorama accessories produced by the Greek firm "Alexander the Great" for review from Tasos Tsiplakos. There are many, many items for the armor modeler all in 1/35th scale and full color. These range from printed sheets of cobblestone and brick to WWII German and Allied posters and newspapers; actual 1/35th scale carpets printed on both paper and cloth, military maps, wall paper, self adhesive non-slip metal sheet (one of my favorites); various national flags (each includes a sheet of brass to which the flag can be attached and shaped), pierced sheet sand channels, Vietnam era posters and signs (both army and airforce), a whole large sheet of German WWII traffic signs, and finally for that Desert Storm diorama a set of Saudi Arabian and Kuwaiti flags, as well as posters and traffic signs typical in Kuwait. I wish I could run photos of this material so you could see just how good it is. But instead for a catalog and ordering information write: Collector's Items, 19 Metropoleos Str, 54624 Thessaloniki, GREECE. (Reviewed by editor) HIGHLY RECOMMENDED

**NATO ARMoured COMBAT VEHICLES** by Simon Dunstan. Published by Arms and Armour Press. ISBN 1-85409-027-5. Price \$14.95. 96 pages, 171 B&W photos, color cover and backcover. Five 5-view line drawings at approximately 1/4-inch scale. This is basically a picture

**Reviews**

book with a few paragraphs of supporting text for each set of photos. Most of the photos are crisp and clean, and give a good general survey of armored vehicles within NATO. As almost a third of the book is devoted to wheeled armor it makes a good reference. The selection of drawings is rather odd, with a welcome presentation of the Canadian Grizzly APC, and the British Saxon. But all three of the remaining drawings are of three different versions of the Dutch YPR-765 tracked vehicle. (Reviewed by editor) RECOMMENDED



**DESERT RATS S.A.S. COMBAT CAR.** Italeri Model Company, Italy. Kit No. 258. Plastic, 1/35th scale.

This kit only shares one sprue with Italeri's earlier Landrover kit and is basically a 1970's era Pink Panther. When I compared the kit to photos and drawings of the actual vehicle the detailing was right on, with crisp casting and a good fit. If any change could have been made, the inclusion of sandtires rather than the standard European tread pattern would have been nice. (Reviewed by editor) RECOMMENDED



**SOVIET TANK CREW.** DML Models. Kit No. 3010. Marco Polo Imports, Inc., 532 S Corairidge Place, City of Industry CA 91746. Plastic, 1/35th scale. Price \$6.

With enough basic parts to mix and match four figures, this is a welcome addition to DML's 1/35th scale series. Instructions and painting suggestions are printed in color on the front and back of the box. The addition of separate earflaps for the leather tanker's helmet is a nice touch. (Reviewed by editor) HIGHLY RECOMMENDED



## Reviews



**ARMOR OF THE AFGHANI-  
STAN WAR** by Zaloga,  
Luczak & Beldam. Pub-  
lished by Concord Pub-  
lications Co. ISBN  
962-361-909-X. Price  
\$11.95. 82 pages, 271  
photos. This is a must  
have book for the  
modern wheeled armor  
fan. Before you build  
your DML BTR-70 or -80

you really should look through this book. There are 271 photos crammed into 82 pages (32 color and 239 black & white). Very little text is included aside from the captions but that's good enough. Afghan government forces, Soviet Air Assault, Spetsnaz, motorized infantry, armored and airborne units, there all here. (Reviewed by editor) HIGHLY RECOMMENDED



**ANTI AIRCRAFT ARMAMENT SET.** Italeri Model Company, Italy. Kit No. 422. Plastic, 1/35th scale. Price approximately \$5.

Another accessories kit, this follows the basic format of color drawings and brief instructions on the box itself with your common sense to work out anything else. This kit contains seven modern anti-aircraft weapons, one of which immediately lends itself to use by the wheeled armor modeler. Primary is the Soviet DSHK 12.7mm heavy machinegun on a ground mount (ready made for positioning in the back of a truck). The other weapons include the Swedish RBS-70 (ground mount), British Starstreak, US Stinger, Soviet Strela, French Mistral (ground mount), and the 25mm US Bushmaster (ground mount). (Reviewed by editor) RECOMMENDED

## Plugs

**THE TANK MUSEUM VIDEO**  
VHS Format, color and black & white. 55 minutes. Available from The Tank Museum, Bovington Camp, Wareham, Dorset BH20 6JG England. UK price £9.95.

This, the Museum's first video, takes the form of a guided tour of the Museum's matchless collection in the company of the Curator-Director George Forty and librarian David Fletcher. As well as a

## Plugs

general tour round, some forty of the 250 vehicles are described in detail with features and strengths of various designs pointed out by the two expert guides. To illustrate these, period film clips and stills are used to form a history of the development of armor. This is of course not just tanks - **ARMORED CAR** readers will enjoy modern and archive footage from WWI French Renaults (I think), Austins and Rolls-Royces, film of the Museum Rolls in motion, Daimler, Saladin and Fox plus glimpses of other designs. The Museum's many other facilities, including shop and library are covered, as well as the various special events run on a regular basis. Much has been fitted in, if the Museum is a little far for you to travel then this is a fair substitute which may persuade you that the trip is worth while. Peter Brown, Dorset, Great Britain.

(My understanding is that at present this video is compatible with European VHS, but sound may not work with the US version -ed)

## CHANGE OF ADDRESS

The Dutch modeling magazine **MILCIV** has moved to: MILCIV/H. Molter, A. Jacobsdreef 106, 2135 NB Hoofddorp, THE NETHERLANDS.

**Fire Force Products** has moved to 180 Station Road, Kings Heath, Birmingham, B14 7TD, GREAT BRITAIN

## NEW PRODUCTS

**US CASTS** has released eleven new models in their 1/76th scale line. Of interest to wheeled modellers are four versions of the WWII German 5 ton halftrack series: SdKfz 6 troop carrier (\$12), SdKfz 6/1 gun tractor (\$12), SdKfz 6/2 3.7cm FLAK 36 (\$15) and SdKfz 6 7.62cm FK 36(r) "Diana" (\$15). The last would be a nice addition to a North African Campaign collection. I haven't seen any of these models so can't make a recommendation. For a list of available kits and prices write to: US Casts, PO Box 3229, Santa Cruz, CA 95063.

## Letters

Dear Dave:  
My friend, master modelmaker C.A. Atkins is to produce a collector's range of armored cars to 1/76th scale. The models will be cast in pewter, far superior to white metal or resin. The first models are the Daimler MkI and MkII armored cars. The master patterns are made of solid brass and are the best I've seen to date. They will be highly detailed models and not wargamer's toys. Prices should be about £7 to £8 (about \$14-16 -ed).

## Letters

Other models under consideration are the Humber MkII - MkIV, Marmon-Herrington MkII, Saladin and Saracen.

I previously gave a list of armored car models in 1/35th from Cromwell Models. The list is correct but the production has been delayed.

Dartmoor Military Models are to release a Saladin and rerelease the Saracen in resin. Hopefully they will be ready by the end of the year. Philip Greenwood, Bridlington, Great Britain.

Dear Dave:

I am currently looking for Monogram's 1/32 or 1/35 th M-20 armored car and the M-56 90mm SP gun. If anyone has them available, please let me know. Leon Wong, 15A, Block 3, Felicity Gardens, 111 Shaukwian Road, Hong Kong.

Dear Dave:

I have found a company which supplies line drawings and photos of various armored cars. They also have excerpts from technical manuals all at a very reasonable cost. They also have other interesting conversion kits for armor modeling as well. The company is called Armor Research and their catalog can be ordered from: Armor Research, PO Box 8583, Cedar Rapids, IA 52408.

Also I'm in the process of building a 1/35th Humber MkI armored car produced by Sovereign. Can any reader assist me in finding some more detailed information on this particular vehicle? James P. Welch, Rue maison Communale 38, Meix-le-Tige, B-6747, Belgium.

(A detailed review of the Sovereign Humber MkI by Ken Jones, appeared in Military Modelling Vol 17 No 7, July 1987 -ed)

Dear Dave:

I really enjoy AC and look forward to each issue. I recommend a regular feature concerning a review of the cottage industry kits including vacu-form, multi-media, resin and cast metal. Usually these types of kits are purchased from mail order service and are obtained sight unseen.

I would also like to see articles about more commonly used vehicles such as the US M-8 and M-20, British Humber and Daimler, German SdKfz 222 and 231, etc. I would also like to read about combat experiences of WWII veterans such as George Forty describes in his two books on German and US tanks during WWII. Dan Robichaud, Canton MI 48187.

(The biggest problem on reviewing most of the resin and multi-media kits available is the cost. I don't get all that many review kits, which limits it to those I specifically buy, or when someone



**Letters**

es a review on a kit they've  
 . While I will mention new  
 icts, I will not!! recommend  
 any kit or publication that I  
 haven't personally seen. As for  
 articles on more or less common  
 subjects, AC only comes out six  
 times a year with a yearly total of  
 48 pages. Unless the information is  
 new or presents old material in a  
 new light I won't use our precious  
 space to cover subjects that have  
 been well covered in other  
 publications. -ed)

Dear Dave:  
 About the Puma APC treated in AC #3  
 the Italian Army has asked for  
 development of the 6x6 APC version.  
 Most likely the 4x4 version will  
 not be employed as an APC, but used  
 for specific requirements such as a  
 tank destroyer with the MILAN ATGM  
 or for reconnaissance duties.

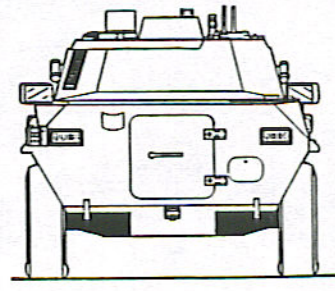
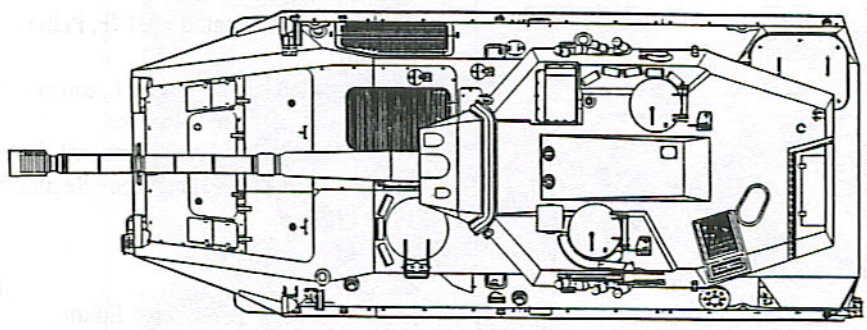
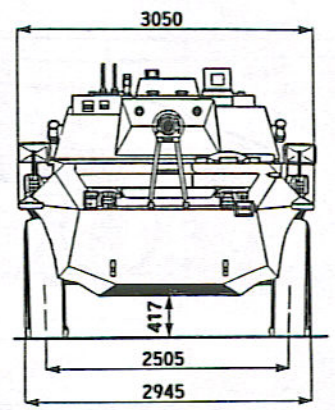
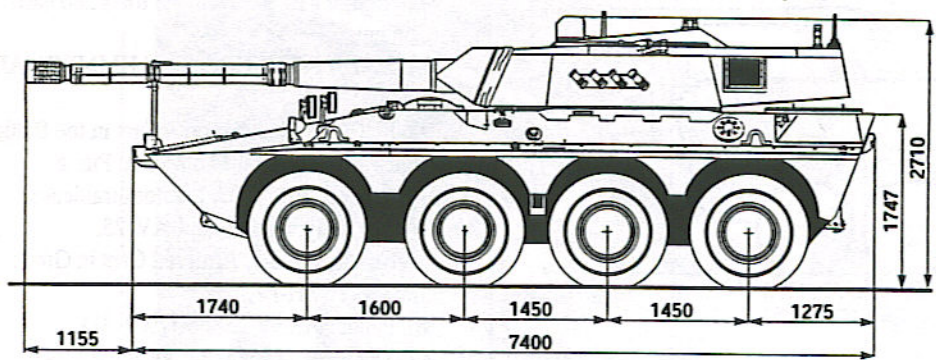
On June 24th of this year, the  
 first lot of 8x8 Centauro armored  
 cars were delivered to the Italian  
 Army. The unit which received the  
 new vehicle is the 19th Cavalry  
 Regiment Cavallleggeri Guide  
 stationed in Salerno, Italy.

Also I'm interested in trading  
 photos, information, etc., with  
 other readers, please write in  
 english to: Carlo Sabatino, Via L.  
 Cassese 12, 84122 Salerno, ITALY.

**ARMORED CAR «CENTAURO»**

**Technical data**

<b>Crew</b>	4 men (pilot, commander, gunner, loader)
<b>Combat weight</b>	24 t
<b>Hull length</b>	7400 mm
<b>Height</b>	
- Hull top	1747 mm
- Turret top	2438 mm
- Total	2710 mm
- Ground clearance	417 mm
<b>Total width</b>	2945 mm
<b>Track</b>	2505 mm
<b>Wheelbase</b>	1600 + 1450 + 1450 = 4500 mm
<b>Turning radius</b>	9 m
<b>Tyres</b>	14.00 - 20 (run flat type)
<b>Ctis</b>	Centralized tyre inflating system
<b>Engine: Power</b>	382 Kw (520 H.P.) at 2300 r.p.m.
<b>Max torque</b>	1865 Nm (190 kgm) at 1600 r.p.m.
<b>Gear box</b>	5-speed fully automatic + reverse gear
<b>Braking system</b>	8 self-ventilating disks
<b>Suspensions</b>	Independent, hydropneum.
<b>Max speed</b>	over 100 km/h
<b>Range</b>	800 km
<b>Gradient</b>	60%
<b>Side slope</b>	30%
<b>Armament</b>	
- Main	105/52 High pressure Low recoil gun
- Auxiliary	Coaxial MG 7,62 AA MG 7,62
<b>Ammunition (Main)</b>	- 14 in the turret - 26 in the hull - 40 Total



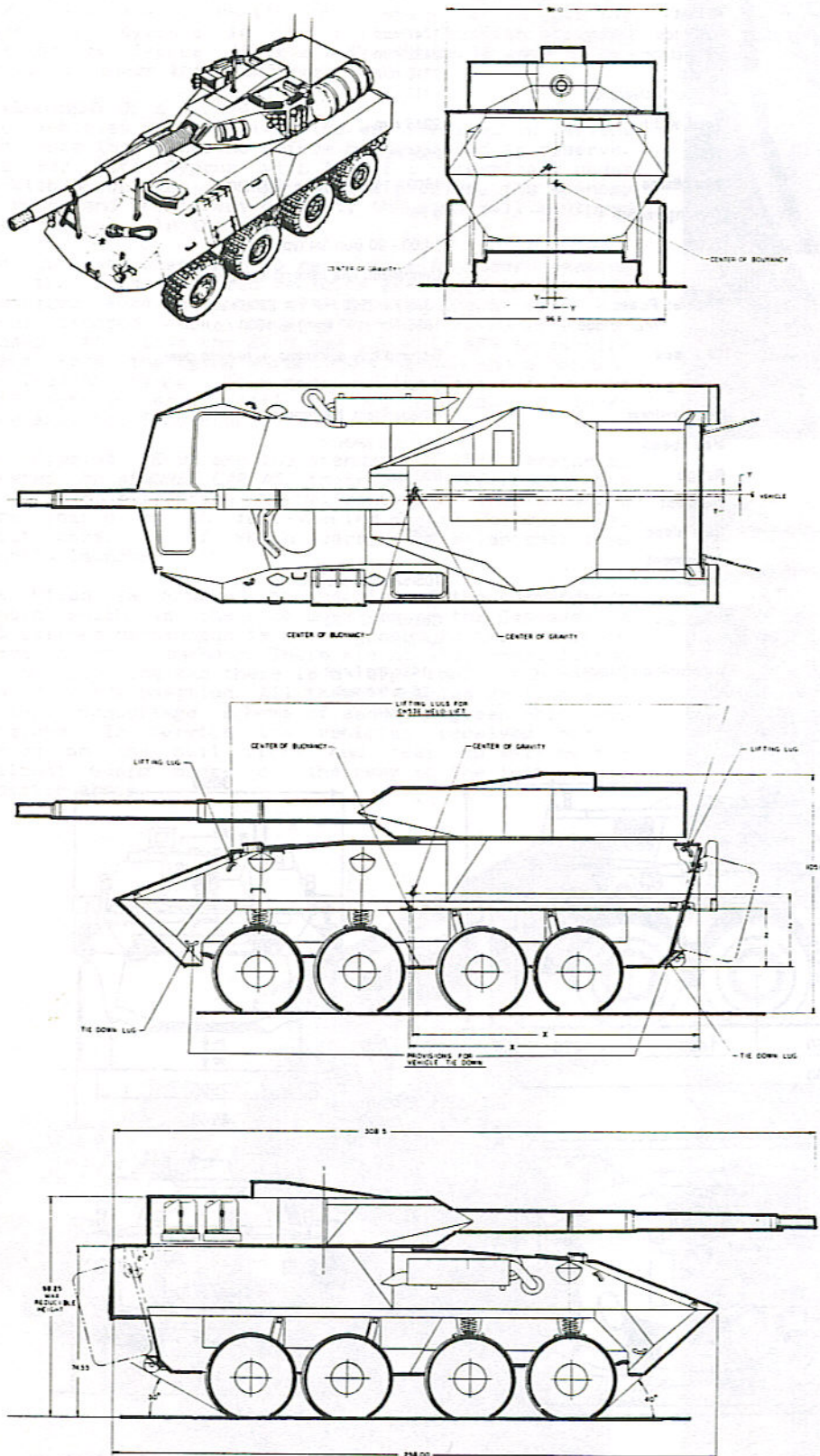
Scale 1/76th

**Consorzio Iveco Fiat-Oto Melara**



# A LAV 105 for the US Marine Corps

For comparison with the Italian Centauro, below is the proposed LAV-105 for the U.S. Marine Corps. Drawing is in 1/76th scale.



**EDITORIAL POLICY:** The purpose of the *ARMORED CAR* Newsletter is to: "promote interest in; and exchange information on; the history, development, collection, preservation and modeling of wheeled fighting vehicles from around the world". In support of this goal, *ARMORED CAR* encourages international cooperation in researching the history of the development and usage of wheeled fighting vehicles from their initial introduction to the present time. Subscribers are asked to support *ARMORED CAR* by submitting material (photos, drawings, articles, etc.) for publication. All material is copyrighted by *ARMORED CAR* and no reproduction in whole or in part is permitted without written authorization.

**SCHEDULE:** *ARMORED CAR* is published six (6) times a year in January, March, May, July, September and November.

**SUBSCRIPTION RATE:** U.S. \$10.00 for six issues via surface mail. Canada, \$12.00 via airmail. All others, \$15.00 via airmail. Payment should be in U.S. funds. Subscriptions begin with the first issue after receipt of payment. Send remittance or correspondence to **ARMORED CAR, 556 N 3RD STREET, WOODBURN, OR 97071 U.S.A.** Checks or Money Orders should be made payable to *ARMORED CAR*.

**BACK ISSUES:** Copies of *ARMORED CAR* #2 through #10 are available for \$2.00 each.

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- #3. FUG(OT)-65, Armored Cars in the Baltic States 1918-40, Fiat-Oto Melara Puma.
- #4. Panhard ERC-90S, L'automitailleuse White-Laffly, Australian LAV-25.
- #5. Cascavel EE-9, Armored Cars in Greek Service, PSZH-IV.
- #6. Pandur ARSV 25, FMC XR-311.
- #7. TPz1 Fox, Armored Cars at the Royal Tournament, Morris-Commercial CS-9.
- #8. Marmon-Herrington Mk IVF, Putilov-Garford.
- #9. Hungarian Armored Cars, Croatian "Homebuilt" Armored Vehicles.
- #10. Lanchester Six Wheel Armored Cars, Armored Cars of the Hong Kong Regiment 1925-1965.

### STAFF:

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Bryce P. Haugh, Circulation Manager.  
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