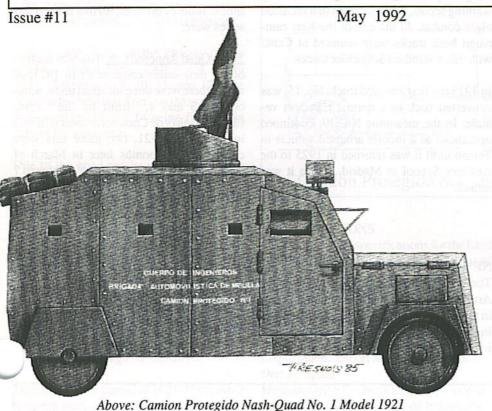


## ARMORED CAR



The Wheeled Fighting Vehicle Journal



### COCHES BLINDADOS DEL EJERCITO ESPANOL

(Armored Cars of the Spanish Army)

Los Camiones Protegidos Modelo 1921

by Javier de Mazarrasa

#### BACKGROUND

In the beginning of the 20th Century, as occurred in other nations; the Spanish Army began to consider the possibility of using armored vehicles in operations. To further this aim, in 1909 a motorized brigade of artillery was formed to develop projects, experiment with concepts and test equipment for the War Commission. In this way the first steps were taken to develop new armored vehicles and determine how they might be used.

After investigating armored cars and trucks from Armstrong-Witworth, Hotchkiss, Mandstay, Rheinische Metallwaren und Maschinen-fabrik (RMM), Schneider-Brillie, Suddeustche Automobilfabrik Gaggenau (SAG) and Thornycroft, it was ecommended that one Schneider-Brillie be cquired for experimentation.

Photo right: A Nash-Quad and two Latil Armored Trucks Acquisition of the vehicle was authorized and the necessary credit arranged for; and on 11 December 1909 a contract was signed with the Schneider group for a 40 horsepower Schneider-Brillie Armored Truck. The 1909 price was 33,000 gold francs.

#### THE SCHNEIDER-BRILLE

The vehicle arrived at the city of Irun on the Northern Spanish border on the 20th of June



... continued from page 1

1910 and by the 30th of June had been delivered to the experimental commission at the Central Artillery School in Madrid.

This first Spanish armored truck was registered as Military Vehicle number 15 (Aut M.n 15). The vehicle was assembled on a Schneider Ps-4000 truck chassis using 5mm armor plate. The vehicle itself was divided into two compartments. The forward compartment housed the driver and crew, while the rear cargo compartment had a capacity of 1,500 Kg. (See drawing for side view).

Powered by a Brillie gasoline engine of 40 horsepower at 1,000 RPM, the Schneider was able to obtain a maximum speed of 18 Km/h and a range of 100 Km. The vehicle was tested extensively for the rest of the year for both reliability and tactical usefulness with excellent results. By October results had been so encouraging that another Schneider was authorized for purchase.

A contract was finally issued on 3 March 1911, and the second Schneider armored

truck arrived in Madrid on 23 September 1912. This vehicle was registered as Aut M.n 19. Number 19 was just a little different than the first model, having a front that was totally inclined from the top of the radiator to the top of the vehicle.

Anticipating the possibility that the vehicles might be sent to North Africa, both armored trucks were fitted with two Vickers machineguns (these weapons used the Spanish 7mm cartridge) as well as the small arms of the crew (up to 16 soldiers were carried in each vehicle).

In January of 1912 they were taken to Morocco, No.15 was assigned to the First Motorized Brigade at the city of Ceuta (across the Strait from Gibraltar), while No. 19 was assigned to the Second Motorized Brigade at Melilla (on the north Moroccan coast). Both vehicles were loaned to other formations and assigned protective duties as well as early warning scouts, during actions that included night combat. At the end of the Kert campaign both trucks were reunited at Ceuta with other standard Schneider trucks.

In 1913 the first armored truck, No. 15, was converted back to a normal transport vehicle. In the meantime No. 19, continued operations as a mobile armored vehicle in Tetuan until it was returned in 1925 to the Artillery School in Madrid, where it was retired.

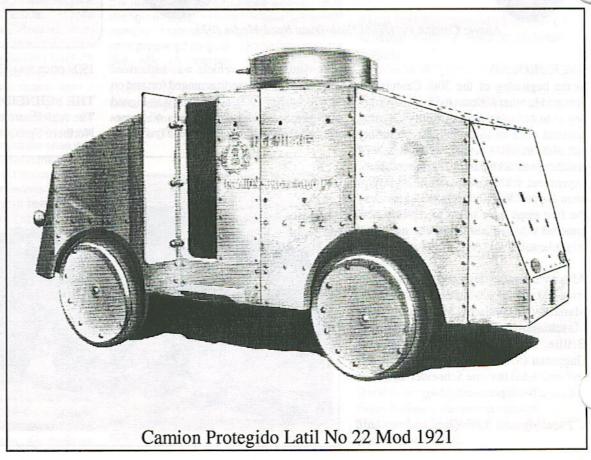
#### NEW VEHICLE DESIGN

The necessity of reinforcing the Spanish Army in Morocco due to their heavy losses in the Summer of 1921, led to the Engineering section of the Artillery School designing a new set of armored vehicles.

Some forty-one wheeled armored vehicles were designed for the Ministry of War staing with the 1921 models. The majority these vehicles carried a 7mm Hotchkiss machinegun and were used for artillery forward observation, as well as reconnaissance. Some of the vehicles that formed this series were:

Nash-Quad Armored Car. This was the first of the new series constructed in 1921, of which there were three identical units, numbers 1, 3 and 4. Built by the Centro Electrotecnio y de Comunicaciones (CEYC) in August of 1921, two more cars were completed six months later in March of 1922, the new set of cars being numbered 7 and 8. Finally in September of 1923 a final three cars were finished by CYEC and numbered 15, 16, and 17.

Federal Armored Truck. The only example of its kind, the vehicle was built on a light truck chassis by CEYC receiving registration number 2. The Federal was only in service for a short time when it was caught in an ambush and seriously damaged. It was later recovered and rebuilt.



Benz Armored Truck. Of the same general 'sign as the Federal, these two armored also were issued numbers 5 and 6, and were built on the larger and heavier Benz chassis by CEYC in December 1921.

<u>Latil Armored Truck.</u> This series was the most numerous and came in two versions.

Type I was built on the chassis of the artillery tractor Latil TAR 4 x 4 model 1915. Numbers 4, 9, 10, 11, and 12 were constructed between April and May of 1922, with numbers 13 and 14 being finished in July of the same year.

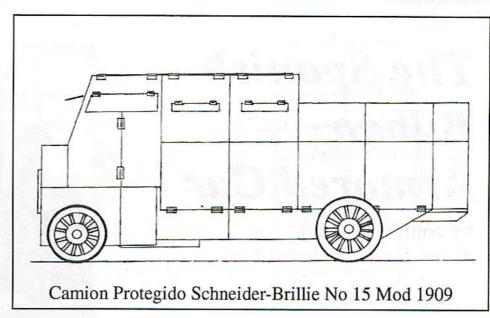
Due to the good results obtained with the Latil's, the Spanish Army in Morocco requested that more be produced, and in June 1924 a further five vehicles were authorized. These new armored trucks were numbered 18, 19, 20, 21 and 22, and became the Type II using the Latil NTAR-4 chassis. This first set was completed in 1925.

Before the second set had even made it out of the factory, in October of 1924 the order was raised to nine more vehicles, these being imbered 23 through 31 inclusive.

During the same period of 1921-25 ten other armored trucks were constructed by organizations other than CEYC. Maestranza de Artilleris de Madrid built three armored trucks on the <a href="Landa-Romeo">Landa-Romeo</a> chassis, and Fabrica Nacional de Artilleria built five vehicles based on the <a href="Trubia">Trubia</a> and two on the <a href="Hispano-Suiza">Hispano-Suiza</a> chassis.

Altogether some 41 vehicles of the 1921 model were used by the Spanish Army for convoy protection, raids, and in the support of mobile columns. Both the designers of the vehicles, and the troops that used the trucks and bled in them were recognized with service awards and medals.

When the war ended in Morocco some of the vehicles continued with their protection duties, with some being retired towards the end of 1932. On 18 July 1936 a small number, no more than fifteen, of those vehicles surviving, were scattered to different nilitary sites where they ended up having a role in the beginning of the Spanish Civil War.



#### SPECIFICATIONS

Following are the specifications for the Latil Model 1921 Type II, the most numerous of the vehicles used during the 1920's.

Name: Camoin protegido Latil Model 1921 Tipo II

Employment: Escort and reconnaissance

Origin: Spain

Manufacturer: Centro Electrotecnico y de Comunicaciones Militares, de Ingenieros (CEYC)

Date of Construction: 1924-25

Crew: 9

Weight: 7,000 Kgs Length: 6.5 m Width: 1.8 m

Height: 2.1 m

Wheels: 4 wheel drive with each wheel measuring 1,000 mm in diameter Track: 1.75 m - expandable by fitting a second set of outside wheels to 2.9 m Suspension: 4 semieliptical springs Engine: Latil 4 cylinder gasoline, water-cooled, producing 80 horsepower at 1,200 rpm

Transmission: 5 forward, 1 reverse

Max speed: 20 km/h Range: 80 kms

Fuel: 90 liters

Turret: Cylindrical

Armament: (1) Hotchkiss 7mm MG Mod 1914

Ammunition: 2,500 rounds

Armor: 5 mm

Vehicles by number and type (note some numbers were reissued and appear twice, and not always in sequence):

Nash-Quad. #1

Federal. #2

Nash-Quad. #3

Latil Type I. #4

Nash-Quad. #4

Benz. #5

Benz. #6

Nash-Quad. #7

Nash-Quad. #8

Latil Type I. #9 Latil Type I. #10

Latil Type I. #11

Latil Type I. #12

Latil Type I. #13

Latil Type I. #14

Schneider-Brille. #15

Nash-Quad. #15

Nash-Quad. #15

Nash-Quad. #17

Latil Type II. #18

Schneider-Brille. #19

Latil Type II. #19

Latil Type II. #20

Latil Type II. #22

Latil Type II. #23

Latil Type II. #24

Latil Type II. #25

Latil Type II. #26

Latil Type II. #27

Latil Type II. #28

Latil Type II. #29

Latil Type II. #30

Latil Type II. #31

Landa-Romeo. #?

Landa-Romeo. #?

Landa-Romeo. #?

Trubia. #?

Trubia. #?

Trubia. #?

Trubia. #?

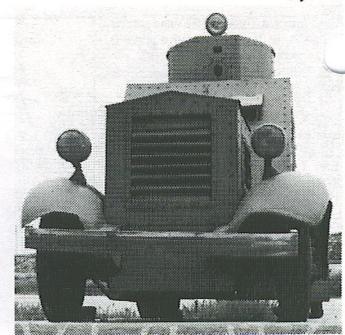
Trubia. #? Hispano-Suiza. #?

Hispano-Suiza. #?

# The Spanish Bilbao Armored Car

by John Baumann

Photos: Angel M. Salcedo Oliver



he Bilbao armored car was constructed by a company located in the town of Bilbao (hence its name) on the Spanish northern coast. It was manufactured in significant quantities and at least some fifty were built before the outbreak of the Spanish Civil War.

The basic vehicle was based on a Dodge or Chevrolet truck chassis (depending on the source - evidence suggests that the former is more likely) to which was added sheet iron forming the armored body.

Contrary to some references there weren't two types of turret; the 'round' or 'polygon' versions are actually one and the same, viewed from different angles. The rear is slightly more than a semicircle while the front is three sides of a hexagonal. Note that there are no welds and the armor has been bent under tremendous force to the required shape. Most photos do not capture its true contours due to a combination of sun reflection and angle.

Little contemporary pictorial or technical evidence exists on the Bilbao, however it is known to have been in service from around 1932 with the State Security Assault Guards. Later some Army Cavalry units are known to have received them before the war. In February of '32 they were used during the national elections to restore order after riots

Right and top: The Bilbao at Escuela de Logistica. occurred in the Cataluna area surrounding Barcelona.

Bilbao's were also in action against the Hospital at Talavera; the Alcazar (a ruined fortress) in the town of Toledo; the Cuartel de la Montana ('Barracks of the Mountain') in Madrid; and several other local areas.

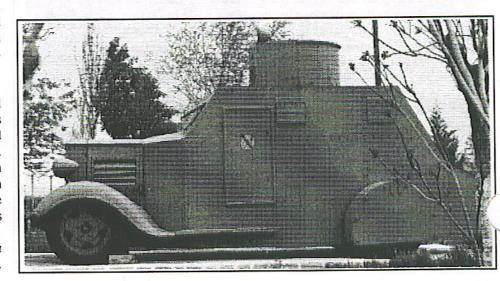
The armored car's later history is somewhat vague, certainly Bilbao's operated with Republican Army Forces and in the city of Madrid. Other known actions in which Bilbaos served include a column of no fewer than eight vehicles advancing toward the towns of Alcala de Henares and Guadalajara (some 60 km NE of Madrid). Bilbao's were also seen with Republicans in a ruined village of the Sierra de Guadarrama (a mountain chain north of Madrid).

It is curious that there doesn't seem to be any record of how many cars survived beyond 1939. The sole known Bilbao was found in the Parque Movil de Ministerios; today it is preserved in the Escuela de Logistica just south of Madrid (it is displayed at the Army Barracks, please note that advance permission must be obtained to inspect the vehicle)

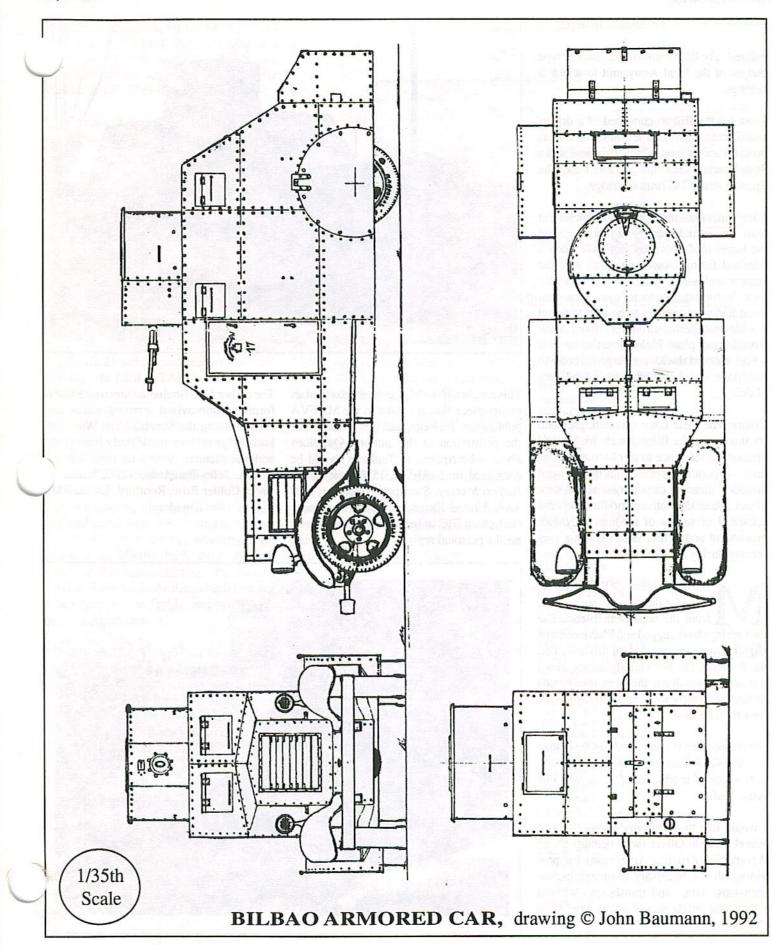
The Bilbao is in fairly good condition inspite of being left open to the elements. When it was rescued for preservation it was repainted to its current shade of green (since faded), with the upper interior in white and the lower portion black.

The original door markings did survive and were found when the exterior was over-

...continued on page 6



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painted. The Bilbao now sports 'sticker' type badges of the local Army unit to which it belongs.

Crew for the Bilbao consisted of a driver, and commander/machine gunner as well as up to six armed men. Main armament was a 7mm Hotchkiss machinegun which used the Spanish Army 7x57mm cartridge.

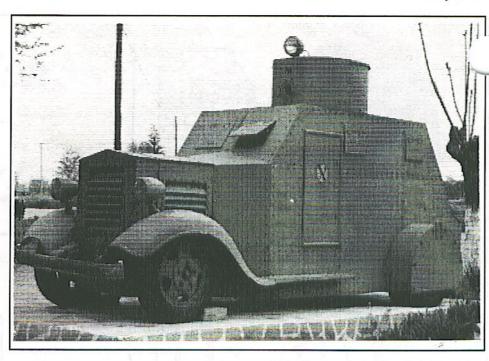
Some other features of the Bilbao include at least one vehicle carring a searchlight on the turret roof, this may not have been a standard fitting. Another vehicle had the spare wheel lashed to the front bumper/grill area. Yet another vehicle, even more unusual had what appears to be an additional machinegun (perhaps a dummy) fixed on the frontal armor plate. Please note that the rear wheel armored shields are hinged in order to undertake wheel changes with a minimum of delay.

Colors: The basic color was dark grey and for this reason the Bilbaos were nicknamed 'tiznaos' - a reference to an obscure appearance - a popular appreciation of the word 'tiznados' meaning dirtied by coal or a dark object. A later alternative camouflage scheme consisted of stripes of medium grey/dark green/sand and ochre, used on some cars serving during the Civil War.

odeling Notes: All the dimensions for the drawing were taken from the preserved Bilbao. The car's springs have sagged and I have perhaps slightly over compensated for this aspect on the drawing. I'm not entirely happy about this area, if anything, the front mudguards should be slightly lowered allowing less of the tire to be seen.

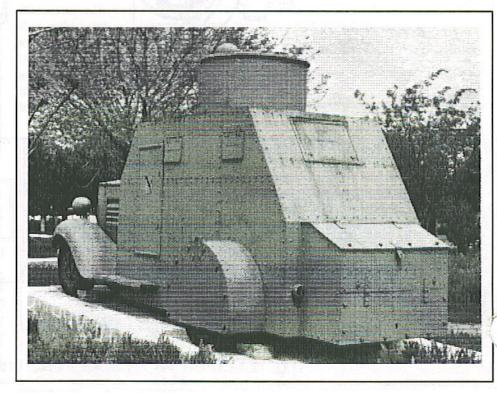
For the modeler, the only model of the Bilbao was the KMR/Raretanks resin series which is now out of production. (See review this issue - ed).

I would like to extend my appreciation to Angel Salcedo Oliver (who belongs to the Agrupacion Artistica Aragonesa) for providing all the necessary photographs, dimensions, data, and translations without which this article would never have been finished.



This article is a slightly revised version of an earlier piece that appeared in the MAFVA publication Tankette, and is reprinted with the permission of the author. Questions about subscriptions to Tankette should be addressed to: MAFVA, 15 Berwick Ave, Heaton Mersey, Stockport, Cheshire, SK4 3AA, United Kingdom. Please be sure an enclose an IRC to help with postage if you need a personal reply.

The author John Baumann is interested in all forms of improvised armored trucks that served during the Spanish Civil War. Any knowledge or data, particularly library and archival pictures, would be gratefully received. John Baumann, 102 Clockhou Lane, Collier Row, Romford, Essex, RM. 3QT, United Kingdom.



#### Letters

ar Dave:

My family and I are joint owners of a 1942 Ford GPW armored jeep built in November of 1942. I would like to find out all I can about the vehicle - how many were made, how many are left, and even if possible, where our jeep served. Any information would be appreciated. -Robert Pritchard, 619 Henderson, Winslow, AZ 86047.

(Can anyone help Robert? -ed)

Dear Dave:

I have lots of issues of AFV-News from the '60s, '70s and into the '80s for sale on my publications disposal list. Anyone interested? - Dave Pfankuchen, 434 Hillington Way, Madison, WI 53705.

Dear Dave:

My interest in armored cars goes back to World War 2 when I served in the Far East with the R.A.F. The article on the Lanchester 6 wheel armored car (issue #10) takes me back to Malaya in 1946 when if my memory serves me right I saw the wrecked bodies of what I am sure were Lanchesters destroyed in battle with the Japanese in 1941. They were "Up country" at a place I have forgotten the name of. I had photos of these vehicles but unfortunately they were destroyed with a lot more of my gear in an ambush in the Dutch East Indies some time later.

I notice that in most of your articles everyone keeps clear of one subject and this is "COLOR", which is a very thorny and difficult subject. -John Oldroyd, Heywood, Great Britain

d. Colors and markings are one of the hardest subjects to present, articularly with any hope of accuracy. What iinformation is included I use, and whenever possible double check against other sources. But I agree let's have more color and markings! Anyone out there ready to contribute?)

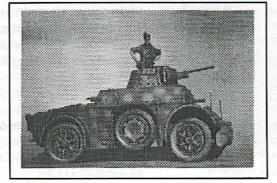
Dear Dave:

Regarding Erik Ahlstrom's letter last issue, I think his Marmon-Herrington kit came from Manuel Schmidt (Spain) and was released in the late '70s. In the '80s Mr. Schmidt released the KMR range (now out of business).

I have enclosed a photo (see below) of the new AB41 from Azimut. The kit is fairly simple and accurate with a complete hull, a turret with a 7mm recess for a figure and several little parts in resin. A photo etched plate for flaps, tools, tiedowns, etc. is included as well as a suspension in white metal. The wheels are little marvels with engraved SPA logo on the hubs, but alas the wheels are about 1mm too short in diameter.

Also, Cromwell is due to release a Lanchester armored car from WWI.

Patrice
PeBucquoy,
Lys lez
Lannoy, France



Dear Dave: After a little research I have come up with the following answers to some past questions in the letter section.

Solthurn/Breda 20mm Heavy MG 47/32 sources are IPMS Italy's *IL Notiziario* Vol 9/1 and 10/3-4. Details were also repeated in *IPMS USA*, issue unknown. There are also plans by Benussi and Lacey.

Laffly 80AM and Panhard 165/175 plans have appeared in *Tankette* 25/5 and 22/3 respectively. Other references are: <u>Les Vehicles Blindes Francais 1900-44</u>, <u>Les Engins Blindes Francais 1920-45</u>, <u>Encyclopedia of Armored Cars</u>, *Armies & Weapons* No. 7 and *L'Enthousiaste* No. 1 (both now defunct) and Lacey plan number X13 of the 1916 White.

SdKfz 222 gun mount, Tankette 24/1.

Dodge WC55, T-214, non-French service covered in AFV-News 15/ 5 and Lacey plan A93. -John Baumann, 102 Clockhouse Lane, Collier Row, Romford, Essex, RM5 3QT, Great Britain.

(The address for Geoff Lacey was on page 6 of issue #7, see page 6 of this issue for the address of <u>Tankette</u>. <u>AFV-News</u> can be reached at: George Bradford, R.R. 32, Cambridge, Ontario, Canada N3H 4R7).

#### Plugs

Museum Ordnance. The Magazine for the U.S. Army Ordnance Museum. Published six times a year by Darlington Productions, Inc., P.O. Box 5884, Darlington, MD 21034. Subscriptions: One-year (six issues) \$13.50 US. All foreign \$18.50 surface, \$27.00 airmail. I don't usually run reviews on a publication twice in a row, but I felt it was worth reviewing Museum Ordnance again. I mentioned last issue that I liked the magazine, but that the issue I had received hadn't included any material on wheeled as opposed to tracked vehicles. As usually happens with such statements, the very next issue featured a cover photo of UNITA operated HMMWVs as well as an outstanding article on the May 1990 Battle of Mavinga in Angola, by Dr. John Turner. I'd like to change my rating for Museum Ordnance from RECOMMENDED to HIGHLY RECOMMENDED.

THE COMMANDERS. 551 Wegman Rd, Rochester, NY 14624. Ted Paris sends the following update on new and upcoming kits.

Avilable now:

- . French VAB (6 wheeled) full kit, hollow cast, \$79.95
- WWII U.S. tires with chains, set of six, \$12.95
   Coming soon:
- French VAB with HOT missiles, \$79.95
- Marmon-Herrington Mk IVf with photo etched and fighting compartment detail parts, price TBA

Coming this summer:

- Polish WZ. 29
- M-H Armored cars all marks
- · WWI Megrow armored car
- · SdKfz 251 full interior
- SdKfz 251/16

(-I'll try to run some reviews of these kits at a later date. As you can see The Commanders is really moving into the armored car/wheeled fighting vehicle area. -ed)

...continued on page 8

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...continued from page 7

Quality Castings Inc., P.O. Box 11714, Alexandria, VA 22312. Quality sent me a postcard announcing some new releases that may be of interest.

#### Available now:

- 4070 Krupp "boxer" 6x4 Light Truck \$5.75
- 6003 M8 armored car, \$5.50
- 4071 SdKfz 10 1-ton halftrack \$5.50

#### Available soon:

- Italian AB 40/41 armored cars
- SdKfz 10/4 halftrack w/2cm flak
- French Citroen truck

All vehicles are cast at 1/108th or approximately 15mm scale.

(I haven't seen these castings so I am unable to make a recommendation. -ed.)

FIRE FORCE PRODUCTS. c/o Richard Pike, Unit 26, Supa-Shopper, High Street, Kings Heath, Birmingham B14 7LB, Great Britain. Besides 1/35th figures (including a good looking set of Luftwaffe gunners for the Tamiya 20mm Flakvierling, Fire Force produces a really good looking set of 11 different sheets of German tactical markings from the period 1939-40. A quick review of those markings offered looks like most if not all of the tactical markings you might want for your 1/35th models. Sheets include: Mobile troops, Infantry weapons, Rear echelon units, Signal units, Infantry & mountain units, Engineer and Artillery. The sheet I have on hand is #DG35002 and has 22 sets of markings (3 each so you have a spare) from a Motorized Recon MG Co, to a Light Tank Platoon, to a Cavalry Bicycle Platoon. It's kind of hard to describe how these decals are put on, but bascially you cut out the ones you want, and stick them face down in the correct position, then wet the back of the cover sheet and leave in place until it releases from the design. Dry the spot and your ready to go. The operation is easier than it sounds. Price is approximately £2.15 or \$4.50 each. For orders other than Great Britain subtract 15% tax, but add 20% for postage. HIGHLY REC-OMMENDED.

#### Reviews

BLINDADOS EN ESPANA 1a Parte: La Guerra Civil 1936-1939, by Javier de Mazarrasa, illustrations Luis y Carlos Fresno Crespo. Publisher, Quiron Ediciones, Valladolid, Spain. Softcover 8x11, 106 pages, black & white photos and full color illustrations. For information on availability and price contact Javier de Mazar-rasa, Apartado de

Correos, 47078, 28080 Madrid, Spain. ISBN 84-87314-03-1.

It's really hard to say too much good about this book from de Mazarrasa. Wonderful photos, full color paintings of camouflage and markings, four view



drawings, and statistics as well as vehicles I had never seen before. Is there a drawback? Yes, the text including the captions is all in spanish. But there's nothing that a good english/spanish dictionary and some patience can't work out. Among the armored cars covered are the Bilbao, Tiznaos, FA-1, Ansaldo-Lancia IZ, UNL-35 Chevrolet, and BA-6, as well assorted "home builts". HIGHLY RECOMMENDED.

#### Errata

As a correction to the Lanchester article in last issue (#10), Raymond Surlemont writes: I would like to point out that you have mistakenly modified my text (production and variant) as far as Mk I and Mk IA were concerned. These two marks had four wheel stations at the rear, each with duplicated wheels. Thus the figure (eight) in my text relates to the total number of rear wheels, not to the number of cars produced as such. This is also true for the Mk IA variant (see drawing).

I forgot to give Byron H. Delavan of Canandaigua NY credit for supplying the material for last issue's article on the Hong Kong Regiment, sorry Byron!

#### Editorial

With the second annual issue almost ready. I thought is was time to take some of our precious space and communicate. Things are going well with ARMORED CAR and I have already planned out a third year, so yes! AC will keep going. At present there are readers in 19 countries plus the U.S. and Canada. That's a lot, but we need more to continue to expand and improve the newsletter. I've had good luck in sending potential readers a free sample of AC. So, if you know someone that might be interested in a sample issue, please send me their name and address and I'll mail them a copy. Also, don't feel shy about contributing articles or materials to AC, everything is welcome!

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. Contents:

#2. DAF YP-408, Uparmored HMMWV, AB 40/41.

#3. FUG(OT)-65, Armored Cars in the Baltic

States 1918-40, Fiat-Oto Melara Puma. #4. Panhard ERC-90S, L'automitrailleuse 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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