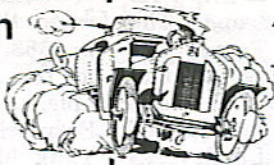


Irish Armored Cars
Swedish Landsverk
and Leyland-Irish
Look-A-Likes
by Mark Salisbury



ARMORED CAR

THE WHEELED FIGHTING VEHICLE NEWSLETTER

Issue #28

March - April 1995

\$3.00

Leyland A.L.V. 1

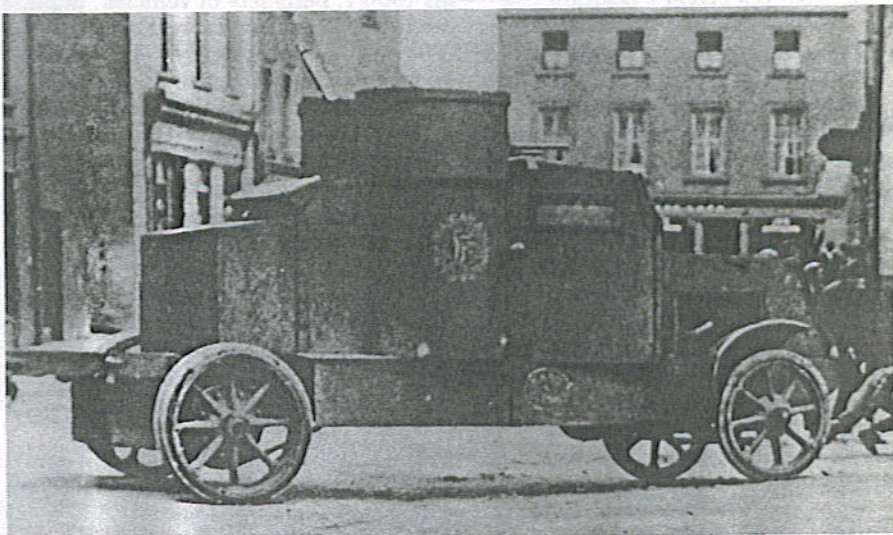
When dealing with the fact that the Irish Cavalry Corps was in need of replacing a large part of its' armored fleet with newer and more modern vehicles, the Corps faced the same problem confronting the military in most of Europe during the late 1920s and early '30s; lack of funds.

The newly promoted Acting Director of the Cavalry Corps, Commandant J.V. Lawless, put forward one possible solution. He suggested building armored car bodies designed to fit chassis already in civilian use. These shells would be stored until required and then mated with their appropriate chassis. As a further cost saving, Lawless envisioned the use of armor plate and turrets from redundant Peerless armored cars.

There was a certain amount of apathy towards this and other ideas, but in 1934, Lawless was given permission to purchase a suitable chassis. The type chosen was the Leyland "Terrier" a three axle chassis manufactured by Leyland Motors, England.

The Leyland T.E. 2 chassis (T.E. 1 and T.E. 3 being the others in the series) was presumable seen as suitable for military service, even though it was in civilian use (it had been produced in accordance to a British War Office specification). This War Office requirement called for a vehicle suited for colonial work, where

roads would generally be of poor quality and access to well equipped maintenance facilities would be limited. To this end, the chassis was simple in overall design, but very durable. The rear twin-axle suspension for instance had only one spring per side, and their ends were encased in grease boxes to prevent the



Above: Peerless Armored Car in Dublin, circa 1920. Photo via John Loop.



Right:
Preserved
example of
Leyland ALV 1
(Modified) at
Tank Museum,
Bovington.

Photo is
Copyright © to
and appears
courtesy of the
RAC Tank
Museum,
Bovington.

entry of dirt. The chassis was arranged to give good ground clearance, and when tracks were fitted, its' 80hp engine could drag the vehicle up a 1 in 2 gradient.

When the chassis was delivered, Cmdt. Lawless, along with Captain Aubrey Mayne and C/Sgt. Paddy Lynch, set about designing and producing an armored car. Due to the layout of the chassis, the design of the vehicles was not radical, being quite similar to other armored cars being produced at the time. The center and rear portions, along with the twin turrets, were installed on the chassis practically unchanged. The major design work involved a new front section from the driver's position.

Due to the difficulties in working with the salvaged plate with the equipment on hand, production of the first vehicle took from March until September of 1934. It was during September that the "Armored Vehicle A.L.V. 1" was shown to a representation of staff officers, where it performed quite well with road speeds of 40 mph and 10 mph being achieved cross country. There were some problems experienced with the twin turret arrangement, and various changes were recommended, such as mounting a spare wheel on a stub axle on both hull sides; but this idea wasn't adopted.

Delays such as the redesign of the workshop buildings, training new fitters and the production of turrets based on the Swedish L-60 tank (two of which were on trials with the Corps) with which to replace the twin turrets were experienced. Although the last problem was unexpectedly solved when approval was given to purchase four turrets from Landsverk.

As such, it was July of 1937 before work could begin again on the Leylands. The first all new Leyland was completed in May 1938, the second had been started in October 1937 and a third in January of 1938. Work was also begun on the original Leyland to bring it up to the same standards of the other machines; so by July 1939 all four were finished.

Service History

The Leylands served alongside Swedish Landsverk L-180s in the First armored Car Squadron (a total

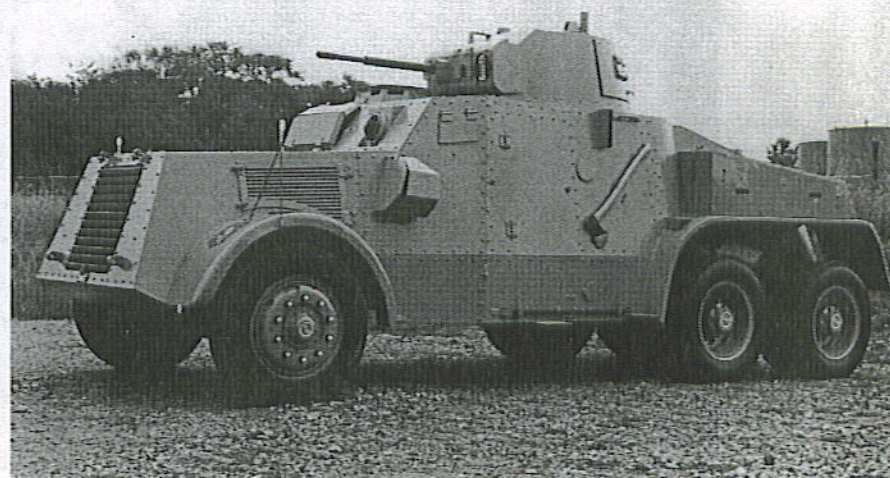
of eight L-180s had been purchased from Sweden) until 1940, when the squadron was disbanded to help form the new Motor Squadrons. The Leylands became "A" Troop, 2nd Motor Squadron and were based at the Curragh. In 1942, a heavy armored car squadron was formed and the Leylands and Landsverks were reunited and served out the rest of the war.

The Leylands saw no action during the war, but actively took part in exercises and always caused a stir when they were seen close to the border.

In 1956/7, both sets of vehicles were re-engined with Ford V8s and the opportunity taken to rebuild the front of the Leylands. The Madsen machine-guns were replaced with .30 caliber Brownings (taken from withdrawn aircraft). The original 36" x 6" tires were also exchanged for larger 7.50x20s.

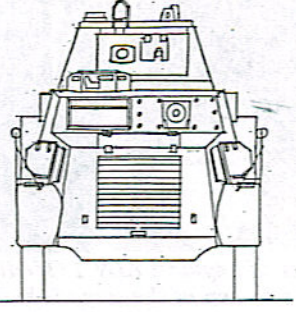
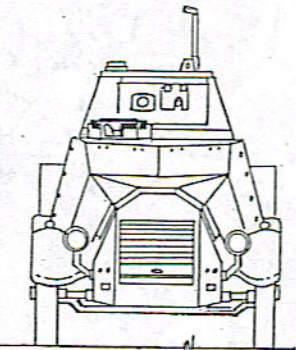
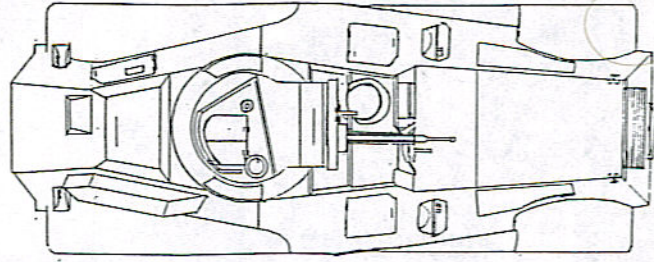
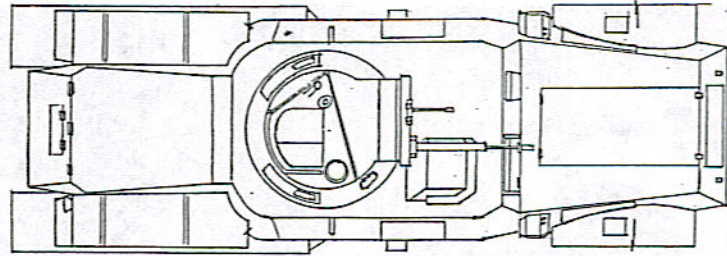
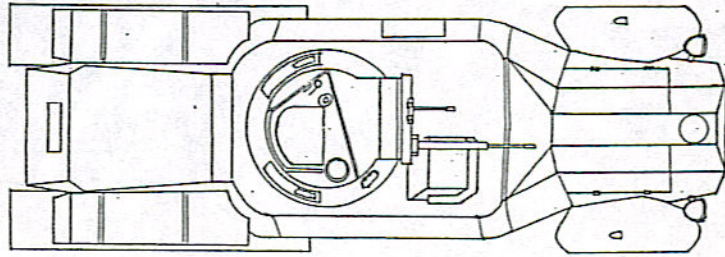
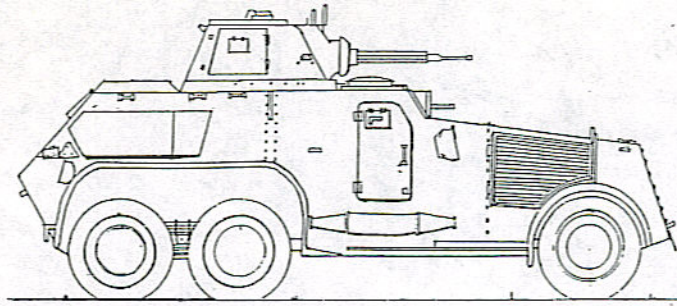
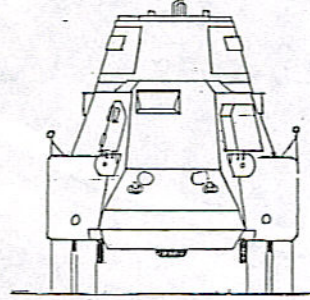
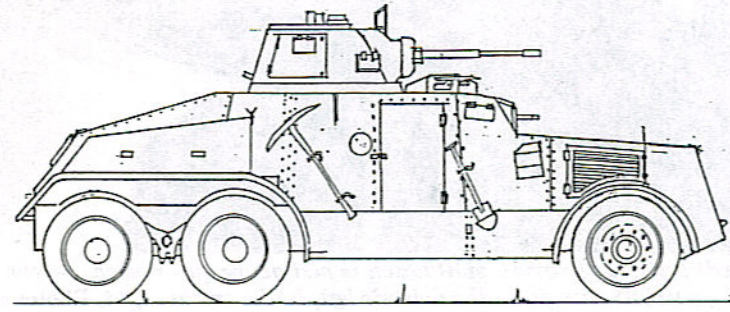
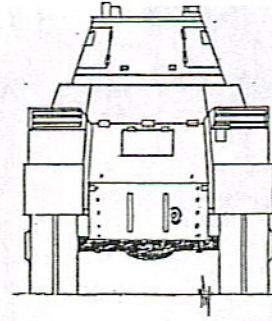
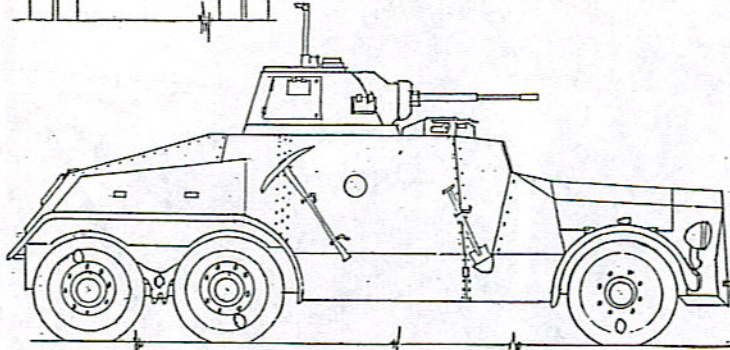
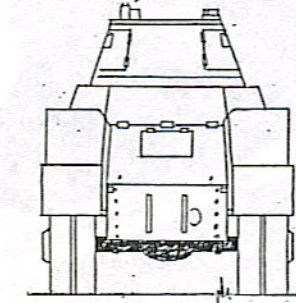
The Leylands served with the First Armored Car Squadron until 1972 when the remaining three vehicles were

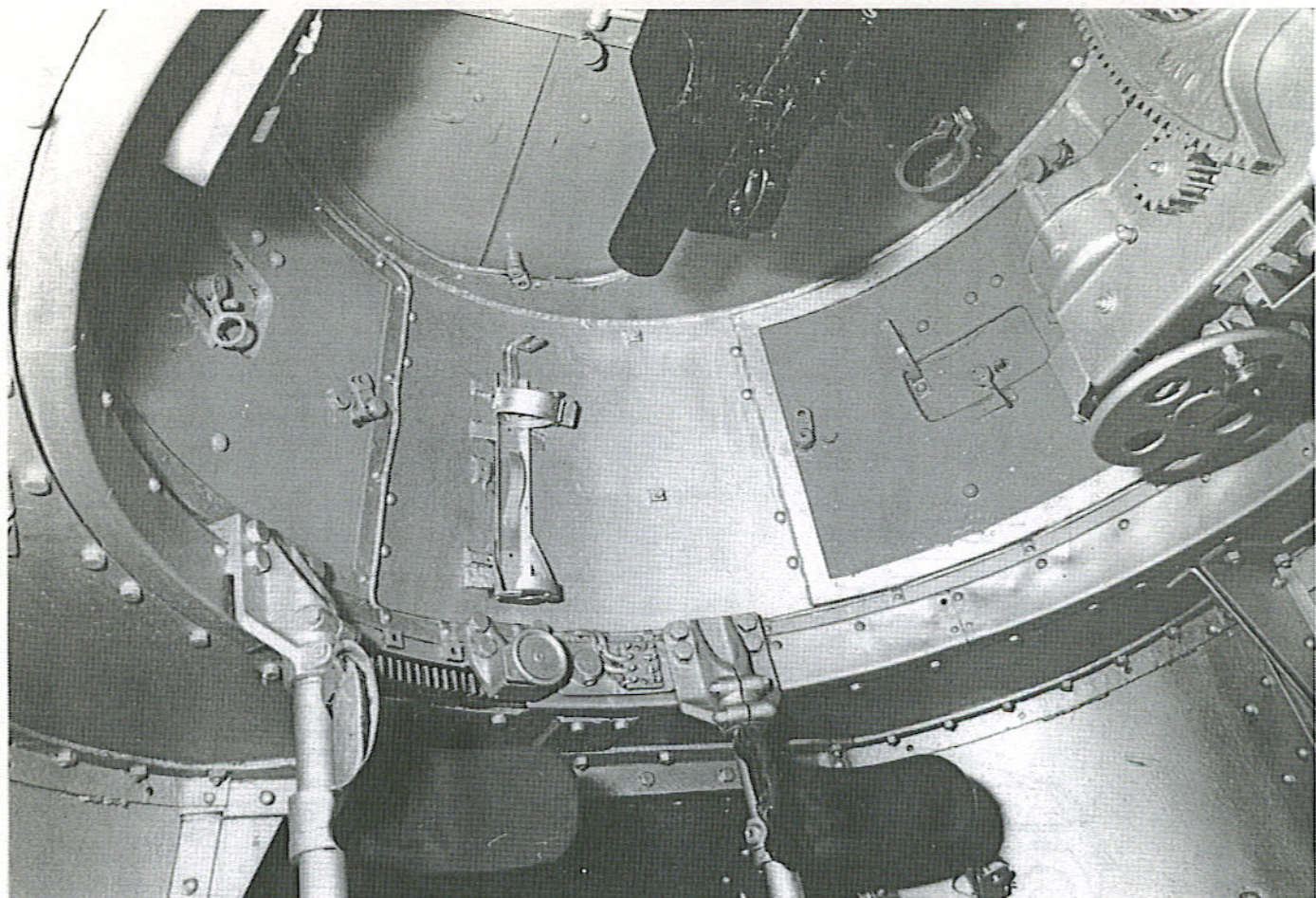
passed on to the 5th Motor Squadron, an F.C.A. unit (Forsea Cosanta Aituil - Gaelic for Land Defense Force) where they stayed until finally retired in 1983. Vehicle ZC-773 was set aside for the, hoped for the, Cavalry Corps Museum, ZC-774 was exchanged for a Ferret Mk2 armored car from The Tank Museum, Bovington; ZC-775 was scrapped in 1969, and ZC-776 is thought to be in storage, possibly waiting for an exchange.



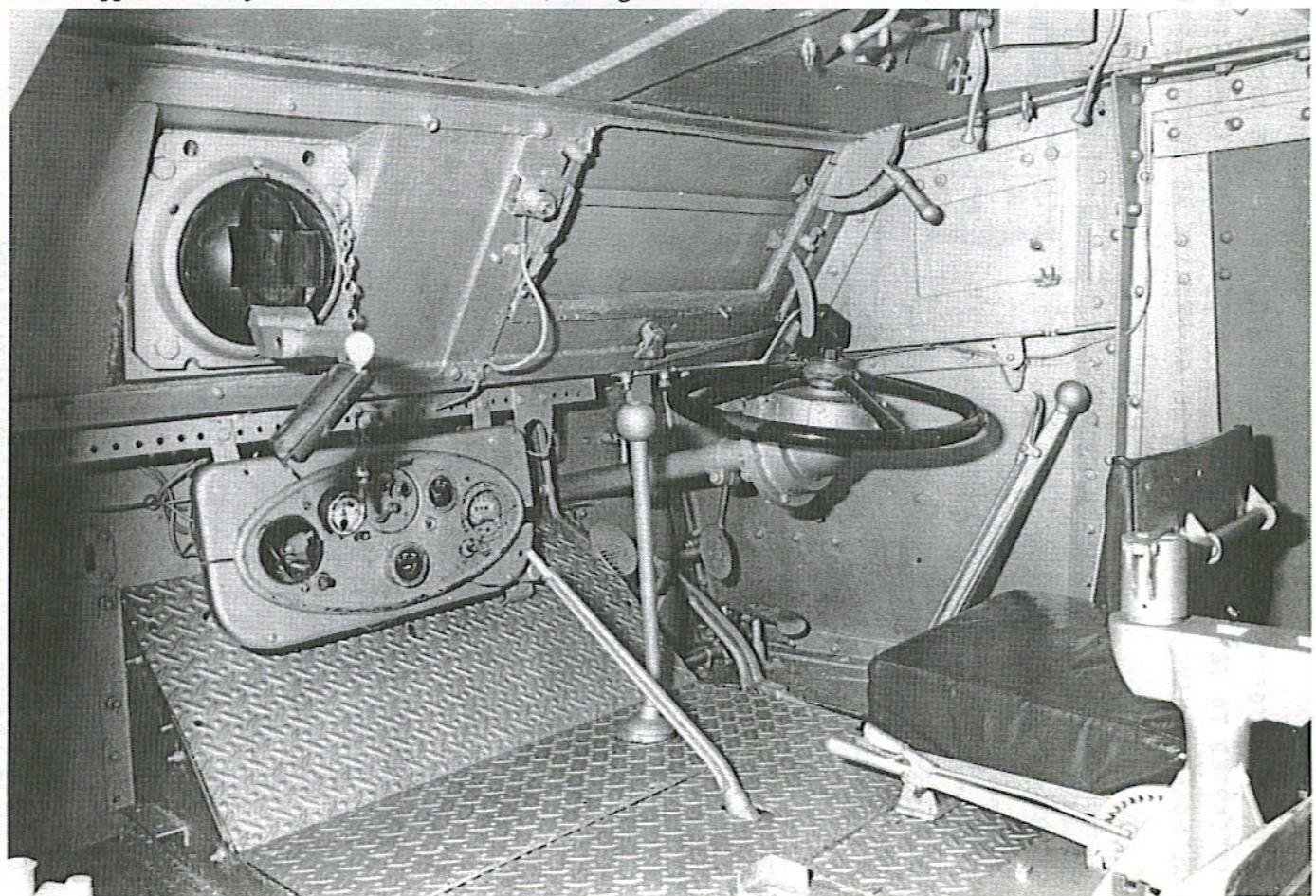
*Right, top and middle:
Leyland ALV 1 (Modified) at Tank
Museum, Bovington. Photos are
Copyright © to and appear courtesy
of the RAC Tank Museum,
Bovington.*

THE OBJECT OF THESE DRAWINGS IS TO ILLUSTRATE THE SIMILARITIES AND DIFFERENCES BETWEEN THESE VEHICLES AND SO I HAVE ATTEMPTED TO GET THE OUTLINES AND GENERAL PROPORTIONS CORRECT. I HAVE NOT TRIED TO PRODUCE ACCURATE SCALE DRAWINGS ALTHOUGH I HAVE ENDEAVORED TO BE AS PRECISE AS POSSIBLE. M.S.





Above interior of Leyland ALV 1 (Modified) Landsverk turret, split hatch is just above gun breech. Below: Driver and machinegun position of the same vehicle, gear shift lever is on the driver's left, brake on the right. Photos are Copyright © to and appear courtesy of the RAC Tank Museum, Bovington.



The Landsverk L-180

The Irish Cavalry Corps didn't always have to rely on ingenuity to acquire vehicles, small amounts of funds were made available to purchase a few "ready made" vehicles. Two L-60 tanks from the Swedish firm Landsverk, came on trials and monies were made available to buy four turrets for the Leyland vehicles under construction. The decision was made to buy armored cars instead of tanks from the Swedish company, allow for use of the road performance for speedy deployment so as to compensate for the small number of armored vehicles available to call on.

A.B. Landsverk of Lanskröna, Sweden, started as a heavy engineering works producing railway locomotives. The construction of armored vehicles began in the late 1920s in partnership with a number of German companies, who, under the Treaty of Versailles, were prohibited from carrying out such work.

During 1935, Landsverk set about improving on a previous design of theirs, the L-181. This was in response to a requirement from the Danish Army, who cooperated in the design and production of the L-180.

The L-180 had the same turret as the L-181, but was heavier, had a more powerful engine (a Bussing-NAG 8 cylinder 150hp engine, compared to the earlier Daimler-Benz 6 cylinder 80hp version), and was larger in size overall. The 20mm main armament remained the same, although this was changed to a 37mm Bofors weapon for a Dutch order, with a rear hull mounted

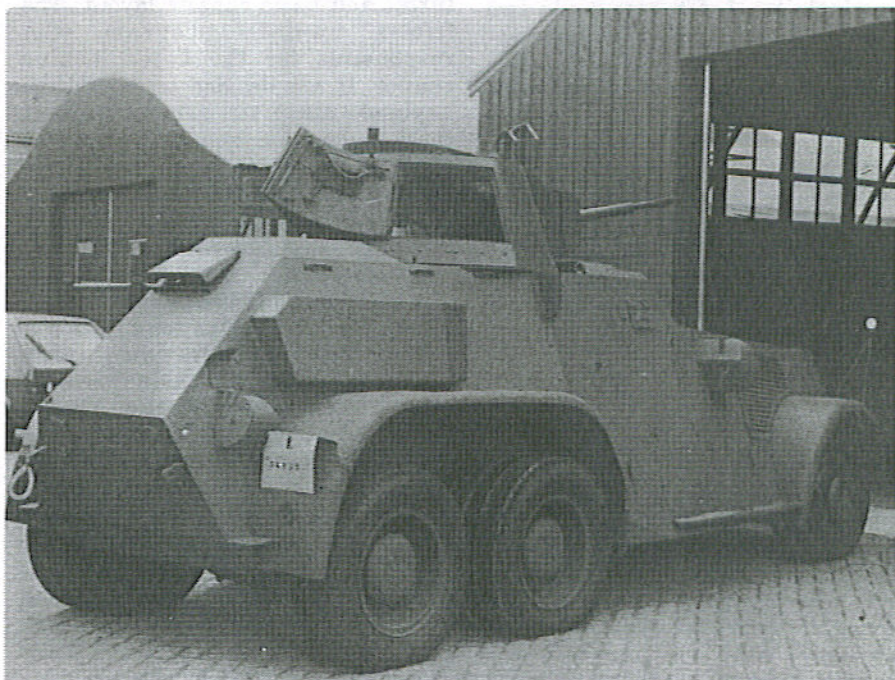
machinegun being specially fitted as well.

The first two Irish vehicles were delivered in late 1937 and were given registration numbers ZC-757 and ZC-758. A further six machines were ordered the following year and when they arrived shortly afterwards, were numbered ZC-5837 to ZC-5842. Five more cars were requested in 1939, but when war broke out this order was held by the Swedes and the vehicles used by the Swedish Army (these were the only L-180s to see service in Sweden, and were modified to mount the same turret as that installed on the Pansarbil M/39 Lynx armored car - a vehicle that was considered as a replacement for the L-180 series in the post-war period).

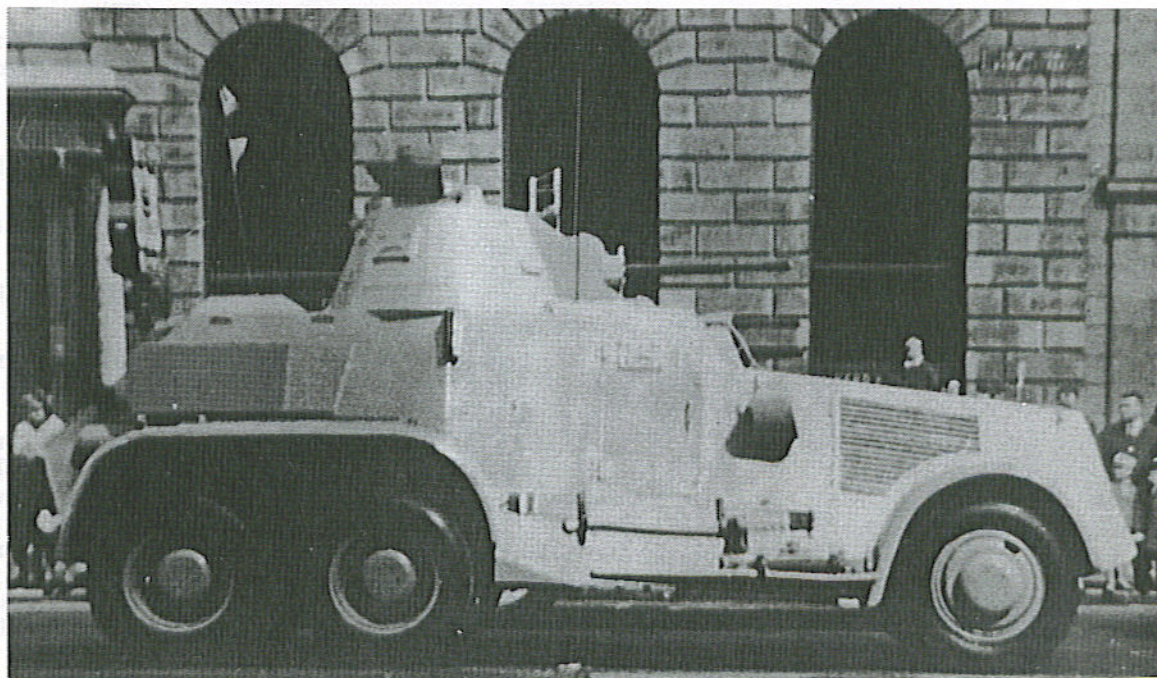
The loss of the five L-180s was a blow for the Cavalry Corps as a large number of spare parts had also been included in the order. Replacement items for the vehicles had to be fabricated in Ireland using whatever was available.

Service History

Initially, the Landsverks served as part of the First Armored Car Squadron until 1940, when they were divided up along with the Leylands to provide an armored troop to the four motor squadrons that had been formed. The Landsverks thus became "A" Troops in the 1st, 3rd and 4th Motor Squadrons based initially in Dublin Limerick and Athlone respectively, but these locations changed frequently during the war.



Top: Irish Army Landsverk (L-180) M38 photographed at the Dutch Cavalry Museum, Amersfoort, in 1985. Photo: Hans Heesakkers. Right: Irish Landsverk L-180 in the Post-war period, possibly during one of the Easter Parades. Photo is Copyright © to and appears courtesy of the RAC Tank Museum, Bovington.



They were returned to the First Armored Car Squadron in 1942, and with the Leylands and Dodge armored cars, which had been "home" produced, formed a heavy armored car squadron. The L-180s served out the war involved in border patrolling and field exercises.

The end of World War II saw the Landsverks receive several modifications and improvements to the vehicle design to prolong their usefulness. An armored box was installed outside the rear of the hull to accommodate the more modern No. 19 radio set (it was possibly during one of these immediate post-war refits that the solid rubber tires were replaced with pneumatic ones - but there is no evidence to support this). The single top hatch was made two piece and in the 1950s they were re-engined with Ford V-8's and the Madsen machineguns replaced with Brownings.

In the early 1970s two L-180s had their cannon replaced with 20mm Hispano-Suiza's from scrapped De Havilland Vampires. This conversion was a success and three other Landsverks were also modified. There was an attempt to mount surplus aircraft rockets onto these vehicles, but tests proved the idea not to be practical.

In 1972, the First Armored handed their Landsverks over to two F.C.A. units, the Third and Eleventh Motor Squadrons. They remained with these units (except for ZC-757, ZC-758 and ZC-5838 which had been scrapped in 1979) until they were withdrawn from service or "boarded" on the 24th of February 1987 (although their Brownings carried on, being installed

on the Unimog scout cars that replaced the Landsverks), ending fifty years of service with the Irish Army and living up to the Cavalry Corps motto, "First in - last out".

Vehicle Colors

The basic color for both vehicle types seems to have been a light gray or gray-green overall finish. Just prior to WWII, or the "Emergency", as it was known, vehicles were seen with a darker color over-sprayed in a disruptive type style. Post-war photos show the reintroduction of the single color scheme.

Similarities

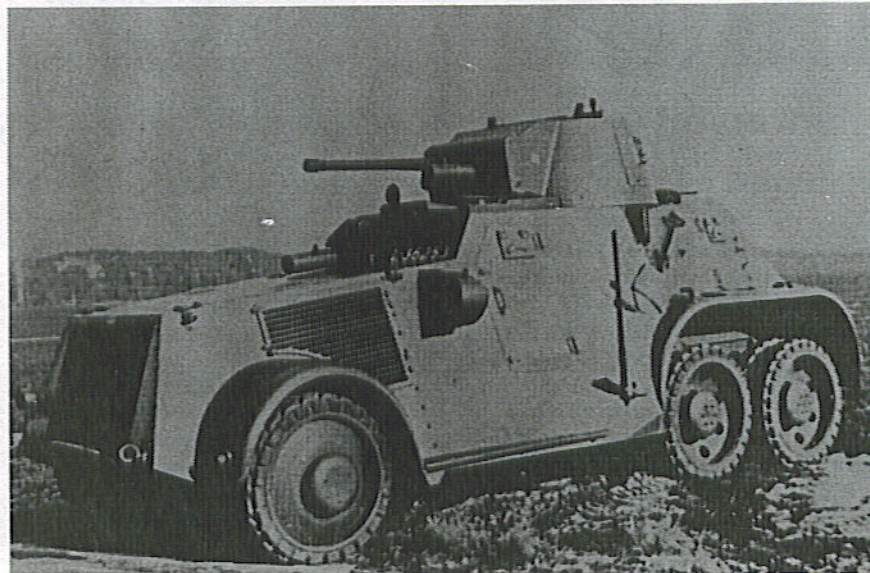
Initially, the Leylands and Landsverks were only alike in the turret and basic chassis layout. The fifties up-date program was responsible for the types looking similar. It was decided to rebuild the Leylands along the general lines of the Landsverks, and as far as the front end is concerned, they were successful. The new shape was less complicated, more easily repaired if damaged and the protective boxes that contained the headlights, although of a different shape, are as on the Landsverk. Plus the addition of a front mounted Browning (even though on the opposite side from each other) still adds to the overall similarities of the two vehicles and to the confusion of AFV historians!

Even though this is a short article, I have to thank a number of people for the patient assistance, namely: Paul V. Walsh, Hans Heesakkers, David Fletcher, John Baumann, Mr. D.J. McCarthy, Staffan Lindgren, Peter Brown and Mrs. Roslyn Thistlewood.

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Below: Landsverk L-180 (vehicle #22) in Dutch service prior to World War II. Photo is Copyright © to and appears courtesy of the RAC Tank Museum, Bovington.



Reviews

Scale Vehicle Plans from George Bradford

Even with the kit manufacturers best efforts, there are still vehicles which have not been produced as kits. Some of these may never be produced as such, others are variants of a main type which will not be produced in their own right. So, if you want one, you must scratchbuild or convert.

As few people have the real vehicles

around to measure and use as a reference, a good set of plans, or a set of good plans, is all but essential. Despite having main dimensions and as many photos as you could hope for, to see the vehicle laid out on a plan is all but essential for scratch building, and very useful for the converter.

Those of the old and bold still around will remember the Bellona Prints series of plans in 1/76 and later 1/48 scales, but there is no modern equivalent. Magazine articles often include plans but they are hard to track down on their own. Or they were until George Bradford, long-standing stalwart of the AFV Association of Canada, decided to produce a range of plans.

To do this he has harnessed modern technology, as the plans are 'drawn' on a computer and printed out on a laser printer. This results in a number of benefits all round. The originals can be checked and rechecked without tiresome and time consuming redrawing, and amendments can be made until the end result is satisfactory. Variants can be produced by copying and amending an original, which is ideal for widely built vehicles. The final print can be made, literally, to order, so there is no need to hold expensive stocks of conventionally printed plans, trying to guess demand while balancing the two, often irreconcilable, demands of low print cost and high print runs, against space and deterioration. Finally, plans can be printed to any suitable scale, within the limits of the paper size the printer can use. This again avoids expensive duplication, redrawing and many other problems, and saves the need to rely on photocopying a plan using enlargement or reduction, which can result in distortion and loss of quality, and may well not be able to handle a particular scale.

This venture is very welcome, and George should be congratulated and supported in it. To date he has ready some 60 plans, covering a wide range of subjects. Most fit onto a single sheet of US 11" x 8.5" paper, although some subjects need two sheets to fit in all the views. It is good to note that there is no extra charge for these two-sheet sets, and the price is reasonable overall. Each drawing costs \$2 Canadian per set, including postage and packaging, assuming you want at least five subjects. Single items cost \$3 each plus another dollar for handling, so you may as well get several sets at one go. Also, if buying from outside Canada, you can save currency costs with a big order.

As to the plans themselves, I bought a number and was impressed. They are neat and complete, include a scale bar on each one, and have been subtly shaded to help show what the real thing looks like, something which is not always apparent from a plain plan. Some of them would make good decorations, perhaps until you can line them up as model subjects? I obtained all mine in 1/35th, which is the 'standard' scale, and they came back across the Atlantic very quickly, request to receipt was two weeks which, if typical, is very good indeed!

Wheeled subjects are well covered to date, perhaps AC readers can make this a regular trend by buying them?

George will supply a full list on receipt of an IRC, to whet your appetites he currently offers three versions of the Staghound armored car as plan A4 T17E1, A5 T17E2 (the AA version with twin .50 HMGs) and B9 the British conversion with Crusader turret, the Staghound III. Plans A5 and A6 cover the other main US WW2 car in M20 and M8 versions respectively. Canadian wheels include C8 Otter Light Recce Car, C9 is the C-15 armored truck, C12 is the LAV-25 while C14 and C15 are the Canadian's own six wheeled Grizzly and Cougar versions. C15 covers the Ford Lynx I & II. Russian AFV fans have the BA 64B on plan R12, while the French Panhard 178B is plan F3. German subjects include, assuming my ID's are correct, SdKfz 231 in plan G4, SdKfz 233 as G5, SdKfz 252 on G6 and SdKfz 253 on G7.

So if you want plans for modeling projects, here is a series well worth checking out. Write George R Bradford, RR32, Cambridge, Ontario, CANADA N3H 4R7 with an IRC for a list, or else try a sample order from the wheeled items. While you are about it, ask about joining the *AFV Association* as well. I can recommend both it and the plans. -Reviewed by Peter Brown March 1995

ONLY THE ENEMY IN FRONT

(Every other beggar behind...) The Recce Corps at War 1940-1946 by Richard Doherty. Published by Tom Donovan Pub. Ltd, London, England. Price £19.95 in UK.

The Reconnaissance Corps was formed in early 1941 to provide specialist reconnaissance for British infantry divisions. While men of the Corps were trained in all aspects of recce work, they often used armored cars, which makes them of interest to

AC readers. The reconnaissance function had formerly been provided by cavalry units, first on horseback and later in light tanks. Following the campaign in France and Belgium in 1940, a number of lessons emerged which showed the need for a specialist corps. Also, many of the cavalry units were rolled into tank units and were no longer able to act in their former capacity.

Other specialist units, notably para-troops and commandos, were raised at the same time, and all came in for wide coverage in the press and cinema newsreels of the day. However, while the paras remained in being after the war, and the commando ideal was taken over by the Royal Marines, Recce was disbanded and dispersed. Perhaps as a result of this they have not been given a lot of coverage in print, although many, if not all, individual regiments produced their own unit histories and there was a Corps history published. Apart from that, and of course 'Mac' Charlsh's article in AC#21, their exploits have been little recorded.

This makes Tom Donovan's book all the more welcome. It covers the origins of the Corps, with insights into the plans behind it and early ideas on how it should be used, and describes their early training. Initially, each Division had its own Regiment, raised from its own troops, and numbered in line with the parent Division. Thus, 50th Infantry Division had 50th Recce Regiment, which was one of the first to see action. Units were often transferred, both between Divisions and often to act on their own, and showed themselves able to fight both mounted and on foot.

The actions of each unit is covered, in each theater of war. This is no dry and dusty history however. It is easily read, and contains details of the men, their equipment, and their actions. There is also some idea given about uniforms, as some units created their own distinctions, and the design and standardization of a Corps badge is also covered. But AC readers will be most interested in the actions of the units, which range from early days in North Africa, through Tunisia, Sicily and Italy, Singapore, Burma and North-West Europe. Not all this action was in vehicles, and not all the vehicles were wheeled, but much of the action was as armored car units and as such offers an insight into an area of armored warfare often overshadowed by tanks.

It is also good to see extensive references made to the original

records and unit histories which may be useful for anyone wanting to make further research into this area. The book itself provides good coverage, and leaves little more to be said, although as a history of a whole Corps, fighting in all theaters through most of a World War, many people may want to see more fine detail than can be covered here. As the only work in print on the subject it is a worthy tribute to this unit, and makes interesting reading for anyone interested in WW2 era armored cars. While the vehicles themselves are not covered in great detail, much of what a unit used is described, and many of the photos show cars in service and action. -Reviewed by Peter Brown March 1995

Letters

New resin Humber Mk IV. For his first venture into 1/35th scale, "Tommy" Aitkins has chosen the late production Humber MK IV armored car, though by the time you read this the Humber Mk III and Humber Mk II kits should be available. The kit is a mixed-media offering with the major parts cast in resin and the smaller ones in pewter. The resin parts are sub-contracted to a company called Castoff Models and are similar in style to those produced by Verlinden in some respects. The instruction sheet is good and contains a parts list and a brief history of the Humber cars.

Construction is straight forward and poses no problems to a modeler with some experience building plastic kits. Overall the fit is very good, the only surgery I had to do was to cut down the front suspension dampers. The level of detail is about average, some bolt heads were missing, but nothing that can't be added. But the biggest thing going for this kit is the price (£43) meaning it one of the cheapest kits around of this size. The Humber Mk IV (late) is the first of a series of Humber cars which will eventually include the Mk II, Mk III (early), Mk III (late), Mk IV (early) and at a later stage perhaps the Mk I. The Fox Mk I which was basically a Humber Mk III built in Canada is also a possibility if a good set of plans can be found.

The kits are available direct from C.A. Aitkins for £43 post free in the UK, add 10% postage USA and Canada. The address is C.A. Aitkins Models, 17 Ashbourne Ave,

Bridlington, East Yorkshire, YO16 4PE, GREAT BRITAIN. Phil Greenwood, 27 Brookland Rd, Bridlington, E. Yorkshire, YO16 4EZ, GREAT BRITAIN.



Correction for issue #26 regarding Major Models. Please note that the price for the (resin) 1/35th model of the Mgebrov-White armored car is \$44 (US) and for the (resin) 1/35th DAF M-39 armored car \$36 (US). They are my productions, and only I sell these models, not "Tankmaster".

I am also working on resin models (1/35th) of the 1916 Austin and Austin-Pitilov armored cars which should be ready soon. For future projects, I need photos and drawings of the following WWI armored cars: Armstrong-Whitworth, (1914) Isotta-Franchini, (1916) Sheffield-Simplex, (1914) Austin, (1916) Fiat, (1916) Packard, (1916) Peerless, and other armored cars used by the Russian Army.

It's possible that some of this information appeared in the following books: (1) *Russian Tanks 1900-1970*, Milsom, (2) *Tanks and other AFVs 1900-1918*, B.T. White, (3) *Encyclopedia of Armoured Cars and Half-tracks*, Crow and Icks, (4) *AFVs of World War One*, Profile Publications, (5) *War Cars*, Fletcher, (6) *War Machine #31*, (7) *World War I Album*, Gallery Books, (8) *War Cars, British Armored Cars in the First World War*, Unipub. Help me please! Major Models, J.A. Pivkin, P.O. Box 2451, Penza 440018, RUSSIA. (I am going to do reviews of both of Mr. Pivkin's models which I am going to submit to "Boresight", but in short the Mgebrov-White is excellent, and the DAF M39 is a good model; both are well within the skills of the average modeler, and are recommended. -ed)

1/35th brass gun barrels. I just received the latest list from Michael Dobiesz of his great line of brass replacement barrels in 1/35th scale. He is now up to fourteen American subjects, thirty-five German, one French, one Italian, five British, and nine Russian barrels, along with four resin accessories including a campfire that glows (AAA batteries not included). It would be well worth your time to write or phone Mike for his latest list, the barrels really do look good on a model. Michael R. Dobiesz, 249 Greenbriar Townhouse Way, Las Vegas NV 89121, or call 702-435-4832 /Fax 702-434-6593. -ed.

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GREAT BRITAIN

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