

A CLASS APART

Despite its primitive, boxy design the Dorchester had high aspirations when it first appeared in 1941. David Fletcher profiles the lofty Command Vehicle and other front-engined variations on the AEC chassis theme



The AEC 6x6 Armoured Command Vehicle Mark I, shown with two cable reels on the nearside front mudguard. Notice the folding frames for extension tents on the roof.

Probably the most famous front engine design of armoured car based on the Matador chassis was the Armoured Command Vehicle, nicknamed the Dorchester after the posh London hotel, of which a few survive. It was built on the AEC 0853 chassis, powered by a six-cylinder diesel engine rated at 95hp via a conventional four-speed and reverse gearbox with an auxiliary gearbox to supply a lower range. But whereas the regular Medium Artillery Tractor chassis also included a 7-ton winch with a towing drawbar at each end, these features were not included in the armoured version.

The ACV was armoured on a 12mm basis and featured full height doors at each side and the back. Behind the door both sides was a spring loaded roll of canvas which could be pulled out to form a roof for an extension, to be used when the vehicle was stationary. There were no concessions to style – the body was essentially a utilitarian box without any windows, except at the front for the

driver. Even the bonnet, such as it was, added nothing to the vehicle's glamour. Weighing (laden) over 12-tons such vehicles were rather slow and ponderous and liable to become bogged down in the desert despite having four-wheel drive. Inside there were seats for four officers, two lower rank wireless operators and a Coventry Climax generator in a compartment at the back.

POWER TO THE PEOPLE

The ACV came in two versions, Low Power (LP) and High Power (HP). The LP carried an ordinary No. 19 wireless set and a No. 19 High Power set and amplifier. There was even a Mark II version with an internal partition which separated the wireless operators from the rest of the staff. The HP which also had a No. 19 set, a 53 set, an R107 receiver and an RCA receiver and amplifier, was sometimes disguised as an ordinary lorry, with a canvas extension to the front of the body, a false roof and judicious use of paint. The idea was to protect its senior rank passengers from capture, although the extended nose seems to have lasted long after the need for it had gone because it was often used for storage and



Above: A view inside an Armoured Command Vehicle showing the crew seats and the working surface. **Right:** It's not so easy to identify the Low Power variant of the Dorchester. But this one, seen in the desert with some of the command crew posed, is probably one. The roof is cluttered up with furniture and camouflage netting.



The mock-up of the proposed second version of the Matador Armoured Command Vehicle. Notice how the front end resembles the bonnet of the 6x6 version.

carrying camouflage nets. Even so at least three of these vehicles fell into German hands, and were used by Erwin Rommel and his staff for the same purpose.

A photograph exists of another four-wheeled ACV on an AEC chassis. It has a long bonnet and a lower, more streamlined body design but we know nothing more about it and can only assume that it was a design which went no further. This, however, should not be confused with an interim vehicle featuring a Guy Motors armoured body on a Matador chassis, of which three were built according to the contract card. No photograph has ever been seen, but a drawing and a stowage diagram exists. It would seem that these vehicles were never used, if they existed at all.

Three other versions of the Dorchester are known. One was an Armoured Mine Layer which delivered mines, carried inside, down a chute to lie on the ground as it went along. However, leaving mines exposed on the ground was soon regarded as pointless

and since the AEC could not bury them it was adapted into an Armoured Mine Carrier. However, since this could be done as well by an ordinary lorry the type soon faded away and any survivors were modified into Armoured Command Vehicles.

DEMOLITION DUTIES

The Royal Engineers also used a version described as an Armoured Demolition

"The body was essentially a utilitarian box without any windows."

Vehicle. Its most striking difference was a hatch in the roof, and one directly beneath it through the floor, through which a mechanical pile driver could be operated so that holes could be made in roadways or bridges into which demolition charges could be placed. A pneumatic compressor was also fitted inside which could be used to operate rock drills, hammers and other tools. Whether they were ever used remains unknown. There is no record of them being converted to anything else but on the other



A version of the High Power Armoured Command Vehicle with an unusual nose on the front end.

hand, when the British Army was advancing it was not in the habit of destroying roads and bridges but repairing them. There was even an Armoured Personnel Carrying Vehicle although these were wired up as armoured command vehicles so that they could be easily converted, which they were since the British Army was not yet ready for an Armoured Personnel Carrier. Bodies for these vehicles were supplied by Weymann Motor Bodies and a total of 416 is quoted but whether this includes the Armoured Demolition Vehicles is not clear since we

don't know how many of these were made; various figures are given ranging from 30 to

45 vehicles but they are still listed in the *Data Book of Wheeled Vehicles* for 1945.

SELF-PROPELLED DEACON

Next up for consideration is the Deacon, a self-propelled six-pounder gun. None of which survive that we know of. They were built in 1942 and are referred to on the contract card as using AEC Mark II (armoured car?) chassis. They were issued for service in North Africa and once again the AEC Matador 4x4 chassis was used.



Above: The Armoured Demolition Vehicle version of the Dorchester showing the roof hatch through which a pile driver could be operated.

Right: The Armoured Mine Layer variant identified by the fact that someone has helpfully written ML at the front. This type was never developed.



Above: A rear nearside view of a Deacon painted in camouflage colours. Notice the narrow driver's cab and the huge shield for the gun, almost a turret but open at the back and on top.

Left: A front offside view of an AEC Deacon, although the driver's door is missing.

Although similar at the front end to the ACV the cab was only half width and there was an ammunition locker at the back. It is not known who made them, only AEC is mentioned on the contract card. The main business of the Deacon was to get the new six-pounder gun into the field, on a mobile mount as quickly as possible. The gun, on its field mounting, was located behind a tall shield on a rotating mount so that it could fire over a substantial arc, albeit not including the cab. However, mobility was a bit dubious – like the ACV the Deacon weighed around 12 tons and was limited to a top speed of 19mph (30km/h) with inevitably a tendency to become bogged down in soft sand or mud. It was also rather on the tall side for an anti-tank gun. Although some sources say that it performed very well in North Africa it is difficult to find any accounts of it being used, although the *History of the King's Dragoon Guards* states that 234 anti-tank battery, equipped with Deacons, was attached to them for a while in Tunisia and in the end, when the fighting

in North Africa was over, most of them were sent to Turkey for service with the Turkish Army. If any survive, that's where you are likely to find one.

The official name for the Deacon was the Carrier AEC, 6 Pounder Mark I and 150 are said to have been built. The only variant we have any record of was one that was used as a flail dynamometer which served in the UK. It had a tall armoured body at the back which contained a Ford lorry chassis,

contract (although some say a conversion). These looked a bit like a Deacon, as one might expect, without the gun mounting and 25 are said to have been built on the AEC Matador chassis, the bodies being assembled by Normands Ltd. Behind the armoured cab was a low sided tray body which was supposed to carry replenishment ammunition. Boxed 105mm rounds are mentioned in an early contract, which suggests the M7 Priest. The subsequent intention seems to have been to use them in conjunction with batteries of self-propelled

guns, Sextons, in which case the ammunition would have been 25 pounder rounds. Evidence that they were

ever actually used is difficult to find as this sort of duty was normally carried out by tracked vehicles or ordinary lorries if the ground wasn't too bad. But photographs of ammunition replenishment are rare, so anything is possible.

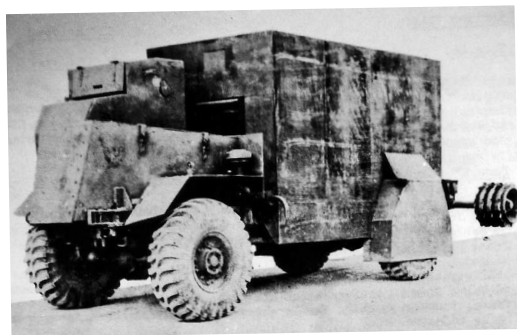
The next vehicle, a giant by British standards, used the 6x6 AEC chassis and was essentially a stretched Matador. The Type 0857 was powered by an A196 diesel engine, a six cylinder unit rated at 150bhp

“The entire vehicle measured 26ft from front to back, more than twice as long as the four-wheeler.”

complete with engine, gearbox and rear axle which stuck out at the back and was fitted with a number of rotating discs onto which various flail chains could be fitted for testing. It was only ever a research vehicle, not a type used in service.

AMMO CARRIERS

Finally we should record the existence of what were known as Armoured Ammunition Carriers, an extension of the Deacon



Above: The unusual Flail Dynamometer, converted either from an AEC Deacon or an Armoured Ammunition Lorry although it definitely used an AEC Matador chassis.

Right: The AEC Armoured Ammunition Lorry was based on the Matador but developed from the Deacon. Were they ever used?



but driving through a regular four-speed and reverse gearbox and two-speed auxiliary with drive to the rear bogie. It offered the option of selecting six-wheel drive by engaging the front axle when conditions required. The bonnet was long enough but the body was enormous, although somewhat lower than on the four-wheeler. The entire vehicle measured 26ft from front to back, more than twice as long as the four-wheeler and fully laden weighed 19 tons.

Despite the fact that the driver had a good view ahead, when the armoured flaps over his windscreen were open, this leviathan must have been difficult to drive. It was armoured by Birtley & Co, the armour still being 12mm thick. The rear was divided up into compartments as before although the total crew was only eight, two of whom sat in the front cab while two more were wireless operators. There was a Coventry Climax generator at the back and a ventilation plant. Again there were Low Power and High Power

versions and all told 150 were built, 50 LPs and 100 of the HP derivative. Despite the fact that they first appeared in 1944, photos of them in service are rare compared with the four-wheelers. We know of one seen with 11 Armoured Division in Germany and two with the Czech Independent Armoured Brigade. A rather tatty one was acquired for the Tank Museum but nobody was interested in it so it was disposed of, but where it went after that I don't know. There was also a Dinky Toy version at one point which is a bit of a collector's item these days. The chassis from some of these ended up as civilian breakdown lorries after the war. There was also a prototype Heavy Artillery Tractor, partly armoured, on an even longer 6x6 chassis, which had an armoured crew compartment, to seat eight men, directly behind it. It is said to have been intended for a special role but it is not

clear what that was although it has been suggested that it was planned as a tractor for the huge 32 pounder (94mm) anti-tank gun, but we are unable to confirm this. Since the gun was not ready by the time the war ended and was not proceeded with afterwards, neither was the tractor.

OLD FLAME

There were also two mobile flame-throwers on AEC 6x6 chassis. One by GJ Rackham and by the Petroleum Warfare Department was known as the Heavy Pump Unit. Power for the Mather and Platt pump came from a Napier Lion engine and could deliver flame fuel at 750 gallons per minute. A smaller projector on a two-wheeled mount was also carried. One source claims that 25 were built, but this is impossible to confirm and in any case the thing was never used in action nor even taken into military service

Below: The big AEC 6x6 Armoured Command Vehicle seen from the right hand side. They seem to have been used in service but were rarely photographed.



as far as we know. That said, it is featured in the AEC wartime publication *Contribution to Victory*.

Rackham's rival, Reginald Fraser of The Lagonda Engineering Company, also produced a flame-thrower on the AEC 6x6 chassis. Known as the Mark IA, Heavy Cockatrice six were built for service with the RAF. Using carbon monoxide as a propellant it had a range of about 100 yards from a rotating projector and also carried an anti-aircraft mounting of two light machine-guns in an open compartment at the back. It is said that by the time these were completed the threat of invasion was almost over.

Just to round this story off, in 1966 Royal Ordnance Leeds built a prototype Armoured Command Vehicle on an AEC Militant Mark 3 chassis. Given the serial FV11061 it was 6x6 of course, powered by a 226 bhp AEC six-cylinder diesel coupled to a six-speed, two ratio gearbox. Unusually for a British vehicle it was left-hand drive, the driver sitting behind a prominent bay window arrangement at the front with a commander's position alongside him with a forward facing window and a large roof hatch above his head. Otherwise the armoured steel body was plain with no windows but well insulated and air conditioned inside. There only seems to have been one door, on the right side of the vehicle, fitted with what looks like a concertina corridor connection as on a train, which would appear to connect up with an adjacent vehicle. No more were ever built. Today, of course, a field commander has to use the cramped conditions of a modified combat vehicle. ARMED AND DANGEROUS



Top: The massive AEC 6x6 Armoured Gun Tractor which is thought to have been selected to tow the big 32 pounder anti-tank gun. It was never developed beyond the prototype stage.

Above: The post-war AEC Armoured Command Vehicle seen at an FVRDE display in 1966. You can just see the concertina like 'corridor connection' on the right-hand side.

Left: The AEC Heavy Pump Unit, a devastating mobile flame-thrower on an AEC 6x6 chassis, shown here giving a demonstration of its powers.

Below: The Cockatrice Mark IA which was built for the RAF on the AEC 6x6 chassis. A Spartan looking vehicle but note the two machine guns at the back for anti-aircraft use. They were never used in action because the Germans never landed.

