

Gun Trucks and Convoy Escorts

Historical Background

Gun trucks were first heavily used by the US Army in Vietnamⁱ. Here the difficulty had been escorting convoys of up to two hundred vehicles through countryside invested by guerillas. Initially the convoys were escorted by Military Police units with M60 armed M151s. This however proved unsatisfactory, mainly as the firepower was too limited but also as the MP units regarded escorting as a task and they did not have the co-ordination with the escorted vehicles. Even when Commando V100 vehicles were provided for the role they still did not meet the requirements of the escorted vehiclesⁱⁱ.



Illustration 1: Very early M35 gun truck of the 442nd Transport Company in Vietnam with an M2HB rear and an M60D forward. It had a double wood walled rear compartment with the space between them packed with jerry cans of water, personal gear and sandbags. The cab has had armour plate added.

In some areas with the slow speeds achievable on poor roads, M113s were used for escort duties. On better roads however the speed of the M113 meant the convoy was reduced to that of these escorts. In addition in some areas there were simply not enough M113s were available to escort.



Illustration 2: A number of early Vietnam gun trucks used quad mount M2HBs originally developed for the AA role. These gave a vast amount of firepower at the expense of protection for the gunner. Some of these were actually not part of the Transportation Corps but were artillery units helping out the convoy escorts.

ambush sites and pouring on fire. Initially again based around the M35 2 1/2 ton truck these were quickly upgraded to 5 ton trucks as the weight of the increased armour put such a strain on the vehicleⁱⁱⁱ.

In addition to the trucks a number of gun jeeps based on the M151 were used. These were often used by commanders allowing movement up and down the convoy

The US Army's Transportation Corps' 8th, 48th and 500th Transportation Groups found that they needed some form of organic escort vehicle. Initially the escort vehicles were M35s with a M2HB in a ring mount and fitted with an armoured cab.

By 1967 improved gun trucks were created locally, these were basically armoured boxes with multiple scrounged machine guns that would travel with the convoy before rushing to



Illustration 3: Unusually armed M151 of an unidentified unit in Vietnam with an XM174 grenade launcher. A number of these were reissued to the 174th Military Police Brigade in 1996 and the 260th Military Police Brigade in early 1997 as demand exceeded the supply of Mark 19s. Both of these units were still using the M151 at this point. At least two such M151s later found their way into marauder companies (one in the 5th Division and one in the 1st Cavalry Division).

Created for the Twilight 2000 RPG by James Langham

like a mother hen. There were actually often more gun jeeps than gun trucks in truck companies although they rarely had the publicity that their larger siblings did as they were usually modified less and were therefore less noticeable. Their lower firepower (usually a single or at most twin machinegun) and the usual lack of flamboyant paint schemes due to their smaller surface area also contributed to their slipping under the public radar.

The usual ratio of upgrades to gun trucks was about 10% of truck strength^{iv}. This meant that already a unit was at 90% of capacity and when it is considered that the gun trucks used more crew than a normal truck this reduced personnel (including relief drivers) and therefore unit performance even more. This combined with high wear and tear on units (and crews) often resulted in only 60% of trucks being available for transporting supplies and even this was only achieved by the use of vehicles that were marginal and would not have been used outside a war zone.



Illustration 4: Here a tribute gun truck shows the use of ammunition cases as extra belly armour. Note the stowage between the two walls of armoured plate.

Another threat in Vietnam was the use of mines and explosive devices in the roads. These were more of a threat to gun trucks with their armour against small arms fire although the RPG2 and later RPG7 were always a threat plus the occasional use of the DShK 12.7mm heavy machine gun. Many trucks armoured the floors with sandbags or filled ammunition tins^v although these were only of limited effectiveness in saving the crew and no use at all in protecting the vehicles suspension^{vi}. They also further increased the load of the vehicle, straining the suspension and engine even more.

“Sandbags are very heavy, a cab requires about 15-16 sandbags, whilst the cargo bed requires over a hundred. These weigh about 40 pounds each. That quickly adds up to nearly three tons (this weight increases by approximately a third when they get wet). In addition unless protective measures are taken when used as a floor they quickly wear through requiring frequent replacement and getting sand all over the protected area.”

“Tactical Lessons for Gun Truck Crews” US Army Transportation Command 1999

Eventually standardised kits of armour using steel plates and armoured glass were developed in the States and shipped to Vietnam. These were however not popular (although they were used) and units continued to develop their own alternatives using locally fabricated parts often mixed with elements of these kits.

In 1968 the most heavily armoured of the gun trucks appeared, this mounted a heavily stripped M113A1 on the cargo deck of an M54. This required the removal of the engine, suspension, tracks, wheels, transmission, fuel tanks and drive train among other unnecessary items (making getting it in the cargo deck an interesting exercise in itself!). Most of the M113s were fitted with an ACAV kit for the M2HB although most did not fit the shields on the M60s for increased visibility. Top heavy and giving the truck engine and suspension major difficulties these were difficult to drive but gave good protection for the crew.

After Vietnam the US Army retained only a single gun truck “Eve of Destruction” which was stored in the US Army Transport Corps Museum^{vii}. The remainder were passed to the South Vietnamese, scrapped or converted back to ordinary trucks. With planning now concentrating on fighting conventional wars in Korea or Europe, the doctrine of the gun truck and the lessons learned were allowed to die.



Illustration 5: Many National Guard MP vehicles in the early days of the fighting were armed only with the crew's personal weapons. This M151 of the 163rd MP Battalion arrived in Germany in February 1996 but only the unit only received enough heavy weapons for one in four vehicles. This deficiency was finally only corrected in March 1997. (Department of the Army)

By 1995 the role of convoy escorts had returned to the Military Police who were equipped to deal with this role in smaller wars or conventional fighting. These used a variety of vehicles depending on the threat level. The commonest vehicle was a HMMWV armed with an M249 or M60 (occasionally an M2HB, M240 or Mark 19). National Guard units (generally those non-roundout units) sometimes however used M151s (these usually mounted M60s). Supplementing these were occasional heavier units in armoured HMMWVs^{viii} or from 1994 M750s^{ix} (the 18th Military Police Brigade in Germany had one company of each of its two battalions, the 93rd and 703rd equipped with left over M706s).

In Afghanistan, the Soviets also discovered the need for gun trucks with convoys coming under ambush in the mountainous terrain. Initially the Soviets used BTRs as convoy escort vehicles with some use of BMPs and even in areas of high threat tanks. There was however quickly discovered a problem, namely the difficulty that the Afghans fired down from the hill tops where the Soviet vehicles were unable to elevate the guns of the armoured vehicles against. As a result convoys often used ZU23-2 on Kamaz trucks covered with a tent as disguise. This allowed firing at the hill tops but did not provide any protection for the crews. Other attempts to provide support included the occasional use of ZSU23-4 anti-aircraft vehicles (these having no role in the fighting) and the mounting of AGS17s on pintel mounts^x



Illustration 6: A typical armoured cab HMMWV with improvised armoured rear compartment with issued gun shield of an unknown unit. US Army

Doctrine

Pre-Vietnam the doctrine for ambushed convoys was halt in the road (expecting verges to be mined), to dismount, take cover and return fire. If necessary the troops were trained to assault the enemy position to fight their way out. In Vietnam this proved disastrous as this played into the Viet Cong hands.

From this the doctrine of driving straight through the ambush evolved (with assistant drivers firing the machine gun if fitted^{xi}). As gun trucks became more common the tactic became the ordinary

US Army Gun Truck Armour Package Levels

US army Gun Trucks were classified into different protection levels due to the wide variety of different systems used.

Level IV

This was non-metallic armour such as wood. It was very uncommon but was sometimes used if no armour plate was available.

Level III

This level armour incorporated extra armour to protect the cab only. The glass was not armoured although a number did provide armour plate with vision slits. In August 1997 this category was further subdivided.

Level IIIA

This was used to classify units that had level III protection to the cab only using improvised armour.

Level IIIB

This was level III protection to the cab only that was achieved by the use of an issued upgrade kit such as the Cadillac Gage Modular Crew Protection System (MCPS) level 1.

Level III Plus

This was any of the above protection levels with a gun shield (either issued or improvised) added.

Level II

This was similar to the level II package but also incorporated ballistic glass to the armour. It was also subdivided in the same way from August 1997.

Level I

This was the highest level of protection, it incorporated all of the above plus added protection against under vehicle explosions.

It is with noting that in US practice the armouring of the cargo bay was not included in the armouring package designation (mainly as it was designed for all vehicles not just gun trucks).

vehicles continued on while the gun trucks rushed to the scene of the fighting and won the fire-fight by sheer weight of fire with their armour protecting them from the ambushers.

What is often not understood when it comes to the planning of operations involving gun trucks is the need for forward planning of supply operations, this was usually twenty four hours ahead of the event to allow loading, vehicle checks, route planning and briefings.

During the Twilight War doctrines for the use of gun trucks were never formally adopted by either the United States or Soviet Union. Differences in terrain and even equipment across the theatres of fighting were so vast as to make any such overall doctrine redundant. As a result doctrines and equipment tended to be theatre based. These are noted below under the relevant sections.

US Armament



Illustration 8: Detailed study of an M134 mounted on a gun truck belonging to the 416th Transportation Company in Poland March 1997. Taken when the truck was converted it has a number of interesting features, the weapon is mounted in a very unusual way being pivoted at the top not the more usual base making sighting harder, the truck has an armoured windscreen and cargo compartment but unarmoured cab and the paint scheme shows a white star not the authorised black star. (US Army)

Gun trucks tended to be armed with whatever their crews could scrounge. Standard weapons initially were machine guns, mainly M60s as few M240s were available to non-infantry units, although a minority of M249s were seen. As the war continued foreign weapons were often scrounged or traded for with common options being DshKs, NSVs and PKs (also popular were German MG3s or in Iran and Mexico copies of them due to their high cyclic rate).

Grenade launchers, usually Mark 19s but occasionally captured AGS17s or more rarely the older XM174s could be found.

Occasionally seen were miniguns, usually the M134 in 7.62mm or occasionally the XM214 in 5.56mm. These were not common but liked for their firepower in an ambush. Their ability to eject rounds that would cause a stoppage in a conventional weapon was also liked.



Illustration 7: A typical mounting for a pair of M60s on an unknown gun truck taken in Europe in late 1997. Note the added gun sight on the right weapon. It was common for such twin weapons to load only the primary weapon with tracer (unless testing for accuracy) in order to not distract the gunner. The truck looks unusually well maintained so is probably fresh from a base depot. (US Army)

"We had an amazing amount of firepower on our truck "Chainsaw Killer." We had scrounged four miniguns to replace the 60s we had up to that point (Max had done some deals with an air cav unit that had taken them from damaged OH58s in return for some things they were desperate for that we liberated from convoys we were escorting). When they opened up it was deafening, imagine being in a box with four giant chainsaws ripping through steel, that's what it was like. There were a few other drawbacks, it was annoying when it was your turn to drive as the brass was bouncing off the roof of the cab and often fell down the windscreen obscuring your vision. Also after an ambush we needed snow shovels to pick up all the brass in the back. We all loved the firepower though and the old girl must have saved our lives many times over in ambushes.

PFC Jacob Cohen

416th Transportation Company

"Professionals Talk Logistics" Callum Drew, Military History Press 2022

One truck belonging to the 416th Transportation Company “Chainsaw Killer” holds the record for the most heavily armed gun truck, carrying a twin linked M134 mount at the front and a further M134 on each side^{xiii}. Very rarely heavier weapons could be found, often recovered from wrecked armoured vehicles or helicopters.

“We were supposed to have been issued an M16, instead I got given an M231 with no stock and sights that wobbled every time I fired on full automatic – which I had to do as there was no selector lever! It got lost in action pretty quickly after I won a para-Minimi in a poker game. The one time we were hit bad and dismantled it came in handy. You know, thinking of that time, none of us was carry a '16, “Doc” had an Uzi he had scrounged from a German, “Ghost” had an AK and Ripper had a HK CAW and a sawn off M79. ”

PFC Teri Davies, 416th Transportation Company quoted in *The M16 Family*, Osprey 2033

Drivers on US trucks were issued with the M16 rifle (in either the A1 or A2 versions). US gun truck crews frequently carried an M203 which was an ideal weapon for convoy crews with its ability to fire explosive rounds or smoke (these were issued to transport units at a scale of 4 per platoon). Some drivers traded to obtain shorter weapons that could be carried and used more easily in the confined cabs, shotguns were a common choice but the occasional M177s, captured AKS74Us and even the odd M3A1s could be found. The most widespread choice of short weapon was however the M231 with its higher cyclic rate of fire and very short length making it a popular desperation weapon. This was often the weapon that was actually issued in lieu of an M16 in Europe from late 1997 onwards.

Some trucks followed a British SAS trick of mounting smoke grenade dischargers on the front bumper of the trucks. These were triggered by the drivers while disengaging from heavy opposition. Another form of protection was the practice of drivers acquiring a second set of body armour to sit on – one driver commented it may not do that much good when striking a mine but considering what was at stake felt it was worth the discomfort. More practical drivers placed them under the seat to achieve the same effect. It is worth noting that this practice was not restricted to gun truck crews.

Soviet Armament

Soviet gun trucks were usually less varied in armament. In most cases the vehicles used standard Soviet weapons although it must be said they were often not ones that had been issued to the unit (or even types it should have had). Captured weapon use was much rarer and usually officially discouraged. Heavier weapons were more common however than in US use, ZU23-2s were frequently mounted on



Illustration 10: A typical Soviet gun truck in Iran with rear pintel mount HMG. Note the canvas covered area used as a crew living quarters common on Soviet vehicles. (Pravda)



standard trucks to create quick and simple gun trucks (which had the benefit of quick conversion back). Vasilek automatic mortars were also sometimes used.

Illustration 9: Soviet truck of an uncertain type mounting a ZU23-2. Captured from the 146th Motor Rifle Division in Iran in late 1998 by the US 3rd Marine Division. (USMC)

Perhaps the most bizarre vehicle mounted weapon on a Soviet convoy escort was a BMP1 with the damaged turret removed and a frame with four scrounged helicopter rocket pods welded to a mechanism that allowed limited elevation and depression and allowed

them all to fire straight forward from under armour. When an ambush was encountered the vehicle would be driven forward and a salvo fired at the ambush position through the light screen cover before the vehicle withdrew to reload. There is an example of such a vehicle in the Aberdeen Proving Ground in the US^{xiii}. Initially tentatively identified as the BMP1M1999, it appears that this was not a standard design but a field expedient conversion. The designation was rescinded in 2001 but still sometimes is used for variants with different armament configuration.

Crew weapons were usually standard AK series rifles (usually although not always with a folding stock) although some carried shortened versions (mainly the AKS74U). A number of lower readiness units however were less well equipped, these tended to quickly acquire better weapons (often unofficially trading a few items that fell off the back of the escorted lorries). Surprisingly one of the more popular choices was the APS pistol, especially among ZU23-2 gunners as it could be carried on the belt (in its shoulder stock holster) ready for rapid dismounts.



Paint Schemes

Normally military vehicles are painted in colours designed to hide the vehicle using camouflage schemes that are appropriate to the area operating in. Gun trucks however are slightly different as they are road bound and not in a real position to hide. In addition once the vehicle is in sight of the enemy the doctrine is based on massed firepower which clearly identifies the gun truck for what it is. As a result crews are more likely to use a paint scheme that differentiates their vehicle from their charges they are escorting^{xiv}.

Illustration 11: A good example of a flamboyant paint scheme seen on a gun truck of the 184th Transport and Escort Battalion of the 184th Infantry Brigade operating in Virginia in late 2001. Not obvious from this angle is the ingenious internal rail that allowed the weapons to be moved around and locked into position. (Free Virginian Magazine)

The CIVGOV 12th Transportation Group's 841st Transportation Support Battalion (Provisional) attached to III Military Region has even taken this a stage further. As they are tasked solely with escorting the convoys of the group they have decided to embrace the concept of the “Knights of the Road” and each truck is brightly painted with

“At one point we actually ended up trading and getting an M167 that we mounted on the back of a 5 ton truck – Steve had shown me a picture of his dad in Vietnam with a quad fifty that had given us the inspiration for it. We thought that that should give us the edge. Unfortunately it didn’t! First we struggled to get ammo and while it had a lot of firepower it also attracted a lot back. After we lost two gunners we tried to create an armoured shield for it. We never got it quite right and we lost ‘Tanner’s Unwilling Killers’ to an RPG strike before we did.”

Sergeant Deborah Walters

464th Transportation Company

“Professionals Talk Logistics” Callum Drew, Military History Press 2022

heraldic symbols^{xv}.

Soviet (and by extension Pact) units however did not tend to paint the vehicles in anything other than standard schemes. This is mainly due to the lack of dedicated gun trucks and their temporary conversion. Given the fact that camouflage patterns could vary considerably, this is less apparent when looking at collections of photos of Soviet gun



Illustration 12: A good study of an unknown convoy escort group showing the flamboyant paint schemes in use. It is of an unknown unit in Poland in 1998 (Photo courtesy of Harold Black)

trucks. It is notable however that a number did acquire graffiti style slogans that were more humorous and less patriotically based after exposure to US examples!

Europe – NATO



Illustration 13: Graphic illustration of the need for convoy escorts taken during an ambush on the I-293rd Infantry of the 76th Indiana Infantry Brigade of the 38th Infantry Division near Sulechow in October 1997. Note that the unprotected gunner on the HMMWV is already a casualty. (ABC)

The need for convoy escorts in Europe was not high in the initial stages of the war. Once NATO troops advance into Poland however convoys became subject to ambushes on more frequent occasions. As a result the US MP units were unable to provide enough cover and the transportation units again started to develop their own solutions that were very similar to those evolved in Vietnam. By August 1997 the need for gun trucks had resulted in the deployment of a number of standardised armour and armament kits to supplement the large number of local designs (it had been intended that these would replace the locally developed kits but this was never even close to being achieved). V US Corps went even further creating the 1011th Convoy Escort Group



Illustration 14: A surprisingly well escorted UK convoy of a Land Rover Wolf (leading) and a Land Rover 110 being escorted by two CVR(T) Scimitars. The reason for this high level of escort is that the convoy included the newly rescued King Charles III (MoD)

(Provisional), a battalion-sized group tasked with escorting the Corp's logistical trail (see Appendix 1). By 1999 the need for convoy escorts was even higher as the marauder threat increased. Many units formed gun truck equipped units not just in this role but also as surrogate APCs. A number of gun jeeps were also used in the raider role by Marauder Companies. Initially these were unarmoured but many opted for the increased protection of the armoured versions at the expense of some mobility.

British units did not use gun trucks but did use a variety of light vehicles for escort duties. The most common being the Land Rover WIMK. This was a Land Rover with an M2HB and one or more L7A2 GPMGs (occasionally an L7A2 and L4A4s respectively). Used in both a reconnaissance role and as a convoy escort, these were popular with their users for their reliability and mobility (which was much better cross country than a gun truck). These were supplemented by Ferret Scout Cars, Fox Armoured Cars and even the CVR(T) series of light armour. Occasionally wheeled Saxon APCs were seen

in the role as were a number of Saracen APCs from units of 38th Infantry Brigade deploying direct from service in Northern Ireland.

Canadian, Dutch, German and Danish units also tended not to use gun trucks but did make extensive use of gun jeeps (or equivalent) (usually unarmoured) supplemented by light armour (here the Canadians with their recently purchased Grizzlies and Cougars quickly deployed to Europe in late 1996 had the advantage with wheeled light armour although it was in short supply).



Poland – Pact

Pact units in Poland made limited use of gun trucks for convoy escorts. The main escorts were BRDMs and BTRs. In addition motorcycle (often with sidecar) outriders and soft-skin vehicles were used to scout ahead. When trouble was expected then some of the trucks would have heavy weapons (usually the ZU23-2) added. A BMP-T or BTR-T might also be added

Illustration 15: Canadian units frequently pulled the unsatisfactory M113 C&R Lynx from storage and used it to escort convoys where the poor cross country performance was not a problem. This example photographed in mid 1997 from the 1/22eme Infantry (the Vandoos from their French name) shows its good condition well. (The Times)

in these cases. In areas where a major attack was expected then a fake convoy (heavy in escorts) would travel with a reaction force in helicopters and/or armoured vehicles would follow not far behind. By the start of 1998 this force was frequently cavalry and by the end of the year the tactic was rarely used as the truck losses to the fake convoy were regarded as too high despite their success. A specific armoured vehicle was even developed for convoy escort duties, the BMP1M1998. The history of this vehicle can be found elsewhere (in the article on BMP1 variants).

An area that is frequently forgotten when discussing convoy escorts in Poland is the use of railway convoys. This is outside the scope of this article and will be the subject of a future article.

Franco-Belgian Use in Holland and the Rhineland



Illustration 16: VAB belonging to the French 17th Armoured Division engaging Dutch resistance fighters in southern Holland July 1999. not all the sections of the gunner's shield have been fitted. (Le Monde)

French troops in Holland did encounter a number of difficulties with convoys. As a result they frequently used VABs as convoy escort vehicles. These regularly were upgraded to mount an M2HB with a cupola similar to that of the M113 ACAV. Many also mounted two or more AA52s (or very occasionally FN MAGs) sometimes with smaller gunshields at the rear hatches. Unlike most nationalities, the French regularly used a dismounted element, usually pairing a standard VAB with the dismounted element with one of the gun versions^{xvi}.

Dutch resisters tried various means to counter the VABs, anti-tank weapons were limited but very effective when they were available. Careful planning and considering French options allowed the occasional success with pre-placed explosive devices (often from artillery shells that

had failed to explode)^{xvii}.

In the Rhineland there was less difficulty as the area was quickly depopulated and the French used far less restraint if a convoy was attacked. Here helicopters were often used to attack anyone near the site of an ambush.

Yugoslavian Splinter States

A shortage of modern armour in the former Yugoslav states resulted in the use of armoured trucks as surrogate APCs and tanks by all the factions. Due to the nature of the fighting with much being conducted by local militias, outside of the Soviet and US forces few convoys requiring escorts existed. In addition with the highly ethnic nature of the fighting few guerilla forces existed to create ambushes behind the lines. As a result the vehicles were little used for convoy escorting by the various factions. Those convoys that did exist were escorted by whatever forces were available, often the unit requiring the supplies.

Soviet units tended to follow their standard doctrine of using BTRs and similar vehicles as escorts with BMPs and even tanks in high threat areas. Interestingly these tended to be attacked even in areas that the

locals regarded as secure. Soviet troops drew the obvious (and usually correct) conclusion from this and tended to be distrustful of local advice and support from either civilians or local forces.

The troops of IV US Corps were short of armour and as a result made some use of the gun trucks that were often obtained from their Serb allies (or more often) captured from other factions.

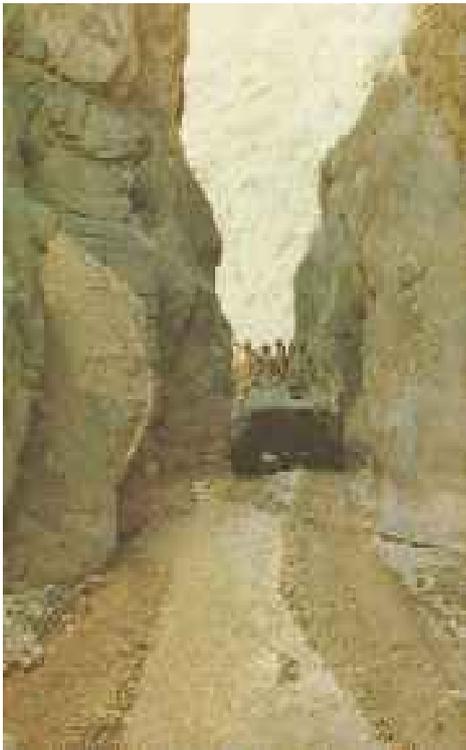


Illustration 18: A vivid illustration showing the difficulties faced by the Soviets in the Zargos mountains. Off the main routes infantry dismounts often had to precede the vehicles to spot mines. (TASS)



Illustration 17: Belgian gun jeep in Holland March 1999, the censor has deleted the insignia on the driver but the red beret at the rear identifies this as the Para-Commando Regiment. (Le Monde)

“We actually came to an accommodation with the Croats who would let us know when a Soviet convoy was coming through. In return if we hit it and captured anything we would leave some in a barn near the front line, withdraw from it, let them make an attack on it and take it before we would make a counter-attack retaking it as they fled. It sounds a bit dramatic but it meant that any Soviets would see them recovering the stores from us...”

Karl Johansen, CIA Operative in Yugoslavia 1997-2002 quoted in “Secret Warfighters” Agency Books 2025

Iran – Soviet

In Iran the Soviets faced a different threat to Europe, in the south and east of the country, more open sight lines on flatter terrain allowed the use of normal armoured vehicles (in particular BTRs and BRDMs with the occasional BMP or tank) while the Zargos Mountains gave the same challenges that had plagued them in Afghanistan. Here the commanders utilised the same answer as in Afghanistan with ZU23-2s (or occasionally other weapons) being mounted on trucks. As air power reduced a number of ZSUs of all types became available and were used.

One type of attack that had not existed elsewhere was attacks by fanatical Iranians carrying explosive charges throwing themselves at trucks (especially tankers) and detonating the explosives. Difficult to counter, convoys quickly started to carry second drivers armed with short barrelled assault rifles to deal with this threat. Experiments were made locally with mini-claymore type devices mounted on the vehicle sides but these were unsuccessful. A sergeant, Ivan Dogavich wounded in action developed a possible solution using a Kalashnikov type action using a 12 bore cartridge. This weapon was rushed into production by Saiga as the AKSU-12. Despite records showing none were ever sent to Iran before the factory was destroyed, the weapon has turned up in Iran^{xviii}. It has been hypothesised that these were either pre-production versions or locally made versions. Very popular in their intended role they had a vicious recoil due to their short barrel. A bull pup version was allegedly under development when the nuclear strike destroyed the factory.

KGB and GRU troops frequently dealt with attacks on convoys by reprisal attacks on nearby villages. Surprisingly many army unit commanders argued against this policy as they observed that frequently a guerilla band would launch an attack near a settlement that was actually loyal with the aim of turning the villagers against the Soviets.

Iran – US

Initially as elsewhere, MP units were responsible for convoy escort duties. Guerilla attacks however were a major problem, particularly as the fighting rapidly moved back and forth. Limited troop numbers also posed a problem although the high proportion of HMMWVs available to the light troops helped counter-balance this to a degree. As a result of these factors, CENTCOM had drastically underestimated the numbers of troops required for such duties. As an interim solution, locals were hired to act as convoy guards. These usually provided their own vehicles, usually Toyota pick up trucks or locally made copies. Details of these convoy guards can be found in the article on foreign troops.

Mexico

As is typical in civil wars improvised vehicles were common in Mexico. All factions used them as APCs broke down or were destroyed in combat. These were heavily used in the role of gun trucks and surrogate tanks. Used extensively by all factions were buses converted with armour and usually firing slits (plus often a cupola heavy weapon). These could carry a full platoon into a combat zone in relative safety. The downside was the resultant heavy casualties if the vehicle was destroyed. If used correctly as a combat taxi they were however satisfactory.

Mexican convoys at least during the initial invasion



Illustration 19: US Convoy from the 24th Infantry Division in Iran May 1999. Note the gun truck 4th from the end and the gun HMMWV in front of this. A further gun truck appears to lead but it is difficult to be certain due to the quality of the photo. (US Army)

on the eastern front were based around heavy expected guerilla activity and as a result worked on large convoys of vehicles of at least a hundred supply vehicles supported by a battalion of infantry in APCs. These would take the supplies further forward than most armies would and commanders of the units being resupplied were then responsible for bringing the supplies forward. Planning had also allowed for the fact that there were many tractor trailer rigs in the United States that could be captured and used for military logistics. As a result three infantry battalions were converted to transport regiments, one for each of the invasion columns. These advanced behind the lead elements seizing suitable vehicles and forming them up into convoys to return south to fetch supplies. Once these tactics became known US troops started to booby trap or destroy suitable vehicles but by this point a significant logistics boost had been made.

In the smaller western front, the Mexicans changed the model slightly as this was initially intended as more of a diversionary front. Here the initial aim was to rush troops forward until they almost reached the limit of logistics support. At this point convoys would be formed at brigade and divisional level which would be thrown forward almost to the front line laager positions. From here battalions and brigades would again use local transport to replenish before repeating the process.



Illustration 20: Mexican Army gun jeep acts as a rearguard against a Texan ambush near Brownsville spring 2000. It is armed with an M60. Note the girder welded to the front to cut wires designed to decapitate crew members. (Republican)

In both cases there are many instances of leading Mexican units pulling into petrol stations on the highways to replenish their supplies. Surprisingly these actually handed over receipts for the fuel taken although none were ever honoured after the collapse of the government (it has been speculated that none of these were even planned to be paid but were aimed at reducing civilian resentment and the risk of attacks on follow on units).

Despite these measures, the Mexicans after a number of bad experiences quickly found a need for convoy escorts as their vehicles were suffering large numbers of guerilla attacks at the end of a long logistics chain, mainly hitting one of the large convoys with a quick attack and then fleeing. The attackers were mainly guerilla fighters armed with light weapons. As a result the vehicles developed were very similar to those deployed by the Americans in Vietnam although with less belly armour. Tactical use tended towards attacking the ambushers and pursuing when they broke off. As a result jeeps were more popular than gun trucks although a number of trucks were converted to carry a dismount element and a single weapon station. Once the ambushers realised this their aim was often to break off into impassible terrain. To counter this cavalry were sometimes used by both sides.

Reprisals against locals were rare at first but the frustrations, particularly when the supply chain broke down after the nuclear strikes and breakout of the civil war resulted in many atrocities. Lest it be seen as one sided it must be stated that some guerillas were committing such acts from the start of the war (the racist Texian Legion being the best known example).

Continental US – CIVGOV

CIVGOV was desperately short of armoured vehicles as most of the units loyal to it were lighter infantry and support arms. As a result the gun truck was commonly used as a surrogate APC or fire support vehicle with convoy escort duties as only one of the roles it was required to fulfil. Almost any softskin vehicle could be and was converted into this role.



Illustration 22: Late model tractor unit showing the added low armoured box to the rear in addition to the gun mount on the cab roof. This photo was taken somewhere on Maryland in late 2000. (New Library of Congress Collection)

Interestingly one of the more successful types little used elsewhere was a tractor unit from a tractor and trailer unit. Despite the higher centre of gravity limiting mobility, they were popular as the large engine allowed for large amounts of armour to be fitted. Weapon fits were however restricted. Initially a single weapon station was improvised on the cab roof. The inadequacy of this was immediately apparent and soon a superstructure was added to the rear of the unit giving a small box capable of mounting more weapons.

During the evacuation of Maryland, the gun truck came into its own, many were stripped of some of their weapons (which were often fitted to unarmoured vehicles in the convoy) and used to carry high value stores as the armour protection was not common in CIVGOV vehicles.

Occasionally seen in CIVGOV units were a few National Guard M42 Dusters. These were usually not deployed to Europe or were ex-display vehicles brought back into service. While not suitable for war in Europe when used as a convoy escort they were highly popular for their firepower (although the crew were somewhat exposed to hostile fire). At least one World War Two era M16 half track with a quad fifty was refurbished and used in the same way by the 108th Infantry Division.

Continental US – MILGOV

MILGOV used gun trucks far less than CIVGOV as they had better access to armoured vehicles. In the convoy escort role however they were still prolific users after a number of bad experiences where convoys were massacred^{xix}. As a result a number of depots started independently to create gun trucks along the Vietnam model. More kits were available than CIVGOV had available as MILGOV had better access to stockpiles of equipment destined for overseas. These were however frequently modified to suit local conditions and few



Illustration 21: "Little Bo Peep" a gun truck of the 2nd/228th Infantry Brigade pictured as it heads a convoy leaving Maryland during the evacuation. Armed with a twin M2HB at the front and an M1919A4 on each side, the truck survived the journey but was later cannibalised for spare parts when it later broke down. (New Library of Congress Collection)



Illustration 23: A popular conversion of trucks was into surrogate APCs. This CIVGOV example belonging to the 184th Infantry Brigade (which due to its role as a former transportation brigade was strong in trucks but not armoured vehicles) and is pictured in Fort Meade in early 2000. Note that when used in this role a far less colourful paint scheme tended to be used as here. Also of note are the raised sides for increased head room (in some cases a small turret or pintel mount was added above this). Some conversions made by the unit incorporated storage racks or anti-shaped charge mesh screens on the sides. (Jose Loraes photo from a collection in the 184th Infantry Brigade Museum)

standard patterns existed.

While APCs were less commonly available than in units deployed abroad, MILGOV still had a sizeable superiority in the United States making them less of a priority. While most were deployed to Alaska and to counter the Mexican invasion there were still sufficient for most other areas (at least as many as the local logistic chain could support).

Continental US – non-government

Reproduction and tribute trucks were sometimes seen in the hands of re-enactors in the United States^{xx}. These were often pressed into service by both MILGOV and CIVGOV (as detailed above) plus assorted local factions and warlords.



Illustration 24: "Ace of Spades" New American M35 based gun truck operating in Arkansas. On the original photo the .50 gunner can be seen to be wearing a New America arm band. Note the lack of any other identifying insignia (the Ace of Spades" heraldry is unusual as New America discouraged any non-official looking items). This was typical of New American tactics in order to appear as more of an authority group. The truck has been fitted with armoured glass windscreens, armoured doors and rear compartment (note that this has firing ports for use in heavy threat environments with the crew using personal weapons). In the background the walls of a fire-base can be seen. This would date the photo to after 2005 when these were introduced by a hard pressed New American leadership in Arkansas. (New Library of Congress Archives)

Carl Hughes had identified the gun truck as a good vehicle for New America to use in the aftermath of Doomsday. In order to create these he ordered the creation of a kit that could be applied to easily available vehicles. In particular factories controlled by Hughes created kits that could be fitted to the M151 jeep (or a reasonably similar vehicle), HMMWVs, M35 and M54 trucks and tractor-trailers (these were a more generic kit that could be customised based on the actual configuration). These were then stockpiled at various locations in the United States



Illustration 25: Unusual photo of a New American gun jeep. Here the armour package has not been installed but the improved M2 weapon mount has been (not all the New American jeeps mounting the M2 had this fitted). Date and location are unknown. (Huntington Collection)

ready for the prophesied Armageddon. Most New American gun trucks saved weight by not protecting the floor as much as those used in Vietnam as mines were felt to be less of a threat. Operating in an environment where anti-tank weapons were limited, these gun trucks were a major threat to those attacking New American convoys. In addition some New American leaders ordered the running of night-time convoys through high danger areas that were composed entirely of gun trucks in an attempt to invite an ambush where the tables could be turned by high firepower. These became known by the crews as "blitz runs." One such run in South Dakota caused over fifty guerilla casualties for the loss of three wounded New American crew members (one of whom was injured when he fell as the truck braked hard!).



Illustration 26: Ezekiel Irving, a former member of the 500th Transportation Group in Vietnam and in 1998 an employee of Kinsley was quick to volunteer to help the fledgling Texan Republic. He is shown here in 2002 when he was commanding the gun truck "Lone Star Sue." (Kinsley Collection, University of Texas)

In Texas with a trickle of oil available the fledgling Texan Republic made efforts to create surrogate light armoured vehicles. Initially these were based around the easily available pick up trucks that were common in the area. Used less as convoy escorts and more as "technicals" they were a common sight in the fighting. With the oil starting to flow however a vehicle to escort the vulnerable tankers was required. A ranch hand, Ezekiel Irving who had served in Vietnam with the 500th Transportation Group as a platoon sergeant suggested that a modified version of the gun truck might be the answer. He proposed that each convoy should have two trucks that acted as both gun truck and maintenance and repair vehicles with the crew being composed of mechanics. Each vehicle would use a short box approach that allowed the rear of the cargo bed to be used to store spare parts and tool kits under a low armour plated compartment. Floors could remain unarmoured with the reduced threat from mines. While these were an ideal concept, there was a major problem for the Texans in that weaponry was in short supply, machine guns were initially replaced by small arms carried by the crews.

While only used occasionally as a convoy escort vehicle much attention has been focussed on "The Brady's BuMP." This was a re-enactors M3 half track fitted with



Illustration 27: The BMP1 turret being repaired prior to being fitted to "The Brady's BuMP" (Kinsley Collection)

the turret off a BMP1 on the newly roofed over cargo area and used by the 31st Texan Volunteer Infantry Battalion (Lone Star Rifles)^{xxi}. Used mainly as an AFV it was used occasionally in the convoy escort role for which as special grapeshot round was developed for the 73mm gun. It was eventually destroyed by a Mexican AMX13 in the fighting around Austin in mid 2001.

Korea

Neither of the Korean forces developed much in the way of gun trucks. North Korean forces were so short of mechanised transport that there was none to spare for this role.

South Korean forces tended to use HMMWVs (often locally uparmoured to what has become known as HMMWVK standard) as escort vehicles. These were usually armed with M249s, M60s, M2s or occasionally Mark 19s. These were not used for stand up fights but were intended only to provide enough cover for the escorted convoy to escape. These were crewed by members of the ROK Military Police many of whom were made of up older reservists tasked with the convoy escort role. To make up losses a number of M151s were brought back into service although these were usually unarmoured and armed with M60s.



Illustration 28: 956th Transportation Company gun jeep restored and housed at the Aberdeen Proving Ground (US Army)

US Troops in Korea were the largest users of gun trucks in that theatre with a mix of standard armoured HMMWVs and improvised gun trucks. The ratio of escorts to escorted was significantly higher than in Europe, probably due to the difficulties in identifying threats and the large number of North Korean infiltrators (or at least the high profile given to them). The US units were heavily enhanced with KATUSA (Korean Augmentation Troops US Army) who were South Koreans chosen to be attached to US units^{xxii}. In transport units these rose as high as 50% of the unit strength, enabling all vehicles to have a South Korean who could act as an interpreter^{xxiii}.

China

China saw the heaviest use of convoy escorts by the Soviets. Actual gun trucks were limited in use as the fairly flat terrain where much of the fighting occurred allowed the use of the normal escort system. Gradually however with the increasing Chinese guerilla activity the Soviets were forced to increase the number of troops on rear area security until three divisions were being used (in addition to KGB troops and two airmobile brigades for rapid response actions)^{xxiv}. In areas where convoys were attacked reprisals were made against local civilians. Unlike in Iran, few commanders objected to such actions as the populace was almost uniformly anti-Soviet.



Illustration 29: Typical Soviet gun truck mounting ZU23-2 belonging to the 767th Transportation Regiment in northern China, March 1997 (Journal of Soviet Military Studies)

UK

In the UK gun trucks have been very rarely used. The limited armed threat to convoys resulted in a more dual purpose vehicle that was already in service, the Land Rover WMIK discussed above. Heavier vehicles were comparatively rare. Occasional gun trucks were seen in merchant convoys but these were usually short box bodies with a crew armed with small arms (including usually at least one LMG/GPMG). They can really be best regarded as surrogate APCs using dismounts than gun trucks although a few used by merchant convoys in the marauder heavy Midlands were closer to the classic gun truck. Each of these was a unique design created by the local manufacturers and a variety of vehicles both civilian and military were used as the base.

Soviet Internal Use

In addition to being used as convoy escorts, a number of trucks were armoured and used as internal security vehicles. Here the main requirement was intimidation and protection was only really needed against small arms. As a result in contrast to the normal Soviet policy, steel plated armour was used over the whole vehicle and less emphasis was placed upon the need for high angled weapons. This practice did however change when they were used against insurgents in urban areas. Again no standard pattern was created by instead units locally modified the vehicles available to them.

Many were also used by KGB internal security units in a similar way.

A number of units returning home from the front brought armed trucks with them. These were frequently seen in the immediate post war era as mobile gun positions if the



Illustration 31: Proof that gun trucks were still in use as late as 2009 in the border skirmish between Russia and Ukraine. Here the gun truck has returned from the fighting and is being viewed by civilians. (Ukrainian Daily Press)

armament was fixed. Those with temporary mounts were usually returned to role of trucks (the initial Soviet mobilization plans had called up many civilian trucks and of the remainder many were called up to replace losses as the war progressed).



Illustration 30: 102nd Internal Defence Rifle Division improvised armoured truck operating in support of militia (police) troops. It is pictured in eastern Siberia in 2001. Note the firing ports in the side and the fold down driver's vision slit. The top gunner appears to have an RPK or RPK74 free held. Note the protection offered to the wheels a notable problem for such trucks. (TASS)

See also

BMP1 Variants for BMP M1998

Foreign Troops for details of US Convoy Escort troops in Iran

Convoy Rules for a typical example of orders issued to convoys.

Appendix 1: 1011th Convoy Escort Group (Provisional)

Official organisation as of 1st January 1998 (items in *italics* are known to have been used but are unofficial).

Group Headquarters and Logistics (6 HMMWVs, 1 M577A1, 3 M113A1s)
Signals Squadron (4 HMMWVs, 2 M577A1s)
Defence Platoon (6 HMMWV, 2 HMMWV FSV)
Medical Platoon (2 HMMWV, 4 M113A1)
Maintenance Platoon (6 M578s, 2 *M88A1s*, 6 5 ton trucks, 2 HMMWVs)

A Company (2 HMMWV, 2 5 ton trucks)
1 Platoon (6 HMMWVs, 6 uparmoured HMMWVs, 2 HMMWV FAVs)
2 Platoon (4 M113A1s, 2 HMMWVs)
3 Platoon (6 UH1, 2 AH1 2 5 ton trucks, 2 2 1/2 ton trucks)

B Company (2 HMMWV, 2 5 ton trucks)
1 Platoon (6 gun trucks – 5 ton)
2 Platoon (6 gun trucks – 5 ton)
3 Platoon (6 gun trucks – 2 1/2 ton)
4 Platoon (8 HMMWVs, 2 *HMMWV FSV*)
5 *Platoon (4 M706, 1 BRDM2)*

C Company (2 HMMWV, 1 M113A1, 2 5 ton trucks)
1 Platoon (6 gun trucks – 5 ton)
2 Platoon (6 gun trucks – 5 ton)
3 Platoon (6 gun trucks – 2 1/2 ton)
4 Platoon (8 HMMWVs)
5 Platoon (6 M750)

D Company (2 HMMWV, 2 5 ton trucks)
1 Platoon (6 gun trucks – 5 ton)
2 Platoon (6 gun trucks – 5 ton)
3 Platoon (8 HMMWVs)
4 Platoon (4 M113A1 ACAV, 1 *M163A1*)



Illustration 32: C Company gun truck pictured at some point in mid-1999 after returning to Fire Base Robinson after a mission. (Collection of John Fearn)

On arrival at Bremahaven as part of Operation Omega, official returns show the following strengths but unfortunately no organisational breakdown below battalion level.

Officers: 3

Warrant Officers: 0 (amended in a different pen to show 1)

NCOs: 12

Other ranks: 42

Dependants: 12

Foreign nationals: 15 (9 German, 2 Polish, 1 Canadian, 2 Russian, 1 unspecified)

Vehicles: 1 x M113A3, 1 x M113A1, 3 x HMMWV, 1 x BRDM2, 7 x 5 ton trucks, 3 x civilian vehicles (all vehicle sub-types are not differentiated so it is impossible to identify gun trucks from cargo trucks)

- i Although similar concepts had been used in World War Two where units often recovered .50 cal machine guns from shot down aircraft.
- ii In US service they were known as the M706.
- iii Another problem was found that when the convoy had dropped off the stores and was returning empty, the M35 was still heavily loaded with armour and ammunition and was the slowest vehicle in the convoy. The M54 with its more powerful engine helped partially overcome this.
- iv In 1967 this had been set at one gun truck per 30 vehicles but this was quickly increased.
- v A common alternative to filling them with sand was to leave them full of small arms ammunition which was unlikely to explode from a mine explosion.
- vi These measures were also often used by armoured vehicles in Vietnam.
- vii In early 1998 this was moved from the museum and put into service with the 809th Transport Company attached to the 228th Signal Brigade. When the brigade declared for CIVGOV and was redesignated the 228th Infantry Brigade the truck was used as a surrogate APC along with another eleven newly created gun trucks in the 1/228 (Mechanised) Infantry. During the evacuation of Maryland in 2001 it suffered a breakdown when the suspension finally died and it was stripped and abandoned.
- viii A number of units were issued the HMMWV FSV on a scale of one per ten vehicles from mid 1996 but these were not widespread and by the outbreak of the war were limited to the 95th and 385th Battalions of the 14th Military Police Brigade (the 8594th Battalion was tasked with correctional facilities and was therefore not issued HMMWV FSVs).
- ix These were armed only with twin M240 machine guns in the turret, the pintel mount M2HBs were a later addition usually fitted in base workshops when guns were acquired from 1997 onwards. They were occasionally fitted with a front gun shield.
- x The best known example being the BMP1E “Afghan.”
- xi In Vietnam initially there was one M60 machine gun (without a truck mount but only a ground mount) per ten trucks as opposed to the one M2HB per four trucks in World War Two – this was due to the doctrine that machine guns used in the anti-aircraft role were no longer effective.
- xii This truck was destroyed in an ambush near Zielona Gova in mid 1998.
- xiii The bizarre history of this vehicle is worth recounting. As far as can be reconstructed, the vehicle was a BMP of an unknown unit, damaged in combat in Iran, recovered and converted to this format by the 66th Internal Defence Rifle Division to be used as a convoy escort vehicle (the division being desperately short of armoured vehicles for escort duty). In early 2000 it broke down and was abandoned in western Iraq where it was captured by members of the 2/75th Ranger Regiment on a long range patrol. After managing to repair the vehicle they returned to US lines where it was used by the Rangers as a fire support vehicle. With the US withdrawal from Iran the vehicle was handed over to the Iranian People's Army. During the Saudi War the vehicle was immobilized by a mine while being used by the 12th Infantry Division and captured by French Foreign Legion troops of the 2nd Infantry Regiment. Intelligence specialists recalled that a similar vehicle had been seen before and handed it over to their American colleagues. It was quickly discovered it was the same vehicle. When the American troops withdrew the vehicle was returned to the US and after restoration it was placed on public display.
- xiv The major exception to this are the less identifiable command jeeps where the firepower is proportionally less and they therefore tend to be painted in less flamboyant schemes.
- xv Call-signs in the unit have even been based upon Arthurian mythology. A Company is called Arthur, B Company Bedevere, G Company Gallahad and M Company Merlin and C (Headquarters) Company Camelot. It appears that at least one member of the unit appears to have been a Monty Python fan as the transcript here recorded in early 2002 shows:
 - “Merlin Six, Merlin Six, this is Merlin Four, contact, contact, grid Hotel Yankee six, eight, nine...[broken transmission]...engaging with Holy Hand Grenade Launcher, over.”
 - “Ah, roger that Merlin Four, Tim is on the way with the Fearsome Beastie, over.”

- xvi These were usually known as VABA – Vehicule de L'Avant Blinde d'Assault although this was never an official title.
- xvii The most successful Dutch resistance group who used this technique was known as the Lions of Nassau who had an explosives expert who was capable of making a charge that used an explosively formed projectile. The name of this expert who was believed to be a university scientist has been lost after he was killed during a French raid on one of the group's arms caches just outside Nijmegen. He is remembered only by his code name “The Teacher.”
- xviii There were however a significant number deployed to Poland in what appears to be a bureaucratic error when a clerk transposed the 7th and 8th Guards Tank Armies when allocating supplies. A high proportion of the production was also diverted to the KGB and GRU and issued to all fronts.
- xix The better known examples are what has become known as the Gold Convoy from the Federal Reserve in Manhattan which never reached its destination and is presumed to have been attacked and destroyed and the Shelbyville Massacre where a convoy of the 402nd Military Police Company escorting Pact POWs was attacked and all the guards and prisoners were killed.
- xx Reproduction trucks are copies of actual trucks from the Vietnam War, tribute trucks are those that do not model a specific example but follow the general layout of the trucks used.
- xxi The unit was typical of the semi-official volunteer units that sprang up with the Mexican invasion. Unlike many it comprised of full time fighters and therefore had a heavier weapon base (there being no need to blend back into the local population). The 31st at a peak was composed of 37 men backed by three re-enactment vehicles and four pick up trucks.
- xxii These troops regarded it as an honour to be selected, something increased by the lack of physical punishment in US units that were inflicted in ROK units for even minor offences. Access to American PXs was another bonus of service.
- xxiii One KATUSA actually rose to command a transportation unit. Lin Hu Nim was a career sergeant at the outbreak of the war attached to the 509th Transportation Company. Promoted in June 1997 to become the platoon sergeant of the 2nd platoon. He found himself in command when the commanding officer was killed in an artillery strike. When acting as the platoon commander in September 1997 he was late arriving at a company orders group due to a flat tyre on his HMMWV. While he was sorting this the group was attacked by a party of North Korean special forces. As a result Lin became the acting company commander until a replacement officer arrived. The new commanding officer was wise enough to keep Lin on as her second in command. Lin survived the war, retired and entered the civil service in the Postal Department he eventually rose to command.
- xxiv These were the 29th Internal Defence Rifle Division, 33rd Guards Motor Rifle Division and the 37th Motor Rifle Division. The 128th Air Assault Brigade (prior to the attack on the Kurile Islands) and 217th Air Assault Brigade (prior to its disbanding after its remaining airframes were used to reinforce the 128th) were used in battalion and company groups as quick response troops. KGB units are as yet unidentified.