



BARTREAD



NEWSLETTER OF THE WARTIME VEHICLE
CONSERVATION GROUP, South Australia .

EDITORIAL



Greetings, and welcome to issue 17 of your club magazine, BARTREAD. Winter is well and truly upon us, it has started to rain, and the subsequent abundance of moisture has prompted you editor to include an article on the DUKW amphibious vehicle. In addition, this issue includes a report on our recent inspection day, and articles on the Volkswagen Kubelwagen, the Land Rover Perentie, as well as a progress report on Rick's shed. So, while it is so cold and wet, take the time to have a read and enjoy this edition.

ISSUE 17, AUGUST 2015

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2015
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ALSO FEATRUED



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ITEMS FOR SALE, FIND THAT SPECIAL
HARD TO GET PART, OR JUST
DISCOVER A REAL BARGAIN !
PLEASE EMAIL DETAILS OF ITEMS
FOR SALE TO THE NEWSLETTER
EDITOR, INCLUDING PHOTOGRAPHS

"No newsletter editor is at all hours wise ,
perhaps just whilst rendering opinion"

DUKW AMPHIBIOUS VEHICLE

The famous DUKW, is a six wheel drive amphibious truck used in World War Two by the US Army and allied forces. Its primary purpose was to ferry troops, ammunition, supplies, and equipment from supply ships offshore to fighting units on the beach. "DUKW" is an acronym based on "D" indicating the model year (1942) ; "U" referring to the body style (utility, amphibious) ; "K" indicating all wheel drive, and "W" for

dual rear axles. The truck soon became known among troops as the "DUCK" . The DUKW was shaped like a boat, had a hollow airtight body for buoyancy, and used a single propeller for forward momentum in the water. The vehicle was capable of carrying 25 soldiers and their equipment, an artillery piece, or 2,300 kg (5000 pounds) of general cargo, as required.

DUKW AMPHIBIOUS VEHICLE (CONTINUED)

At sea the vehicle could maintain a speed of 5 knots (9 km/h), whilst on land it could achieve 50 miles per hour (80 km/h). Although the vehicle had a very low seaboard, it could handle surprisingly rough seas. The United States produced some 20,000 of these vehicles throughout WW2. Through the lend lease program, the British were provided with 2,000 of these trucks. The DUKW was first used in operation Husky, the invasion of Sicily in 1943. In the Normandy invasion of 1944, by their ability to ferry weapons, troops, ammunition, and supplies to the beaches, they played a decisive role in the overall success of the landing and the operation. DUKWs were also successfully employed in various operations in the Pacific war, as well as being involved with one of the last amphibious operation in Europe, crossing the Rhine River into Germany. In addition, they went on to serve in the Korean War, 1950 – 1953.

The DUKW was designed by a partnership under military auspices of Sparkman & Stephens (a naval architecture and yacht brokerage firm in the United States, famous for its involvement with the America's Cup yacht races) and the General Motors Corporation. The vehicle was based on the then standard US Army GMC 353 series 2.5 ton 6x6 truck.

The DUKW had a length of (you will need to do the metric conversion) 31 feet, a width of 8 ft 2 inches, a height of 8 ft 10 inches, and had a gross weight of 20,055 lbs. (Including net weight of 14,880 lbs + payload of 5,175 lbs) Not a small vehicle by any stretch of the imagination !

For the military vehicle collector, this vehicle's obvious appeal has to be that you can swim it. It does however have its downsides. The DUKW is big, with an appetite for fuel, and requires maintenance each time it is swum, and of course salt water shows no mercy !

One club member who has intimate knowledge of rust and these iconic WW2 vehicles is our secretary, Rick Shearman. For some time now, Rick has been engaged in the complex task of restoring a DUKW to its former glory. Below are some photographs, showing his good progress



Jacking up this seven ton monster in preparation for underbody works required (in Rick's own words) "An abundance of caution !"





Interior, showing the DUKW hull half finished.

The Hull was rusty and so Rick has been busy replacing all of the hull in the centre section of the vehicle. New sheets have been fabricated, with all of the reinforcing ribbing pre welded on, and then jacked up and welded in place. This has been hard work, and welding upside down hazardous !



Interior, showing the DUKW hull almost finished.



Underneath view of the drive shaft tunnel.

This view shows the back view of the drive shaft tunnel and the rear of the transfer case. The lower half of the tunnel is new with a rebated seam, welded on both sides, half way down

WVCG VEHICLE INSPECTION DAY 2015



This year, the WVCG Inspection day for historically registered vehicles was held at Steamroller Park, Sterling. This was followed by a run to the Hagen Arms Hotel in Echunga.

As members are aware, this year was the third year since the introduction of the new Code of Conduct, and as a result, all historically registered vehicles had to be inspected by club inspectors. (It is no longer sufficient to just lodge a stat – dec.) This event provided an excellent opportunity for that to occur.

In addition, other administrative matters, such as the payment of club membership fees, the signing and stamping of log books, and statutory declarations could also be attended to with ease.

A good turn out of members was had, and these were treated to an excellent sausage sizzle, as well as tea and coffee, which was well received on such a cold day !

A big thank you must be extended to Mr Tony Van Rhoda JP for his attendance and services rendered on the day. All members who attended would agree, a most enjoyable day out !



THE VOLKSWAGEN KÜBELWAGEN



Whilst meandering about the vast array of military vehicles on display a Corowa in March, the Editor came across this particular humble Volkswagen, which he was later to discover was a Type 82E Kübelwagen, a variant of the famous WW2 type 82 light weight military transport vehicle. The editor was previously unaware of the existence of this variant, and has therefore prompted the following article on this famous German icon, the Kübelwagen.

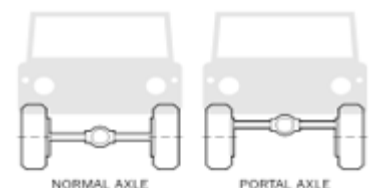
The VOLKSWAGEN KÜBELWAGEN was a light military vehicle, designed by Ferdinand Porsche, and built by Volkswagen during World War Two, for use by the German Wehrmacht. It was based heavily on the Volkswagen Beetle, and prototyped as the Type 62. Kübelwagen is an abbreviation of “Kübelsitzwagen”, meaning “bucket seat car”. It was so named because all German military vehicles of the time that had no doors were fitted with these bucket type seats to prevent the passengers from falling out ! (The editor has had some experience in this regard, when an old flame fell out of a moving CJ5 Jeep, driven by the editor – the romance did not continue !!)

The Kübelwagen was for the Germans what the Jeep and GAZ-67 were for the Allies. Prototype Type 62 vehicles were modified to improve their ground clearance, given a portal rear axle and a more substantial body, to become the type 82. Full scale production of the type 82 Kübelwagen began in February 1940, and no major changes took place until production ended in 1945. Only small modifications were implemented, mostly eliminating unnecessary parts, and reinforcing some others, a true testament to the soundness of the original design.

Despite the fact that this vehicle did not have four wheel drive, it did possess some remarkable features at the time. It was fitted with a limited slip differential, the first application of this technology outside the thirties Audi GP cars, for which it was developed. Along with the rear air cooled engine (998 cc) , the flat underside, and the vehicle’s overall light weight, it allowed the Kübelwagen to be a most effective off road vehicle.



Illustration showing a portal reduction drive gearbox from a type 82 Kübelwagen.



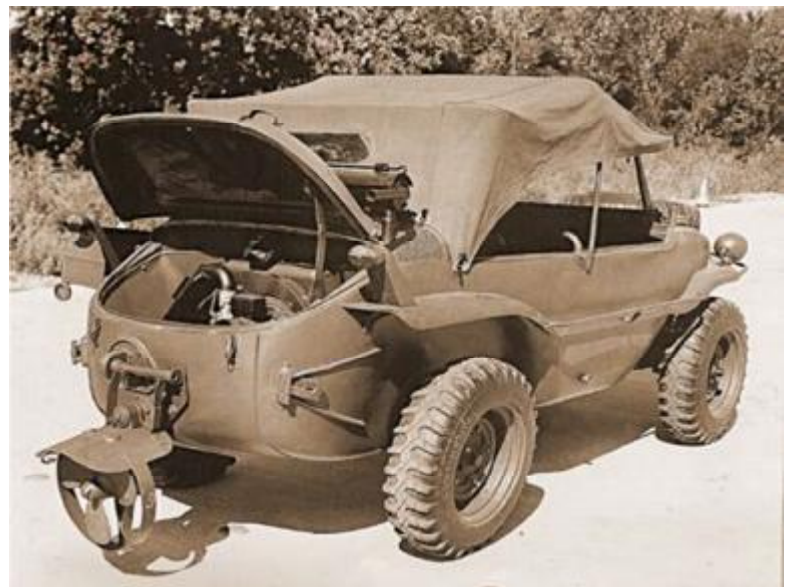


Having stated that the Kübelwagen did not have four wheel drive, several notable variants were produced that did incorporate this feature. The type 87 Kommandeurwagen was given four wheel drive in order to assure that high ranking officers could get through (or away) even in the most extreme conditions !

The same four wheel drive system was incorporated into the type 166 Schwimmwagen, a remarkable and more extreme conditions vehicle. The schwimmwagen went on to become the most mass produced amphibious car in history.



These three photographs give a good overall impression of the schwimmwagen, showing the swing down rear propeller. Steering was via the front wheels. There was no reverse gear in the water, that is why paddles were standard equipment ! The schwimmwagen was also given a larger 1100 cc engine .A partially restored example (still in it's red primer) was also on display at Corowa this year. A most rare and highly desirable military vehicle !





Photographed at Corowa this year, a partially restored schwimmwagen being towed by a Volkswagen type 181. The type 181 was developed for the West German Army, and was a two wheel drive vehicle, manufactured from 1968 to 1983, and was also sold to the public in West Germany as the “Kurierwagen”, the “Trekker” in the United Kingdom, the “Thing” in the USA, the “Safari” in Mexico, and the “Pescaccia” in Italy.



The two images above clearly illustrate the classic lines of the type 82 Kübelwagen. Interestingly, there are many conflicting stories about what the allies thought of this vehicle. Captured wartime vehicles gave the US Army an opportunity to evaluate the Kübelwagen, and it was concluded in one report that the vehicle was simpler, easier to manufacture and maintain, faster, and more comfortable than the Jeep. The rear wheel drive, good ground clearance, and flat underbody floor pan gave the vehicle good off road capabilities. Another report found that the vehicle was inferior in every way except for the comfort of its seating accommodations !

The Kübelwagen was produced throughout WW2 in many variants, including an armored version with a machine gun-fitted turret over the cabin, an all wheel drive version, an experimental automatic transmission version, with a turbocharged engine, fuel injection, diesel engine, even an electric version. They do indeed represent a most interesting chapter of military vehicle history !

RICK'S SHED, THE PROGRESS SO FAR

So, you think you have a shed! Look below and see what a REAL shed looks like

PROGRESS REPORT ON RICK'S SHED :

Building 5, as it was in 2007 at DSTO, before it was taken down (left). Many thanks must go to Aaron, Mick, Tony Van Rhoda, Alan Newton, Richard Saunders, Alister Winspear, Steven Luke, Rick's father in law, Barry and especially Tony Luke (who helped Rick get it down in 2007 and stuff it all in the car ! BELOW : showing how the building support columns were dug up, the new shed site at Rick's property (much digging) , with Aaron ; standing up some of the columns on the new site ; shed frame completed. Once the rain has stopped, the guys will come in to make a start on the walls.





LAND ROVER PERENTIE

Love them or hate them, the Land rover Perentie is a military vehicle that is being seen in ever increasing numbers on our roads of late, in civilian hands. The Australian Defense Force is currently engaged in the process of replacing the ageing Land Rover fleet with Mercedes G Wagons.

There are a few major differences between the civilian Land rover 110 and the military version, the most obvious of which would be the camouflage canvas cover and the pioneer tools on the engine cover. In addition, the Perentie has a specially modified rear chassis to accommodate the spare wheel in a position under the rear load area, and this chassis is fully galvanized. The fitting of an Isuzu diesel engine, the 4BD1 of 3.9 litre capacity, mated to the four speed LT95 gearbox (Land Rover's strongest), resulted in an extremely reliable and fuel efficient vehicle. (10 litres per 100 km average)

The Perentie was produced in both 4x4 and 6x6 configurations. The 4x4 is coil sprung, while the 6x6 has a wider cab and load sharing leaf sprung rear axles. There were a number of variants produced including GS, FFR, a hardtop senior commander's version, a hard top van, ambulance, air defense, regional force surveillance, and repair workshop vehicles.



The Editor's Perentie GS, photographed on a recent trip to Woomera.

Those with a keen eye will note the fitting of an FFR canvas cover, and the air intake snorkel (non standard)

Project Perentie



"Perentie" is the nickname given to the Land Rover 110, produced for the Australian Army. These vehicles were part manufactured and assembled in Moorebank, NSW. They were introduced in 1987 to replace the ageing fleet of series 2A and 3 Land Rovers. The name "Perentie" comes from the Australian goanna lizard of the same name, and was the name given to the tender and evaluation project that resulted in the adoption of this vehicle.



Australian Frontline Machinery is the company that receives decommissioned vehicles from the Australian Defense Force, for sale to the general public. Vehicles are sold on line through Gray's Auctions, and auctions are held in most capital cities on a regular basis. Vehicles on offer not only include Land Rovers, but Unimogs, Mack Trucks, various trailers, and quad bikes. Worth a look if you are interested...

Some Land Rover Perentie Variants



Perentie 110 4x4 Regional Force Surveillance Vehicle (RFSV) Fitted with PTO winch, power steering, twin fuel tanks, raised air intake.



Perentie 110, Fitted For Radio (FFR) fitted with separate 24 volt electrical system, provision for carrying 4 extra 12 volt batteries.



Perentie 110 hardtop, FFR



Perentie 6x6 cargo hard top (cabin)



Ambulance body, 6x6, air conditioned, power steering, turbocharged diesel



Isuzu 1BD1 diesel engine 4 cyl, 1.8 liter, direct injection. Bore : 102 mm, Stroke : 118 mm, weight approx. 350 kg. Power 78 kw, torque 263 Nm.

LIGHTEN UP !

While its so cold and gloomy outside, take the time to have a laugh and lighten up !!



Know your knives



**FOR
SALE**



We have a new style Club Baseball cap for sale to members. They are Khaki in colour with the WVCG logo, and are for sale to club members for the bargain price of \$20 each. These are selling fast, so go on, let a few moths out of your wallet and purchase one! If you are interested, please see our club treasurer, Mick Jenner.

The following items are for sale by
Tony Van Rhodda. Tel : (08)
85362627 email :
gumbrae@acenet.net.au



New MB or GPW Jeep rear seat backrest ,
priced to sell at \$60.00



Vietnam era- Full harness 2
basic pouches, 3 water
bottles, bum pack on web belt
and harness, including olive
drab hootchie : \$75-00



Coleman 60 second tent (10 x 9 foot)
as new, only used once, includes new
rain cover. Plus brand new large
heavy duty stretcher – the lot for \$350



Vietnam era – Back
pack. Good condition.

Going cheap at \$35.00



Large ammo box. 46
cm W x 22 cm D x 16
cm H. Priced to sell at
\$35.00



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