

"EXPERIENCE"

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DESERT PATROL

The Australian armed services have been using Land Rovers for 35 years to train new recruits in the art of four wheel-driving and survival in the outback. David Wilson accompanied one such training exercise to bring us this report.



IN JULY 1994 a party of 12 Royal Australian Air Force (RAAF) trainees departed for a 2,000 kilometre round trip to Lake Eyre South on a 4WD training exercise that lasted four days.

At the end of the exercise, each trainee could expect to have a specialist 4WD service licence and a greater appreciation of just how big the outback is, all courtesy of the Land Rover 110.

On this occasion three Land Rover 110s, fitted for radios (FFR) and a solitary Mercedes Unimog truck were to be the workhorses.

The Land Rovers were all 3.9 litre Isuzu diesel-powered, running through a four speed, constant 4WD driveline.

Day One of the expedition began at El Alamein Army Camp, just outside Port Augusta, that sits atop the Spencer Gulf in South Australia. Port Augusta has traditionally been a staging post for many outback expeditions, as it was the last major port and railway head for

explorers looking for a vast inland sea.

For explorers in the 1990s, Port Augusta offers the last conveniences and services of a big city before striking out north or west, where distances are measured in thousands of kilometres.

This modern day convoy made its way through the foothills of the majestic Flinders Ranges via Pichi Richi Pass to Hawker. Here, the buckled and twisted sedimentary layers of Arkaroo and the ABC Range could be seen lying like giant snakes across the plains.

This is a place of spiritual presence; those giant serpents have a real meaning for the people of the Adnymathanha tribe who inhabited the Flinders Ranges.

For many of the trainees, this was their first opportunity to drive a 4WD. The instructors paid particular attention to developing their students' skill on the major formed roads, so when the time came to journey off-road, they would have a reasonable grasp of the controls and what might be expected of them.

test each group's resolve to overcome a 'mechanical failure' and get back on the road as quickly as possible.

As the afternoon faded to dusk, the convoy passed townships along the old Ghan railway line that were settled in the 1880s, like Beltana, Lyndhurst and Maree. Lyndhurst would probably go unnoticed were it not for a colourful character called 'Talc Alf', a loner who transforms discarded 20th Century junk, into 'green' appliances around his home.

After travelling 500 kilometres, the convoy camped for the night near the edge of Lake Eyre South, in the lee of an ancient red sand dune.

The first port of call on Day Two was to see Lake Eyre from a high vantage point. The lake is an enormous, normally dry salt pan, but every so often it fills with flood waters from the Cooper and Diamantina river systems. It occupies about 9000 square kilometres and the entire Lake Eyre Basin takes in approximately one-sixth of the Australian

area for bird life, animals and plants, recently being the focus of World Heritage listing.

The same vantage point then became the site for a demonstration of the climbing ability of the Land Rovers, with diff locks engaged.

Nearby Curdimurka, a disused railway siding, is transformed every two years into the venue of the famous 'Outback Ball'. Almost 3000 people descend on this siding from all over Australia and overseas, dress up in formal evening wear and dance under the stars. The income from the event is used by the Ghan Railway Preservation Society to preserve relics from the railway for the future generations.

The expedition then turned south down the Borefield Road, which links the Oodnadatta Track with the township of Roxby Downs, the settlement for the nearby giant Olympic Dam copper and gold mine. A detour into the dunes provided the opportunity for a winch demonstration – and another problem solving exercise – the vehicle is bogged, the right front tyre is flat and the jack doesn't work!

The instructors then demonstrated safe practices with the winching equipment.

The next stop was Andamooka, west of another large salt pan, Lake Torrens. Here, the terrain is harsh, arid sand dune country with

limited vegetation. But underground lies fabulous wealth in the form of opal.

The plan at this point was for each trainee to drive alongside an instructor over a circuit through the sand and scrub. After a couple of hours, all drivers practiced rapid changes of direction, tugging at the heavy, non-power assisted steering wheel. Throttle control was critical to the success, or failure, in being able to negotiate a turn in a hurry.

Instructors demonstrated a squirting style of throttle response, which would kick the back end of the vehicle out, initially to shorten the radius of the turn. Lifting off the power would increase steering response and save the vehicle from understeering off the course. Once

the techniques had been mastered, the real test came in the form of a cross country exercise.

Many of the trainees were doing it hard, trying to come up with the right combination of gearing, power and steering, responding to the rapid and sudden changes of direction required by the instructor, all without warning.

If anyone needed convincing about the ability of a vehicle in very difficult terrain, then this exercise proved beyond a doubt that the combination of an Isuzu



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diesel in a Land Rover 110 chassis and driveline, with diff lock engaged and powering a set of heavy lug tyres in low range, is unbeatable.

At day's end, with a lot of sweat and energy expended, it was time to unwind with a refreshing beer or two at the Andamooka pub before heading to the campsite for the night.

Day Three dawned with the same desert chill and by 7 a.m. the training was on again. The group was split into two, one group to practice those newly-learned skills on the bush circuit and the other to further develop their knowledge on winching and ground anchors. There was also a hand winching demonstration using a Tirfor 516 unit strung between

two of the Land Rovers. The real benefit of this unit, is that a vehicle can be extricated from a bog from almost any direction. With a vehicle-mounted winch, recovery can only be obtained from the front of the vehicle. If there are no substantial objects or ground anchors to attach the cable to, then the winch is near useless. Hand winching, while slow and tedious, does offer greater flexibility in difficult situations.

The day's tasks were set to continue beyond midnight, with a night driving exercise across the top of Lake Torrens. With the briefing complete, the next stop for fuel was at Roxby Downs before heading down to Woomera for a quick look at 'Rocket Town'. It was here at Woomera during the 1960s that a joint British and Australian space research and launch centre was developed after the successful detonation of atomic bombs at nearby Maralinga and Emu.

En route to the night exercise, the team pulled off the Stuart Highway to practice stall starts on the gentle slopes of a disused earth dam. This technique can be a lifesaver in tall country, as it is the safest way to bring a vehicle down off a slope under control at all times.

As you climb or descend a slope and run out of power or traction, if you bring the vehicle to a standstill by

standing on the brake, it will stall. The vehicle is now hanging on the compression of the engine via the gear that it was in prior to stalling and combined with the added assistance of the footbrake, the car cannot move. By selecting low range 4WD and either reverse or first gear (preferably without using the clutch), you release the footbrake and then turn the ignition key (no clutch), allowing the car to restart on compression and come down the hill under power and maximum control.

Some gentle footbrake pressure to further assist the speed of descent will also preserve the shear pin in the transfer case of the 110, which will break under extreme load to preserve the transmission.

After the stall recovery demonstration, it was time to head south once more for Lake Windabout and a meal.

The group travelled for three hours in close convoy, driving by the dim beam of blackout lights. It takes the eyes around twenty minutes to adjust to the available light, and just make out the shapes of fence lines, trees and rocks.

The lead vehicle has the most difficult task driving without assistance, as the subsequent vehicles have the benefit of watching the glow from the white rear differential housing in front of them.

Around 10 p.m. the trainees practised climbs out of a shaly creek crossing in the foothills around Lake Torrens. It was a good opportunity to test the traction of the vehicles on a very loose surface. Across the top of Lake Torrens with midnight slipping by, it was time to make camp on the eastern side, somewhere near Mulgaria Creek.

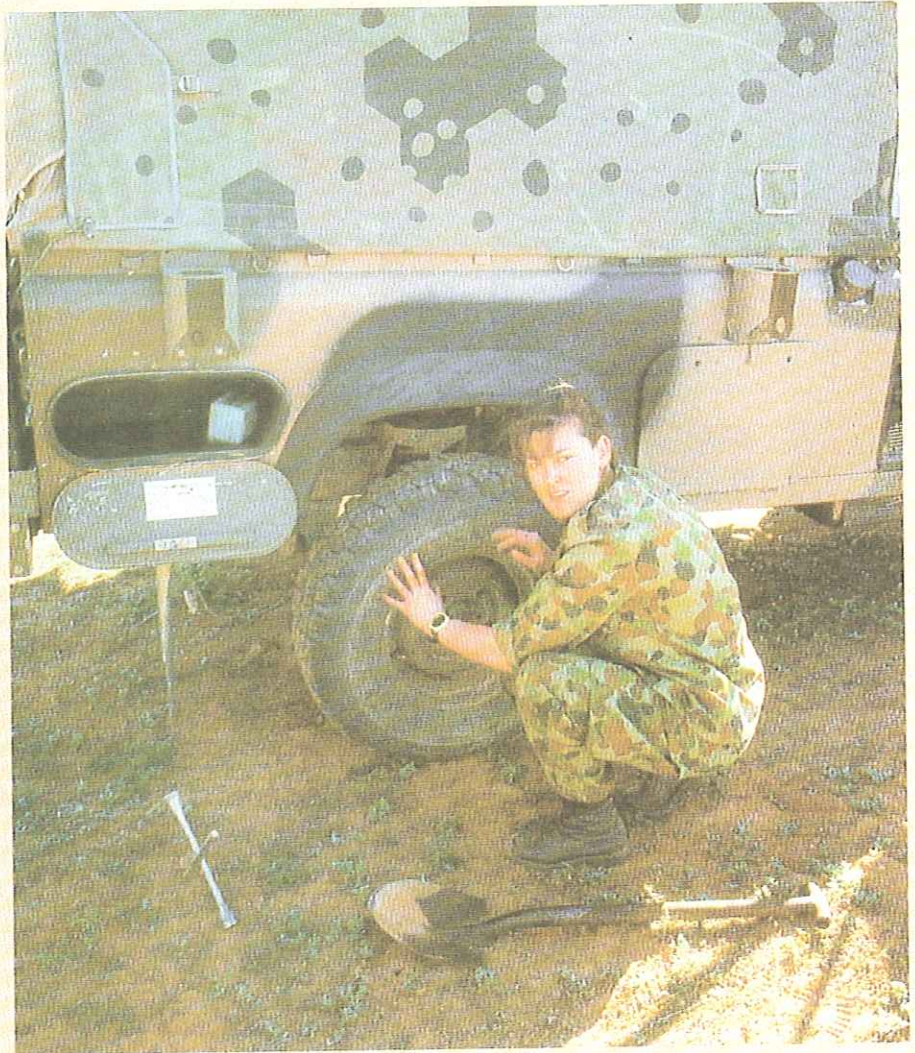
Day Four began with a 5 a.m. start. It was still dark and probably the coldest morning at around minus five degrees Celcius. Half an hour later and the convoy was on its way back to El Alamein along a dusty station track that passes remote homesteads on the plain between Lake Torrens and the western side of the Flinders. But the training wasn't over, with the best saved for last.

El Alamein is set in the hills that overlook the Port Augusta power station. This dominant range has a number of vertical tracks cut into its steep rocky surface and it is used to test the abilities of all manner of army vehicles.

For two hours the trainees drove up and down slopes, that to the unexperienced would have been suicidal, particularly given the erosion gullies and shale displaced by the ACPs which had tested it previously. But the trusty Land Rovers crawled up and over and down the faces of 35 degree slopes.

By midday it was all over and time for the return trip to Adelaide and the Edinburgh Air Base. On arrival, the exhausted trainees were greeted with the news that all of them had qualified for their 4WD licences.

The Australian outback is indeed a remarkable place; ideal for 4WD touring. And for decades now, Land Rovers have been a part of the trailblazing that has opened up the vast interior of the continent for pastoralism, mining and tourism. The Australian armed services have used Land Rovers since 1959 and their tradition of rugged dependability lives on in today's vehicles. ☺



Top: yet another tyre changing exercise en route to Lake Eyre. Above: stall-start practice near Lake Windabout. Opposite page: a beautiful dawn in the Flinders Ranges and (below) early morning diff-lock instruction near Lake Eyre.