Rolls-Royce Owners' Club
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A Pre and Post Rally - "Dawn Patrol"

by Lloyd Missen, 1998

Part Two

Seven thirty a.m. Saturday 23rd March, we had just left Middle Cove and were finally on our way to Parramatta Park for the official start of the 13 day "Coast to Coast Overlander" to the 1997 Federal Rally in Fremantle.

"Turn on the CB," I called to Shirley as we motored down Epping Highway, to see whether any Overlanders were within range. Some had indicated they would also be fitting a UHF CB radio. "Hound Dog to Overlanders, Hound Dog to Overlanders, does anyone read me?" called Shirley into the microphone. She repeated the call, but the speaker was silent, and she commented that the panel lights went out just after she turned the radio on. Funny, the radio had operated for the past two months in the kitchen as a trial. The only fault was the unbelievable language coming in over the air waves. It was also working last night in the car on the trial run up the hill from Roseville Bridge; however, panel lights suddenly extinguishing sounds like a blown fuse and we were not even at Parramatta Park.

NOT a good start! The CB was not essential, and we could forget it for the moment.

My major interest, as we continued, was the coolant temperature, i.e. how the new radiator was performing. I was hoping it would not be necessary on this Overlander to have one eye glued to the temperature gauge. So far it was sitting at a respectable 81 Celsius. The thermostat was rated at 78 C. and I had previously confirmed that the gauge was indicating a few degrees higher than its probe embedded in the water circuit, so 81 seemed about right.

The gathering at Parramatta Park was BIG. A large contingent of Club members came to cheer us away. Two TV Channels were represented although one had technical problems and their project was a fizzer; however, they both added to the atmosphere. All seven Overlander cars with combined crews numbering seventeen were present and eager to depart and six Queenslanders in two more cars would join by tomorrow evening and we would pick up five more Overlanders enroute.

It was obvious that all cars were well-prepared and no doubt the owners had their own interesting and varied stories to tell of the effort they had expended on their cars for this venture.

After Shirley handed out her carefully prepared "Overlander Packs" to drivers and suggested places to stop for morning tea and lunch Kim Stapleton, our President, dropped the flag and we were off.

My eye returned to the temperature gauge to monitor the yet untested new radiator, while Helga showed her true upbringing and we sailed up the mountain range to Mt. Victoria without hesitation, deviation nor repetitive gear changes, for none were needed. What's more, the temperature hardly budged from 81 degrees. "If only!" I thought; however, the scene was about to change.

As we continued on the 362 Km run to Parkes on the Western Plains the ambient temperature slowly rose and unfortunately so did Helga's. Firstly, I noticed I was losing coolant from under the filler cap. Inspection showed that the raised lip in the seat for the filler cap in the header tank had been damaged by the Radiator Repairer when fitting the new core and, despite the new rubber washer on the cap, it leaked. I eventually sealed it with an additional washer cut from insertion rubber from my toolbox.

As we headed across the Western Plains the ambient temperature continued to rise into the high 30's. The coolant showed 90 on the gauge and we were losing water from the overflow. By the time we reached Parkes, Shirley and I were both pretty warm and Helga had consumed a few litres of coolant.

We were not the only ones with temperature problems. The Greens said their '47 Wraith had boiled. The NRMA was at the Motel next morning to lead them to a garage to have the radiator reverse flushed.

The next day was even hotter and approached 40 Celsius on the latter part of the 360 Km stretch to Cobar. The air conditioning on the Dawn consists of low side air vents. These are fairly effective m scooping fresh air into the car at feet level, however the air, although fresh, had been warmed as had Shirley and I by the time we booked into the motel that evening and Helga, for one reason or another, had consumed 5 litres of water.

Naturally I had the bonnet up a few times to cheek the water level. The under-bonnet temperature always seemed quite normal and there was never any sign of water leak other than from the overflow.

Considering all the prior work I had done on the cooling system, including a new core, there had to be a reason for the water temperature moving up to 90 on the gauge. Surely, this was not characteristic in the design of the Dawn! I decided to remove the thermostat while I searched for an answer. This had been successful in lowering the high coolant temperature on our first Overlander to Ballarat in 1992, shortly after purchasing the Dawn and before having done any work on the cooling system.

Day three, the terrain quite flat, not a cloud in the sky and Helga continued to purr along. Except for one eye wanting continually to check the temperature gauge, we, along with the

other Overlanders, were thoroughly enjoying ourselves motoring in this sparsely settled section of far western NSW where, surprisingly, Shirley and I had not previously travelled. Wilcannia was the only town to speak of on the 444 Km day's run to Broken Hill and this didn't appear to be much more than a service station, a hotel and a few buildings.

The day had been much cooler, but Helga still consumed 3 litres of water.

The planned two-night stop at Broken Hill gave us lime to check out our CB. For much of "Outback Australia% radio is still the only means of communication and we found the Flying Doctor Service a source of expertise, with a radio repair section adjoining their office at Broken Hill Airport.

I located the radio technician, explained my problem with a blown fuse in the power supply to the set and he had the CB apart, replaced a protection diode and the radio back in the Dawn in not much more than 10 minutes. There had to be a reason for the diode operating and bringing out the fuse, but he said it was common for these diodes to trigger for almost no reason. We were now able to join the others who were having limited success with inter-car communication.

Meanwhile, the Greens who were still experiencing overheating had somehow found a radiator repairer brave enough to extract the radiator from the Wraith, remove the tanks and apparently a quantity of sediment from the core. They were surprised at the low charge and delighted with the subsequent improvement We were not so lucky as the attempted temporary cure of removing the thermostat had little effect.

The CB repair was also short-lived. It failed on the next day's 417 km run to Port Augusta where a more major repair was necessary, requiring replacement of the Audio IC. The two faults in the CB to date pointed to dynamo over-voltage, but nothing abnormal showed on my digital multimeter, although this would not register voltage spikes if present.

Our next two overnight stops were Ceduna then Eucla on the West Australian border, with daily runs of 468 and 494 km respectively. Except for the need to keep the radiator topped up, Helga was in her element, and she was cruising effortlessly at 70mph (110 Km), the South Australian speed limit.

(After spending almost forty years of one's working life as a testing engineer (not on cars), what could be the most interesting activity after a 500 km run in 40C with 70 mph on the "clock"? SURELY to look under the bonnet and see how Helga had performed. Not all Overlanders were of the same mind. (Photo: Brian Jenkins).

As there was evidence of frothing in the header tank, which I hadn't experienced before, I replaced the thermostat. Its removal had not improved matters. Searching for a solution I examined the steam valve. The Dawn has this small, slightly spring loaded, mushroom-shaped valve with a hollow stem, in place of the more normal radiator pressure cap. This device always seemed a rather crude, delicate, "hit-and-miss" affair to me. In fact, the Workshop Manual tends to confirm this as it states that there had been three variations to the design. Early steam valves on the Wraith and the early Bentley Mk VI applied the 4 lbs./sq.in. to the system (presumably with no hole in the valve stem), then the valve and spring were eliminated and the system operated at atmospheric pressure. Finally, because of complaints of loss of coolant, the "reduced pressure" hollow valve and spring, as fitted to our Dawn, was introduced. Considering the above, from the point of view of coolant loss, the spring pressure seemed important My spring when examined, seemed very light, as though it could have been damaged by overheating with the blowtorch during the radiator repair; but how to calibrate it?

The Workshop Manual gave a compressed length of 0.600 ins. under 3 ozs. Brian Jenkins, keen to help, reminded me that 1 gm was equivalent to 1 ml of water and hence, 85 ml of water equalled 3 ozs.

With the spring sitting loosely on a ¼in diameter 5/8ins long upturned bolt (a bolt length of 0. 625 being a close enough measure of 0. 600 in.) and Brian's see-through plastic cup balanced on the spring, we dribbled water into the cup so that it compressed the spring to the height of the bolt, then measured the volume of water. Sure enough, the spring had

been weakened as only 1.8 ozs was needed. We stretched the spring until it gave the specified 3 ozs.

For my interest under the bonnet, some unkind rugby union fanatic, whom I shall not name, but owning a red Shadow and a delightful effervescent wife, presented me with a bent-up piece of rotted timber off the Nullarbor, in place of the now highly decorated shillelagh (back scratcher) at the evening get-together.

Next morning we crossed into W. A-with only 1200 kms to go and four more nights; Balladonia, Kalgoorlie, Merridin and Hyden before Fremantle.

Passengers and drivers had been swapping cars and experiencing the different levels of luxury while motoring across this remote, desolate pan of our great continent, which few of us had previously visited, - certainly not often. Although desolate, the landscape was ever-changing and this, coupled with the camaraderie which had developed, had created a unique experience which no-one quite wanted to end.

Back to reality. A pause for an under-bonnet inspection for which it seems, I was now becoming famous, (I really don't know how some members get their car kicks), showed, somewhat surprisingly, that the recalibrated steam valve effected at Eucla, had in fact increased the dynamic (operating) pressure of the cooling system. Water was again coming away from the temporary repair to the damaged radiator filler cap seat. Fortunately, another gasket cut from my stock of insertion rubber, together with rubber grease, provided a more effective seal; and so we continue with a thirsty Helga requiring frequent drinks. There was no sign of any leaks other than what appeared to be from the overflow. I was well aware that it is almost impossible to detect a leak in a hot radiator but had dismissed this likelihood anyway because of the brand new, presumably tested, core.

At Kalgoorlie I found that the local Ford garage had the necessary equipment to test the air in the header tank for carbon monoxide. It was clean, confirming no leakage between the water circuit and the combustion chamber which could occur with a blown head gasket.

Meanwhile, the CB link between the five cars so equipped was responsible for some comic situations somewhat hard to describe - one had to be there. Included was further failure and subsequent repair to our CB, this time at Merredin and Helga featuring in both the longest and shortest CB transmission of the trip.

Before leaving Merredin Hound Dog (Shirley) made contact with Tiger One (The Boscoe party) and Cinema 71 (the McFarlands), both having left earlier were an estimated 60 kms along the road towards Hyden. This was rather exciting as communication up until then had only been between cars in sight of each other The shortest distance record surely occurred a little later in the W.A town of York after visiting the motor museum. Hopeful of keeping the group together for this last leg of the run to Fremantle, Hound Dog sent out a call to all Overlanders., "Does anyone read me?" Andy, in Cinema 71 suddenly came out of a side

street and while passing in the opposite direction, leaned out of his window and called: "Loud and Clear!"

After 13 days and 3009 miles (4842 kms) showing on the speedo, all the cars with combined crews of twenty-nine found themselves outside the Federal Rally Headquarters, Fremantle, looking at the blue waters of the Indian Ocean. The event had been a unique experience; most were sorry that the Coast-to-Coast Overlander had suddenly concluded. No one appeared tired, which says something for the cars we were driving. As for Helga, although thirsty, to prevent serious overheating, we had limited her stress to 92 on the gauge and hence an actual water temperature of just below 90, from an earlier calibration.

This should not have been at all harmful to the engine and we had no intention of changing our minds and joining other Overlanders and transporting our car back to the East Coast. We had intended to drive both ways, as had the Hiscox'. This meant another 6,000 kms. or so to complete the route we had planned, which included the Post Rally Tour organised by the Western Australia Branch. What we found when we took time off to closely examine Helga and what transpired on the return journey through the Outback will have to wait, as that is a story in itself.

Three Dawn Owners; (from left), Shirley Missen and Naelo and Brian Jenkins make the most of the time together after the 13-day Coast to Coast Overlander, in their sumptuous Federal Rally Fremantle apartment beside the blue waters.