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Austin Times

A NEWSLETTER FOR ENTHUSIASTS OF AUSTIN PRE-1955

IN THIS ISSUE

***Austin Times* - you can depend on it.**

Sled ride from hell. The A90 is dragged the last few metres to the Nordkapp by crawler tractor as Richard Pape steadies it's progress.

Pape-shape but not so Longbridge fashion

BY BENT HORSINGTON

It is small, wide-eyed, children who are said to flatten their noses hungrily against sweet shop windows. If I had flattened mine against the showroom glass of Howells's Garage in The Hayes, Cardiff, it would have diminished my ravenous viewing of Richard Pape's pale blue, battered and spattered, Cape to Cape, A90 Westminster.

The story of how Pape drove from the North Cape, 600 miles above the Arctic Cicle, across the Sahara, to Cape Town, is Austin's lost epic. Why, is as mysterious as the giants and trolls that haunted Pape's progress through Norway's Trondelag or the blue-veiled Touregs who terrorised the desert.

Richard Pape was born in Roundhay, Yorkshire in 1916. He left his job as an artist in the publicity department of the *Yorkshire Post* newspaper and joined the RAF at the outbreak of the Second World War.

Most of the pictures which accompany this feature and the concluding episode in the next issue have never been published before and were provided by Johan Brun.

Navigating Stirlings for 15 Squadron out of Wyton in Cambridgeshire he was shot down in 1941 while returning from a bombing raid on Berlin. Three desperate years in prisoner of war camps followed, during which he was tortured by the Gestapo.

His health broken he was repatriated in 1944 and after the war, still sick, foot-loose and virtually penniless he drifted into Johannesburg and while installed at the YMCA wrote his million-copy autobiography *Boldness Be My Friend.*

SELUBRIOUS

To say the book made his fortune would be overly romantic, but by the late spring of 1955, Pape was an established author, living in London's elegant Mayfair and preparing for lunch with a publisher at the selubrious RAF Pathfinder's Club.

It was the meeting which spawned the Cape to Cape run by Austin car.

The representative of the Norwegian imprint Steensballes suggested the adventure and it soon became an obsession with Pape; a challenge to his integrity, his Britishness and almost his manhood. It was to bring forth the best in human nature; and perhaps the worst.

Phrases like 'you must start not later than July; before the fiords and lakes are icebound, before the snow blankets the mountains, hills and dales, and the Northern Lights flame in the dark sky, had flowed from the Norwegian's Lips as the wine flowed in.

There had been talk of British-engined bombers being the best in the world; of the Viking and Elizabethan spirit being alive and well.

FIRST EVER

And to the background of former Service chums, chortling at nearby tables, the spectre of a German car tackling the run and boosting that nation's motor industry was raised.

Pape was soon committed to the first ever run by car from 'cape cold to cape hot'; to include non-stop dashes from the Arctic to Oslo, Oslo to Paris and Paris to Gibraltar and a new speed record from Algiers to Cape Town.

SHOWROOMS

He inteded to use a Humber Hawk, and wrote a personal cheque for it in Rootes' showrooms in London's Piccadilly.The choice between Humber and Austin was made, apparently quite literally, on the toss of a coin and despite the advice that the A90 Westminster was the better car from a knowledgeable confidante. However, the evening of the purchase and, as Pape himself would have it, 'hops and malt' in the company of his Austin-advocating friend, he cancelled the payment on the Hawk.

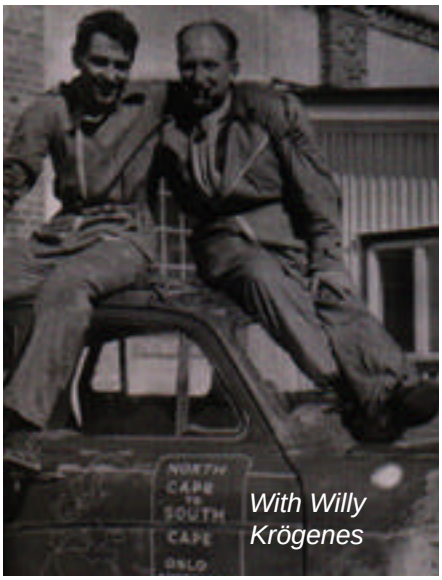
Green Austin RLD 164 came new from Car Mart in Davies Street, Mayfair, and was modified at their workshops in Hendon and by Pape himself in his brother-in-law's domestic garage at Watford.

REFINEMENTS

This involved fitting extra fuel tanks, heavy duty springs, armour plated sump and rear axle guards, three-eighths inch guage chrome steel crash bars front and rear and an enormous roof rack. Not to mention a fold down bed in the rear compartment, refinements such as an illuminated compass and a platform for our hero's Remington typewriter, and metal screens for the windows which, he pointed out, would protect against wild animals and keep natives out.

This was to be no 'goodwill' tour, as later transpired, with two co-drivers incapacitated,

Parts had to be transferred from the wrecked A90 to the fresh car



With Willy Krögenes

a third in prison and a dead donkey, dog, two cats and almost a little girl in a red dress, littered along the roadside.

And perhaps that is one small clue as to why Pape didn't simply go to Longbridge and ask for a works supported car. This would seem to have been such an obvious expedient. Alan Hess, in charge of press relations, was an inveterate publicist, a man who boasted he made news happen, and someone who had courageously campaigned Austins in some of the very regions Pape was contemplating traversing.

Furthermore the company had a corps of exceptionally talented drivers some of whom also knew the climes and would have been thoroughly familiar with the Longbridge product. Yet, I can find no reference to Pape having gone down this logical road. Perhaps he did, and was rebuffed. And it is somewhat pointed that while in his writings his praise for the vehicle is fulsome, it is usually referred to as either just 'a British car' or, unenigmatically, the A90.

We do know Pape approached Longbridge during the shake-down period after RLD 164 developed a feint 'clicking' in the engine. Acrimonious outbursts at Car Mart failed to resolve the situation and Austin export manager Jim Bramley seems to have been coerced into having the car sent to the works.

As related by Pape, he then bombarded chairman Leonard Lord with some 30 telegrams in the space of a few hours demanding the car be fixed and returned to London for a press call.

The messages were reputedly so memorable that a selection were framed and hung in the Longbridge boardroom, but one should be sceptical on that score.

BONDING

Suffice to say, the Westminster was repaired, returned, christened Pape's Progress by the film actress Peggy Cummins and set out for Oslo on July 10, 1955.

Pape's problems with the A90 were as nothing compared to those with his co-drivers.

Initial pairing had been with a Norwegian photographer and film maker called Gunnar Melle, who was almost as fixated about the expedition as Pape and having been introduced to the Englishman, told him: 'If I can't drive with you, Pape, I'll drive against you; and beat you.'

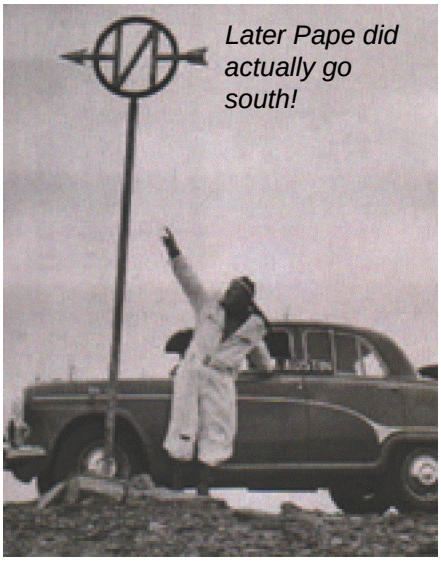
After some further Pape-style bonding and team management, which involved drawing on a lighted cigarette then placing it on the back of the unflinching Norwegian's outstretched hand until the flesh seared, they set off together.

But the partnership only lasted as far as Oslo on the outward trek to the Nordkapp. A squabble about sponsorship and Melle's commitment to German recording equipment left Pape facing a long solo drive with the bonus of a race against his erstwhile companion who had secured a Renault for a rival run.

Co-driver number two materialized as young, handsome, Willy Krögenes, another Norwegian, about to get married and who innocently came to Pape's hotel room on behalf of the Wakefield Oil Company to offer supplies of Castrol.

Matters squared with Krögenes boss and his fiancée, they left Oslo secretly, hoping to give Melle's Renault the slip. Rather incongruously a break was taken in Trondheim after Pape saw copies of the translation of his latest book in a stationer's window and was forced to conduct an impromptu book-signing.

As they eventually sped away his comment was darkly prophetic: 'now for a burst into hell and out again.'


Later Pape did actually go south!

This shot illustrates perfectly the conditions faced by car and crew.

If the mountain gods issue warnings to unwary travellers, Pape certainly had his share this trip. On the run to Trondheim he had put the speeding Austin's left hand wheels into soft earth at the side of the track and only just managed to snatch back control. Further north, beside Lake Snasa, he did the same thing again but had to be towed out of the ditch by a bus using six plastic clothes lines which, for some reason, formed part of the A90's tool kit.

TYRE BURST

Unscathed, the car was running perfectly and the drive continued without a break. At times Krögenes was so tired he could only be roused for his session by Pape pulling his tousled hair. Retribution came about 80 kilometres north of Narvik. At 70 mph, on a flint and dirt track with Pape driving, a tyre burst and the car somersaulted across a ravine to land right way up on a pile of rocks.

It is beyond question the sturdy monocoque of the A90 helped save their lives. Pape had been bruised in the ribs by the steering wheel; Krögenes faired less well with an abrasion on his head and bad cuts to his wrists; the car, even worse. It was wrecked.

Miraculously, a squad of Norwegian airforcemen were close by with a lorry and were soon at the scene. 'Get me another car quickly,' demanded Pape as their saviours winched the shattered Austin back onto the track,' any damned car of any make, I must continue to Nordkapp. Krögenes observed, rather more realistically: 'I'll get married yet.'

Pape had never shown any particular affinity to Austin other than it was British, but by now he must have been convinced the A90 was the car for the job. From the remote village of Sjovegan he managed to get through to Longbridge to demand another Westminster while the heavily bandaged Krögenes worked with the local garage to strip all special equipment from RLD 164.

It must have been at times like this that Bramley, Hess *et al* were desperately relieved to be in Birmingham not Oslo.

It fell to the Austin agent in that city to find another A90 and the features editor of the influential newspaper, *Dagbladet*, to find a replacement co-driver. This time the Westminster was not new, but a pale blue example with 7000 miles on the clock.

ASSIGNMENT

The new partner was journalist Johan Brun who had been 'volunteered' while on his way back from an assignment in Sweden.

Brun squared with his wife he was going straight to the Nordkapp, then across the length of Europe, through the Sahara off-season, and stilll further south to Cape Town. Pape, the A90 and short-term companion, Knut Eidem, also on *Dagbladet*, headed north for a second time. Brun was to join-up after formalities such as obtaining visas - something, incidentally, another member of the team had failed to complete before leaving London!

SOFT EARTH

On the first leg to Trondheim, still shaken and bruised by his accident, Pape was keeping speed down to 60 mph through a settlement. Suddenly a little girl in a red dress darted into the A90's path. If Krögenes had been there he would have had a strange sense of *déjâ vous*. As the car swung to the left and into the soft earth beside a fiord, the driver struggled with steering and brakes for split seconds before snatching back onto the track. This time everyone escaped and the Austin, its engine

screaming in the low gears, the wheels spinning on the last boulder strewn, rutted, 25 kilometres, made it to within eight of Nordkapp. No ordinary wheeled vehicle would have been able to cover that final short leg. The Austin was taken to within a metre of Europe's northern wall - the edge of the 500 metre cliffs which descend vertically into the Arctic Ocean - on a sled hauled by crawler tractor, photographed, then dragged back.

By the light of the midnight sun, at 00.00 hours on July 28, Richard Pape began his 22,000 kilometre blind south.

It was a foolhardy drive by any standards. To establish the records he and his companion would need to motor, turn-and-turn-about, at high speed and virtually non-stop. To fight eye-bulging fatigue and shortening tempers. Yet, devoid of information as to whether Gunnar Melle and the Renault were even on the road, there was no evidence to make any of it particularly necessary.

There are many heroes in the story; Kröegenes, of course, and less pivotal characters like the Norwegian airmen who hauled RLD out of the ravine, the bus driver who had struggled to tow it out of a ditch and, of course, the workmen who grappled with the panting tractor and splintering sled to get another A90 to and from the lip of the Nordkapp. And there are heroes and heroines still to appear.

But as worthy as any is the six cylinder Austin itself. It had already been driven at dangerously high speed over some of the most atrocious apologies for roads in the world. Far worse lay ahead. But now as an interim, heavily overladen, it was to face hour after hour of continuous running at, by the standards of the day, extremely high average speeds (about 50 miles in the hour was the norm) with top speed bursts approaching 100 mph.

On top of the world - well almost

Heading south the companions stopped in Sjovegan to attach the equipment stripped from RLD then dashed on to Oslo where Pape had one of his many squirmishes with the French ambassadorial staff over papers and permits for North Africa.

From there it was out of Norway through Sweden and by way of Göteborg and Halsingborg into Denmark. Pape was able to adorn himself for the photographers with 'Roberta' the sword stick, his Mauser pistol and American quick-fire high velocity rifle.

The last two had been acquired in Oslo, outward-bound, after death threats from Russian communists offended by his latest book. Roberta was an old friend.

Next encounter was with friendly Germans in Flensburg who pointed out the merits of the Volkswagen and Mercedes and were then nearly run down for their trouble amidst a torrent of mutual profanity. Oh how they would have sighed with relief in Longbridge that no one from the works was directly involved.

Only a few hundred kilometres further on, though, the enigma of Pape's character was revealed. The adveturers detoured into Holland to visit the widow of the Hengelo farmer who had saved the lives of Pape and his engineer when they had crashed their bomber - the pilot had been killed.

Bernard Besselink, along with the local schoolmaster, had been shot by the Gestapo for their trouble to leave not only a young wife but three baby girls.

Pape attached to the memorial a plaque inscribed, in Dutch, with the Biblical quotation - *'Greater love hath no man...'* .

Not only was it an act of sensitivity and compassion but the whole episode must have drawn deeply upon his emotional courage.

It was more than just the fatigue of driving hour after

hour that was effecting Brun by the time they reached Paris - 32 hours Scandinavia to Holland, five from Amsterdam across Belgium to the French border, Paris by midnight - 150 kilometres in two hours. An incandescent poker of a pain was stabbing at his back and boring its way to his navel.

WIVES

Rendezvousing with two Norwegian diplomats and their wives a meal was snatched in *Les Halles*, just off the *rue de Rivoli*, before the two men hit the road again at 4.30 am.

Pape had wound up the A90 to 100 mph on the 'ruler straight' road to Bordeaux. It was the little grey donkey's unlucky day.

Wandering across the road a crash bar intended for an elephant almost finished a gruesome job. Roberta the sword-stick completed it. Pape drove on whistling the 'Donkey Serenade'.

Richard Pape was a man of diverse moods. Gentle one moment, outrageous the next

THE STORY of the remarkable journey of Richard Pape and his British car will be concluded in the next issue of *Austin Times* with more exclusive photographs from the camera of Johan Brun.

SPEC AT A GLANCE
Austin A90 Westminster

Engine: six cylinder 2639 cc (79.4 x 88.9 mm) ohv single Zenith 42VIS carb. 85 bhp at 4000 rpm
Clutch: Hydraulic
Gearbox: Four speed column change. Optional overdrive
Brakes: Girling hydraulic to all four wheels with twin leading shoe at the front
Suspension: Ifs by coil spring and wishbone. Semi-elliptic leaf springs to rear.

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ASK ARNOLD

I'D JUST GOT back from Hughes the dentist over that molar that'd been giving me gyp to find young Tosh looking as though it was him who had a pain in the face.

Seems, while I'd been out the chauffeur to Miss Lewis who lives in the big house on the back road out of town had been in, giving him a right royal ear bashing about their Eighteen.

Seems also he'd had a similar ear bashing off the old lady because when he'd had to reverse the Norfolk up the drive the day before he got her, the car that is, shuddering and juddering like a party jelly and she told him if that was going to happen she may as well have saved 200 odd quid, bought a Seven, and learnt to drive herself.

Anyhows, there was the Eighteen standing in the yard looking a bit sad.

Now it has to be said those big Austins could be a bit lively when reversing or starting on hills and eventually would 'knock out' the back universal joint.

I have heard that some went back to the Works for rectification early in their lives and when that happened they looked at the withdrawal levers for shimmy.

But in our case that wouldn't do at all. Old Mordicai the chauffeur would be back straight after dinner.

I got Tosh to lift that short stubby bonnet and we began by taking a long hard look at the engine mountings. If these have deteriorated because of oil contamination or age it can cause the sort of problem that faced us.

Jumped down

But everything under the bonnet was as clean as a new pin and the rubber mounts were as new too.

So we got the Parks Department's Fergey from over the short pit a bit sharpish and ran the Norfolk in.

I jumped down and took a look at the two at the gearbox end. Same thing.

While I was in the vicinity I got Tosh to fetch me a pry-bar and gave the universal joint at the front of the transmission shaft, and the output flange on the rear of the gearbox, a really good going over.

Nothing was slack or undone and there was no wear but I could tell something wasn't right.

So Tosh came down and we moved astern.

Same routine at the after end and although there was no wear in the universal joint and the four bolts were properly fitted we could see something was loose.

It took just a few minutes for the two of us to uncouple the shaft and reveal all. The nut holding the pinion flange had been fitted by some furry fairy without its lock washer and was not much more than finger tight. We put everything back together properly with new washers all round and just had time to take off our overalls and head up the Richmond Road.

That's where the driving testers put their victims through a hill start and was just what we needed.

Difficult to reverse? And not only because you can't see a blind thing out the back. But was transmission judder a problem?

I wouldn't say you could have balanced a glass of mild on the bonnet as the Norfolk pulled away or went back but it was certainly good enough not to wake Miss Lewis from a snooze and for Mordicai to keep his job.

Back in the workshop Tosh asked me if there was anything else we could have checked. Truth be told, we'd been very lucky.

The next thing to be done would have been to get that heavy gearbox out and strip the clutch so we could examine the linings for contamination.

Experiment

That could have come from dust, oil, or even water if the car had been exposed to flood water.

I would also have wanted to take a look at the condition of the thrust bearing and the pressure plate springs. And I might even have put the flywheel in the old Colchester and given it the once over for truth with the 'clock'.

Another possibility is to try a different grade of friction lining, but you can be toing and froing with that kind of experiment for a month of Sundays.

Rescue came from above

by MARTYN NUTLAND

Although the Mosquito fighter bomber of Coastal Command which engaged a Junkers 88 over the Bay of Biscay on January 7, 1944, downed the German, the British aircraft was so damaged in the fight it too had to be ditched some 200 miles south of the Scilly Isles.

In appalling weather conditions crew members, Flying Officer Huckin and Flight Sargeant Bob Graham managed to get their inflatable dinghy away. But the prospects were not good. After 15 hours on the seething ocean they were only 20 miles closer to shore.

Then above the scream of the scything wind they heard the friendlier tones of an air sea rescue Warwick bomber circling high above their position.

Shortly afterwards four parachutes sprouted, almost invisibly against the sleet streaked sky. Attached was an airborne lifeboat. It would be their refuge for the next four days; and ultimately their salvation, as Huckin and Graham, still in sound physical condition, were eventually picked up by rescue launch and landed at St Mary's in the Scillies.

In providing many of the engines for the airborne lifeboats Austin's input was among the company's significant contributions to the war effort.

The idea of the boats was originally that of a Royal Navy lieutenant named Robb. His idea of a rigid boat with sails and oars which could be dropped to ditched air crew was put to seafarer *extraordinaire*, Uffa Fox.

Fox had been born on the Isle of Wight in 1898 and served an apprenticeship with boatbuilder S E Saunders.

SPECTACULAR

Coincidentally, this would have been at a time when they would have been involved with the spectacular Austin-modified race boat, *Maple Leaf IV*.

By the time he was 21 Fox had established his own marine business in Cowes and his designs for dinghies that planed over the surface of the water became the most popular in the world. Other boating breakthroughs followed, often backed by personal demonstration, but it was in World War II he produced what he considered his most fulfilling concept of all.

Faced with Lieutenant Robb's challenge, Uffa Fox remembered transporting one of his celebrated *International 14* racing dinghies to, incidentally, the Scilly Isles slung beneath an aeroplane. He now built a lifeboat based on the same method of construction as the *International 14* but with dimensions to enable it to fit beneath the fuselage of an American Lockheed Hudson aircraft.

But with a descent rate of about 25 feet per second on its parachute it broke up on contact with the water and a revised design was formulated. The Mark 1 airborne lifeboat was 23 feet 2 inches in overall length and 22 foot long at the waterline with a beam of 5 foot 6 inches. Construction was on the

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The Classic Boat Museum at Newport Isle of Wight's restoration project of a 23 foot airborne lifeboat afloat on the local river Medina

double skin mahogany principle with the one eighth inch interior planking laid diagonally with the three-sixteenth external members fitted fore to aft over quarter by three eighths elm timbers. Copper nails were used as fasteners and freeboard was 2 foot 6 inches with a draught of nine. The vessel weighed around 10 hundredweights.

PARACHUTES

Austin were not initially involved and the Mark I and Mark Ia, intended for use with the Vickers Warwick, were powered by two Brittania 'Middy', twin cylinder, two stroke engines giving a capability of about six knots.

The first rescue involving the craft came in 1943 when a Halifax bomber went down in the Humber estuary. The crew were able to board a lifeboat dropped to them on three parachutes and then navigate towards the coast to meet rescue launches.

The Air/Sea Search and Rescue Service (ASR) celebrated their 60th anniversary in 2002 and consider their most important single operational development the introduction of the airborne lifeboat.

Although the Service were active at the Dieppe landings of 1942, and saved several aircrew with heavy losses to themselves, the demands on their gallantry increased considerably when they were called on to cover American operations.

US crews were ill-equipped and untrained for ditching in the sea, and as the daytime bombing offensive against Germany gathered momentum this was increasingly an eventuality. Thus the airborne lifeboat was much to the fore when the ASR saved no fewer than 118 of the 121 airmen who crashed into the sea over two days in September 1943.

Increasing demand and larger aircraft called for larger lifeboats and it was with the advent of the Mark II, also for the Warwick, and the IIa, for the Avro Lancaster and the Liberator, that Longbridge came on the scene.

The second series boats were longer (30 foot), wider at six foot with a draught of 11 inches on a freeboard of 2 foot 10 ins and weighed threequarters of a ton. Construction was similar to the Mark I but with a third 'skin' of treated calico placed between the two layers of the hull. The boats could now rescue 12 people.

Austin's selection as machinery provider probably stemmed from their production of large numbers of engines for conventional lifeboats on merchant ships.

CARBURATION

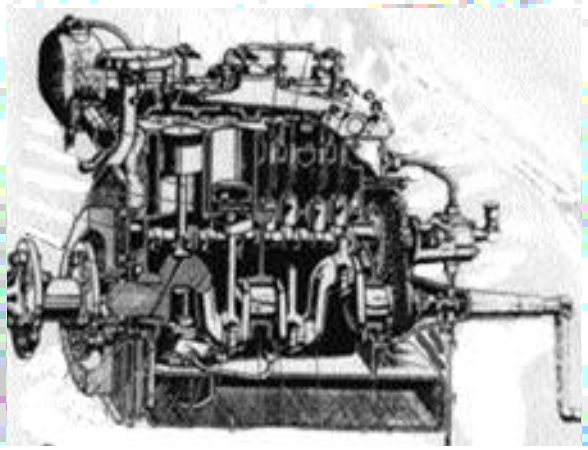
These units were usually the 8 hp 900 cc (56.77 x 88.9mm) four cylinder side valve Thetis and they chose this model to develop for the Mark II airborne lifeboat.

The Thetis had begun life in 1939 as a road vehicle engine for the 8 hp car and van.

It now underwent a typical marinisation with changes to the cooling and exhaust systems, ignition and carburation. Altogether 3,500 were built during the War, 150 of which were set aside for the Mark II airborne lifeboat and the remainder either for the merchant ship lifeboats or Admiralty dories.

The airborne lifeboat called for more engine modifications than on standard marine units.

There was a danger a normal



Sectioned view of the Austin engine

propeller shaft would be bent or displaced by the shock of being dropped from an aeroplane. To overcome this a flexible joint composed of two fabric discs attached to the ends of a tubular steel bridge piece was used. One side bolted to the engine flywheel, the other to the end of the 1 1/8 inch diameter propeller shaft. There was also a simple thrust block formed by two taper roller bearings arranged to take a reaction from either fore or aft.

A neat touch from Uffa Fox himself was to provide a tunnel in the hull for the shaft and propeller.

AUSTIN SEVEN

This not only provided protection for anyone in the water but directed the entire thrust efficiently aft without dispersing it in side waves.

Missing from the engine was the long chain of the standard unit, enclosed in its cast iron case, which normally linked the crankshaft to a starting handle connexion above cylinder head level. Instead, these engines had a fixed handle, rather in the manner of the Austin Seven car, where the shaft was carried in an extension to the timing gear case and engaged with its dog by pushing against a spring.

The importance of easy starting is obvious, but it was always a contentious issue. When the Austin engine for the airborne lifeboat was described in *Yachting Monthly* for September 1945 the journalist seems under the impression that the drive was fixed and is at pains to explain 'that not only must the engine be turned by hand to start, but also the shaft and propeller' and that 'in practice the added load is hardly noticeable'.

LENGTHY LEVER

However, Stephen Brewster Daniels in *Rescue from the Skies* (HMSO) tells us the Austin was fitted with a 'reduction gearbox of the usual marine type, having two operating positions, the lever forward for going ahead and towards aft for going astern, both from a *central neutral* (my italics) position'.

In any event, the handle, which even though it had a lengthy lever and was raised by the height of a substantial sump containing over 50 per cent more oil (12 pints as opposed to barely eight) than that on the standard lifeboat engine, seems to have been difficult to get at. There were also supplementary problems we will explore later.

Thetis engines usually carry their magnetos in a cradle on the front starboard side of the crankcase and drive by short shaft from a gearcase chain .

INSTRUMENT

It seems only some airborne lifeboat units had this arrangement, possibly engines in the series 300-960, which used a Lucas GJ 4/5 magneto. From then on a GJ 4 instrument with an impulse starter was fitted to aid starting with the awkward handle. If this is the type illustrated by *Yachting Monthly*, its drive was now by the same method as for a coil ignition distributor. That is, from an internal shaft crossing the crankcase diagonally to reach a camshaft gear.

Consequently, the magneto was at 90 degrees to the engine pointing upwards at an angle.

It was fully screened, as were its high tension leads and the sparking plugs to prevent interference with wireless transmission and reception.

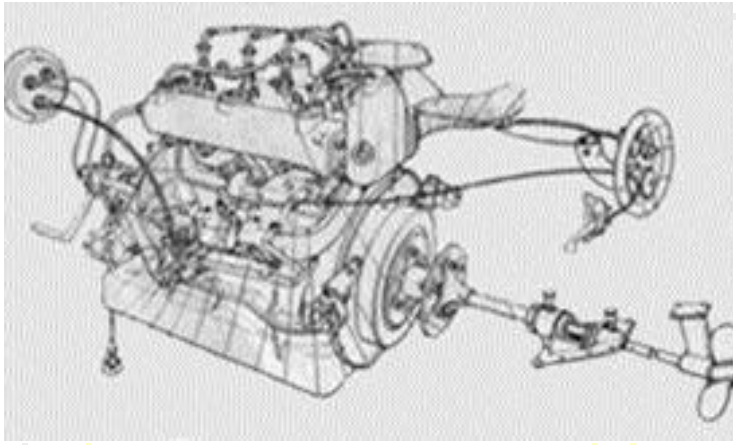
Engine speed was governed at the magneto to prevent racing if the propeller lifted out of the water momentarily in very heavy seas.

An AC Sphinx T Type mechanical fuel pump was fitted and the familiar Zenith 24V updraught carburetter used. However, a long tube, closed by a cap when the engine was not in use, was employed to deliver air from above the rear of the cylinder head to the air intake protected by a flame trap.

The importance of easy starting is obvious, but it was always a contentious issue

The whole engine sat on rubber mountings and its torque reactions were accommodated by a stainless steel flexible exhaust pipe. The combined discharge of gas and cooling water was somewhat simpler than normal.

A gear type pump drew



Port side of engine viewed from astern

water from the sea and delivered it to the cylinder block and head, whereupon it was discharged into the exhaust manifold's water jacket before combining with the combustion gases in a separate mixing chamber and being plumbed back into the sea.

The water inlet on the starboard side of the block which figured in the complex routeing for the standard Thetis was conveniently blanked by a drain tap.

Because of the risk of the whole engine being immersed when the lifeboat was dropped it was covered by a watertight neoprene hood secured between two wooden bulkheads.Each of these had an instrument panel screwed to it.

That at the forward end carried the strangler control, a matching priming knob and the petrol tap. The primer worked very simply by a cable attached to the standard priming lever on the pump. The throttle lever was mounted on the after panel along with an oil pressure guage and a button to earth the magneto when the engine needed to be stopped.

The method of enclosing the engine presented problems both of ventilation and access and the neoprene hood was subsequently divided so the upper portion could either be removed or dispensed with altogether.

The final version of the airborne lifeboat proper was the Mark lll. Apart from being bigger (32 foot long with a beam of 7 foot 1 inch) and heavier, this version was constructed of light alloy.

LOGIC SUGGESTS

Of more interest to the Austin enthusiast though, it 'ditched' the Thetis engine and reverted to a two stroke, this time the twin cylinder T5AM/X from Vincent/HRD.

That said, and as we have seen, there does seem to be a little confusion generally about Austin engines fitted to airborne lifeboats. Some authorities state the Mark ll used a 10 hp unit which would have been the 1125 cc Austin Triton. Logic suggests this might have suited the Mark lll but, as will be revealed, this was never in prospect.

Another interesting point for speculation is, just how suitable was the Austin - Thetis *or* Triton?

The director of developments Air Sea Rescue included these design parameters in the original specification for the airborne lifeboat: 'light enough to be carried by the aeroplanes of the day; have engines which could be easily started by hand by men without experience of marine power units, probably not at the peak of fitness after the ordeal of ditching and spending considerable time in a dinghy or Mae West.'

Now anyone who has ever worked on Austin Eight or Ten horsepower engines will acknowledge they are monstrously heavy for their purpose and it is quite clear the little Britannia 'Middy' of the Mark I and then the bigger Vincent (264 lbs dry), would have had a more favourable power to weight potential.

To get at the truth we need to refer to reports from the Marine Aircraft Experimental Establishment (MAEE) at Felixstowe published in 1946. They assessed both the Austin and Vincent and, however unpalatable it might be to Longbridge devotees their findings are not very complimentary.

Yet to put them in context we need to appreciate the propulsion problems which applied to the airborne lifeboat generally. These have never been better expressed than by Stephen Brewster Daniels:

To get at the truth we need to refer to reports from the MAEE at Felixstowe published in 1946

A fit yachtsman in the Solent on a sunny Saturday might get one started at the third or fourth pull

'At sea you're on a hostile element even in fine weather; there's no hard shoulder to pull onto for a quick repair or to await help in relatively peaceful conditions; instead there's a constant battle against winds, tides, waves and salt air, and there are immeasurably greater obsta - cles than gradients, road con - ditions and traffic hazards.

The sea does not let up and there's a high degree of incompatibility where sea air and water are concerned with small boat engines. So when choosing an engine reliability has to have priority over the conflicting demands of weight, space, fuel consumption, ease of starting, accessibility, centre of gravity etcetera. Plus one other for the first two Marks - availability in a wartime situation of materials and production capacity.'

Uffa Fox's initial choice of power unit was the Marston Seagull, a simple outboard, driving its propeller via a long vertical shaft. Others though seem to have crticised the 'Seagull' deflecting Fox towards a 1933 development by the British Motor Boat Manufacturing Company of the Brittania 'Middy'.

At £35, complete with reversing and steering gear, it had been sought after for pre-war tenders and dinghies and by those early years of the War was certainly hard to come by.

Normally the engine bolted vertically to the deck and drove its little 7.5 inch propeller through a short shaft fitted from outside the hull.

POWER OUTPUT

Capacity of the two cylinder, two stroke, over-square engine was only 165 cc (50.5 x 41mm) and power output four bhp at 3000 revs.

The magneto was contained within the flywheel and carburation was by an Amal instrument fed with its 16:1 petrol oil sustenance from a saddle tank partially encircling the flywheel.

The unit was liquid cooled, and collected sea water in a scoop at the stern, feeding it to the water jackets before discharge back to the ocean.
It was certainly simple, but one Middy had insufficient power for even the Mark 1 lifeboat.

PERILOUSLY

But an inboard with a big 'screw' wasn't the answer as it would have brought a conventionally positioned propeller and its shaft perilously close to earth. The transom and keel could not have withstood the stress without strengthening and the Hudson aircraft which were to carry the Mark Is had little ground clearance at the rear or when the landing gear telescoped on touchdown.

Uffa Fox's solution was to fit twin Middy's amidships and on either side of the keel with their propellers also located at this point. Clearly none of this would have been possible witth the Marston Seagull, and it removed a host of other problems into the bargain - a vulnerable propeller and shaft susceptible to damage either on the aircraft or when dropping into the sea; excessive weight aft and the need for strengthening at the stern.

But the Middy was not an ideal shipmate. A fit yachtsman in the Solent on a sunny Saturday might get one start ed at the third or fourth pull on a cord which was wound around a flywheel flange.

For debilitated aircrew in a stormed drenched North Sea it was another matter.

ROUGH WATER

Re-starting a hot engine was also difficult. And the oil mixed with the petrol tended to gum the carburetter jets on engines which, perforce, only had occasional use.

Furthermore those small propellers so far forward were prone to flail in air space created by the boat's movement, particularly in rough water.

With the bigger and heavier Mark ll there was no alternative to the inboard/big propeller option. The details of the eight horsepower Austin were described earlier and it is sad the MAEE saw fit to assess this strong reliable engine as 'not very satisfactory for the airborne lifeboats'.

They complain of defective and corroded parts after only 95 hours running with the oil very sludgy and water discernible. Of coolant passages in both head and block restricted by scale, sufficient, in some cases to reduce the communicating holes, notably

around number one cylinder and at the top of numbers two and three.

Corrosion was found on the valve stems so the component was difficult to remove; valve springs broken, or short by an eighth of an inch under load; and timing sprocket teeth corroded and the chain rollers burnished by dry running.

PASSAGEWAYS

Starting handle bearings partly seized were noted, with the throw-out spring rusty due to lack of oil from inadequate passageways and the handle's overly small grip liable to seizure; very heavy soft carbon deposits in the engine as might be expected on an over-cooled unit; breakdown of the insulation on the sparking plug screening sleeves with the gauze vents on the magneto blocked by paint.

A wide spectrum of criticism is covered here from poor materials to faulty design and work.

DEFENCE

In Longbridge's defence it should be said immediately that it is highly unlikely anyone at 'the Austin' had any personal experience of the conditions under which their wartime marine engines were likely to serve and, at the end of the day, these were basically road vehicle motors designed in the mode of Austin's core business.

In addition the company would have had little control over the quality of the materials supplied to it and there would have been enormous pressure to get equipment out and onto the battleground.

Over-cooling and lubrication problems seem to be the principal areas for complaint yet it should be recognised that most vehicle engines of the 30s suffered from this characteristic and manufacturers did not enjoy our knowledge of thermo-dynamics.

At best cooling marine engines relying on 'total loss' systems was haphazard. Did not Austin's instruction manual advise 'the cylinder head should be just too hot to touch'?

And in the context of the airborne lifeboat we are dealing with traumatized men.

OVER-COOLED

Many would never have seen a marine engine in their lives, let alone be capable of regulating water flow for optimum running temperature. And over-cooled engines keep going whereas overheating ones don't for long.

The MAEE blames water in the sump, and presumably corrosion generally, on Austin's provision of a conection between carburetter intake and tappet gallery.

This was intended to suck fumes away from the occupants but allowed damp salty air into the engine as well. The shortcoming was compounded because moisture could also enter through the vehicle type oil filler cap and because the original crankcase breather in the tappet gallery cover was left unsealed.

Whether it would ave been justifiable to devote design time to such details under the pressure of wartime production is questionable.

In any case the issue is not that simple. Austin would have wanted to ventilate the crankcase for safety reasons.

DRAUGHT TUBE

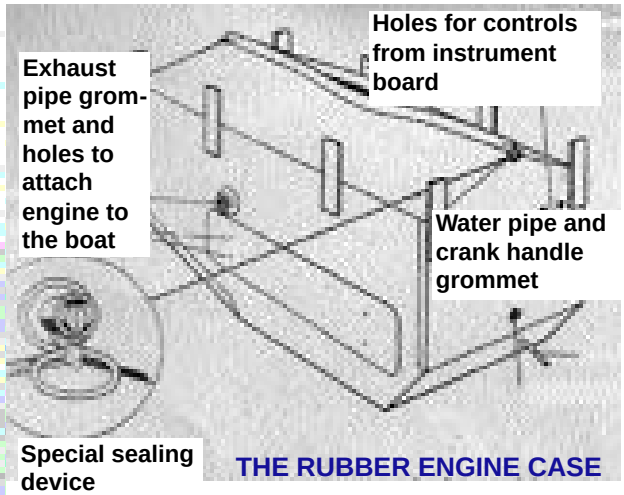
With a totally enclosed engine the draught tube protruding into the air stream they used on road vehicles to carry away blow-by gases was not possible. The vapours emerging from it would simply fill the boat!

Lubrication was also a complication and it was not uncommon for sump oil to acquire the viscosity of treacle, and sometimes freeze during flight.

PEAK REVS

It would not have assumed its normal characteristics by start up and it is easy to imagine a desperate airman running his lifeboat's engine at peak revs in these circumstances whereupon almost anything might break including a valve spring.

Whatever vindication of the Austin engine we might offer, the powers that were had no



THE RUBBER ENGINE CASE

truck with it for the airborne lifeboat after Mark ll and even imposed the ignominy of considering the Vincent/HRD as a replacement. But was it that much better?

Destined for the Mark lll, its role was perceived as being primarily in the Pacific where a maximum range of 1000 miles might be required with the usual attributes of easy starting, convenience of weight and size, plus climatic tolerance and the possibility of submersability.

The T5AM/X was based on a design by Philip Vincent of motorcycle fame but specially reworked for the lifeboat by P E Irving.

To our eyes it would seem extremely complicated. A horizontally opposed two stroke of 497 cc (56 x 50.8mm), it had twin power cylinders with an induction cylinder between them in which partial compression took place. There were two crankshafts linked by chains and with throws for the conventional pistons and the two double acting 'pumping' or induction pistons. Compression ratio was 7:1.

Carburation was by a marine Amal (Type 30HVL) and ignition from a BTH KD2-SS4 magneto with an impulse device to aid manual starting before a Rotax motor was subsequently fitted. All electrics were shielded against causing radio interference and the magneto itself also enclosed in a watertight metal case. The chain linking the crankshafts operated a counter shaft to a reduction and reversing gearbox which drove the propeller through a multi-plate wet clutch. The material used for the main engine components was corrosion resistant anodized magnesium aluminium with stainless or cadmium plated steel used for any other exposed parts.

Ingeniously the engine was 'flown' without coolant to save weight and obviate freezing. The time it took the gear type pump to fill the jackets on starting aided warm up.

Power output from this sophisticated engine was 13.5 bhp at 3080 revs. This would have been far below its potential but the propeller could not accept more than 15 bhp before cavitation so the tuning provided for maximum economy at 11 bhp with little increase in consumption right up to a critical 14hp.

For whatever reason the Vincent/HRD was fine tuned but the Longbridge product's maladies remained untreated

The Vincent/HRD clearly had answers for many of the criticisms levelled against the Austin. It was tested by MAEE in November 1946 who required the replacement of the Amal carburetter by a Zenith (sic). They also described the lever starting - a variation on motorcycle kick-start practice - as 'triclky' with the fairly damning observation that in the hands of the inexperienced a 'kick-back' could result in a broken wrist! The complicated expedient of the electric starter was recommended. The Amal fuel pump was condemned as inadequate and the engine as a whole described as very noisy and to blow fumes into the boat.

In many ways these criticisms were much more significant than those of the Austin, but for whatever reason, the Vincent/HRD was fine tuned whereas the Longbridge product's maladies appear to have remained untreated.

Development of the Vincent - mainly as regards electrics, including a sump heater - was still underway as late as 1953 and Mark llls with this power unit eventually went into service with the South African Air Force.

As with many blindingly obvious concepts the airborne lifeboats were not as simple as they might at first seem. The general shape had to allow the vessel to 'fly' through the air suspended from a single bomb hook.

The equipment had to be arranged so the bow would drop at release and provide a 'wedge' shape in which the air would force the craft away from the aeroplane.

As the boat descended a pilot parachute opened, and when all was well clear of the aircraft, it activated the main 'chutes for a descent at about 26 feet per second.

The parachute harness gave the bow a downward inclination of some 30 degrees so it could knife into the sea and settle the boat gently. An element of rocket science came into the picture as a sea anchor was fired ahead of the vessel to hold it bow to wind

once in the water. A second explosion blew off the parachute connections on contact and yet a third series of rockets fired life lines to assist victims haul themselves to the boat.

During the descent carbon dioxide bottles inflated turtle decks to enclose a portion of the hull and provide both buoyancy chambers and small cabins.

At a more prosaic level the lifeboats were excellently equipped. At the base of the hull in wooden compartments labelled with white paint were sails and oars, petrol for as much as 500 miles, charts, a compass and the course to the nearest safe port, enough food for a month including self-heating soups and beef, clothes, a comprehensive medical kit, fishing tackle and even some cigarettes.

Naturally there was a wireless transmitter and receiver with a kite to elevate the aerial and the all-important instruction book on how to sail!

Flying Officer Huckin of the drama off the Scilly Isles had cause to comment: 'Whoever designed these lifeboats did a grand job. Neither of us had any experience of sailing, but it was almost child's play, everything labelled, you couldn't do wrong.'

Altogether about 540 of the wooden lifeboats were built by Uffa Fox's own company and manufacturers such as Woodnuts, Saunders-Roe, Ranelagh and Herbert Woods. Some were shipped to North America, Australia, New Zealand and as far afield as India for use in those arenas. Other sizes of craft from 16 foot right up to 50 were envisaged but never built. The only version which materialised was an 18 footer for the Fleet Air Arm and fitted to Fairey Barracuda aircraft.

If you want to see an airborne lifeboat a Mark I one is undergoing extensive restoration by the Classic Boat Museum at Newport, Isle of Wight, with the intention of creating a fully seaworthy example.

The author gratefully acknowledges generous assistance in the preparation of this article from J Collis of the Classic Boat Museum and Amanda Martin, curator at the Isles of Scilly Museums Association, Church Street, St Mary's.

Round About

with AÏDA MAURICE

AUSTINS HAVE really been out and about the last few months tackling hillclimbs and road runs and visiting other spectacles.

We go first to St Cloud in the near suburbs of Paris for the first *Festival Historique Automobile.* As well as being an excuse for a jolly good motoring bash the three day jamboree commemorated a1946 grand prix which celebrated the opening of a tunnel on the nearby *autoroute de l'ouest* and the recommencement of motor sport in France after The Occupation.

Although cars from our period were thin on the grass-there was a *bijoux* turn out of that model synonymous in France with Austin - the Mini.

A WEEK OR so later the time had zoomed around again for the non-competitive hillclimb at Chanteloup-les-Vignes just a little bit further from Paris than St Cloud. Acclaimed as the oldest event of its kind in the world, the foray by Austin Sevens that had been planned failed to materialize but there was abundant compensation in a visit by cars not that much further way in the alphabet - the Bentley. *(see over page).*

Donaz family 'Ulster' was sole Austin at St Cloud and Chanteloup

MEANWHILE our Belgian friends and many others besides have been on the move for the Brittany Tour which begins in three equally charming villages and takes three days to wend its way to Rennes.

For some reason Rosengarts always seem to be a bit shy but this year turned out in some strength. Even the rare six cylinder model, which is effectively an extended Austin Seven unit, put in an appearance.

Also present and correct were the Nippy of Luc Wynen, a PD tourer from France and a British Ruby.

AND ON THE other side of the world, but way back in March, which is summer in Australia, of course, The British and European Motor Show took place at Dandenong. It turned up the fare below.

Charming light commercial - an A40 'ute' at Dandenong and inset *Peter Booth's 'Chummy' at Pakenham*

Adopted friend of the Austin, Bill Ballard didn't go but true to tradition went to the Pakenham Picnic, south of Melbourne, hence the Seven spotted and snapped for *'Times'*.

Still in the southern hemisphere Ron and Jenny Day from New Zealand took their 'new' Eight (above left) on a club run based on Hawkes Bay and met another.

Left *Rosengart line up in Brittany and* below *the open road seen from Luc Wynen's Nippy*

JUST ROOM TO remind you of that great Swiss event, the *Classic British Car Meeting* at Morges on the shores of Lake Geneva.

Now in it's 13th year the previous gathering attracted 10,000 visitors and 1200 British vehicles from many parts of Europe.

Thanks to generous support from the business community and Morges town it's all free and one very good reason to lend your support is that organizer Keith Wynn is an Austin devotee with a superb Ascot.

Date for the diary is SATURDAY OCTOBER 2 with more information on the web at www.british-cars.ch