

THE BULLETIN

No. 457 MAY/JUNE 1999

Contents

Alvivacity	195
International Alvis Day	197
Alvis Owner Club Ltd	198
Leaded/Unleaded Fuel And Alvis Cars	199
The 1999 A.G.M	201
The History Of A Speed 25	202
Into The Darkness	204
Winter Challenge 1999	208
Alvis Car Club N.S.W. Picnic	215
A Pile Of Old Pallets?	217
Soaring With The Eagles — Part II	219
Letters To The Editor	230
Roderick Revived	247
Iron Lungs, Smith-Clarke And Alvis	255
Posed, Probed And Solved — The Last Lap	264
In The Workshop — On Small Diameter Pipes And Pipework	267
Book Reviews	272
Archive	276
Regional Round Up	280
New Members	283

Cover Photo: A preview for International Alvis Day at Calke Abbey. Murray Maclean's 1929 TG 12/50 Doctor's Coupé, John Burnell's 1929 TG 12/50 Atlantic Saloon and Mike Meakin's 1963 TE 21 Saloon. Photo: Mike Meakin

Centre Spread: R.W.C. Costa's Firefly at the foot of Woodcotdale in the 1935 SSCC Winter Half Day Trial. This fine period photograph comes via Donald Cowbourne. George Melville and Derek Tourle will understand!

Display Advertisements: available on a per issue or annual (six issue) basis. Annual rates: £450.00 per full page, £275.00 per half page and £150.00 per quarter page. Per issue rates are £100.00 per page; £60.00 per half page and £35.00 per quarter page except for quarter page advertisements for personal car sales for which a special rate of £7.50 applies Artwork costs extra if not supplied.



- A Round up of Alvis Matters -

This year sees the One Hundredth anniversaries of two famous British makes, Sunbeam and Lagonda. Congratulations. We Alvis enthusiasts have another twenty odd years to go before we can indulge in a centenary. It is slightly unnerving to realise that I shall be seventy three by then, if I am still around. I may not still be the editor, of course.

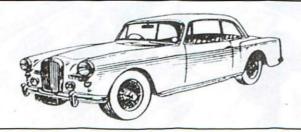
Visitors to Singapore have included John Rowlands, who took the pictures used for the Welsh Weekend Report in the last issue, and Coen van der Weiden from Holland, who also contributed to the last issue. It was very interesting talking to Coen, who related to me a couple of problems that they have in the Dutch Alvis Club. The first is that the name Alvis is still relatively unknown among car enthusiasts, and so this limits the enthusiasm for the marque. Secondly, Coen mentions the problem that Dutch Alvis enthusiasts are an aging group. Few, if any, younger enthusiasts are joining the ranks. Does this problem happen in the AOC too?

The Dutch magazine, British Car, features Alvises from time to time and Coen van der Weiden has given me copies from two issues which feature a TE 21 and a 4.3 short chassis VDP tourer, so Dutch enthusiasts are being given some information about Alvis.

The April issue of Thoroughbred and Classic Cars contains an article "The League of Gentlemen", which is a comparative road test of a TE 21, Mercedes-Benz 250 SE and an Alfa Romeo 2600 Sprint. Most of us will think that these three cars have little in common and I am sure that none of us doubt which is best. In the article, Neville Biford's TE 21 is described as, "For those people who can't quite embrace the second half of the 20th century an Alvis is a perfect tonic". Thoroughbred and Classic Car also runs a page of cars of different professions. This issue features farmers. Richard Smith is photographed with his 1928 Silver Eagle Special.

I was idly looking through one of the British classic car magazines, and I decided to see how many Alvises were for sale. In the issue that I looked through, there were nineteen. The cars included three 12/50s, two 12/60s, two Fireflys, two Firebirds, two Silver Eagles, two Speed 20s, one 4.3, one TA 21, one TC 21/100, two TD 21s and one TF 21. I was quite surprised at the number of cars for sale and I wonder if this means that every month or so we should be getting 20 new members, or is it that we lose 20 and gain 20?

J.N.B.C.



INTERNATIONALALVIS DAY WEEKEND CALKE ABBEY

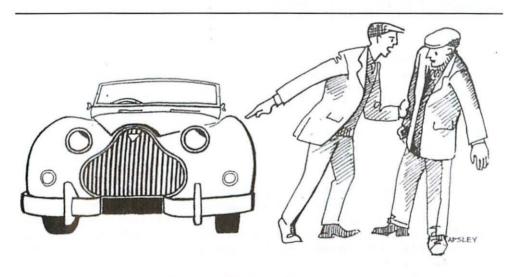
_ July 16th to 18th 1999 _

Our cover picture gives a sneak preview of Calke Abbey, venue for this year's International Alvis Day, which in turn is the climax of the International Weekend. Calke's rolling acres will form an ideal backdrop for the Sunday's events, but there will be plenty of activity on the Saturday as well. On that day, the Midland Section have arranged a tour which will cater for members arriving at any time — Friday night, Saturday morning, midday or afternoon.

Main attraction in the morning will be a visit to Tom Wheatcroft's world-famous racing-car museum, the "Grand Prix Collection", which is adjacent to the Donington motor-racing circuit. The exhibits range from the 1936 twin-engined Alfa-Romeo Bimotore to Mikka Hakkinen's Jerez-winning West McLaren-Mercedes of 1997. There are also some notable road cars, including a Bugatti Royale. Thereafter there is a pub stop for lunch in the village of Sudbury, followed by a visit to Sudbury Hall (a National Trust property) with its "Museum of Childhood". The tour then returns to the Mickleover Court Hotel, where there will be a dinner and dancing in the evening.

The Midland Section is promising a number of "surprise items" throughout the weekend, which should help to make it a memorable one. If you were thinking of going but have not yet booked the hotel, there may still be time! Full details have already appeared in the Calendar, but if you need more information, ring Eric Ody on 01889-567-397. Remember, too, that there are both an Autojumble and a "Cars for Sale" area on the Sunday — details from David Lowe on 01384-872-392.

NICK WALKER



"IT BIT ME!"

ALVIS OWNER CLUB LTD

Dear Fellow Member,

We all have concerns about change, especially when it effects something dear to our hearts such as our club, but sometimes change is essential for survival and in these days, where the values and the image of not only old cars but the motor car in general, have changed, we must look to the protection of our interests and to those of the Club.

The Council has been concerned for some time that we are vulnerable to litigation. We could well have problems should a case for substantial compensation ever be levelled at the Club, an official, or a member. We are concerned as to how well protected we are, or could be. You will know that there are now many opportunists offering to handle compensation claims on any subject, the basis being "no win, no fee" and they look for soft targets. Honesty and fairness do not enter the equation these days.

As notified in the November 1998 Calendar, last October the Council voted to create a working party to look at the best ways of protecting the Club and its members in such circumstances. I was elected chairman of the working party and three well known, experienced and trusted members joined me, they being Brian Maile, Nick Simpson and Nick Walker.

What is important is that we consider that in the Club's present format, we may be very vulnerable. One hears of high compensation payment awards and the situation is likely to get worse. Although the Council has endeavoured to make sure that our insurance covers every eventuality, including libel, third party liability and even infringement of patents and designs when it comes to the production of spare parts, you can never be sure that it is enough or that we are fully covered against a very substantial claim.

Over the past months we have sought advice from many sources including professional advisors and members who are qualified in such matters. We notified the Council that the culmination of our investigation was that there was sufficient evidence in favour of the Club becoming incorporated by way of a company limited by guarantee. We therefore recommended this course of action to the Council.

I feel that it is important to explain this recommendation. First, let me state that in respect of this change there is no advantage or disadvantage to the Club as far as the way its finances are run or used. We have, through good management, a more than adequate accounting system already in place and the way the Council look after the interests of the members is more than acceptable, particularly when you look at the formality aspects of a limited company. Consequently, you would see no significant difference in the way the Club is managed, if we take this step. The registration/operational costs involved are minimal but the benefits considerable. It will have no effect on subscription levels. For international members, it is unlikely that this action would be any direct benefit to you, other than protecting your Club's future.

By creating a company limited by guarantee, the risk to you and to the Club is substantially reduced. I quote from the advice of one of our most eminent advisors on these matters: "Although the Club, or more importantly, the officials organizing the Club or specific events, are covered under public liability insurance, any claim is bound to be against the officials personally. A claim against the Club would be additional. Incorporation seems to be the only practicable way to insulate individuals from collective responsibility."

This means that if we incorporate the Club by guarantee, in the unlikely event of anyone taking action to seek substantial compensation against the Club or an official, your maximum liability, in the

very worst case, as a member of the Club, would be one pound. Another benefit of incorporation is that the Club would be seen to have such protection in place, and it would therefore substantially reduce the risk of inappropriate litigation being taken against it. Incorporation means that the Club would become an addressable entity with a registered office and this protects the membership from outsiders more easily.

You might ask why we did not go down the Charitable Trust route. The reason is that this is not an option today as the law has been changed. We would have to prove we are a bona fide charity and that we can not do.

The Council is dedicated to the protection of your interests and those of the Club, for future generations, and so the Council overwhelmingly voted to accept the working party's recommendations, and it is hoped that you will endorse that acceptance. The problem now is finding a way to deal with this issue within the rules of the Club, which are far from clear; we are now working on the finer details so that we can be sure we are following the correct procedures. This is a very important issue and it is hoped that you will agree the need for positive action.

I am quite prepared to answer questions but I do feel that urgent action is needed on this subject. To delay would be very risky.

As a separate issue, the working party has also recommended that a Trust be created to be responsible for the Club's Archives. You have been very generous already and John Wheeley is doing an excellent job in holding and documenting the Archives. What we have suggested is a long term plan. The hope is that eventually we would have dedicated storage facilities for our Archives which would enable any member to use them. It would also give those members who own what we know are important items/documents (part of the history of our cars and Club), the assurance that their treasures will be preserved and protected. The Archives would be cared for by the Trust and could not be disposed of, whatever happens to the Club. Our wish is that one day we will join with The Register and Red Triangle in having Archives on all Alvis matters in one place for all to use.

We today have a clear knowledge of Alvis as a car manufacturer but to future generations that knowledge may only come from our Archives so we hope that you will continue to support the transfer of artifacts. By the creation of the Trust, we are demonstrating the Club's commitment to Archive preservation and management.

ROBIN BENDALL

LEADED/UNLEADED FUELAND ALVIS CARS

Leaded fuel (Four-Star BS 4040) will not be available from January 1st, 2000 at filling stations. There is to be a limited quantity of leaded fuel to be made available to "Special Interest Groups", perhaps classic cars and classic competition cars. To date there is no published plan for distribution of this fuel. It may only be intended for competition use.

Other countries already have a leaded fuel ban. Users in those countries switch to unleaded fuel and top their tanks with an **Anti Wear Additive (AWA)**. These products are said to provide a measure of protection against **Valve Seat Recession**. It is expected that Anti Wear Additives (AWAs) will be available in motorists shops by 01/01/00. These should not be confused with Octane Enhancers intended to boost performance. To date, (24/03/99), four products have been tested and approved by the FBHVC:-

Millers VSP-Plus Red Line Lead Substitute Superblend 12/Zero Lead 2000 Valvemaster

N.B. Each of these products has different ratios for mixing and it is essential that doses are measured carefully as too much additive can do harm.

It is also advised that one should 'stick' to one additive only as mixing them may be harmful.

There are a number of 'devices' that may be fitted in fuel lines and fuel tanks that purport to 'add lead' to unleaded fuel. So far, none of these has been convincingly tested and there is no British Standard.

Shell issued a pamphlet that states, "There will be an acceptable replacement for 4 Star in the U.K. when the Lead Ban takes effect in the year 2000." They say it will be "Widely available". They also say they are working with motor manufactures and consumer groups to develop a British Standard for Lead Replacement Petrol. To date, 24/03/99, none of the LRP producers has submitted their products for test by the FBHVC. We do not know for sure if the LRP to be offered will have a British Standard. When using LRP, it is suggested that one should 'stick' to one brand and not mix them.

At present, the lead into petrol acts as a protective barrier between the engine exhaust valve and the valve seat into which it fits. Without lead or an alternative valve seat protector, the normal 'soft' exhaust valve seats can wear away more quickly than usual causing loss of power and the eventual need for an early Top Overhaul. This condition is known as **Valve Seat Recession**.

Historically, lead was introduced into fuel around 1931 in response to demand from consumers and motor manufacturers. They needed to lengthen service intervals between top overhauls. The problem had become acute with the growth of motor haulage and wider use of the car. Exhaust valve and seat metallurgy was not so advanced as today. Pre 1931 Alvis cars ran without lead in petrol but valve overhaul was a regular and irritating chore at service time until the introduction of leaded fuel.

All Alvis cars should benefit from Lead Replacement Petrol or an additive when the ban becomes effective. They should reduce Valve Seat Recession. Some Alvis cars may be mechanically converted to run on unleaded fuel. This is carried out by fitting hardened exhaust valves and valve seats. A list is available for models that may be converted. It is thought that all Alvis cars may be driven gently using untreated unleaded fuel with certain provisions:- motorway driving, high engine speeds and long periods of heavy pulling must be avoided.

The Department of the Environment, Transport and the Regions issued a four-page statement on 7th December 1998 entitled "Making the Change — Moving to Lead Free Petrol". Paragraph 10 states, "It is expected that LRP or AWAs will be increasingly available from the autumn of 1999. Where petrol stations choose to offer LRP, this will replace 4 Star at leaded petrol pumps. Pumps dispensing the new fuel should be clearly labelled 'LRP' and will have a wide nozzle that will not fit the fuel filler of cars equipped with catalytic converters". (LRP or additive-treated unleaded fuel can damage a catalytic converter.) "As an alternative to LRP, petrol stations may offer AWAs for mixing with unleaded petrol. These additives will be available in bottles or syringe-like injection applicators."

This statement is available from the DETR by telephoning 0870-1226-236 and asking for leaflet T/INF/476. You can also find it in full on the Internet at http://www.detr.gov.uk.

NICK SIMPSON Technical Editor

THE 1999 A.G.M.

Some forty four members attended this year's AGM at the Allesley Hotel, Coventry on March 28th. Among the apologies for absence was one from Eric and Brenda Oakman who, regrettably, had to be elsewhere. This would have been Eric's 40th consecutive AGM which must surely be a record. After acceptance of the minutes from the previous year, reports were presented both on the year past and plans for the year ahead.

As is customary, the Chairman, Arthur Fairburn, was the first to make this report. In the year past, his first in the post, Arthur had visited all the Section days and had been impressed by the quality and organisation of the events and thanked all involved. He had also attended a delightful weekend in Cornwall where his predecessor laid a wreath in memory of Major Harvey. He ended his report by commenting on matters currently under consideration by the Council such as whether the Club should become a limited company and also looked forward to the many events in the year ahead.

Jim Pearce was able to report the Club's continuing healthy financial position although the year had ended with a small deficit which would be corrected by the increase in subscriptions announced earlier. Dave Culshaw described the changes to his sleuthing team and in particularly welcomed a new addition in the person of Mark Chapman who will coordinate matters relating to military vehicles. For his part, Charles Mackonochie was able to report the highest level of membership yet at 1,646.

The overall results were provided by the Mick Fletcher. Well done East Anglia for winning The Intersection Shield, Jim Tatchel for the best individual performance and Susan Little who gained the Ladies plate.

A report was given by Eric Ody on the progress toward International Alvis Day 99, which moves to the Midland Section this year and each of the other Section Secretaries reported on the many and varied events of the year past and looked forward to the attractions to come within their respective areas.

The Editor's report was delivered by the new Assistant Editor, Chris Watson. He commented not only on the quality of the material received but also on the quantity which ensures healthy Bulletins in the months to come. Brian Maille made reference to last year's very successful 75th anniversary of the first ever Alvis Day at Brooklands which even contrived to show a profit and described progress in the restoration of the Motoring Village and the setting up of the permanent Alvis display.

It is now some three years since the Archive Census. John Wheeley described the progress so far and confirmed he is happy to receive anything appropriate.

The posts of Treasurer, Registrar and those of Competition and General Secretaries were all due for re-election. The present incumbents were all willing to stand again and no other nominations had been received. During the year, Colin Newby had announced his retirement as PRO. As yet no replacement has been found.

Many people will know that Martin Wickham is about to leave Alvis. In recognition of all the assistance Martin has provided, the Chairman was pleased to present, on behalf of the Club, a small token of our appreciation.

Considerable discussion took place on the subject of unleaded fuel. Nick Simpson was able to inform the meeting of the latest developments in fuel additives, the availability of lead replacement petrol and the likely effects on our cars.

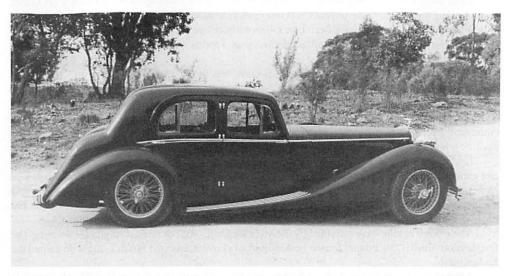
Before closing the meeting, Arthur announced that our President, Norman Whitton, has decided to retire this year. John Wheeley proposed a vote of thanks to Norman which was heartily endorsed.

MALCOLM DAVEY

— General Secretary —

THE HISTORY OF A SPEED 25

— Car No. 19913; Chassis No. 14629; Engine No. 15113 —



Simon Ramsay's Speed 25.

Photo: Simon Ramsay

Ex-works as a chassis only in 1939. Probably imported at Melbourne where it had a saloon body fitted (probably built by Martin and King). The original owner is not known but it is believed it was sold new to a Sydney horse trainer or bookmaker. The car was stolen and chased by police. It crashed, overturned and caught fire. The wreck was offered for sale by tender and bought by a Quantas pilot, "Snow" Schubert, who had the car rebuilt with a new body. The body was said to be too narrow and did not fit the chassis rails properly (not visible to me when I photographed the car at this stage). It now had a divided V-shaped windscreen and a matching pair of rear windows and the car was painted black. In this form, the car was registered (NSW) ABF 519. It was said to have been previously registered as 15.194 but that number belongs to an earlier series so remains a puzzle to me.

In mid-1959 the car was acquired by John Macnaughton and registered now as (NSW) CDN 415. The car had some gearbox parts replaced in 1963/1964 and was offered for sale in 1976. It was purchased by Bob Rodger of Lindfield, N.S.W., who soon afterwards sold it to John Ham of Victoria and Canberra.

John Ham sold this car to Max Houston in 1978 who rebuilt the car in its present form with a one-piece windscreen and a single, wide back window. The boot top is lower than previously and the beaver-tail is lengthened so that the rear end has smooth-flowing lines now. The window quarterlights, front and rear, are retained in the present car. The car was sold to Martin Pye of Inverell, N.S.W. (probably before the above work by Houston was commissioned by Pye).

Pye is believed to have sold the car to Ian McNee who later passed it on to Simon Ramsay.

ERIC CUNNINGHAM

This Speed 25 which now belongs to Simon Ramsay, is pictured at the head of this article. Eric Cunningham has sorted out its history as far as he can. Can anyone add further details? -J.N.B.C.

INTO THE DARKNESS

It all began at the "Surrey Noggin" in November. Mike Baker came in with the latest VSCC Newsletter in his hand. "How about entering the Measham night rally", he said to rally enthusiast Brian Maile. A discussion then followed about the practicalities of such a venture. Mike had competed in this event twice before, as a driver, but Brian had not participated in a rally held under VSCC regulations. The first thing was to find a suitable car. This is where Mike's experience came in. "A saloon is essential", reasoned Mike.

It was then that I became involved, for standing outside of the pub was my recently acquired Firefly saloon. "Not at all suitable", I protested, and then proceeded to explain to Mike and Brian about the car's power/weight ratio. In reply, I was then told that "Austin 7's" and the like competed annually. "All you have to do is drive", said Mike, "we will do all the rest". With some reluctance, I agreed, although I still had concerns about the car's suitability, the car's condition and the driver's capability. But in the cosy atmosphere of a warm pub with a couple of pints inside it all seemed distinctly achievable.

For anyone who is unfamiliar with VSCC events, "The Measham" is a night rally that is held in the middle of January, in some of England's most difficult areas for motoring and is reckoned to be the most testing VSCC event held on public roads. This year, the event had been moved to North Yorkshire which has both the Yorkshire Dales to the west and the North York Moors to the east, for the organiser's to do their damnedest.

Over the next two and a half months, many misgivings went through my mind. About the car and the driver, about what to check, about what to repair, what to add and what to take off. The attitude of my family, which varied from, "you must be mad", to references of the "Last of the Summer Wine", did not help, although I felt that they were all well intentioned. Another point of concern, was that my rally experience was limited to one "Inter-Register" event, close to home, when I had navagated for the driver of a 12/50.

The plan was for me to drive the 30 or so miles north to Brian's, load the car on his trailer and then for Brian to drive the remaining 280 miles north to North Yorkshire, compete and then repeat the operation for the return journey. The first problem that we were to encounter, was that the trailer's capacity was only one ton and the Firefly's weight was 1.35 tons (27 cwt). Before we had solved it, came news that Brian's car had been involved in an accident and had been written-off.

This then forced us to change our plans completely. A new plan was agreed, that I would drive the first 230 miles on the Friday to Sheffield, stay overnight and then drive the remaining 80 miles on the Saturday. Brian and Mike to come up in a modern car on Saturday, then we could compete in the rally and then repeat the strategy for the return.

In the week leading up to the event, it became clear that the exceptionally mild weather that had featured since before Christmas would hold. This led me to believe that at the very least, we would not be driving the entire event on packed snow. But fears were still present; the thought of driving all night in thick fog was one that I did not relish!

At first light on Friday, 15th January I was off on the first leg to Yorkshire. Once I depart on any trip, I always adopt a philosophical approach — what's left behind, is left; just get on with it and enjoy it. The weather for the entire day was to turn out to be light rain, driven on by a near gale force westerly wind. The journey was punctuated by a series of irritating minor mechanical and electrical problems, not at all a good omen.

After an overnight stop, the next day brought some winter sunshine and the wind was dropping

but the air that they have in Yorkshire is many degrees lower than in the south of the land. But the car was running well and confidence returning. Then coming up to the northern end of the Doncaster bypass, suddenly the engine began to falter, this was accompanied by a strong smell of petrol and then the engine cut out entirely. On to the hard-shoulder, lift up the bonnet and "hey-presto", the float chamber had fallen off the carburettor! "Is someone up there trying to tell me something?" Fortunately, the bolt and all of the washers were still attached, so it is a simple job to put it back together. But what could happen next?

I arrived at the start point with plenty of time to spare. Before I can get out of the car, a fellow competitor walks over, shakes me by the hand and introduces himself to me. He is Alvis man, Ken Burnett; Heather Milne-Taylor also introduces herself to me. They were tipped off that I was coming by competition correspondent, Mike Meakin. This gesture by two of the top flight rally competitors, really put me at ease. The car park, meanwhile, was filling up with all sorts of machinery, both exotic and sporting. The Firefly, covered in road-grime, looked quite out-classed in such company, but it would be dark soon.

In the warmth of a motel room, a tutorial had been arranged for newcomers, such as myself, on the subject of navigation for the event. It was during this, that I was joined by my crew of Mike and Brian; things are finally coming together. Next, we went back out in the cold, to the car park, to prepare the car. First, top up with petrol, then fix map reading light to navigator's satisfaction. Swap over all my equipment that is not absolutely essential for Mike and Brian's navigational effects plus extra clothing and Mike's "goody" bag of snacks. Back inside and sign-on, we are then given our first pack of information and the numbers that the car will carry for the night (11). These are then fixed to the car and then we report nearby for scrutineering. There seems to be so much to do and the clock is ticking.

Back inside and Mike and Brian, then begin to plot the "give-ways". To those not familiar with this term, they are points on the maps where one must make stops, for if they are on the route, they may be observed. There seems to be several dozen of them, apparently only some of them will be on the (as yet unknown) route. The organisers obviously believe that the crews like doing this to wile away the time.

Time is now found to dine in the motel's restaurant, but still at the back of one's mind are thoughts of the night ahead. The next critical time is 20.26, this is 45 minutes before our start time. Only class 1 competitors (newcomers) have this privilege, others only have 30 minutes to plot the first half of the route.

Right to the second at 20.26, we collect our route, to a much more frantic pace, Brian, with Mike's help, starts to plot the route that we will endeavour to follow for the first part of the night. As we are a crew of three, I feel a bit "spare" for the moment. At about ten minutes to go, I head out to the car park and start up the now very cold Firefly and proceed to warm it up. I am then joined by the crew and we are ready for the "off".

We join a ragged queue of cars, at 20.09 and a few seconds, we move to the front, car number 10 is a non-starter, we wait until a few seconds before 20.11 and the countdown begins 5-4-3-2-1 and we are off. Away across the well-lit car park and into the darkness. The first thoughts are to get up to the 30 mph speed limit. "Slow down", I am instructed by Brian, the navigator. This first section is to be run at an average speed of just 22 mph and this part of the country is very flat.

On and on, generally to the west towards the Dales. It was very dark under a cloudy sky but after going through four time checks, disaster struck, we were off route. A very difficult manoeuvre to turn around on a single track road, in a car with a 43 foot turning circle and without the benefit of reversing lights. It seemed for ever, but we eventually, did it and then it was a rush to get back on route. This error was to prove very costly to our time-keeping.

Through the next time control and then we begin our climb up on to the tops of the moors. The gradients are not as steep as I had anticipated, but as we get higher, we notice that the narrow road has

a carpet of snow upon it, but we must be on route as we can see wheel tracks of the competitors in front. Suddenly, I have to slow, I think that there are route boards to read but on reading them, they are ice warnings! But the ice, in a half-melted state, is not a problem, except to the driver's nerves. Up on to the top of High Ash Head Moor and on both sides of the road we see spectators, they all have green eyes that reflect in our lights and, if it were not so dark, we would have seen that they all had woolly coats on. Now for the descent and caution is the name of the game. It is very steep with extreme bends but fortunately, we do loose traction and make it safely down.

Soon after this, we have our first excursion on to what are known as "white roads". These are roads that the Ordnance Survey in their wisdom, do not colour in. They are, in winter, rocky tracks up on the moorland and a series of muddy puddles on the lower ground with no tarmac near them. Could be quite good fun in daylight, I suppose, but on the very darkest of nights, when trying to make up time, are quite alarming. With the suspension, hitting the stops and muddy water hitting the windscreen by the bucketfull.

On and on through the Yorkshire night; the time controls when you come across them are like small pockets of civilization in an otherwise completely black night. Small creamy coloured tungsten filament lamps, powered no-doubt from ex-WD batteries, seem to give a warmth in the cold night air.

A 01.16, on Sunday, we pull in to the half-way stop. A feeling of achievement is felt by the driver; at the very least, we have made the first half, some 80 miles. Until 02.11, the driver can, with a three-man crew, to a certain extent, relax a bit. Not so for the navigators, for at 01.26, the route instructions are given out for the second half, and route plotting begins again.

As we wait for the final seconds to tick away, we are given another ice warning, that focused the driver for the journey ahead, for in the past hour a lot of rain had fallen. Off into the darkness again, this time toward the east and the north York Moors. On two occasions we were to go off-route but quickly found our way back.

After going through several time controls in the Swale Valley, we headed further to the east and went through the tiny village of Boltby, and the road started to climb up. After doing a smart change down to second, we passed a gradient sign. Now, I cannot be sure but, I think it reads 26% which is a little steeper than one in four.

From the driver's seat, it looked like a wall in front of us! An ultra-fast change into first at near maximum revs. As the car slowed on the gradient; I was aware of the first sign of petrol vaporisation and power started to die away bringing us to a standstill. I was just able to keep the faltering engine going and Brian and Mike quickly got out to put a shoulder behind the car. We were able to get it up the last few yards of this extreme gradient. At the top, Mike and Brian quickly scrambled back in, and we were off again but still climbing in first. With some cold air moving through the radiator, most of our power returned and we were able to climb the next step of the gradient. It now levelled out a bit and the fuel started to cool as our speed rose.

The worst of all sights now appeared in front of us. For there was a time control that we were obliged to stop. Now those of you that suffer from fuel vapourisation, will know that the worst thing that you can do with a very hot manifold, is to stop. The marshalls at this control seemed to me to take for ever, but we got away without the dreaded loss of power. Accelerating away all seemed well but after about 1/4 of a mile, the final episode of this climb appeared in front of us. Not quite so steep as the first part, it nevertheless forced a change to first and near the top the engine died completely.

After about three hours running, the silence was deafening. I got out and opened up the bonnet; the manifold was so hot I could feel the heat radiating to my face although the night air was very cold all around. I gingerly reached in to the fuel pump and pumped more fuel to the carburettor, got back in and spun the starter but the engine would not fire. Meanwhile, other competitors were squeezing past at regular intervals, partly on the narrow road and partly on the muddy verge. We sat for what seemed like an age, then Brian got out and performed on the fuel pump; I pressed the starter button

and the engine burst into life. A scrambled start and we were off again but the memory of Sneck Yate Bank will stick for some while.

Up here, we were running on a light snow covering and trying to make up a bit of time. After some more "white roads" and a ford, we descended down a fairly gentle but far from straight incline to the flatter part of Yorkshire. Further on, we came across two of the cars that had squeezed past us on Sneck Yate Bank, they were stopped with lights-on. As we were not waved on, we stopped to enquire as to the problem. We were told that the driver of one of the cars had stopped, got out, and fallen over and it was believed that he had fractured his leg, due to the icy road surface. We responded by driving on to the next time control to report the incident to the organisers.

This incident, sharpened the reactions of a tired driver to the road surfaces that we were driving on, but the conditions did not seriously affect our progress. Soon, with each control that was passed, the crew began to feel an increasing weariness. It was quite a relief to pull into the final time check in the motel car park.

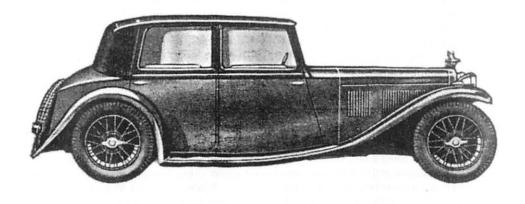
After parking, a quick glance at my watch and it reads 6.45, it is just over 8½ hours since we left here; but it feels days ago. I switch off the ignition, the engine stops and I step out and nearly go flat on my back. The car park is covered in ice! It is still very dark, but we make our way very gingerly to the bright lights of the motel. After a quick wash and brush up, we go into the restaurant for the most extensive of English breakfasts, with not a thought for the polysaturated fat or the cholesterol.

Brian and Mike bid their farewell at about 7.45, and soon I make my way to the car just after 8.00. It is now fully light and the car is covered in mud up to the waistline. But there is no inclination to clean any of it off, I drive out of the car park, past cars covered in thick frost and up the slip road to join the A1 south bound for the return 310 miles.

Now I am greeted by the rising sun coming over the horizon, straight ahead. It was so low that there was absolutely no shade for my eyes; eyes that been staring into the inky darkness all night long. This is just the start of a return trip that would hold a few surprises but then that's another story.

DEREK TOURLE

A splendid piece by Derek Tourle which I particularly enjoyed reading while sitting on our verandah in the tropical sun, sipping a cold drink. -J.N.B.C.



WINTER CHALLENGE 1999

- Monte Carlo or Bust -



Robin Myerscough fully kitted up for the Monte, "en Provence".

Photo: George Melville

Well we bust!

Four Alvises — our Firefly, Paul Carter and Rupert Bravery in the 12/60, Jim Bristow with two colleagues, and Robin Myerscough and navigator in their TDs. We all started from Brooklands to be joined in Northern France by cars from Oslo, Biarritz, Dublin, Noordwijk and Venice.

Brooklands to Dover was a fast two hour run with check points in Sussex and Kent. Paul's 12/60, recently fitted with overdrive, showed a clean pair of heels to the majority of pre-war entries along the M20. The run from Calais was uneventful with long fast country roads, culminating in an early evening supper/time control. These stops are usually a frantic mixture of cleaning of lights, checking of oil, rearrangement of maps, and hurried consumption of any available food and fluid plus a visit to any loo or tree — this was the hard part, for the vintageants in open vehicles; removing layers of clothing to the last layer of thermals and then the rearrangement is a nightmare!

The Firefly was running like clockwork, well on schedule. No amount of pre-rally preparation could have foreseen our problems of the night. Earlier in the day, I had questioned (one never questions a navigator!) James about a dull knocking from down below — we discussed it as a "nothing" — especially as oil pressure and performance were as good as ever — may be a gasket, may be a? After our supper break, the noise became more and more obvious. Adrenalin dictated, forget it, drive harder, lose the sound. A petrol stop around midnight brought every French enthusiast from miles around

putting wise heads under our bonnet — "C'est mal" - "C'est frappe" — "Mon Dieu, pauvre Anglais — pauvre Alvis". No mountains or snow for us. We headed for the nearest Autoroute and travelled for ten cold, tired hours at 28 mph to Calais, the engine sounding as if a rod would shake our hand at any minute. AA Relay whisked us from Dover home. The car is now having an engine rebuild and exhaust valves reseated for the September Classic Marathon from Le Mans to Biarritz via the Pyrenees. We greeted our wives — "the bad news is we are home early — the good news is we are off again". We loaded my elderly Jaguar with clothes/spares and headed back to Aix Les Bains to join our friends to support and help Alvis needs.

Well, through appalling weather, the other three all reached the warmth and Bon Ami of Monte Carlo. Paul won the under 2-Litre class in the vintageants in his 12/60 and Robin and Jim's TDs ended with finishers medals.

Robin Myerscough writes:-

"We set out in the TD 21 with great expectations of doing better than our position for 1998, of 125th! My co-driver, Graham was new with no previous experience but made up for this with plenty of enthusiasm and good humour. We took stop watches this year, which was a novelty, but Graham stopped the clock by accident at the first attempt. On the second go, he stopped it at what he thought was the checkpoint, but it was two cars broken down. By the third regularity he got it about right.

We had to dig ourselves out of a snow bank, which we got into by trying to miss a Mini, also in the snow bank. All of this was caused by a French chap parked on a hairpin bend, while he went off snow boarding — C'est la vie.

Next year we will definitely be using Town and Country tyres to get the grip. We had no mechanical problems apart from the interior lights packing up.

Mission accomplished, we finished 111th. We will be back next year to try to get below 100!"

Jim Bristow writes:-

"It has always been my intention to take part in some rallies starting with the "easy one", being the Monte Winter Challenge. I was joined by two other city brokers, all of us complete novices, not knowing one end of a sparking plug from the other, and zero map reading ability.

The car was a 1962 TD 21 Series II which we thought we had prepared well for the event. Preparation including new shocks front and rear, new tyres front and rear, clutch, brakes, fuel pump, battery and hoses. Despite all this preparation, we still had, during the event, the following problems:-

- 1. Calais Blown head gasket Massive overheating
- 2. Calais Fuel blockage Blown out with air hose at garage via tank
- 3. Split bottom hose Overheating
- 4. Brakes (right) overheating

It was a close thing us getting to Monte with the head blowing on us on day one. This involved major time, worry, effort, labour and expense to several people to keep us in the event and lots of thanks have to go to the following:-

- 1. The RAC tow truck from Dover/Tunbridge Wells
- 2. Miles Garage Tunbridge Wells (Brian) for fixing the head.
- Richard, at the spares department Red Triangle who had several messages left on the answer machine Sunday night, that we needed the parts motor biked down to Tunbridge Wells Monday morning to enable Miles to carry out the job.
- 4. Malcolm Davey and Charles Mackonochie, Alvis Owner's Club, who I phoned from the ferry to try and help us locate a head gasket.



Monte pit stop.

Photo: George Melville



Paul in control of "L'éssence de Alvis".

Photo: George Melville

- 5. Robin Myerscough and his co-driver in the other TD 21 for good advice and a jump start in Monte Carlo.
- My wife for putting up with all three of us overnight, having thought she had got rid of us for the week. We then reappeared in the RAC low loader on Sunday night.

Being complete novices and part of café society, we were not sure quite what to expect, the whole thing being a real eye opener. The route was tough and tiring but thoroughly enjoyable. The highlights for us being driving through the mountains in the snow and ice, and a day chasing the Brock-Jest Lagonda V12 for about 30 miles or so up and down mountain hairpins etc. (Hence the black smoke off the rear brakes as mentioned above.) Jester couldn't believe we were still in their rear view mirror, but had the courtesy to stop and tell us the brakes at the rear were almost on fire at the rear wheels.

The whole event was tremendous fun which can only be described as a combination between Wacky Races/Monte Carlo or Bust. The best thing was the spirit in which the event was held and the overall camaraderie of all participants.

Thanks must also go to some Dutch chaps who towed us for ± five miles in a Bentley S1 after our fuel blockage (these people require a round of applause having blown up a vintage Bentley earlier to then reappear in the S1).

Paul Carter writes:-

"Having solved all the gremlins in the car at Brooklands on Saturday afternoon, we departed for France at 8.47 am Sunday morning —optimistic and enthusiastic, if not a little tired. Pre-match nerves and preparation does not aid sleep or relaxation.

An uneventful drive to Dover to catch the ferry. Enjoyed a relaxing lunch with George and James (Firefly). Great talk about significant snowfall throughout the Alps. Departing the ferry, the starter motor refused to engage and we had to suffer the indignity of being "bump started" by the Bentley Boys.

The remainder of Sunday till the supper halt was 250 miles dicing with George's Firefly — for a much heavier car than the 12/60 it really does fly. A float chamber came loose at one stage — if you smell petrol, stop immediately. You either catch fire or lose carburettor parts, both highly inconvenient. We did neither.

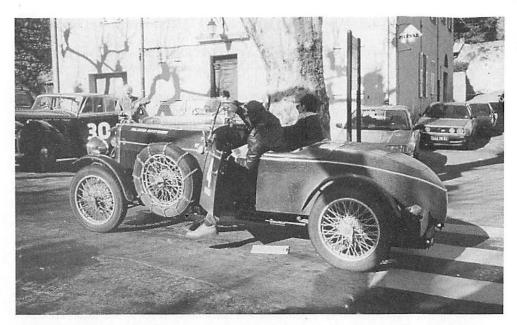
At the supper halt, we met Vincent Fairclough and James Baxter in the 1929 Chrysler, a beast of a car. We took on board sustinance for a long night, procurred the services of a mechanic to sort the starter motor — a pin fixing the Bendix spring had broken — a sawn off BA bolt sorted the problem and back on the road.

As we headed through the night, problems arose for other vintageants. George developed a nasty knock in his engine which sadly proved to be the end of his rally. The pre-war BMW lost its lights. We hot wired the lighting circuit direct from the battery to give them night vision.

During the night, temperatures dropped to -14°C — cars with roofs and heaters were suffering freezing windows internally, us with no heater, no roof — no problem. The first serious snow at 4.00 am sadly caused one of the Lagondas to lose control with serious body damage, which had to retire. Keeping on the road and avoiding other competitors became increasingly difficult, but thanks to my companion, Rupert Bravery navigating, we kept to our time schedule.

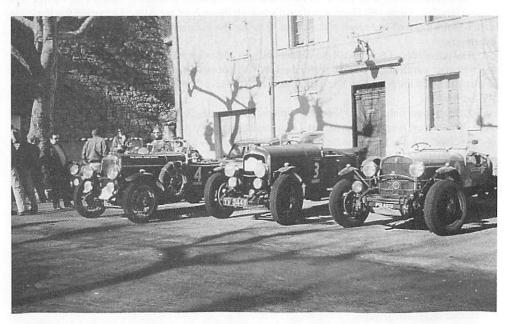
6.30 am, cold, tired, dark and in the middle of nowhere, the car stalled, lights dimmed and failed. Miraculously, a quick push by marshalls, two backfires the lights came on, engine started on and off—another unknown gremlin.

The rally is all highs and lows. Lows of 20 minutes going the wrong way — lost and finding route, then highs of driving flat out catching up time, surprising many MGAs and TRs at the 12/60's speed and managing to breathe the exhaust of the Bentley and awesome 1929 Chrysler. After 30 hours with



Rupert (dropped papers) makes a hasty exit.

Photo: George Melville



A.B.C. Team — Winner Vintagent Team Award. Alvis — Bentley — Chrysler.

Photo: George Melville

no sleep, fatigue, high altitude and misfires resulting in time penalties, but on a par with the other prewar cars.

After a good night's rest, back into the mountains, snow, ice and that hindering misfire, we lost a little more time — so did the other vintageants with the $4\frac{1}{2}$ Litre Bentley bedded in a snow drift and the Chrysler "writing-off" a Sunbeam Alpine. The high altitude misfire was cured by advancing the timing and wrapping silver foil around the manifold. The 12/60 was now on another high, and one doesn't think of the dangers hurtling Alvis, Bentleys and Chryslers with no seatbelts or roll cages up and down endless hairpins with shear drops either side — pure madness but when the adrenalin bites ... and we were closing the time gap.

Two hours on the route on Wednesday — Bang, whallop — no drive at all. Floor boards up, the keyway on the Cardan Shaft had snapped. The Bentley kindly towed us to a major junction, and within one hour had found a garage, a Mig-Welder and welded the shaft solid — we had lost so much time, so drove like men possessed for the remainder of the day, dropping only 40 minutes, remaining 4th in the vintageants.

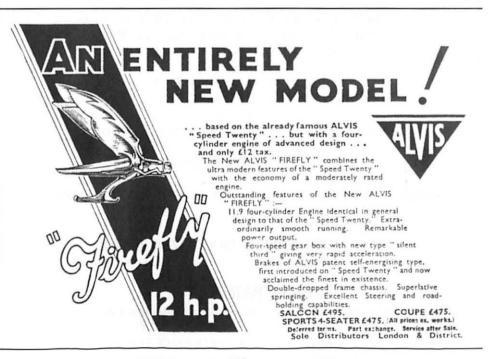
Thursday was a gentler day, sunshine, warm, air, stunning scenery taking us to the finishing ramp in Monte Carlo. The beer flowed.

The camaraderie between the vintageants had been extraordinary. The attrition rate high, but the Alvis finished with the unexpected under-2-Litre Vintageants Trophy.

We will need a new set of tyres and oil change before LE JOG 1999. One set of brand new Michelins completely bald except the offside front — again I know not why?"

Being a non-competitor for most of the Rally, all I can say is that all these three crews were splendid. Their cars were all well prepared and were driven with charisma — their words tell you all.

GEORGE MELVILLE



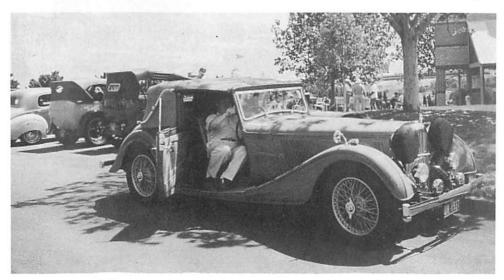
ALVIS CAR CLUB N.S.W. PICNIC

-20th February -



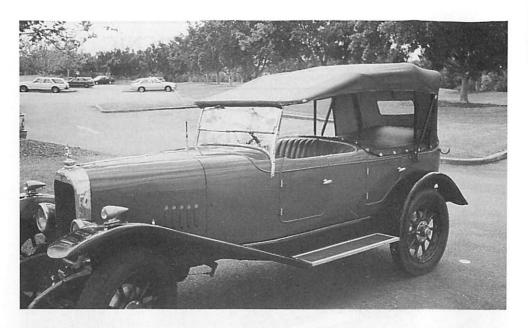
The first outing of the Alvis Car Club for 1999 took place on Saturday, 20th February, at Homebush Bay in the park adjoining the Olympic stadium where the Olympic Games are to be held next year. Cars included two 12/50s, a TC 21 and a TA 21.

Photo: Eric Cunningham



David Macdonald's Speed 25.

Photo: Eric Cunningham



Kendall McSkimming's 12/50, Chassis No. 3182, which won the concours.

Photo: Eric Cunningham



John Doig's 12/60 Beetleback.

Photo: Eric Cunningham

A PILE OF OLD PALLETS?



A mysterious pile under wraps. What is it?

Photo: Nigel Paterson

I like old cars and I like old buildings. Occasionally, you get the opportunity for a joyous day combining both interests. A group of building enthusiasts were asked to record a dilapidated building and in the undergrowth in the garden there was an old builder's tarpaulin covering what could have been a pile of pallets. You just have to be nosey sometimes don't you. So when no one was around I untied the ropes securing the tarpaulin and pulled it back to find this old Alvis smiling back at me. It has an all aluminium body and a fabric roll top. The inside is fairly desperate. The six cylinder engine is part dismantled and the cylinder head seems to be missing. I couldn't pull the tarpaulin back any further to see the rear end, because of a large pool of water that was gradually sinking with the tarpaulin through the rotten fabric top of the car. The car must date from the mid to late 1930's, but I don't recognise the body. I am in contact with the owner who says that the car is definitely not for sale and does not want the location revealed, so my lips are sealed. The headlamps were stolen when stored in Swindon about ten years ago. It's nowhere near Swindon now!

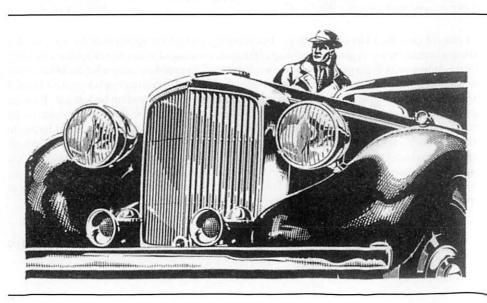
NIGEL PATERSON

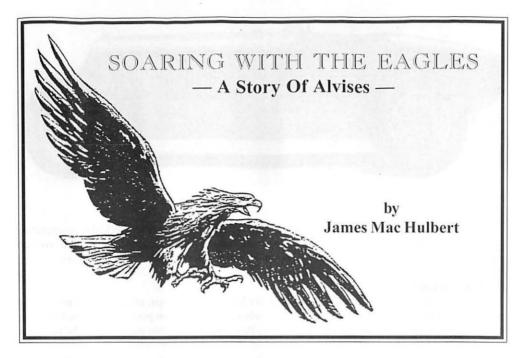


All is revealed.

Photo: Nigel Paterson

What a fascinating discovery. Would anyone like to hazard a guess of the car's identity? — J.N.B.C.



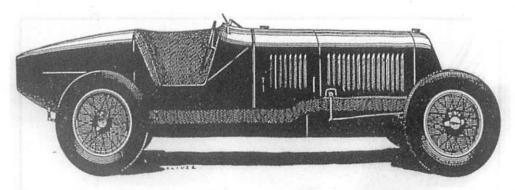


-Part II -

The Work Begins

The die was now cast, and work began. A primed chassis, various restored components and a more or less complete set of engine parts were delivered to Rod. The wonderful photographs below, taken by Clive Taylor, show the car during construction. To accommodate the lowered front end, the rear dumb irons were shortened and the front mounting points of the rear springs raised. In order to then ensure that the driver did not sit at the height of a double-decker bus, Rod then had to cant the rear axle at a slight angle, so the transmission line ran in a gentle U, leaving a flat floor. This meant fitting a more effective oil seal in the front end of the pinion housing, which would now be much more likely to be bathed in oil. Each of these problems was approached with ingenuity and good spirit by Rod. He has a real talent for problem-solving, and although he doesn't leap over tall buildings with a single bound, challenges that would leave some dispirited are grist for his mill.

Next, attention turned to the engine. Here we used many original parts, but where necessary made modifications based on Rod's experience. The standard Alvis pushrods, for example, tend to complain with the intensity of work they are given to do in a racing engine, so new aircraft-quality tubing was used, attached to the original Alvis pushrod ends. Skew-gear driven oil pumps are another known weakness under racing conditions, and we agreed to drive the oil pump off the front end of the crankshaft. This was accomplished through an integrated Jolley-designed chain-driven supercharger system with housing, which he had developed for the Giron but, as he had argued it would, fitted right on to the Silver Eagle. (It is quite amazing how much compatibility there is in the Alvis sixes, but then a clear line of descendance runs uninterruptedly form the 14.75 through to the 3 litres, via, of course, the Silver Eagle, their first really successful 'six'). Rod entrusted the bottom end of the engine to Bob Jones, nominally an M.G. man, but someone who bent to the Alvis task with enthusiasm and



The inspiration — The 1930 Maserati.

competence. The top end of the engine was dealt with by Paul Kitcher, who has worked in co-operation with Rod for many years. He installed the specially made Mahle pistons, which Rod assured me would perform superbly under racing conditions, which indeed turned out to be the case.

Ready for Testing

1986 passed into 1987 as the car progressed. We had nurtured a hope, ultimately forlorn, that the car would be able to compete in 1987, but as the months passed this vision passed with them. However, in September of 1987, in a transatlantic phone call, Rod informed me that the car would be ready for testing in October. The question neither of us had contemplated was where. This was when my relationship with Tony Bianchi, dating back to the early seventies, was resuscitated. Many years before, when I had visited Tony on his home territory in Bourne End, I remembered asking him where he was able to test and develop his Silver Eagle Special, and he had told me of the advantages of being based at Booker aerodrome. It was there, in October of 1987, that I met Rod and the finished masterpiece face to face for the first time.

Unfortunately, the perimeter track had deteriorated just a little in the fifteen years since Tony had given me the idea, and we discovered the limitations of driving a racing car on a rough surface. But did it go! We knew we were on to something good, but poor Rod, dying for a drive, brought things to a halt through no fault of his. Some years before I had had a set of new constant mesh gears made, but in assembly of the gear box had failed to realise that, whereas under drive the end thrust of the Silver Eagle's single helical gear was taken up by the casing, a spacer was needed for the over-run end thrust, which seemed to be pretty substantial on the special! The resulting crunch brought Rod's drive to a premature halt, but the look on his face as we pushed him back in, thinking he had just been responsible for breaking his customer's car, was memorable indeed.

Our next effort, on a public test day at Silverstone, was more successful, but was also ended by mechanical failure, when one of the half-shafts broke. We subsequently found inadequate camshaft lubrication, so the breakage was perhaps fortuitous. What we had learned was that the engine was ready to rev, and that we also had mixture and/or fuel feed problems. The appetite of these supercharged engines when running flat out is truly voracious, yet a weak mixture can burn pistons very quickly. Dr. Rod declared that it was time for a session on a rolling road dynamometer, and this, combined with the previous testing, finally got us to the point where we thought the car might be ready for an entry. It wasn't yet clear, however, whether the VSCC agreed.

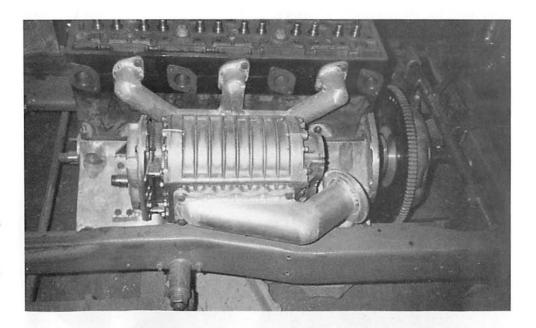
Specials and VSCC Eligibility

Without delving into all the details of what was a fairly protracted process, the car was subject to



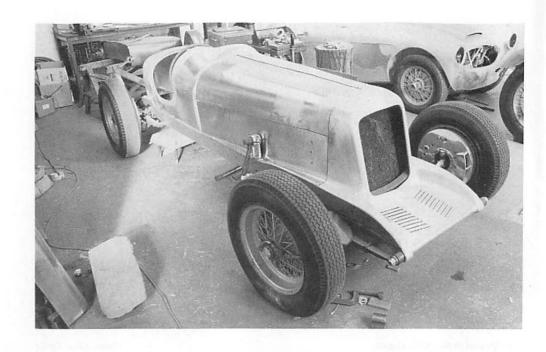
The Special in the early stages.

Photo: Clive Taylor



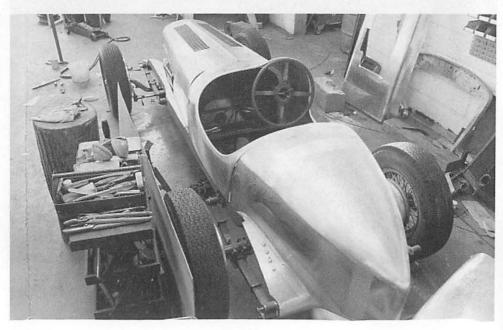
The beautifully neat supercharger installation.

Photo: Clive Taylor



Above and below. The wonderful body created by Rod Jolley.





a thoroughgoing assessment by the VSCC before it was declared eligible and vintage. In the intervening years the VSCC has done a good job of clarifying the rules and procedures associated with acquiring a 'blue form'. In the mid-eighties the rules weren't quite as clear, but expert opinion was clearly critical. Obviously, I am not aware of all who were part of the process, but among noteworthy Alvis owners involved were Brian Harcourt-Smith (then secretary of the VSCC), Mike Hirst, Eric Benfield and Peter Glover (VSCC committee member). The experts, combined with both documentation and inspection of the car, were eventually to convince the committee of the car's bona fides, and in a very appropriately Alvis fashion, it ultimately fell to Peter Hull, by then Acting Secretary of the VSCC, to write to notify me formally of the car's acceptance³. At the time there was a great deal of concern within the VSCC about members bending the rules (to put it politely), which I am sure led to the need for careful inquiry. Since that time, however, there has also been a rise in what I would call preservationist sentiment within the club, and with the Editor's permission, I would like to put in my tuppence-halfpenny's worth.

You will recall that my very first Alvis was a very original Silver Eagle which I still own, and I do believe that originality is important and desirable, so much so that I spent an inordinately long time finding the parts to build my Special (and, very probably, a lot more money too!). Along the way I replica-bodied a car that many would have broken for spares, since significant chassis repair was involved. I mention this because I want to establish my bona fides before taking a position which is very strongly against the views being advocated by a few well-known members of the VSCC, who seem to have taken an inordinate dislike to any form of "Special".

It is, I believe, very important to recognise that special-building has been a crucial part of Britain's automotive history. The tradition is not restricted to the VSCC, in which it has been central since its establishment, but was also a part of the Brooklands scene since the very early days. No-one is more aware of this than the great automotive historian Bill Boddy, who has written two delightful books which are largely about Specials4. Further, many attribute the pre-eminence of Britain in the design and manufacture of modern single-seat racing cars to the existence of the 750 Motor Club, whose members were wholeheartedly devoted to the building of Specials. (This admittedly led to the early demise of quite a few standard Sevens, about which some people would definitely have mixed views). To list the many great British engineers who participated in the 'Specials' movement may seem superfluous, but names which come easily to mind include Berthon, Issigonis, Halford, King, Mallock, Terry, Chapman and no doubt there are many others. In my opinion, the combination of rising prices and a misplaced diatribe against Specials in certain VSCC circles are increasing the risk that significant parts of British motoring history will disappear, and an important part of our tradition lost. Staniland's fabulous Multi-Union has already gone, and I learned recently that we shall never see the Appleton Special again. The VSCC policy is that two cars cannot be made out of one, which rules out the use of replica parts to re-create the original Special when the parts have been taken to "re-create" an original (which of course isn't!).

I suppose one of the reasons I feel so strongly about this issue is that Alvises are usually the subject of a certain notable's remarks. One that really upset me was an allegation that Alvis saloons are regularly being turned into Specials. While not denying that this has occurred in the past, I am also confident that there are far more Alvis saloons surviving than there are W. O. Bentley, Lagonda, Vauxhall (Pre G.M.) or Frazer Nashes. A partial explanation for the apparent anti-Alvis sentiment, I

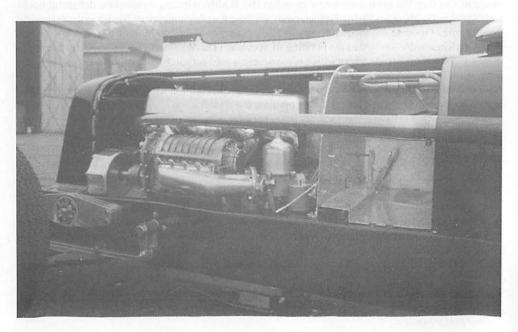
Many readers will not realise that Douglas, Peter's late brother, once owned a wide two-seater Silver Eagle on which Peter had worked. Peter retains an enthusiasm for the type and a healthy respect for their performance.

I refer, of course, to Aero-Engined Cars and Brooklands Giants, both recently published by G. T. Foulis and Company.



The first test runs at Booker Aerodrome.

Photo: Mac Hulbert



The powerhouse, supercharged Silver Eagle engine.

Photo: Mac Hulbert

believe, comes from the Alvis decision to cease direct works competition in 1930. Perhaps as a result, Alvises were usually built with fairly heavy touring-type bodies and, with the exception of a few enthusiasts (who often developed Specials) did not regularly compete from 1930 to 1939. Following World War II, however, dedicated enthusiasts rediscovered the superb quality of Alvis engineering, with their fine six cylinder engines and all-synchromesh gearboxes, and Alvises became extraordinarily successful in vintage and classic competition. (In the late Gordon Allen's opinion, the bottom ends of the Speed Twenty-Five and 4.3 Alvises were the finest examples of pre-war British automotive engineering he had ever seen.) Since the Alvis name did not figure prominently in competition successes in the 1930's, their more recent successes seem to have put a few prominent noses somewhat out of joint! The fact that most of these have been in sportscar classes is perhaps appropriate for the larger-engined pyt Alvises, but in the years before 1931, Alvis were proud carriers of British tradition in both racing and sportscar classes, and I only wish they had persevered with the Silver Eagle as a works entry, since I feel sure they would have enjoyed success. As someone who has almost completed the restoration of one saloon, and is part way through another, it is also worth pointing out that the restoration of a saloon is vastly more difficult and expensive than an open car, for which replica bodies of acceptable appearance can be built by the relatively unskilled. In the difficult days after World War II, it is easy to understand why conversion of saloons was the route chosen by many.

To return to my main theme, Brian Harcourt-Smith had generously allowed me to compete prior to formal VSCC approval, with the understanding that I would not be eligible to win trophies, should I actually happen to be placed. Realistically, one does not expect to win with a Special "straight out of the box", and so it proved. Through the early years of development, we experienced virtually no engine problems whatsoever, although it took a little while to solve mixture and fuel flow problems. The same was not true for the transmission. We were later to discover (thanks to the proliferation of rolling roads) that the engine was developing very high power outputs, somewhere in the region of 230 - 250 bhp at the flywheel, and prodigious torque (approaching 300 ft.- lbs.). The resulting punishment to gears and half-shafts can perhaps only be imagined, but the eventual cure of strengthened half-shafts and enormously stubby first and second gears were a long time forthcoming as the boom years of the late eighties stretched order books and delivery times of specialist manufacturers.

Competition Record

In the early days of shaking the Special down, I had been greatly helped by the mechanical skills of Tony Ind. By 1993, however, Tony had become involved in other things, and I was fortunate enough to find Graham Millard, a talented mechanic whose patient and continuing dedication to the car meant that regular successes began to materialise. From a respectable record in the late eighties, the car, recovered from a bad prang at Oulton Park in 1990, began to accumulate a formidable record in the nineteen nineties. It feels a little egotistical to enumerate the successes, but they include numerous pole positions and class places, as well as Vintage FTD's at VSCC Loton, Prescott, Curborough, Weston-super-Mare, Brooklands and Shelsley Walsh; overall FTD, Brooklands Society/VSCC Sprint and Pre-War FTD, Manx Classic Sloc Road Hill Climb. The named trophies won include the MAC Challenge Trophy; VSCC John Holland Trophy; Brooklands Society Woodlands Hotel Trophy; Manx Motor Racing Club Hill Climb Trophy; VSCC Alvis Trophy (twice); Ruth and Jim Hulbert Trophy (twice); Alvis Register Glencaird Trophy and runner-up in the VSCC Lycett Trophy. The car is now running on a compression ratio of approximately 8 to 1, with about 15 lbs of boost at maximum revs. Top speed obviously depends upon the gearing, but is theoretically about 140 mph. With the highest gearing currently available, the car reaches maximum revs, well before the end of the standing kilometre at Colerne, where it has been timed at 128 mph across the line, covering the standing quarter-mile in a little over 14 secs. In 1995, the Silver Eagle ascended Shelsley Walsh to take the Vintage FTD in 37.96 secs, a time which compares very favourably with Raymond Mays pre-war record of 37.37 secs

in ERA R4D.

One of the most memorable races was the dice with Mark Walker for the 1995 Holland Trophy. The previous year at Pembrey, I had been shocked by the performance of Freddie Giles' Cognac Special, and realised he must have swopped cogs. In 1995 I had fitted a much lower cwp ratio for the tight Pembrey circuit. I began in the lead, and managed to hold Mark off for several laps. Bill Boddy, who as patron of the aero-engined club follows these cars closely, described the race in Motor Sport (August, 1995) as follows:

The twelve lap vintage-car John Holland Memorial Trophy race promised much. Two aero-engined cars were against the field—Roger Colling's well-known 19 litre Mercedes-Maybach ... and the almost invincible Parker-GN of Mark Walker ... But it did not work out for the aero-cars. Walker harried Hulbert's Alvis something awful, Mac sliding into the corners. But just as it looked good for Mark, the ding-dong duel perhaps over, a back-axle tie-rod in the GN chassis broke and Mark had to retire, with transmission problems.

In fact, the lower back axle ratio was enabling me to avoid the very difficult change down into second gear at the end of the straight, a change much worsened by the stubby gears we had fitted. Unfortunately, this also meant I was pulling away from the very tight Pembrey hairpin much more slowly in third gear, and this is where Mark nipped by. I followed closely on his heels for a couple of laps before he began to slow, and I went by again. For the remainder of the race I was without a challenge, something I've learned from experience can be quite dangerous. It is so easy to relax and end up making a stupid mistake, and I can still remember talking to myself, telling myself to keep concentrating and driving hard if I wanted to win.

Another exciting experience was provided by the VSCC visit to Croix-en-Ternois in the Autumn of 1994. Although the AOC is now accustomed to an editor who lives in Singapore, some members may be unaware that I live and work in the United States. I am fortunate enough to be able to spend most of July and August each year in the U.K., but the Croix meeting was in October, one of the busiest times of the year for me. I nonetheless decided that by hook or by crook I was going to make that meeting, particularly because I had never raced outside the U.K. The itinerary was, even for me a little unusual. I finished work in Westchester, New York State, at 4 pm on the Friday night. A car took me to Kennedy airport, where I just managed to catch the 6 pm BA flight to Birmingham. (Now it leaves later; at the time it was the earliest arriving flight into the U.K. Birmingham is also marginally closer to our house in Gloucestershire and has an uncrowded airport). Madge picked me up at Birmingham, we drove to Gloucestershire, where I changed my suit for more suitable clothing, and with two good friends, one driving, we left for Dover with the racer in tow. After a wonderfully smooth ferry crossing, we spent a little unplanned time lost in Normandy before finding our way to the circuit. We were able to do some untimed testing at the circuit before driving to our small hotel nearby, where we enjoyed a great meal before collapsing into bed. The next day the start of racing was delayed by a tragic heart attack causing the death of Howard Bevan, treasurer of the BOC. In the main vintage event, Tim Llewellyn, in his massive 8-litre Bentley pulled into the lead and I followed. In 1994, however, I did not have a low ratio diff., and again a Nash, no doubt once more geared down, but this time driven by classic racing champion Martin Stretton, began to give me trouble. The race was described by the VSCC Bulletin (Winter 1994/1995) as follows:

While Llewellyn jumped into the lead, Stretton made a very indifferent start, and was almost at the back of the field going into the first corner. Llewellyn went on to an easy win, but Stretton was up to third place on lap two and chasing Hulbert's Alvis Silver Eagle, in typical Stretton style. On the penultimate lap, Stretton got past Hulbert at Turn 6, but the Alvis, with better acceleration, recovered second place on the finishing straight, as they started the last lap. Stretton was back in front with smoking locked brakes on Turn 1. Hulbert was not giving up though, and was in front at Turn 5 only to be repassed again by Stretton, on the

apex of Turn 6. It still was not over, as once again the Alvis acceleration did its stuff, and Hulbert took the flag 0.1 seconds ahead. Quite a race.

After my episode at Oulton, I was not about to risk touching open wheels again, but my faith in the accelerative abilities of the Alvis was, I am relieved to say, well justified, and we achieved a hard-earned second place. We left on the Sunday afternoon, with me still in my racing gear. I managed to change into normal clothing while waiting in a queue for the ferry, which caused great amusement for the busload of grey-haired ladies waiting next to us. After a slightly less smooth return crossing, we arrived back in Gloucestershire just before midnight. I left at 5 am the next morning, caught the 8 am flight to New York, taught my afternoon classes at the University, and went straight back to the airport to catch the 7 pm flight to Europe where I was consulting the next day!

I have also enjoyed some epic battles at Silverstone, unfortunately too often for second place rather than first. The 1995 Itala Trophy race was one such experience, where I was able to squeeze past Alex Boswell in the Bequet-Delage, which then proceeded to chase me down the straight on the grass, so hard was Alex trying. My last story, however, is one of sunshine and showers and occurred at June Silverstone in 1994. I had entered both a five-lap handicap and the big vintage race, the Boulogne Trophy. I was on scratch for the handicap, alongside Anthony Seber in the very fast pvt supercharged Wolseley Hornet Special. In a race that was both demanding and thrilling, I came through the field overtaking all but one of the thirty-one other cars before the last corner, with Anthony no further than two car lengths behind me the whole time. The race must have been a handicapper's dream, for I, then Anthony, overtook the third placed man literally fifty yards from the finish line! The victory was sweet, but was to have further consequences. Only one race intervened before the Boulogne Trophy, and we barely had time to refuel and check the water before it was time to go out again. The Eagle has had more than its share of pole positions, but the enormous torque of some of the largerengined cars (8 litre Bentleys, 24 litre Napier Lion engined Bentley, 12 litre Becquet-Delage or 27 litre Hispano-Suiza engined Delage) means that off the start line, it is often at a disadvantage. In this race, although I held pole position, Tim Llewellyn surged into the lead off the line, but by the end of the first lap the Eagle was lying second. As the race progressed, I began to close the gap, realising that I was in with a real chance. The cars were evenly enough matched that I knew it wouldn't be easy. Overtaking in vintage races may not be as difficult as in Formula I, but is still difficult. One advantage of the Eagle, however, is that when balanced properly, its brakes are superb. Conversely most of the larger-engined cars are not too well endowed in the braking department, and one of the ways we can gain on them is by out-braking them into the corners. On the fifth lap I was getting even closer to Tim, and, came into the complex at Silverstone moving very quickly. Unfortunately, I had forgotten that the yellow and red oil flag had been showing at this corner throughout our race. I felt the tail going, but because of the oil, it was too quick and too far for me to be able to catch it, and I spun gently into the outfield. The key, of course, when spinning, is to keep the engine running, but I'm afraid I lost the key on this occasion. Had the engine been cooler, the onboard starter would have come to the rescue, but two hard races in succession had heated the engine to the point where it wouldn't even turn over. I was condemned to watching the rest of the race with the marshals, who confided to me that they had run out of cement dust, and were profusely apologetic. I didn't think that sort of thing happened at Silverstone! The drama was not yet over, for within a few laps, Alex Boswell in the Becquet-Delage began to gain on Tim, taking the lead just before the end of the race. Sadly, Tim's car expired during the last lap, and after the race Peter Morley told me that he thought that the pressure which the Silver Eagle had put on the Bentley broke Tim's effort, I just wish I had been a little more patient, but I suppose that if you don't try hard, there's no chance of winning!

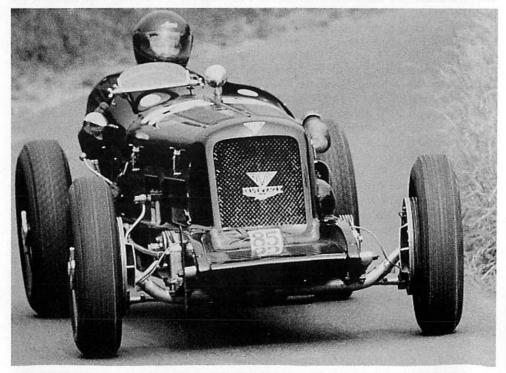
Conclusions

On reflection, I do believe that we have successfully proved my father's belief that Alvis designed a real winner with the Silver Eagle. We were not alone in the belief that it was unfortunate that Alvis



VSCC Silverstone.

Photo: P. R. Hiral



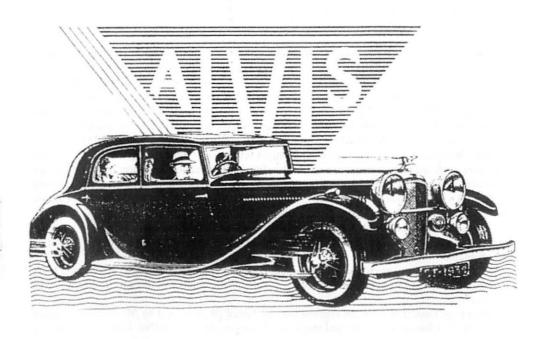
Shelseley Walsh.

Photo: Bob Light

chose not to develop it further for racing, for in the latest edition of The Vintage Alvis by Hull and Johnson (page 368), Michael May opines of the 1930 2-litre team cars:

It was a great pity that Alvis Ltd. did not race these cars again, as they had a very good performance, holding the larger engined Talbots and the blown 1750 Alfa Romeos. I always understood that their engines gave no less than 80 bhp at 5,000 rpm — an astonishingly good figure unsupercharged for then.

I like to think that the Alvis heroes of the Silver Eagle team who were so disappointed in the 1930 Brooklands Double Twelve would be delighted with the car, and that it is built in the true Alvis tradition. The VSCC has always been a traditional club, and one of the traditions that I believe should be upheld is that of special-building. I have been a VSCC member long enough to remember the furore when the Napier-Bentley first appeared, but today it is hailed as a crowd-pleaser and exhibited at Brooklands. The patina of age appears to bring respectability in VSCC eyes, even to Specials built since World War II. I certainly agree that restorable cars, and especially the increasingly rare saloons, should not be broken to build a Special, but it is time we realised that breaking an historic Special to reconstruct something else is equally reprehensible. As a nation we British are attached to our heritage and do a pretty good job of preserving it. Perhaps in a country where trees and 1960's architecture can be subject to preservation orders, it is time to consider whether or not we should do the same to our venerable 'Specials' lest we lose more of them, for greed so easily masquerades under the guise of "originality". Nothing in my opinion is sadder than a public museum or private garage full of historic cars which don't go anywhere. "Collectors" with financial goals do not subscribe to the values which created our clubs. Long live the spirit of using our cars, something which the AOC, Register and VSCC all encourage. Drivers Rule! OK?





P. O. Box 105N Campbelltown North N.S.W. 2560 Australia

Dear Julian,

I have quickly read Anthony Saunders' article on pages 47 to 50 in Bulletin No. 455, "Old versus New", and feel that this type of argument is now irrelevant as we approach the end of the millenium. Such discussions kept the correspondence sections of "The Autocar" and "The Motor" going during the latter part of the Second World War, and sporadically thereafter until about the late 1950s.

Today's "jet set" travel that way: by jet airliner or biz-jet — the private car is often replaced by taxi for those residing in the CBD of the city. An Alvis is sought today mainly by those who yearn for nostalgia in motoring. Or for those who see such cars as the works of art of the future. A Type 37 Bugatti or a Botticelli? A landscape painting by John Constable or a Cord Model 812 sedan? An oil by Raphael or a Phantom III Rolls-Royce? They are all manifestations of man's ingenuity, skill and craftsmanship, but now just to be looked at or drooled over — as works of art, and safe investments!

In the AOC Calendar for March 1999, there is a 1934 SB series Speed 20 offered for sale by a Mr. Brian Waddle, of South Hampshire, with only a telephone number given in the Cars for Sale advertisement. I am curious about this car as it is fitted with a red 4-door tourer body built by the Melbourne coachbuilders, Martin and King, on its arrival in Australia in 1934. According to my register of Alvises in Australia, it appears most likely that this Alvis is Chassis No. 11249, Car No. 16037, which was originally fitted with Engine No. 11696.

When I last saw this Car No. 16037 (as I believe it to be), and had a ride in it, over ten years ago, it was fitted with Engine No. 11725. So, I am curious about how it has since regained its original engine (11696).

My curiousity drove me to call the phone number shown in the March advertisement and I was surprised to receive a recorded message stating that the phone number in the advertisement is "not in service".

Therefore, I ask if anyone can confirm that the Speed 20 advertised by Mr. Waddle is indeed Car No. 16037, Chassis No. 11249, and that it now has its original engine (No. 11696) restored to it,

Yours sincerely, Eric Cunningham

So far, Eric is the only person who has commented on Anthony Saunder's provocative article. I am surprised.

Can anyone help with Eric's Speed 20 query? - J.N.B.C.

444 Mansfield Avenue Darien Conneticut 06820

U.S.A.

E-mail: robtlmerril@hotmail.com

Dear Julian,

The AOC Bulletin is just terrific, especially all the photographs. Thank you for all your hard, smart work.

In the January/February 1999 Bulletin, page 26, there is a nice photograph of EOB 929, a 1938 Crested Eagle, Chassis No. 14526. I e-mailed Robin Bendall because I thought the car was owned by Les Hamer. He e-mailed me back that it was and the photograph was mis-labelled. Robin and I sorted this out in less than 12 hours!

Well, we're finally finished remodeling our home, which really came out beautifully. I've also finished refurbishing the barn, so now have a great place to restart the restoration of my Crested Eagle. The engine has been professionally rebuilt, and will be shipped to me shortly, so now I have to find the motor mounts and other parts needed to re-install it. It will be great to again work on the car after almost five years of everything being in storage.

Best regards, Bob Merrill

My abject apologies for the error and my thanks for the correction. — J.N.B.C.

St. Kitts
13 Glastonbury Road
Wells
Somerset BA5 1TW
E-mail: christopher@chase.nu

Dear Julian,

I can answer one query posed in "Car News" in issue No. 456. OC 7616 in the Haynes Motor Museum, is a 1933 Speed 20 SB with tourer coachwork by Mayfair; Chassis No. 11155. All cars in the museum are owned by John Haynes, founder of the eponymous motor manuals. There are at

least 200 cars on display. The first hall encountered by the visitor is called the Red Room. Here about 100 cars are displayed that are all red in colour and all open sports cars. However, as you approach this display through a darkened corridor, the first vehicle you see is this Alvis. It has pride of place at the head of a diamond-shaped display area. The Alvis also stands out as the shade of red is darker than all the other cars — it's almost a maroon. Haynes has not sprayed the cars an identical colour but sought out examples that approximate to the Ferrari shade. He clearly thinks a lot of Alvis to give it such a prominent position and to include a car that does not conform to his colour scheme. The most exotic exhibit, displayed on a raised, rotating turntable with accompanying music (oh dear) is a Duesenberg. I was there just before Christmas 1997.

Yours sincerely, Chris Watson

"Gateford View" Hawson Way Worksop S81 8TH

E-mail: MDonald771@aol.com

Dear Julian,

Firstly, can I join the chorus of all your other admirers and say how much I enjoy "The Bulletin", I am a member of more than one car club and "The Bulletin" is by far the best club magazine around!

An article of mine on Maltby's of Folkestone appeared in "The Automobile" this month and in response, I received the enclosed letter from Mr. I. A. Chatfield. The letter is delightful and interesting in itself but what is intriguing is the reference to an Alvis Speed 25. Now while I suspected Maltby's would have bodied an Alvis, especially given the popularity of their Redfern Saloon-Tourer model, I could not find a Maltby Alvis during my research for the article. I wonder if it is out there somewhere?

Yours sincerely, Munro Donald

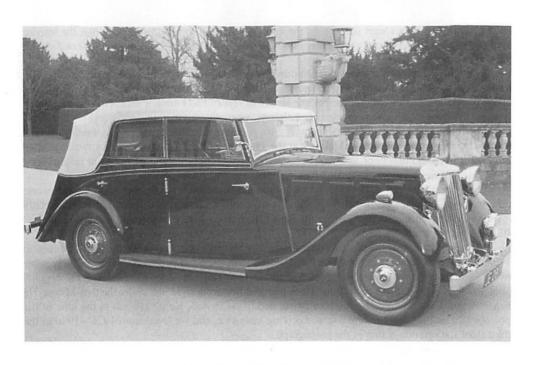
Mr. Chatfield's letter follows, as do photographs of Munro's Armstrong-Siddeley which has a Redfern Saloon-Tourer body. If anyone knows anything of the Speed 25, please let me know. — J.N.B.C.

28 Booth Road Bewbush Crawley West Sussex RH11 6AH

Dear Mr. Donald,

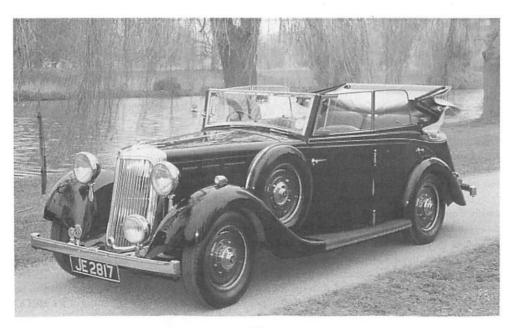
As a veteran of Maltby's coachbuilders of High Street, Sandgate, Folkestone, I was delighted to read the article "What a Topper" in the current issue of The Automobile.

I started my first job there direct from school aged 14 in early 1937 as apprentice panel-beater, and remained there until the completion of the last RST in the summer of 1940. The memory of this lovely motor car on the Lagonda V12 chassis has remained with me clearly over the years. Finished



Above and below: Munro Donald's Redfern Saloon-Tourer bodied Armstrong Siddeley.

Photo: Munro Donald



in black cellulose with cream upholstery, the special feature of this motor car was that the interior door fillets were of glass, and under each was a hunting scene hand painted on celluloid and visible through the bevelled glass.

My first job when I started work at Maltby's was to assist a very highly rated panel-beater Bill Read (for my part armed with emery paper and wire brush) on a pair of front wings for the RST built on the Alvis Speed 25 for, as I remember, the Nizam of Hyderabad I think it was. This motor car was finished in maroon cellulose with cream upholstery, yet another vivid memory.

It is a delight to me still to be in contact with one of my working pals of that time, Mr. Frank Root, who started his first job at Maltby's at the same time as myself as apprentice coach-painter. Frank still lives in Folkestone and we constantly exchange Maltby memorabilia, and he still sees, from time to time, a couple of the old brigade, sadly only a few now with us.

On leaving Maltby's in 1940, I worked at Fox and Nicholl, Tolworth, Surrey on aircraft work; they were sub-contractors for many of the aircraft manufacturers at that time, and coincidentally mentioned in my article, before joining the Royal Air Force where I was again fortunate enough to still follow my metalwork trade.

May I point out that the picture you published as Maltby's premises at Sandgate, Folkestone in 1928, is of the showrooms in Sandgate Road, Folkestone; the Sandgate works premises were some two miles down the road in High Street, Sandgate. How can I be sure of this? Well the original photograph is in my father's collection. He is pictured first from right just under the 0 of Minor. He is Mr. Arthur Chatfield, now in his 100th year, and living in Ash, Kent. He was at the time of the photograph, in 1928, garage foreman and driving instructor, and we lived from 1926 - 1940 in the third floor flat just out of shot of the photograph.

I think I should stop now, but now in my 76th year, it has given me much pleasure to reminisce and write this letter. Thank you for your time.

Yours sincerely, L.A. Chatfield

"Campden Close" Campden Hill Ilmington Shipston-on-Stour Warwickshire CV36 4JF

Dear Julian,

I thought members might be interested in the enclosed photograph, which is of Mrs. Ruth Urquhart-Dykes. It is one which as far as I know has not been published before, and there is an interesting story behind it.

In my capacity as Librarian of the VSCC, I received a package recently from a Peter Lord, who was a personal friend — and indeed executor — of both Bill and Ruth Urquhart-Dykes. This was a set of "stamps", published by *The Autocar* in 1930, depicting racing drivers of the time.



Mrs. Ruth Urquart-Dykes

More than that, though, he also passed on this photograph. Apparently it had been the publishers' intention to include her in the set, and they had gone as far as having her photograph taken specially. At that point, however, she decided in her modest way that she was not well enough known to be included (and this, in spite of the fact that she had been elected an Honorary Member of the BRDC

some two years earlier).

The stamps are a rarity in themselves. AOC members who also belong to the VSCC are of course able to inspect them in the library at Chipping Norton.

Yours sincerely, Nick Walker

I am very pleased to publish this photograph of such a famous driver and Alvis enthusiast. — J.N.B.C.

Sweet's Meadow Vicarage Road Stoke Gabriel Totnes TO9 6QP

Dear Julian,

Ken Day in his 'Memories' Part Three requested information on the photograph which appeared in the May/June 1997 Bulletin. It appears to be the staff of the London Service Station taken just before the war.

I spent the summer of 1949 at the London Service Station, Finchley Road, when the manager was Charlie Ballard and the superintendent was Arthur Bostock (front row, fourth from right). Harry Dashwood is on the front row, second from the left. After the war, Harry was on Road Test in the Coventry Service Department. On one occasion, we were returning from a test in a customer's Speed Twenty-Five when we ended up in the ditch. I was driving; Mr. England was not amused! Whilst at Finchley Road, I bought a TK 12/60 from Tubby, the electrician (third row, second from the left), for £100. I never met Ken Smeeton, the pre-war manager, but I imagine that is him in the centre with a staple through his shoulder.

In the same issue, Malcolm Elder raised a query concerning the remains of the military 4.3 engine production. There were some crankcases lying around in the Service Department after the war which were alleged to have a military origin and they were taken into the Service stock, other common parts I am sure would also have gone back into stock.

Yours sincerely, Ron Walton

Sunny Bank

Church Lane

West Meon Petersfield

Hampshire

Dear Sir.

Nick Simpson's otherwise admirable article on the leaded fuel ban, by just accepting it as a fait

accompli, fails to point out the lessons we need to learn for the next, inevitable, attack on our freedom. I appreciate that The Bulletin is not a political journal, but as it is politics that gave rise to the ban, no rational analysis can avoid the political aspect:

The previous government saw no need to legislate against leaded petrol, as usage was falling naturally and lead emissions were no longer a problem, if they ever had been. The proposed ban emanated from the EU's penchant for all-embracing control, however, ill-judged and unjustified. Though the EU would allow us derogation for up to five years, the present government has stated that it will not take that option. Why not? The technical case in favour of at least a delay, if not cancellation, is clear:

Benzene emissions from neat or burned unleaded fuel, being carcinogenic, are now recognised as being more harmful than lead emissions. This will be especially true for older engines adapted to run on unleaded (necessarily without catalytic converters unless converted also to micro-processor controlled fuel injection).

More pollution is caused by the production of cars than (even old) cars generate during their useful lives. It follows that wholesale premature scrapping of otherwise sound cars is not only economically wasteful, and costly to owners but results in higher overall pollution. In addition, of course, future classics will be destroyed.

Owners of older cars who retard ignition timing and/or lower compression ratio will experience significant deterioration in performance and fuel consumption. One major manufacturer predicts 20% higher consumption — hardly the way to save the planet.

The only safe predictions at this stage about new types of petrol or additives is that they will cost more, that useless quack remedies will be widely available, and that "guarantees" will prove worthless. (One curious point about the new additives being proposed (e.g. phosphorous, known to be many times less effective than lead and therefore needed in far higher dosage) is that no information seems to be provided about their environmental effects.

Large numbers of enthusiasts will incur high costs in converting their cars, at best to no performance advantage and at worst to significant disadvantage.

So why will the Government not listen? The answer is very simple — they will sacrifice us and our cars to their determination to appear "Communitaire", i.e. "Good Europeans". Just as with so many other issues in that Swap Shop Across the Water, this issue will not be resolved on its technical merits but as a pawn in the power play of bureaucrats. Did anyone seriously imagine that the FBHVC survey showing £1.6 billion per annum turnover, 500,000 enthusiasts with 650,000 cars and 25,000 jobs would make a blind bit of difference to those who preside over 18,000,000 unemployed, especially as increased unemployment in Britain would only make their own seem better? It follows that in this matter, as in so many others, the problem arises directly as a result of our membership, for the time being, of the EU. The long term answer is clear — but will not occur in time to save leaded petrol.

We need to understand why this happened, and learn from it. We should start planning our defence now, ready for when the EU turns round and says — "Sorry - you have cable brakes - off the road" or "What, no ABS? Scrap it!" or "More than ten years old? Take it to the dump, Now!" or perhaps first "Only on Sunday?".

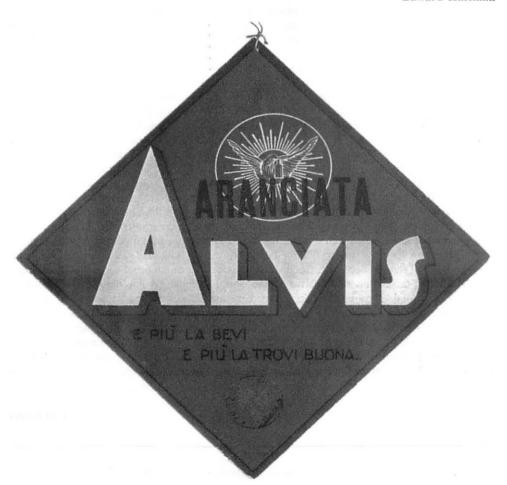
Some of us feel that they already know enough, and that the way to eliminate all such problems is to be governed by laws debated in English and passed, or not, on their individual merits in a Sovereign Parliament at Westminster; that I for one thought was my birthright.

Yours faithfully, Idris R. Francis 30 Ormand Park Road Brookville New York 11545 U.S.A.

Dear Julian,

During a recent trip to Milan, Italy, I purchased the enclosed Alvis poster. The translation of the Italian is "the more you drink it, the more you like it". To my chagrin, it was an advertisement for an "Orange Drink" from the 1930's and unfortunately has nothing what-so-ever to do with Alvis motor cars. You can well imagine my great disappointment when I found out the translation of the Italian to English was for orange juice!

Best regards, Edward Haleman



Edward Haleman's splendid piece of Alvis memorabilia. — J.N.B.C.

Twin Oaks Brynore Dudleston Heath Ellesmere Shropshire SY12 9LP

Dear Julian,

I was very interested in Robin Everall's excellent series of articles on the early Speed 20 gearbox. If only I'd had all that information to hand back in 1961, life would have been much easier. The first crash box I encountered was on a 1932 Charlesworth Speed 20, and was not provided with a clutch stop. This meant that once the oil was hot, the clutch didn't stop! So I fell into the Technical Editor's category of 'drivers dragging their boxes into first'. It was either that or try the patience of everybody behind at the traffic lights Grand Prix. And yes, I did try adjusting and aligning the clutch; it worked fine when the oil was cold, and didn't start re-spinning, so the plate was clear. The second example was on a 1933 Cross and Ellis Tourer. This was fitted with the clutch stop; it seemed to be a rather crude design by Alvis standards, but it worked. At a guess, it was provided to overcome the clutch spinning problem, rather than as an aid to speedier changes.

Although I was by no means gentle with these gearboxes, I never had the tooth shedding problems described. But then they were only 30 years old. I did however notice a tendency for the dogs inside the first motion shaft to wear, and could not find a firm in Birmingham able to rebuild them. This led me to the nightmare described in the articles of trying to find compatible bits from other boxes. I remember on one occasion discussing my problem with Harold Barr at his garage in Shropshire. He pointed to a patch of nettles down the lane and said 'there's one in there somewhere which you are welcome to'. So eventually, with the help of new bearings, I was able to cobble together something that worked.

Reminiscences aside, one point that caught my eye was Robin's query as to why the inside of the box had been painted. In the Autumn 1972 VSCC Bulletin (No. 115), there is an article on page 6 'Treatment of Aluminium Castings' which includes a report from the British Aluminium Company's Technological Centre, covering this topic in detail. Briefly, the insides of engine and gearbox casings could be impregnated with sodium silicate or epoxy compounds if porosity was found to be a problem. However, paint was applied for a different reason. With sand castings, it is possible for loose particles of sand to become embedded in the oxide film of the metal surface as it solidifies. Over the life of the engine, these particles may work loose and get into the oil with disastrous results. The use of thick paint to seal unmachined interior surfaces goes back many years. In 1972, the proprietary paint was called Mecufix; it was resistant to the effects of 'modern oils'. With modern castings, there may be no sand problem, but castings could be treated for other reasons. For example, the inside of cooling system castings might be anodised to combat corrosion.

I would stress that all the above information is over a quarter of a century old. It is probably of historical interest only, in the light of what the trade may be doing nowadays to overcome this latent problem.

Yours sincerely, Ron Banks

I too have wondered about the red paint inside Alvis aluminium castings. Does anyone have further information? — J.N.B.C.

'Hopleys'
Bliss Gate Road
Rock
Kidderminster
Worcs DY14 9XS

Dear Julian,

It was nice to see an Alvis featured in the BBC 2 production of "A Rather English Marriage", starring Albert Finney, Tom Courtenay and Joanna Lumley. Finney played a retired Battle of Britain Squadron Leader and drove the Alvis with abandon, sometimes imagining that it was his Spitfire as he chased fleeing M.E. 109's.

The car was referred to as "the Alvis", not just "my car", and on one occasion, became the cause of a squabble which nearly broke up the friendship which had developed between the Squadron Leader and Southgate, the ex-pioneer, who had come to live in with him. Southgate had been promised use of the Alvis to visit his jailbird son and reacted strongly when the Squadron Leader decided that he needed the Alvis, so that the latter had to surrender, and travel by train instead.

I believe the car was a TD 21 drophead, registered 5101K and shown as property of an AOC member.

Yours sincerely, Doug Pound

Would the owner like to come forward and give us his experiences of making his car a film star? — J.N.B.C.

Montrose Cobhall Common Allensmore Nr Hereford HR2 9BN

Dear Sir.

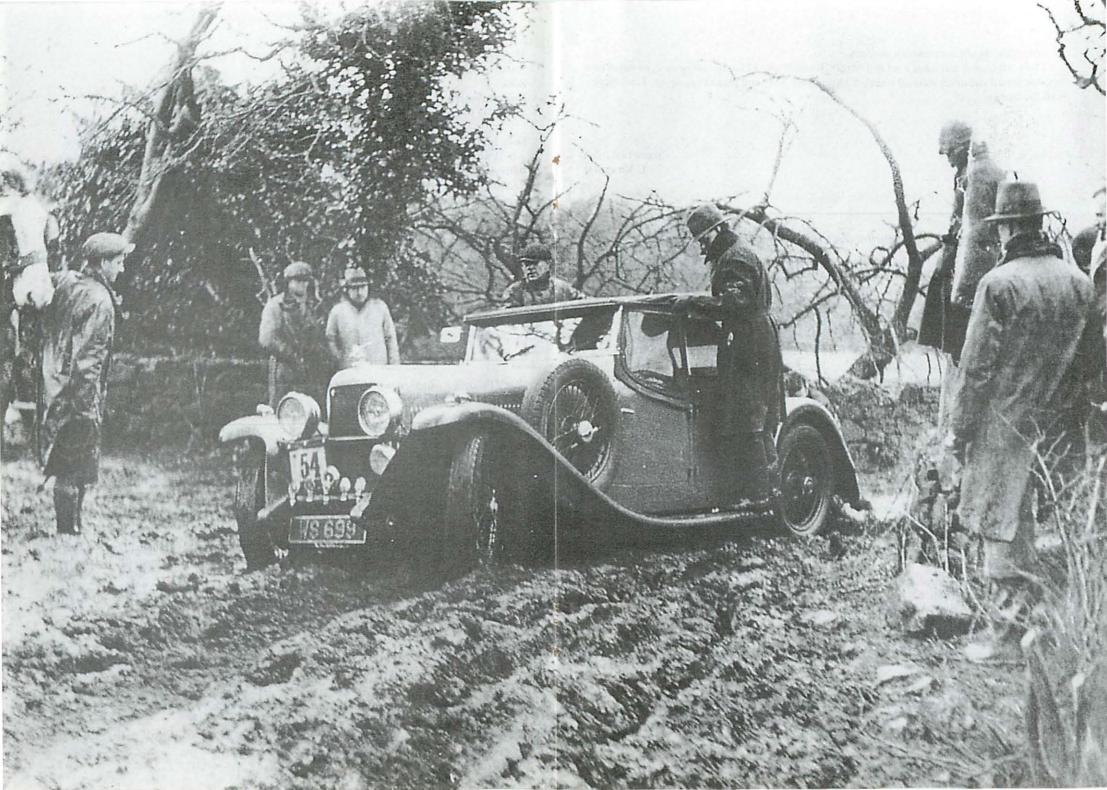
Those of us who have driven a car after changing from crossply to radial tyres (as was the progress in the sixties), know that the difference is dramatic. But where do you start with the TA 14?

There is a tyre, a 175 x 16, as fitted to all London type taxi cabs, 6-ply rated designed for weight, but supple enough to do the job very well, at half the price of a new crossply.

No contest I hear you say, but wait a moment. The dimensions between these two tyres:-

Crossply (New)			Radial (New)		
600 X 16			175 X 16		
Diameter	28'/₄"	(720 mm)	Diameter	27"	(690 mm)
Circumference		2,238 mm	Circumference		2,208 mm
Tread Width		120 mm	Tread Width		140 mm
Tread Depth		8 mm	Tread Depth		8 mm

Fitting radial tyres will lower your TA 14 by about 1" (25 mm). If your springs are in good



order, this should not present a problem.

I took the chance and fitted a set of Trident (British made) 175 x 16 taxi tyres. The car is now very sure footed and much safer all round and even more a joy and pleasure to drive. I can recommend the change.

Yours faithfully, I. Knappett

Does anyone else have this type of experience? I should be interested to hear other members' views.

— J.N.B.C.

Culvan
Wester Cullicudden
Balblair
The Black Isle
Ross-shire 1V7 8LL
Email: Europe@oriel.btinternet.com

Dear Julian,

Here is a picture of SC series 12/70 saloon, Car No. 19919, registration CSC 818 found by Edgar Shields late last year not a mile from his house. I eventually managed to buy it: the first photograph is "as discovered" condition and the second after transport to my house. It is not in "barn fresh" condition, rather "yard fresh"; actually it is amazingly sound, all there except the boot lid and the sunroof. All the brightwork was found inside the car.

I bought it as spares for my drophead, but having got it home it is too good to break, but I am now wrestling with my conscience about what to do with it. The options are:-

- (a) Restore it as a saloon.
- (b) Rebody it as an "Anderson" tourer.
- (c) Rebody it as a Cross and Ellis "miniature vdP 4.3 tourer" as at least one 12/70 was bodied new.
- (d) Turn it into a special.
- (e) Sell it on, probably for someone else to do (d) above.

Really, I have too many Alvises and other projects, but younger son, Ranald is keen to do some work on it, he plans a year out between school and university. The engine is free and we will try to start it soon.

Anyway, another Alvis has been saved from a slow mouldering death.

With kind regards.

Yours sincerely, Robin Gilbert



The 12/70 found by Edgar Shields and bought by Robin Gilbert. Is it not amazing that an Alvis can still be found in this state?

Photo: Robin Gilbert

Long Thatch The Green Hook Norton Oxon OX15 5LE

Dear Julian,

I have been a member of the AOC for a year and firstly, would like to congratulate you on The Bulletin. The balance of editorial is excellent and I always read it from cover to cover.

I am writing concerning an issue which has been raised before but still appears to have no conclusive answers — "The Shakes".

I bought my 1934 Speed 20 Special BUC 204 last year from Ian Fairhurst in Cornwall. I was delighted with the car and drove it probably for over 400 miles before a sudden and shocking case of the shakes. The car hit a nearside bump in the road and immediately a see-sawing motion began at the front end. A resonance seemed to be set up and the motion got progressively worse. The only thing to do was stop the car and begin again. After this incident the problem got worse and would happen on minor country roads every five or six miles and occasionally on good 'A' roads. Whilst originally it only seemed to happen at around 50 mph and on a certain type of bump, the speed range became greater and the slightest nearside bump would set it off. So violent became the motion that my two young children refused to travel in the car and for me it was a white-knuckle ride every time

I drove it.

I have no reason to believe the problem existed when I bought the car so something must have changed to bring it about. My problem was a lack of time to investigate the problem and so my father, David Hunt, stepped in and the Speed 20 took the place of his cosseted Healey 100/4 in a carpeted garage!

Fortunately he kept a very careful record of everything he did and the result is a delight to drive with none of the dreaded shakes to date. I had already replaced a worn corrugated drive plate and studs on the front nearside fully expecting this to be the answer but sadly there was no improvement. My father started by checking the brakes and there was some binding which was easily adjusted. He then turned to the tracking which was suspect as there was some obvious scuffing of the tread on the outside of each of the front tyres. He made a gauge and fixed it to both front wheels and established that the toe in was $\frac{1}{2}$ ". Here we came across a conflict as the handbook refers to a toe out of $\frac{1}{8}$ " to $\frac{1}{4}$ " and the History of the Alvis book mentions zero toe in, which is what he opted for. The wheels had been balanced recently during the previous ownership but my father did the front wheels again statically. Finally a worn nearside shock absorber linking bush was fixed.

Some cautious road testing followed and speeds were gradually increased with no sign of the shakes. The steering had naturally become lighter with less directional stability as a result of removing the toe in but perfectly acceptable. I have covered over 500 miles since the work was carried out on all types of road and at speeds up to 80 mph with no sign of the problem. I have even started to relax my grip on the wheel! In conclusion, I believe the main solution was the tracking. I am not an engineer but my, perhaps naive, theory is that the excessive toe in caused a tension across the front of the wheels (hence the directional stability) which was released when one wheel hit a bump and became airborne. In that split second, the other wheel then heads toward the verge. When the nearside wheel comes down again, the tension is back and forces the offside wheel to turn out at the same time as the bounce is transferred to the offside. Up comes the offside wheel and so the cycle starts with a resonance making it progressively worse. By removing the toe in the tension is taken out of the equation and the problem has gone away.

I am sure that there are plenty of well informed members who will shoot this theory down in flames but perhaps it will provoke a fruitful discussion. It is surprising how many people have the same problem but, for obvious reasons, won't admit it. I have spoken to at least half a dozen pre-war car owners (not all Alvis) who suffer from the shakes.

Yours sincerely, Peter Hunt

P.S. Following my letter to you regarding a bad case of the shakes with my Speed 20, I have remembered one more item which was addressed and which may have a bearing on the problem. Although the front springs looked to have had a good coating of grease, it was clearly only on the outside and the leaves themselves seemed dry and rusty. There was not much evidence of any deflection taking place and so the leaves were sprayed with a penetrating oil with a graphite additive. This was sprayed on every 50 miles or so and the leaves now seem well lubricated. There is much more movement evident and a constant ooze of oily rust emerges from the ends of the leaves as the oil does its job.

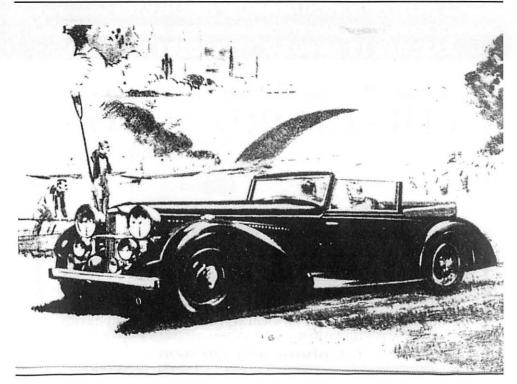
Glaspant Farmhouse Glaspant Manor Capel Iwan Newcastle Emlyn Carmarthenshire SA38 9LS

Dear Julian,

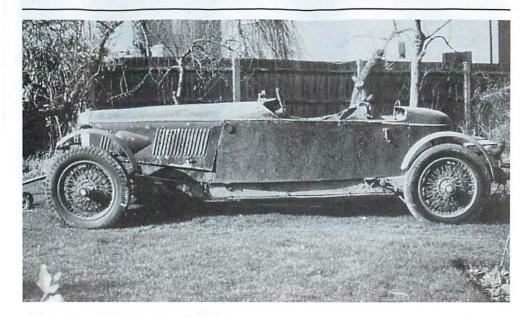
I read with some surprise your review of Inman Hunter's Aston Martin book. Anyone reading it would have been under the impression that this is a new title. The book was actually published seven years ago in 1992: You don't mention that Inman Hunter actually died before completing it, and that it was largely due to his friend, Alan Archer that the Ms was eventually completed and published. The book was, therefore, a joint effort, and both men's names appear as authors on the cover. I just felt that Alan should be given the credit he deserves.

Yours sincerely, Mike Worthington-Williams

Sometimes time passes by and I am not aware of it, but seven years seems a bit much! I note that this superb book has now been remaindered at £25.00. This is a real bargain. By the way, I did mention Inman Hunter's death and that the book was completed by Alan Archer. — J.N.B.C.



RODERICK REVIVED



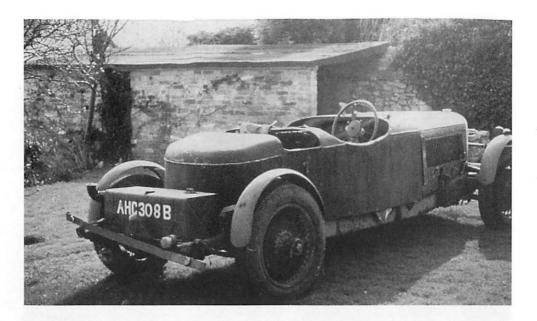
Largely as purchased but with addition of radiator cowl.

Photo: Richard Crabtree

The story of Roderick starts with an engagement ring, well nearly. I bought my first Alvis from Ron Banks in 1959 when we were both cadets at the RAF College Cranwell but more of that another time. I then owned, for a while, the only Alvis in Singapore and perhaps Malaysia, a TA 21 but again more of that at another time. I eventually improved the status of the cars through two Speed 20s and the TA 21 to a 5 year old Series I TD 21, black with wire wheels, white upholstery, and a real 'puller', very suitable for my image as a young, unmarried Flight Lieutenant. The only trouble was that it 'pulled' too well and I sold it to buy an engagement ring. Ah, the foolhardiness of youth! That lovely car, 2993 DA, went to a new home with Eric Stapleton and now, I believe, after a very chequered history, is being restored in Norway.

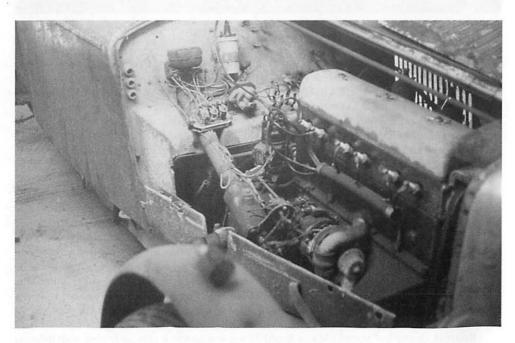
2993 DA was replaced, in 1966, by a Morris 1000 and this after 7 years of almost non stop Alvis ownership. It was not long before the withdrawal symptoms became too much and I was looking around for another Alvis. Chris Steele was, at that time, operating from his establishment in Sussex and regularly advertising in the Bulletin. As my mother-in-law lived in Maidstone an opportunity was taken to pop down to Sussex to see what was to be had. Those who visited him will remember that, not only was his farm rather difficult to find, but also that he had dozens, perhaps hundreds, of cars in the surrounding woodland. Now being a married man I was looking for a car with some comforts but with the characteristics of an Alvis. A TA 21 drophead caught my eye. It looked sad but with new hood, interior, respray and mechanics it was the right solution; we agreed the work to be done and the price but then I saw Roderick!

Roderick clearly had started life as a Speed 20 but was now in a very sorry state with the most basic of rough special bodies nevertheless, apart from a missing radiator cowl, it appeared complete



As purchased.

Photo: Richard Crabtree



Engine bay: Correct engine but stored for 28 years. It did run!

Photo: Richard Crabtree

until I lifted the bonnet. Underneath was not the triple carburettor Speed 20 engine but a 2.5 litre Lea-Francis. A nice engine, crudely installed and somehow mated to the Speed 20 gearbox, how the clutch worked I cannot remember. Interesting as this was it was not what I wanted to see beneath that lovely bonnet. Chris Steele said he wanted the Leaf engine but had the correct Speed 20 engine in boxes and that it was in good condition. I looked at the bits and certainly the crank, bearings, pistons and bores looked satisfactory. A deal was struck, £250 for the reconditioned TA 21 and the Speed 20 as it stood but with the Leaf engine removed and the Speed 20 engine in boxes. I think Roderick represented £25 of the overall price.

It took about a couple of months for Chris to sort out the TA 21 and he did a lovely job. (I subsequently sold NLC 473 to Sunni Duff on the Isle of Wight but where it is now I do not know; it was far too good a car to break and I hope it still has a good home.) I went to collect the TA 21 but what was I going to do with a Speed 20 which could not move under its own power? I was still in the RAF, based at Manby just outside Louth, and Chris wanted Roderick, as it became known, out of the way.

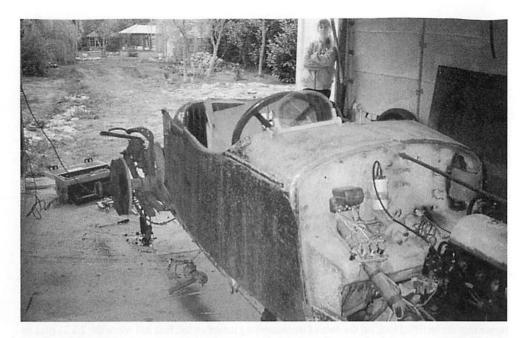
My wife's uncle was a farmer near Wrotham and had all sorts of equipment. He was a kindly man and I knew he would help, which came in the form of a very large four wheel trailer. We had to make up a tow bar for the TA 21, get the trailer road-worthy and set off to get Roderick. We got to Chris Steele's without incident, put Roderick on the trailer, put all the other bits in the TA 21 and off we set back to Wrotham. I had only a single garage and thus the plan was to leave Roderick in a barn at Wrotham until I could make alternative arrangements at Manby.

I had little experience of towing but now I had a 20 ft long, heavy trailer with a heavy car an top. Nobody told me about trailers steering the car, particularly when the trailer had no brakes. I can still remember the terrified look on the face of the oncoming driver on the first hill when the TA 21 plus its load careered from side to side taking up the whole of the road. Eventually we got to Wrotham safe but shaken. Roderick was left on the trailer in a barn for later collection.

Having eventually obtained possession of an extra garage at Manby, it was time to collect Roderick for the long trip from Kent to North Lincolnshire. Once again the tow bar went on the TA 21 and off we went down to Kent. With Roderick on the trailer, the brakes of which still did not work, we left Wrotham at about 7 pm on a dark, cold, November evening. We asked Uncle George for the short cut to the Dartford Tunnel. The route was fine, but he failed to mention the nasty little valley with the 1 in 4 slope down, the ninety degree turn at the bottom and then the 1 in 4 hill up. We got to the bottom, very slowly, but even the TA 21 would not pull the load back up; we were stuck and blocking the road. I sacrificed my relatively new wife to another motorist who said he would take her to call Uncle George with a tractor. Some time later, and after rude words with some other motorists who found the road blocked, Uncle George plus my unharmed wife arrived. The tractor pulled the entire entourage up the hill but it was too late to complete the trip back to Manby so Roderick was returned to Wrotham. Another time, better timing and a better route and at last the car was where I could start work.

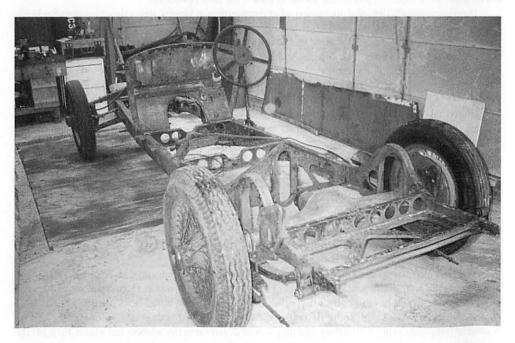
The first thing was to assemble the engine. But no; this was an SA engine and an SC chassis. The engine would not fit. In those days Speed 20 engines could be obtained and I found one in Plymouth, advertised in the Bulletin by a Mr. Snell (he had had the engine reconditioned, I have the bill for £99-1-1 from Old Blundells Garage, Tiverton, dated 1959, and had then written the car off). I also had to get rid of the SA engine I had and, through I believe John Fox, sold it a someone called Green. If I remember correctly I bought and sold for £50.

The new engine had to come from Plymouth and the solution appeared to be British Rail. Mr. Snell crated the engine and sent it off. I next heard from BR that it was at Horncastle some 50 miles away and that I would have to collect it. I refused on the basis that it had been consigned to Manby, the nearest station was Louth some five miles away and I wanted it delivered to my door. A great argument followed during which they said they would deliver it to my address but would 'tip it off the back of the wagon'. Eventually they delivered it to the RAF stores and I pushed it on a trolley to my



The start of dismantling.

Photo: Richard Crabtree



Chassis stripped and ready for repair and paint.

Photo: Richard Crabtree

house some 1/2 mile away.

Work could now really start. In went the engine, a local agricultural engineer made up the exhaust which included a Halfords off-the-shelf silencer, still on the car after 30 years, and some brackets to cross the chassis to support a floor of sorts and two seats. The car was ready for a trial run up the runway, however, it would fire but would not run. There was no starter motor, that was to come many years later, and even as a fit, young chap swinging that engine became tiresome! Help was at hand in the form of a good friend, Hugh Corriat, who is one of the world's gentlemen, will do anything for anyone, and who had just bought a Rover 3 litre coupé — the apple of his eye and the ideal car to tow Roderick to the runway and get him going. We made a start down the road but after a few yards the offside rear wheel passed me and passed Hugh. I had not tightened the knock-ons. Hugh braked, I braked using the middle pedal and the dumbirons punched two neat holes through the boot of Hugh's pride and joy. It shows what a gentlemen he is in that he did not say anything too rude and agreed to try again as long as I checked all the knock-ons. Off we went to the airfield and after a lot of towing the Speed 20 burst into life and I drove it for the first time under its own power. Back it went to the garage for a bit more work but before much could be done I was posted, in 1969, to Cornwall. Roderick went back into store, this time at Maltby-le-Marsh and off I went to Cornwall. Six months later I scrounged a flight to Manby, stayed overnight with friends, and the following day set off to Cornwall. The only time the car had been driven was once on the airfield and then from Manby to Matlby-le-Marsh. Apart from having to strip the fuel pumps and carburettors several times because of the rubbish being drawn from the tank, Roderick went well. Within almost days I was posted again, this time to Northwood, Middlesex. I still had the TA 21 but also had a Ford Y which I was restoring. There was only one thing for Roderick, back to Uncle George's and the barn at Wrotham. I went from Northwood to Bracknell but during 1973 Uncle George died and the farm was sold,. Roderick was moved (by trailer, no MOT and no chance of getting one as all the lights had been stolen while the car was in the barn) with Auntie Hilda to a house in Maidstone. In 1974 I moved back to Cornwall then to London, Edinburgh and, in 1979, to the USA. Roderick stayed at Maidstone.

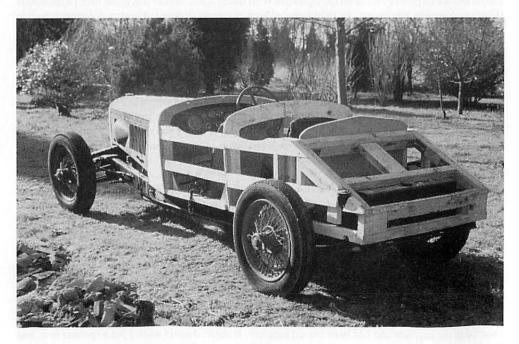
In 1981 Auntie Hilda died whilst I was still in the USA. Before going to the USA I had bought the house I still own, in Finmere, but it was let and had no garage. Through a friend I found a barn, near Finmere, but I had to come back from the USA to move Roderick from Kent. I fiddled a duty trip to UK but had very little time to do what I had to do, hire a Landrover and trailer (I was getting quite good with trailers by this time) and get down to Kent to move the car. I got there in the early morning with the intention of loading the car and getting up to Buckinghamshire that afternoon. But memories play tricks with you. For security, not only had I jacked the car up, but I had taken away the wheels, jelly moulds and also the starting handle; these were with friends in Buckinghamshire. After a mad dash to collect them I got back to Kent in a late, winter afternoon, to a garage with no light or power and only the Landrover headlights and a torch. Not surprisingly, the car would not start and, as I was alone, I, could not tow it. The only solution was to wind it out of the garage on the handle, brakes binding, on to the trailer and drive once more to Buckinghamshire and into the barn. The following day I returned to the USA — exhausted!

In 1983 I returned from the USA but was in a very busy job and was also converting two houses into one. By 1987 the owner of the barn wanted the space back and Roderick was towed, by the Y Model Ford, to another barn. In 1992 I built a garage and, illegally, but under his own power, Roderick came home. In 1995, at last, work started. Off came the rudimentary body; what woodwork there was had been destroyed by woodworm; out came engine, fuel tank, transmission, brakes, and suspension. Apart from some minor accident damage, which was put right with a club hammer, the chassis was excellent. The front suspension was a horror story. The offside, lower, outer wishbone pin had been sheared in the accident and had been brazed together. It sheared again when I put a spanner to it, and I had been driving this car on the road for long distances some 26 years before.



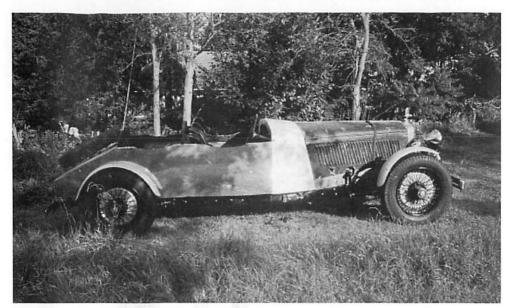
Restored rolling chassis with engine installed.

Photo: Richard Crabtree



Timber frame complete and the car now driveable.

Photo: Richard Crabtree



Complete and ready for the MOT. Not paint or trim yet.

Photo: Richard Crabtree

The chassis was stripped, inhibited and then painted with a special two pack process provided by Sigma Coatings (they did the paint job for the Thames Barrier and are specialists in this kind of process; they even sent a surveyor to look at the job in advance). The front suspension was put right, all shockers re-bushed, fuel pumps re-conditioned and the running gear re-installed. The car could now be safely driven round my grounds. But then I had to build a body. The only things which remained from the original 1935 Charlesworth saloon were the bonnet and scuttle. Many years before I had obtained, from Ron Banks, a radiator cowl.

I could not afford to have a body built professionally and thus it had to be simple and with cycle wings. I decided it would look a bit like a very big Morgan with a sloping back and the spare on top to disguise the slab tail. From the scuttle to the cabin would be boat decking as it would be easier to form rather than tackle a complex double curve in metal. It would have four seats because I did not want to cut and shut the chassis. The result is not pretty but it is functional and I have seen worse. It is all on a wood frame and skinned with aircraft grade aluminium. Commercial grade would have been easier to work but would have been more readily damaged. In any event I work for an aircraft company!

When I bought Roderick 30 years ago he was registered AHC 308B with a previous registered owner, Vernon H Petty of Eastbourne. The log book called him an Alvis Standard with a 2000 cc engine (no mention of the 2.5 Leaf) and the engine number, so Dave Culshaw tells me, was that of a Standard Vanguard. Dave and John Price-Williams, from the chassis and car numbers, provided enough evidence to DVLC for the car to be re-registered with its original number of AER 610. AER 610 was advertised in Motor Sport, complete with Charlesworth body, in 1951, but apart from that, its history appears unknown. Speculation suggests that it was written off between 1951 and 1964 when it was re-registered. Perhaps because of the accident, which damaged the front chassis and suspension, was there also extensive body damage which was beyond repair, was the engine also written off? The replacement body was as light and basic as it could possibly be, some of it appeared to have been used on another car, and could have been designed for some kind of track racing. The Vanguard engine would have been of useful power, amenable to tuning, and lighter than the Alvis one. Perhaps even that was

not powerful enough and hence the Leaf engine. Perhaps we shall never know unless someone in the Club remembers AHC 308B or AER 610.

I am pleased to report that AER 610, with new body, albeit as yet neither painted nor trimmed, sailed through the MOT, still with Halfords 30 year old silencer and on the original 30 plus year old tyres, on 6 October and is now back on the road for the first time in 28 years. Roderick is Revived.

RICHARD CRABTREE



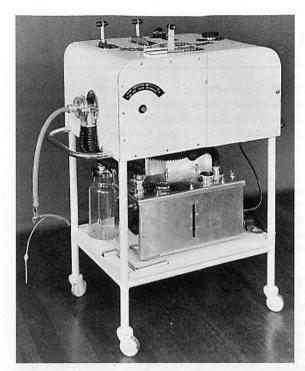
IRON LUNGS, SMITH-CLARKE AND ALVIS

Before the war my mother talked about Alvis cars with awe; they overtook the family Austin 7 without noticing it. A rich architect relation had a Silver Crest saloon of around 1937 vintage, I think. I occasionally rode in the back and thought it much better than its predecessor, a 1935 SS saloon which was just a box on a bonnet with cycle mudguards and no running boards. On corners it jetted mud into my face as I sat behind the driver. This hurt and, to my mother's shame, made me cry, but I don't think our rich relation noticed.

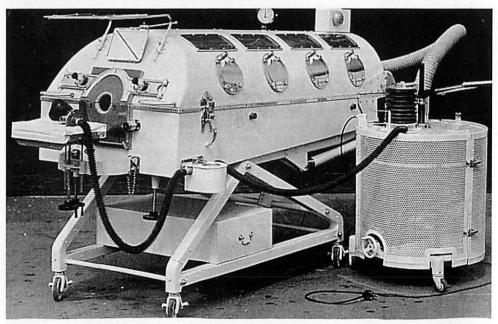
My next Alvis contact was in 1953 when, as a medical student, I took my girlfriend to the Earls Court motor show. There on the Alvis stand was a TC 21/100 Grey Lady — 100 mph! I thought it was the most beautiful car I had ever seen and splendidly British among all the bulbous tinware. The car was locked, but with a modicum of blarney I persuaded the salesman to let us sit in it. Of course, I hadn't a bean but got out of trouble because my girlfriend was a music student who played the harp so I said there was not enough room in the back to carry her harp, though a Jowett Javelin subsequently regularly did so.

Over the next twelve years a seemingly unending series of medical exams and slow climb up the hospital medical ladder left little time for cars other than for essential cheap transport. I went through a 1935 MG Magnette — disastrous, a 1938 Austin 10 — boring but reliable, the Jowett Javelin — excellent in the dry but hopeless in the rain because the distributor was immediately behind the front grille and well in front of the radiator and I found nothing to keep water out of it. Finally, a series of VW Beetles — durable but dangerous. I wrote off two, one while driving to London from Southampton after working all night (probably my fault), the second, more spectacularly, driving at night from Kampala, Uganda, to the Kenya coast at Mombasa. We were struck a glancing blow to the off side rear by an out of control car and we rolled and somersaulted several times. Fortunately we finished right way up and woke up with numbers of loop-eared Mau Mau pawing over our belongings which were strewn over several hundred yards of road.

But I am getting off the subject. In the late 1950s and early sixties the use of mechanical respiration in treating a variety of serious illnesses became my main professional activity as it remained until I retired at the end of 1994. In 1960 my medical professor became interested in the treatment of acute exacerbations of chronic bronchitis by artificial respiration. He chose the Smith-Clarke positive/negative respirator as the best available machine (see illustration), and bought six. I had some vague knowledge that Smith-Clarke was connected with Alvis but little time to inquire further, because we were soon faced with the last great London smog and all the respirators were in constant use. Lives were certainly saved but, being a first trial, there were problems, some due to the respirators. They were beautifully engineered with some similarities to a car engine. An electric motor operated two bellows via cranks and levers. At 20° after T.D.C. one bellows compressed air into a large heated water-bath humidifier, on the lower shelf in the illustration. A camshaft-driven inlet poppet valve then opened and warm wet air was driven into the patient's lungs. Stroke volume was adjusted by moving the crank fulcrum. At the end of the bellows' downstroke the inlet valve closed and an adjacent expiratory (exhaust) poppet valve opened allowing air out of the lungs, either directly to atmosphere or with suction assistance due to the upstroke of the second (expiratory) bellows. The machine had great power and easily ventilated badly diseased lungs — it would have ventilated an elephant, given slightly bigger bellows. However, the massive metal casting of the valve block acted as a heat sink so warm wet inspiratory and expiratory air condensed within it - an ideal reservoir for bacterial growth. In 1965 we published in the Lancet the most quoted article I have ever written



An early Smith-Clarke positive/negative pressure respirator. The water bath humidifier on the lower shelf was difficult to clean and became known as the "village pond".



The Coventry Senior "Alligator" cabinet respirator, or "Iron Lung".

called 'Pseudomonas aeruginosa cross-infection due to contaminated respiratory apparatus.' This was no criticism of Smith-Clark's design, just that we hadn't learnt then how to sterilise the machines properly.

At this point I must break off from personal reminiscence to say more about that undervalued but autocratic genius, Captain G. T. Smith-Clarke. After retiring from the Alvis in 1950 he devoted the next ten years until his death in 1960 not only to astronomy and radio but also to the development of medical equipment including surgical instruments, x-ray machines and respiratory apparatus. The scope of his astonishing retirement achievements is well described in Appendix II of Kenneth Day's classic text 'Alvis, The Story of the Red Triangle' (3rd edition pp 355-362) (written by Dr. Adrian Padfield). There are more details of his respiratory work in his James Clayton lecture entitled 'Mechanical breathing machines' which he was invited to deliver to the Institution of Mechanical Engineers on 14 December 1956. This lecture is an example for all time of clarity and modesty and the more remarkable because he is not writing on his own professional subject. His description of the mechanics of breathing is the best and simplest I have ever read anywhere. I can do no better than quote directly from some relevant sections.

"The lungs are situated in a closed compartment known as the thoracic cavity (the chest). They communicate with the atmosphere by way of the trachea (wind pipe), the pharynx (throat), and the nasal openings. The flow of air into and from the lungs depends entirely upon changes in the capacity of the thoracic cavity, the lungs do not expand and contract of themselves but only in relation to changes of air pressure in the thoracic cavity, caused by the changes in its capacity. During the normal inspiration period the thoracic cavity is enlarged in all dimension, but mainly in the transverse and vertical directions. The increase in the transverse direction is brought about by muscular action upon the ribs and sternum (breast bone). The enlargement in the vertical direction is due to downward pull of the large muscle known as the diaphragm, which divides the thoracic cavity from the abdomen, thus the walls of the thoracic cavity and the diaphragm act together as a bellows-type air pump. During the expiration period the thoracic cavity resumes its normal dimensions (and this) together with the elastic recoil of the lungs causes the excess air to pass out through the nasal openings at zero or only slight positive pressure. It will be clear that the human respiratory system is a negative pressure system, in which the mean pressure is sub-atmospheric.

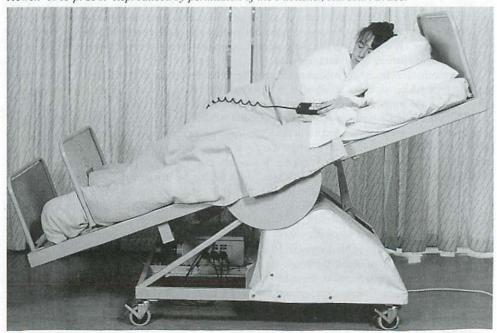
The mechanical breathing machines in use at the present time are of two types: (1) the negative pressure type which attempts to simulate the normal respiratory system, (2) the positive pressure type whereby the lungs are directly inflated by intermittent positive pressure."

The Smith-Clarke positive pressure respirator/ventilator (the words are used synonymously) already described went into production at the Cape Engineering Company of Warwick which was set up by Gerry Turner, joined later by George Webley and Ron Walton, all ex Alvis. The machine was soon modified and most problems overcome. It was then called the Cape Respirator. I had four and a courtship ploy with my medical wife-to-be was "come up and see my new respirator." It was white, with big knobs on the front. She said it looked like a washing machine. Nevertheless, we kept the Cape ventilators in regular use until 1992 although mechanical respirators were gradually being replaced by smaller more versatile electronic machines.

Smith-Clarke's earliest respiratory work was on type 1 negative pressure devices, commonly known as iron lungs. Some of his designs and their direct successors are still in use as I write. Iron lungs — of a sort — had been available for many years. Smith-Clarke first tried to modify existing designs and although kits of parts to make these modifications were produced in numbers by Turner and Webley at Cape, Smith-Clarke soon realised that a new design with better patient access and more respiratory power was essential. Smith-Clarke records that the money for this development was raised by the "Coventry Iron Lung Fund" (£500) and a further £800 by the "Coventry Coronation Carnival Committee". He omits the best bit. Much of the money was raised by a young lady in a long



The cuirass shell and 12 volt pump in use in a TC 21 Alvis; reproduced from Hunter AR, Mechanical Ventilation of the Lungs, in "Recent Advances in Anaesthesia and Analgesia, 9th Edition, ed C. Langton Hewer. 1963 p. 250. Reproduced by permission of the Publisher, Harcourt Brace.



A rocking bed. (This one is not a Smith-Clarke design).

blond wig who paraded the streets of Coventry on a white horse. The Lady Godiva of history may be a mythical figure. It is uncertain whether she really did ride the streets naked or simply threaten to do so if her husband, the local landlord, did not do what she wanted to help the peasants and serfs. The 1953 lady was no myth and made Movietone News — but who was she?

The advantages of the Smith-Clarke iron lungs are that they are quick and easy to get in and out of and a tube directly into the trachea, either through the mouth, or the front of the neck (tracheostomy), is avoided, so if a patient can breath naturally, even for a few hours, the iron lung has advantages. They came to be called Cape Senior "Alligator" respirators although Smith-Clarke's signature is engraved on a brass plaque is on the foot-end of most. The principle of operation is obvious. The patient lies in the closed chamber with his head protruding; a large pipe connects the foot of the chamber to big bellows; as the bellows open, a sub-atmospheric pressure is created within the chamber, thus drawing air into the patient's lungs. Expiration occurs when the bellows close (see illustration).

As well as his iron lung, positive pressure respirator and child's mini-iron lung, Smith-Clarke designed, and Cape made, a cuirass shell with 12 volt or mains pump and a rocking bed. The cuirass shell (see illustration) is a padded dome applied to the front of the chest. It is repeatedly evacuated by a bellows or 12 volt fan pump and draws the front of the chest up into the rigid dome. It is less effective than an iron lung because it prevents sideways enlargement of the chest cage but, as the illustration shows, it is portable.

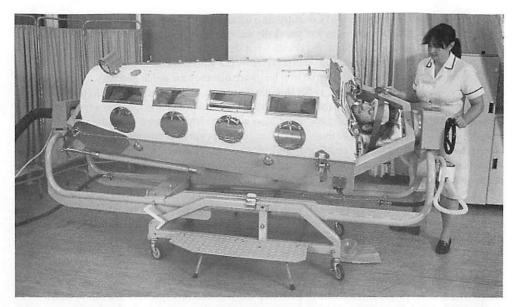
The rocking bed assists a weak diaphragm which cannot function when a patient lies down to sleep. The bed has pivots at the centre of each side and is connected by levers to a motor which rocks the bed 15% head down and up 12-16 times per minute, thus using the abdominal contents as a counterweight to push the weak diaphragm up and pull it down. The principle is simple but as the motion must be absolutely smooth and quiet the engineering is difficult. Smith-Clarke solved this with a belt drive and heavy cranks so that the bed, without occupant, weighed 7 cwt. The rocking bed is popular with users because it is the only method of artificial respiration which needs nothing extra touching or entering the body. Usually the rock-a-bye-baby motion promotes sleep. Despite this, I had requests for double rocking beds. Very difficult engineering, but it must spare male effort, not that I have ever had an opportunity to test this theory.

By 1977 my hospital unit was maintaining, mostly in their own homes, 170 patients using Smith-Clarke's breathing machines. Nor were the occupants idle captives. Most achieve some gainful employment. One, a full time solicitor, owned and occasionally even travelled in a 1929 Rolls Royce Phantom II with a St. John Ambulance body. In 1973 I had the privilege of driving him, with iron lung, in the 60th anniversary RR alpine rally. We fitted an extra dynamo on the propellor shaft but the vehicle did tend to overheat on mountain passes. Arriving at a five star hotel in Paris with iron lung caused the hotel staff to disappear fast. We won a prize for best team effort, and, though not an RREC member, I was granted the right to wear the club tie for life.

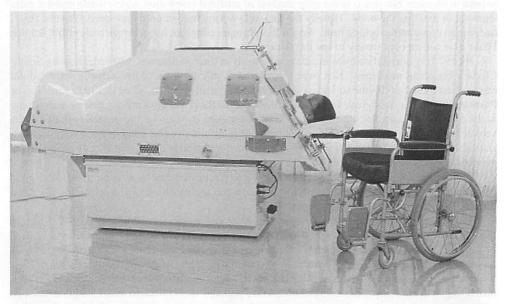
The versatility and durability of Smith-Clarke's respiratory equipment is astonishing. With good maintenance by Cape Engineering, some new developments and modifications, much of it is, like Alvis cars, still in use.

With retirement approaching, Alvis ownership at last seemed possible and in 1992 I bought Michael Dykes' TC 21/100 Tickford DHC. Over the next two years Roland Simmons and his Red Triangle team gradually and completely restored it stage by stage as I could afford it and in 1994 we set off to Peter Black's meeting in Provence. Alas we did not make it. About 100 miles south of Paris we found we were putting in as much oil as petrol. Roland's instant telephone diagnosis was a broken piston ring. Oil consumption was impossible so we pottered slowly back to Red Triangle where two broken rings were replaced. I have never asked who assembled the engine, though I know it was not Rowland or Brian.

1995 was a poor year for Alvis motoring. My wife was seriously injured in a sailing accident and



The ultimate Iron Lung (the "4.3"). The whole tank can be turned upside down for lung drainage. Snag: Modern asbestos-free brake shoes have less static friction and do not hold the Iron Lung in position satisfactorily. When right way up and open, the brake can slip — we have dumped two patients on the floor this way.



The last of the line (the "TF") based on Smith-Clarke and designed by Cape, in 1979, for home use. The bellows are in the base. The mattress is at normal bed height and the user can open the chamber from inside.



Wifely duties in Provence. This service only available in warm climates.



Patient with tracheostomy and respiration in Copenhagen. Note portable hoist used to lift her into the car.

I was confined to short outings just to keep the car properly alive. However, she recovered and in 1996 we made it to Peter Black's meeting and the summit of Mont Ventoux without overheating, though during the return run the condenser gave up. France had none and as my wife had run out of holiday time, we returned by Eurostar leaving the car at an enthusiastic little garage in Chartres. Good came from this. I returned with my son and the parts and while waiting for the ferry at Le Havre, we met and dined with Nick and Pat Simpson. I was moaning gently about the heavy TC gear box, even with the two-one trick, and the need for an overdrive on autoroutes. Nick said it was possible, though costly, to fit a BMW Getrag 5 speed box into the TC, which was interesting.

On my next visit to Red Triangle I mentioned my interest in the 5-speed gear box and Rowland Simmons took me for a test drive in a TF 21 with a ZF box and I was hooked. Rowland then told me that he had used a TF box in his own TC DHC (a car now owned by Mr. Hamilton-Grierson in Scotland) and that it was ideal for a conversion because no alterations to the tunnel were necessary. We fitted one and the improvement in speed, quietness, ease of gear change and fuel economy more than make up for the loss of originality. Yes, I know spares are difficult but you can't have everything.

I think the TF 21 test drive might have been a subtle Simmons sales ploy, not only did I have the TF 5-speed gear box fitted to my TC, but it started me wondering whether I could justify having a TF as well.

In 1997 we twice took the TC to Denmark for a spring holiday in Copenhagen and, with two colleagues to an autumn medical meeting in North West Jutland. The west coast is flat sand dunes, the wind biting and the North Sea cold. Copenhagen is indeed wonderful and by Alvis doubly so. It has been a great centre for artificial respiration and the treatment of poliomyelitis since the infamous 1952 polio epidemic. We visited a patient/friend who has needed virtually continuous mechanical ventilation since 1952. She now has a tracheostomy and small positive pressure respirator on her wheelchair. Using a portable hoist, the TC's big rear-hinged door and open top made it possible to lift her in and drive around the town. The 1963 illustration, from a medical textbook, shows that, by coincidence, this was not the first time a TC was used in this way.

Denmark is excellent for older cars, the roads are good and the traffic moderate. Unfortunately, headlights are compulsory at all times. In town, with traffic lights, trafficators and windscreen wipers, the dynamo was beaten. An alternator would be better.

Inevitably I now have a TF 21 DHC and so two Alvis cars are making up for those years lost to other Smith-Clarke engineering achievements. What a magnificent extravagance!

GEOFFREY SPENCER

I am extremely grateful to Geoffrey Spencer for writing this fascinating article about an important sideline of Alvis history. — J.N.B.C.



AN UNBROKEN TRADITION OF ENGINEERING QUALITY

POSED, PROBED AND SOLVED

— The Registrar's Column —

"THE LAST LAP"



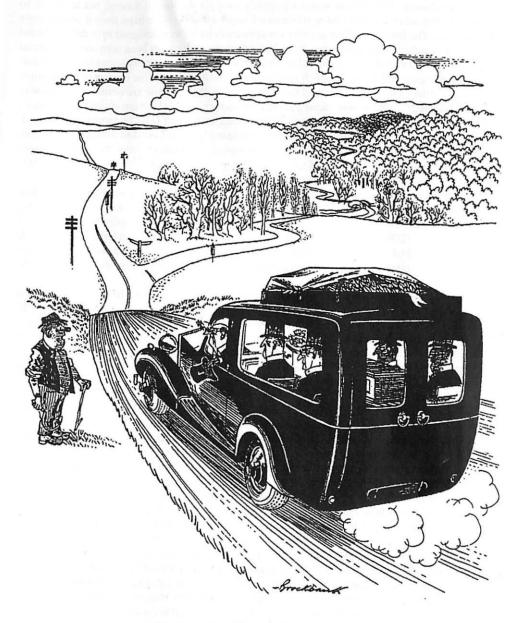
An Alvis hearse?

Photo: Dave Culshaw

I was reminded recently, when reading Nick Walker's A-Z of Coachbuilding, just how wide a variety of coachwork styles have been built on Alvis chassis. You name it — limousine, sedanca, landaulette, roadster etc., and an Alvis example can usually be found. If one also accepts conversions, such as have occurred by necessity, and sometimes by requisition in wartime, the field becomes even wider — with examples of Alvis vans, pick-ups, even the odd ambulance and fire tender, and worse still 'agricultural tractor'. There is however one particular species of which I have yet to find an example, but that is the hearse.

Now this is in a sense strange, because the contemporaries against which Alvis products to a degree competed, supplied chassis for this purpose. Rolls-Royce is an obvious example, but Armstrong-Siddeley, Daimler, and Austins, particularly of the Sheerline and Princess types, all had chassis deployed in the hearse market. A three-litre with another foot in the wheelbase would have given the Company another string to its bow.

All this is by way of an introduction to this month's mystery car, which is a most astonishing piece of bodybuilding. It has typical hearse clues about it, especially at the rear end which is highly



'Straight on be quicker, but t'other be prettier.'

reminiscent of a type of light hearse which Woodall Nicholson, and indeed others, used to build on the FX3 Taxicab chassis. This version was not generally used for the formal funeral, but tended to be used prior to this when a coffin had to move to a Chapel of Rest — perhaps from a considerable distance away. The front end of our mystery car appears to have been designed by a different hand altogether. It is quite elegant in this area, with a grille treatment which has been seen on experimental Lagondas. Noting the absence of a bonnet lid as such, the entire front assembly seems to be one piece, like the Jowett Jupiter and Allard Safari. It appears to be front hinged as in the manner of the Triumph Herald and Spitfire. The scuttle area, and the A-posts below the waistline are remarkably similar to the TB 14 and TB 21. Note too the use of a curved windscreen, unusual but not entirely unknown on pre-Graber Alvis, as the experimental saloon 25330 owned by member David Adams is so equipped. The hub caps are unmistakably Three-Litre, which seems to imply Three-Litre disc wheels, and therefore possibly the axle and hubs of that model. The photograph itself emanates from the Peter Cameron-Clarke Collection, for which many thanks, and is known to have been taken at a Northern Alvis Day of the early sixties, at its then location of the Riccall, or Sherburn Airfields.

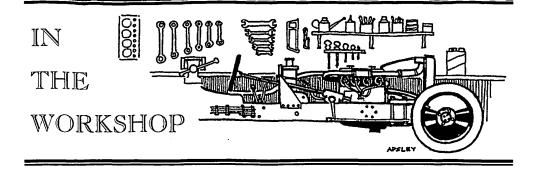
The confusing signals sent out by this car's unusual aspects were only partially resolved when Bernard Nield, Northern Section Chairman, managed to locate a Norfolk registration card relating to the Index No. DNG 281. This shows our car declared as having chassis 19891 (actually the car number of chassis 15646 — a 12/70). The engine is declared as 20782, which is a TA 14 unit of January 1947. It was last taxed 31/12/63, which roughly balances with the time and location of the photograph. By far and away the most interesting aspect of the registration card is in its declaration of the owner as one N. D. Routledge.

Norman Routledge was of course a founder member of the Alvis Owner Club, (Number 28), and was a renowned exponent not only of Alvis, but also of the Bullnose Morris, and he is referred to within the well-known Barraclough and Jarman biography of that well-loved model. One finds an early example of Routledge's advocacy of the Alvis, in his article, published in the Motor, of 10th November 1943, page 267, which is an account of a trip from his Leeds base, to Inverness. A Firefly is mentioned, but not specifically identified, but co-incidentally another of Bernard's chance discoveries had netted a reference to Firefly 10787, registration No. US 2938, recorded in Routledge's ownership in September 1941, which seems likely to have been the same car.

Routlege was a remarkable character, a hands-on engineer of the old school and an inveterate special builder. He apparently identified some of these with 'RA' chassis numbers. We know his chassis RA 1, to have been based on another Firefly, chassis 10531, which was assembled during 1947, and registered GWT 905, as a new vehicle, on 25th September of that year. RA 2 and RA 3 have yet to be accounted for, but RA 4 is very well known, being 'Tea-Bag', the highly perforated version now owned by John Wiggins. This was completed around May 1957, when it was registered as TWX 266. The hearse-like DNG 281 was probably the last Routledge Special, about which we need to discover more. Someone, somewhere, must know something about its origins. The use of an 'L' plate suggests that someone was learning to drive on it. They would, I am sure, never have forgotten the experience. Please help, if you can, with more information.

All this comes around to my original starting point — which was to lament the apparent absence of an Alvis hearse, which dyed in the wool enthusiasts like myself might rather like for that final journey to that ultimate breaker's yard. In the absence of such a device, I personally favour a approach to our colleagues in the D.L.O.C. for the loan of a Daimler Majestic Major hearse, of which there still must be a few examples around. This, with its remarkable Edward-Turner designed vee eight engine could outpace nearly all the sports cars of its day. So — how about it? No slow processions — a Motorway blast at the legal limit, and a last lap of a Racing Circuit; this would be highly appropriate, at least in my opinion.

DAVE CULSHAW



ON SMALL DIAMETER PIPES AND PIPEWORK

William Blake referred to 'Piping down the valleys wild' in his introduction to "Songs of Innocence". They are both connotations appropriate to this stage of Riley restoration.

It seems to me that fitting pipework is similar to playing golf. Both, when conducted by professionals look remarkably simple to the uninitiated. You can, however, at least claim to play golf badly for the fun of it.

Some precautions, mind you, make life easier. Radio music soothes shattered nerves. A preplanned lack of interruption prevents a drama becoming a crisis (the finest marriage in the world can be strained when one's wife runs crying to her mother with a length of pipe clove-hitched around her throat). Above all, space is essential, vertically as well as horizontally. However well you arrange things, two inches of pipe will be firmly clamped leaving four feet free to thrash around like a demented snake wreaking destruction in its path.

Materials

After the initial impetus to re-pipe the car has slowed to a gallop, the question of sources of materials raises its head $\frac{3}{16}$ " petrol piping may be obtained from your local motor factor in the form of hydraulic tubing. This is, in fact, eight mm but the additional $2\frac{1}{2}$ thou on diameter can be accommodated. (The local plumbers' supplier incidentally can provide eight mm olives and unions as used on small bore heating systems but the pipe itself is too thin-walled for car use.) If you buy a ten metre reel of hydraulic pipe, check it for damage before purchase. Typically, it may have been dropped in transit producing kinks and flats which only become apparent when the pipework under manufacture is half complete.

Smaller diameter pipe of various gauges, both copper and brass, may be obtained from model engineering suppliers in two foot straight lengths, which are convenient, or longer if you ask.

GLR Distributors (Ltd), Great Northern Works, Hartham Lane, Hertford SG14 1QN. Tel: 0992-552-962, have been very helpful and a telephone order normally produces the stuff by post, correctly packaged, in a day or two. This firm is also a positive Aladdin's Cave of such material as hexagon brass bar in BA sizes as well as AF, machined BA bolts, aluminium sheet, stainless steel, cutting tools and so on. It is very worthwhile asking for their catalogue.

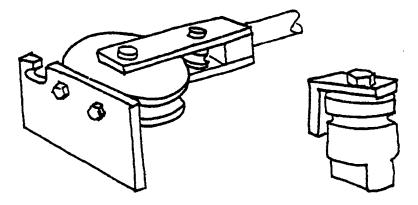
As has been stated, short lengths of pipe arrive straight. Longer lengths are invariably coiled for transport and must be straightened before any attempt to bend it is started. The easiest way is to roll it on a clear bench remembering the flapping end. It can then be eased straight by hand. Over bending and correction work hardens copper and the rapidly increasing rigidity, like human stress, produces a

steadily worsening situation.

Tools

If the finished pipe runs are to be both accurate and attractive, pipe benders are essential. Pipe bending by thumb, even on very small diameter tubing firstly produces flattened cross sections, secondly, results in weird shaped runs which look horrible and thirdly, results in your visiting your GP complaining of tennis elbow or its first cousin. You will get scant sympathy for this complaint not only from the doctor but also from your wife whose lawn remains unmown.

Commercial pipe benders are available but expensive, and you will never find one which alone covers the required diameters of pipe or bend. I made mine as miniature copies of plumbers' pipe benders which can be seen in any tool store, the only effective difference being them fitted with a lug to hold them in the bench vice rather than with legs. Three bend diameters covered all my own needs. These were $2\frac{1}{2}$ " diameter for $\frac{5}{16}$ " diameter pipe, 2" diameter for $\frac{1}{4}$ " and $\frac{3}{16}$ " diameter pipe and 1" diameter for $\frac{1}{8}$ " diameter pipe. The two larger ones had levers, rollers and stops fitted, the smaller just stops.



For simplicity, I machined the roller trunnions into the roller. This was the first mistake. After one or two bending operations, the cat's cradle of piping wrapped around the bender necessitating complete dismantling of the latter with all the consequences of time loss, skinned knuckles, loss to temper and so on and, most importantly, the forgetting of the shape I was trying to produce in the first place. When you are up to your ass in alligators it is easy to forget that your original intention was to drain the swamp.

The answer to the roller problem was easy, I should have made it with a removable pin. Careful machining of the grooves in the former and the roller (so that the piping slid through the assembly gently) was the second error. As the pipe deformed slightly on bending so it seized in the bender locking the whole lot solid. I ended up by increasing the groove radii by 15 thou to give adequate clearance. This last dimension may vary according to the template diameter. The sizes chosen and listed above were merely dependent on the materials I had available. They worked out very successfully, however, given the available space around the engine and chassis.

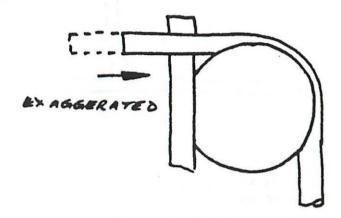
Other necessary tooling is fortunately simple. A two foot rule, carpenter's square and carpenter's bevel, mini hacksaw, a 4" fine file, countersink rose, alcohol based felt tip pens, small adhesive labels and a few odd pieces of wood will cover most eventualities.

Clearly some joints will require soldering. There are many arguments for and against soft/hard soldering which will be settled by personal preference. Suffice to say, GLR Distributors sell prefluxed silver solder in syringes, which are both simple to use and economical.

Bending

The scene is now set. The first (and simplest) pipe run is placed in the bender and gentle pressure is applied to the handle. If you are like the author you now have your first piece of scrap. I have a box full of such pipes which will be given free to anyone with a slightly undersized Riley. The pitfalls leading to this state of affairs are many and varied but start as soon as you first pick up that piece of pipe; it will be in the wrong hand. This is hardly serious in itself but serves as a timely reminder to preplan each move.

Any pipe run demands a length of straight before the bend starts to allow removal of the union nut. If this dimension is carefully measured, it will be found to have shrunk after bending since the bending roller will pull the pipe through the stop.



Oddly enough, this 'pull-through' action becomes less apparent after the first bend is made. (Whether this is due to increased friction or whatever, I do not know but no doubt it may be added to the mysteries of the walking spanner and so on, which beset us all.) Subsequent bends, therefore, may be plotted in position as described later. Assuming therefore that the bender is in the vice the right way round so that the pipe's free end does not stick through the window, at least an inch extra should be allowed to extend beyond the stop. The excess can easily be trimmed off afterwards — and back to the first bend.

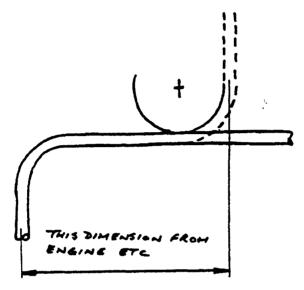
Having established the start point of the bend, and a little practice on scrap always helps, apply pressure firmly to the lever of the bend and allow the bend to be rolled in. Check constantly against the square with which you have gauged the required angle. The next snag now presents itself. Because of the spring in the pipe, the first attempt to set the required angle inevitably requires a fraction more bending. It is far too easy to over bend at this point and, like so many things in life, it is far easier to go too far on the first essay than to try and repair the damage after. It is almost impossible to reduce a bend back two or three degrees.

The next bend may be in the same plane as the first, at right angles to it or in between. Location in the first two cases is best done by nipping the pipe in the bender with the roller then, from a distance, lining up that part already complete so that it is parallel with the bench, parallel with the vertical bars of the window frame or whatever. The final result will be more accurate than using a square. The other factor to be directly associated with the second bend is to measure the distance required between straight lengths of pipe and arrange the pipe in the bender so that you can measure where the next straight will end up.

Reliance on a start point inevitably produces a pipe which is too short or too long. On any other

than very long pipe runs, it is useless trying to "spring in" a pipe where this dimension has gone astray.

For other than very simple configurations use a stickly label (obsolete address labels are ideal) to tell you which way the bend has to go. You will in most cases have to rearrange the whole bender/pipe system to accommodate the new bend and with the pipe now upside down, back to front and reversed, it is the easiest thing in the world to make the bend 180 degrees out; result, more scrap. This is vital when making matched pairs of LH and RH pipes and caused the author much heart searching during the manufacture of those lubrication pipes which go from the front brake cams to the tie rod ball joints.



Once the pipe has been bent to shape, the excess length may be cut off with a hacksaw and deburred with file and countersink rose. Do not immediately cut the pipe to the finished length. An inch or so excess allows room for adjustment in fitting, another example of pipe shrinkage. The carpenters invented the right idea first — "Measure twice and cut once".

The question of how long the initial straight length of pipe should be is vexing. Too much and you get poked in the eye, too little tells its own story of insufficiency or, at best, a box of off-cuts too short for future use.

If you are starting with a set two foot length, the latter may have to be tolerated but a piece of welding rod bent to profile and then straightened out will give you a fair idea of the length of pipe needed to which you will add your adjustment surplus. Even better is a reel of plumber's solder which can be re-wound and used later for its proper purpose.

Having made one pipe, the opposite handed version is best made one step at a time, noting especially the appropriate opposing angles. Think carefully before bending, the demon of the workshop seems to be intent on producing duplicate rather than handed pipes. Slight variations of angle and length may be acceptable where the pair of pipes are widely spaced on assembly but when close together, such as on either side of a tee, differences show up like the proverbial dog's hind leg. In any case, placing the pair of pipes side by side on the bench not only as fitted but also upside down, will quickly reveal any discrepancies.

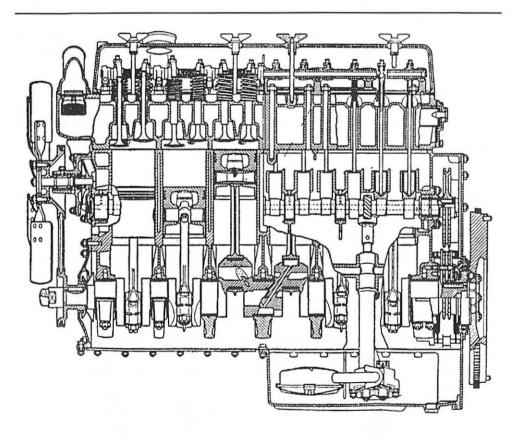
Occasionally a coil of pipe needs to be produced which is outside the scope of the bender. In this case, use a cylindrical former (un-grooved) of a slightly smaller diameter than the required coil and wind the piping round it in one continuous movement. In this case alone, an overbend may be corrected

since back adjustment will apply equally through the whole of the coil diameter giving you a minutely increased coil diameter but no other variation. Since the clamping and the action are manual, a goodly length of straight pipe either side of the coil will be needed for the confidence by which firm control produces the correct result.

As already stated, all this bending will produce work hardening of copper pipes. The extent of this hardening may be judged from the fact that the ancient Egyptians work hardened their copper weapons to give them a durable cutting edge. Annealing is desirable since vibration on the car may lead to further work hardening and subsequent cracking. Hard soldered joints incidentally allow post-manufacture annealing but, in any case, the piping has to be heated a lot more than at first seems desirable. This is another good use for one of the scrap bends. A little experimentation soon reveals the necessary colour changes which indicate that you have reached the right stage.

PETER KNIGHT

This excellent piece first appeared in The Riley Register Bulletin and I am grateful to the author and Geoff Havilland, Editor of the Riley Register Bulletin, for allowing me to print this article. — J.N.B.C.





A Selection of Reviews, Criticisms, Recommendations and Personal Opinions by the Editor and other Contributors.

Scorpion And The CVR (T) Family by Bob Morrison. 64 pp. Price: Unknown. Published by Concord Publications Co., Hong Kong. Card Covers.

This A4 sized booklet features a large number of photographs of the Alvis Scorpion light tank as well as the other derivitives of this chassis, the Scimitar, Striker, Spartan, Samson, Sultan, Samaritan and Stormer. All these vehicles having specific military uses.

Essentially a picture book, and I suspect one mainly directed towards modellers, there is minimal text. Alvis is not even mentioned, but, in general, military vehicle enthusiasts are only interested in the vehicle, not the manufacturer. The Scorpion tank does not go into battle with an Alvis red triangle proudly displayed at the front, but I noticed in looking through the pictures in this book that Alvis badges do appear in other places on these vehicles.

A useful pictorial reference for the Alvis military vehicle enthusiast.

J.N.B.C.

Auto-Architect — The Autobiography of Gerald Palmer by Gerald Palmer and Christopher Balfour. 96pp. Price £19.95. Published by Magna Press.

This is the sort of book that is published all too seldom. A biography of a working engineer who is not a household name. Gerald Palmer was born in South Africa and after showing early interest in mechanical devices and motor cars travelled to England to take up an apprenticeship in the motor industry with Scammell.

After five years of apprenticeship, Palmer in conjunction with his friend Chalenor Barson (who hardly needs an introduction to Alvis enthusiasts) started to build an advanced sports car called the Deroy. It did not get any where so Palmer joined the Nuffield organisation, where he helped to design medical equipment.

Palmer then joined Jowett and was responsible for the design of the very advanced Javelin. As Jowett got into difficulties, Palmer returned to the Nuffield organisation where he was responsible for the design of the MG Magnette and the Riley Pathfinder. Here he met Alec Issigonis and was obviously close to him. When Issigonis left for Alvis, he later invited Gerald Palmer to visit him

there and to view his prototype car. Palmer thought the car not very distinguished in appearance, being like a Morris Oxford Series II and unlikely to appeal to traditional Alvis buyers. An interesting viewpoint.

Later Palmer went to Vauxhall and was involved with the Viva and Victor. The last part of the book deals, in pathetically little detail, with the restoration of a Type 44 Bugatti and the 1924 Targa Florio Mercedes-a car that I saw him drive at a VSCC Race Meeting many years ago.

This is a most interesting volume of memoirs, although I wish that the author had not waited until he was 88 to write it. It is expensive for a 96 page book but there is invaluable material in this volume for the student of what really goes on in the motor industry and certainly it can be recommended for the library.

J.N.B.C.

Model Engineering — A Foundation Course by Peter Wright. 408pp. Price £16.95. Published by Nexus Special Interests. Card Covers.

Despite the title of this superb book, the subject matter is applicable to anyone using tools for whatever purpose, including repairs and re-building old motor cars. The book covers all aspects of hand work, including marking out, filing, bending metal sheet, and riveting. Now that drilling machines are so cheap, many enthusiasts own one and there is a very useful chapter on their use. Another chapter covers the uses of modern engineering adhesives whilst another chapter covers soldering, both hard and soft. A great part of the book concerns operation of the lathe, the heart of any true workshop, but even so do not be put off if you do not have or intend to own a lathe. There is an enormous amount of useful information in the book and even those of us who think that we know quite a lot about practical work, will learn something.

Greatly recommended.

J.N.B.C.

Sunbeam Aero-Engines by Alec Brew. 160pp. Price £39.95. Published by Airlife.

After years of draught, the aero engine enthusiast is now almost being deluged with new books on the subject, this latest volume being of a particularly specialised nature. The Sunbeam Company, apart from being one of the oldest British car manufacturers, was also in the forefront of automotive technology, in particular in the field of motor racing. Their exploits in that field hardly need mentioning. The driving force behind the company was the ebullient Frenchman, Louis Coatalen, who joined the company in 1909.

Apart from his successful car and racing car designs, Coatalen soon designed his first aero engine, a V8 sidevalve engine called the Crusader. The coming of the First World War and the enormous expansion of aviation drove up the demand for more aero engines, and off went Coatalen. As the author so vividly illustrates, Coatalen designed engine after engine of all sorts of configuration, which were built in large numbers but which were, to be truthful, less than successful. Indeed the sad thing is that there was never a really good Sunbeam aero engine. It appears that in the race

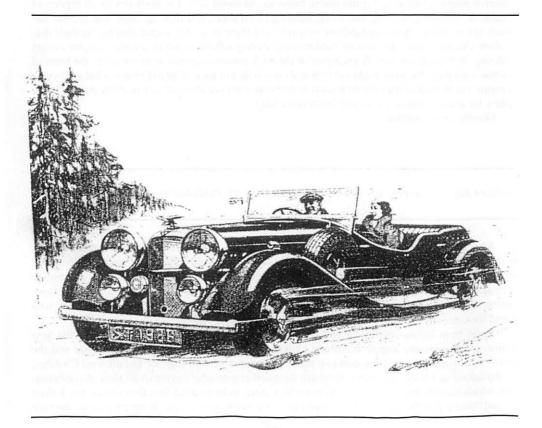
to design more and more engines, quality was lost and certainly Coatalen did not have the same ability as Henry Royce, to gradually develop an engine to its full potential. An example being the Arab, a V8 design, roughly equivalent to the famous and successful Hispano Suiza, which was used in the SE5a fighter aircraft and which suffered from bad vibration.

An interesting feature of Sunbeam engines was that, like most British engines, they were named, the names roughly being those of warriors, or warlike peoples. The Crusader was the first, then there was the Mohawk, the Arab, the Amazon, the Maori, the Spartan, the Dyak and so on. The famous "1000 HP Car" which took the Land Speed Record at just over 200 mph, was powered by two 400 hp V12 Matabele engines. Later in the book, the author deals with the catastrophic Silver Bullet and its twin V12 24 litre "2,000 hp" engines, which failed miserably.

This is a splendid book, very well illustrated although rather a slim one for the price and although Sunbeam aero engines were not very good, they did provide sterling service in the First World War. Much of the book centres on the character of Coatalen and the failures of the engines, but nonetheless it is a most interesting volume. Full appendices list all the engine types and numbers made. A last part of the book deals with other aero engine manufactures in Wolverhampton which is interesting but padding.

This is a rather expensive book but for the enthusiast of the design, technology and history of the aero engine, it is essential.

J.N.B.C.





ARCHIVE

— A Selection of Pictures from the Past —



This selection of photographs of Three Litres was taken by me in circa 1964-66 in car parks at VSCC Silverstone race meetings and at Crystal Palace. For me, seeing a Three Litre at that time was a novelty, and over 30 years later, these pictures have, perhaps, some interest. Identification, as usual, is by Dave Culshaw. — J.N.B.C.

Above is TD 21 (No. 26146, body number 18144) which was last recorded with R. Hill of Wrexham, seen here at VSCC Silverstone. Photo: J.N.B.C.



TD 21 No. 25988, Body No. 18027, in a car park at VSCC Silverstone.

Photo: J.N.B.C.



TD 21 No. 26653, Body No. 18803, now owned by J. M. Greenhalgh. This was the Works (Sales Department) car from 3/61 to 4/62. Seen here at Crystal Palace. Photo: J.N.B.C.



TD 21, No. 26669, Body No. 18820 owned by C. G. Bowler. Seen here in the car park at Crystal Palace circa 1965.

Photo: J.N.B.C.



TF 21, No. 27372, Body No. 9602. The last recorded owner of this car was C. S. Tubbs of Stroud. This was a Works cars from 1/66 to 3/67 and is seen here at Crystal Palace in 1966. It must have been a more or less brand new car at the time.

Photo: J.N.B.C.

REGIONAL ROUND UP

MIDLAND SECTION

POST CHRISTMAS DINNER AT THE RED HOUSE JANUARY 12TH, 1999

As it is some 20 plus years since your reporter exercised his arm at The Red House, this was an excellent excuse to revisit. It came about because my close friend, Mick O'Callaghan and I threatened for some time to spend some time with Ernest and Marjory Shenton and it was decided it would be good to swell numbers at the Midland Dinner albeit only by two. Eric Ody was contacted and booking made. We had had some snow on the drive up from deepest Hertfordshire, about enough snow to fill a good sized dinner plate. The warmth of welcome from Midland members soon dispelled any thoughts of snow. We foregathered at the bar end of the restaurant, the bar was soon doing brisk business, before sitting down to the excellent repast which your reporters felt was very good value. There were 38 people in total and many well known Midland members were in attendance. 'Die Familie' Buck were there 'mob handed', Ron and Hazel having changed but little since we first met in the early 1960's at Crystal Palace. Others present were Ernest and Marjory Shenton, Eric Ody, organising the event to whom thanks are surely due, Chris Taylor, numerous other Midland Section members who made us so welcome. Altogether a splendid evening. We might well find it necessary to return in 2000. Surprise of the evening, a certain Past President conversing with the Polish Landlady (in Polish) saying later, 'I didn't know I could swear so well in Polish'.

Thank you Midland Section, we'd love to visit you again.

MICK O'CALLAGHAN AND MIKE PRATT

HOWARD ARMS NOGGIN AND NATTER

By the time Christmas has passed, we're fed up with not being able to use our cars very often, and we've run out of incidents from the previous season with which we can bore our fellow drinkers. So for the February meeting, we decided to do something a bit different, triggered by an offer from Martin Slater. His day job involves aeroplanes rather than cars, with a fast-growing Coventry-based outfit called Air Atlantique, and he told us all about the company with the aid of a slide-show.

Air Atlantique make a speciality out of putting to productive use older planes which have been rejected by the modernisers. So the parallels with older cars were immediately obvious, and all the more so when we learned that there were some Alvis-engined aircraft in their fleet. The company believe, as we all do, that they are only temporary guardians of these historic pieces of machinery, which are all the more likely to survive if they are used regularly.

Some twenty-seven souls travelled from far and wide to listen to Martin, and much appreciated the time and effort he had put in making his presentation so enjoyable.

NICK WALKER

SOUTH EAST SECTION

CHRISTMAS DINNER AT THE GREEN DRAGON, BARNET

Friday 11th December was the date chosen for the Annual Green Dragon Dinner and 29 members attended with a goodly portion of members coming from south of the Thames via the M25. Our President, Norman Whitton and Ena were there, Malcolm Davey, Brian Maile, Mike and Jan Baker, Idris Francis motored up from deepest Hampshire. There was good support from regulars as well, Dave and Penny Clark, Bill and Jenny Fryer, your trusty scribe, John Pretty of Chingford Auto's, Howard and Loretta Pryor. South Eastern Secretary, Derek Tourle was there (a brave man) as he had dealt with members' reservations and deposits. Peter Galea produced a motoring quiz which kept the more knowledgeable entertained for ages in between courses and caused some head scratching. Thank you Peter, well done.

Most people agreed the meal was good value and mountains of food and a good choice of not necessarily Christmas fare for those that had already had their fill of Christmas dinners. It just remains to thank Bill Fryer for organising the meal, The Green Dragon for providing it, Derek Tourle for collecting deposits and moneys afterwards. A pleasant evening was had by all, I think.

Lastly, The Green Dragon is still going on the second Thursday, so get away from the T.V. and come and support us if you are within reasonable distance. We don't bite and Alvis advice and knowledge is free — swell the numbers now spring is coming. We hope to have a summer barbeque — watch for details.

MIKE PRATT

SOUTH WEST SECTION

DARTMOOR WALK

Last weekend (20/3) a dedicated if not slightly crazy band of owners answered the call by Jane and Ron Walton to join them in the middle of Dartmoor for a weekend's walking. I think it's only right that this intrepid band should be listed:-

Mel and Monica Grigg

Jim Tachell : TA 14

Robert and Carmen Peel Chris and Margaret Webb

Cyril, Sandy and Ted Sayer : TD 21 DHC

Geoffrey and Felicity Spencer : TC 21

Alan and Jane Frith

Scribe and Jan Baker : 4.3

Now you know the runners and riders and a more motley bunch would be hard to find, by the way in fairness Cyril Sayer had more sense and stayed in the hotel. That also needs a mention. The Waltons had chosen the Two Bridges Hotel at, where else, Two Bridges. I think the best way to describe it would be 'a Tardis'; it just seemed to have large rooms running off in all directions, with the most welcoming lounge with two large fireplaces to greet you as you entered. For dinner they had organised a private panelled room, and the food was really excellent, with a menu to suit all tastes.

Now to the reason we were there, the walking. They had organised a seven mile slog across the moors for Saturday taking packed lunches. It started with about *a mile up a 1 in 5 and then got worse as we went on the moors. Seriously, it was great. The Sayers, Spencers and Friths plus Robert were



Mike and Jan Baker with the Waltons and other intrepid walkers recovering from their exertions.

Photo: Mike Baker

all experienced trekkies and the rest of us brought up the rearguard.

On Sunday they had mercy on us, so just a short four-miler to work up an appetite for a splendid carvery lunch.

I understand that they have already made a provisional booking for sometime in April next year and I can do no more than give it the thumbs up; Jan and I have already booked. It is quite difficult to come up with new ideas, but this is certainly great, and if we have some rain then it really will be a weekend for nutcases — well done Ron and Jane.

MIKE BAKER

