



Number 23

May 2010



# Shooting in London

Nick and Claire Stow's GNK 55, poised for action during filming of The King's Speech. Claire enjoyed the experience of queuing up for a lunch-time salad with film star Colin Firth. Colin played the title role, King George VI. Earlier this year he won a BAFTA, and was nominated for an Oscar; the King's Speech has already been tipped for a future Oscar. The film is scheduled for general release in late 2010 or early 2011. See pages 2 and 3.





**The Kings Speech** 

A Tom Hooper film



# THE TWENTY NEWSLETTER

No. 23

May/June 2010

The Twenty Newsletter is published twice-yearly, normally in May/June and November/December, for members of the 20 hp Register of the Rolls-Royce Enthusiasts' Club. Opinions expressed and advice offered in this newsletter is not necessarily that of the RREC or its officials and no responsibility can be accepted for the results of following contributors' advice.

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### Cover Photograph

Nick and Claire Stow own two 20hps, GYK 33 and GNK 55. GNK 55 won two first prizes at the 2006 Annual Rally (see Newsletter 16, page 13), and the car was recently used in a feature film, as Nick reports below. They have also compiled an interesting history of GYK 33, which will appear in the next 20hp Newsletter.

Just before Christmas 2009, Claire and I were asked if we would like to provide a car for the filming of 'The King's Speech' directed by Tom Hooper, with a great British cast including Colin Firth, Helena Bonham Carter, Michael Gambon, Timothy Spall and Derek Jacobi.

The film is a biopic about a reluctant wartime monarch George VI. The first day's filming for us was at Portland Place, London, with a 6.00 am start, which meant that we had to leave home at 4.00 am to make sure we had an easy drive up in Claire's 1925 20 hp GNK 55, a Hooper landaulette. This made for a long day; we eventually left at 6.00 pm. Claire's car was fitted with a false roof shield, flags on the radiator, a 1937 Road Tax Disc, and given the code name 'Hero's Car'. The second day's shooting was a little easier with a 4.30 am start to Iliffe Street, Kennington. The 20 hp was now renamed 'Bertie's Car' and special effects took over, much smoke and false scenery was employed, even a horse and cart, and several interesting adverts were pasted on buildings! And as for my acting career? Well, the director decided that a stunt man should be used as chauffeur, because he considered the job far too dangerous!

### **Editorial and Events**

Thank you everyone who has contributed to this Newsletter by sending information, articles and photographs etc. I already have some contributions for the next issue, but still need more, of course. Many members have sent in their magenta forms with a donation towards the costs involved in producing and posting this Newsletter, and this also qualifies you for the Directory (of members' contact details and cars). If you wish these publications to continue, but have not yet sent in the form, please do so!

Newsletter 23 is a little late, I'm afraid, because the Spain Rally took over that time slot! Also my home email system crashed and was more-or-less out of action during June, and that was a serious hold-up. Like most people, over the last 12 years I've become almost totally reliant on email for business-like activities, and this is the first time it has ever failed.

Jane Else is writing a report on the Spain Rally which will appear in Newsletter 24 and Jane and David are producing a DVD - meanwhile see the photographs on pages 18/19.

### **Forthcoming Events**

18 - 19 September 2010 Small hp Technical Seminar, at the Hunt House

24 June - 1 July 2011 **20 hp Rally to Normandy**, see details below

September 2011 (possibly) 20 hp Weekend Rally It has been suggested that we have a West Country rally - Somerset might be an idea because the problem with Cornwall is that it is 100-150 miles further west than Taunton, say, which might put off some potential participants. Any ideas or suggestions? Please let me know.

### 20 hp Rally to Normandy 24 June-1 July 2011

We have reserved the Ferme de la Rançonnière in Crépon, between Caen and Bayeux. It is near the channel ports of St Malo, Cherbourg, Caen, Le Havre, Dieppe, and within reach of Roscoff (220 miles), Calais (230 miles) and Zeebrugge (300 miles).

The hotel has a total of 29 bedrooms plus 6 suites. <a href="http://www.ranconniere.fr">http://www.ranconniere.fr</a>
The first buildings were constructed in the 13th century, but most of the farm was reconstructed in the early 17th century, forming three sides of an enormous courtyard.

Excellent driving: the traditional Pays d'Auge area; the scenic Suisse Normande area; the seaside resorts on the Cote Fleurie; the D-Day beaches and the artist colony of Honfleur. Remember, it will be the 945<sup>th</sup> anniversary of Guillaume Roi de Normandie's rally in Hastings! In 1027 he was born in Falaise, just south of Caen.

Basic cost is <u>estimated</u> to be £1,150 per couple sharing (ferry not included in cost). As expected for a very old historic building, there is a variety of room sizes, so supplements will apply depending on your preferred choice of room.

Please phone or email the Registrar for further details and an application form. Deposits are required soon!

### Report on the 20 hp Rally in Argyll, Scotland, June 2010

The "rally team" consisted of Bill Lithgow, his wife Mary Claire, Helena Bevis and Charlie Haycock. They organised a wonderful 4-day rally based at Arduaine on Loch Melfort, a sea loch about 20 miles south of Oban. On Sunday we arrived from far (Kent and Cornwall were 600 miles from the hotel) and wide (three cars from Northern Ireland) to a welcoming reception and an eye-popping seafood buffet. The next day, several optional trips had been arranged, including a car ferry to Mull for those who wished to explore the island. It was sufficiently hot to sunbathe on deck during the 50 minute crossing, and this blue sky weather continued for the duration of the rally. The coastal road round Mull was spectacular, and several of us visited Tobermory for lunch – best seafood, naturally. Len and Lesley Meades chose to drive to Fort William and join the steam train on its spectacular meander to Mallaig.

On Tuesday we all headed for Ormsary, the Lithgow family estate, and on to the Kilberry Inn for lunch. En route we saw the historically important Crinan canal which was a shortcut for vessels heading from the Clyde northwards, avoiding the dangerous route round Kintyre and Islay. Ormsary estate embraces a hydro-electric power station, farms, salmon farms and salmon breeding from which salmon eggs and smolt are sold around the world. We also saw the beautiful gardens and, very importantly, Bill's collection of veteran, vintage and classic cars. His 20 hp GTM 31 is a Thrupp & Maberley convertible with dicky seat, and is in wonderful original condition. Then on to lunch at the Kilberry Inn which has won awards for its cuisine, and has even received a visit from those two-wheeled TV celebrity chefs, the Hairy Bikers. Then back to our hotel for drinks on the veranda and another gourmet meal!

Wednesday was a free day, but the rally team had prepared several suggested routes for those who had not yet satisfied their cravings for long-distance driving. More locally, we could visit Arduaine Gardens adjacent to the hotel, owned by the National Trust of Scotland, and Kilmartin museum which concentrates on the geology and ethnology of that part of Scotland. Because of the mild Atlantic climate, the west coast of Scotland has been occupied by man for thousands of years; in the 6<sup>th</sup> and 7<sup>th</sup> centuries the Kingdom of Dalriada embraced present day Argyll and part of Northern Ireland. In the evening we had a cocktail party on the veranda, watching the colours of the setting sun, and being serenaded by a lone piper. As a backdrop, we could gaze at highland cattle in the field leading down to the smooth waters of the loch. At the appointed time our piper led us to the dining room, and carried on piping as we took our places. In traditional fashion he was presented with a double-handled chalice of Scotch whisky (the quaich) which he downed in one, and voiced a blessing in Gallic to us all. We were pleased to be able to understand two of the words in his short speech: Rolls and Royce. After dinner there was a vote of thanks to Bill and the rally team, and Bill was presented with a display model fishing boat - a Falmouth oyster boat - to remember us by

There were only 12 cars on the rally, but everyone agreed that it was one of the best organised and most interesting events we have experienced. Bill and the rally team put a lot of effort into arranging the hotel and visits, and preparing an extensive information pack. We also thank Bill and Mary Claire sincerely for the hospitality showed to us at their family estate. And I can recommend the Loch Melfort hotel to anyone visiting the area.

Rally photographs on pages 16/17

### GKM 56 Recovered - correction to article in Bulletin 299, page 53

John Sampson is a new member of the RREC, and this concerns John's efforts to recover GKM 56's original registration number, after he re-imported the car from the USA. He received crucial help from Tom Clarke and from the Hunt House archives. However one of the paragraphs in the account I sent for inclusion in the Bulletin's 20hp Register Report was significantly altered by the Bulletin editorial staff. Reference to Tom (and Michael Worthington-Williams) was removed from the story.

#### What I wrote was:

"... on contacting the Hunt House he *[ie John]* was told that the Club only had the chassis records of this car - no Flewitt information, and no record of the original registration number. John contacted me and I forwarded his dilemma to several well-known gurus in the Club. Tom Clarke responded within hours, saying that he has information on this car, including the fact that it was sold three times by Jack Barclay during the late 1930s, and that the sales documents show both chassis and registration numbers. Tom also told John that the Barclay sales documents are in the Hunt House archives! So John obtained photocopies from the Club and sent them to his friend Michael Worthington-Williams of the Automobile magazine, who has now retrieved VP 5040 from the DVLA. And all this happened within four weeks of John's initial enquiry to me."

In Bulletin 299 the paragraph above was replaced by:

"The car was sold three times by Jack Barclay during the late 1930s and the sales documents show both chassis and registration numbers. The Jack Barclay sales documents are held in the Hunt House archives."

# **Technical Notes and Tips**

Contact the following volunteers for Technical help and discussion - 20hp cars

John Eastwood, Staffordshire (mechanical, tuning) 01283 790442 – early evg (John also offers personal hands-on instruction on how to maintain your car in good running order, for which he charges an hourly rate. Topics include lubrication, tuning etc)

David Else, North Wales (mechanical, electrical) 01492 531584 evg elsedavid@talk21.com

Ben Grew, Essex (spares prices) 01702 476982 evg ben@grewb.fsnet.co.uk

Tod Marshman, Devon (originality, tools) 01805 804352 flies@turrall.com

David Mead, Sussex (mechanical, electrical, instruments) 01892 661140 If anyone else is willing to offer advice and help to fellow 20 hp Register members, please contact the Registrar.

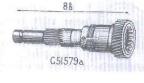
### Four-Speed 20 hp Gearbox: a Warning Note

Ben Smith, a professional who services, repairs and restores RR small hp cars in the West Country told me of a possible problem with ageing 4-speed 20hp gearboxes. He has come across two cases where the main shaft has fractured, just in front of the centre bearing. A characteristic symptom is that the car will only proceed in third gear, and not very happily at that! Ben believes this might be caused by a worn centre bearing. The front and rear bearings can be examined and replaced from the outside, but servicing the centre bearing requires a gearbox strip down. The diagrams, from the 1928 20hp Catalogue of Parts, show the third motion shaft G51555a (also called the main shaft), the first motion shaft G51579a, and the roller bearing which connects the two together. The position of the deep groove centre bearing is indicated, and the main shaft can fracture just to the right of it. Ben's photograph shows a broken shaft, below.

Third motion shaft (main shaft)

HYATT Nº 26882

First motion shaft



HOFF. BEARING



If you remove the smaller front cover on top of the gearbox, then using a small bright torch you can just see the centre bearing. It will probably be the original Hoffman, 80+ years old with a characteristic orange-coloured ring.

Normally the 20 hp gearbox is robust and has a long life, but Ben points out that if an internal component *does* fail, finding a suitable replacement part can be exceedingly difficult. If you suspect a vibration in the gearbox, don't procrastinate - investigate!

**Drill bits** can be used to accurately measure hole diameters, gaps etc when you are working on your car. A set of 60 high-speed drills, from 1.0 mm to 5.9 mm in 0.1 mm (approx 4 thou inch) increments costs only £25 from GLR Distributors Ltd, see



photograph. These drill bits take over where feeler gauges leave off, but if you use them as gauges, don't use them for drilling!

http://www.modelmakingsupplies.co.uk/ 01327 878988

GLR also supply **copper and brass tube in imperial sizes**, from 1/16 inch to 4 inch outside diameter and useful **steel shim**. For £21 you get a pack of eight sheets (4" by 12") of steel shim of assorted of thicknesses - 2, 3, 4, 5, 6, 8, 10 and 14 thou (inch). GLR have a super web-site catalogue, which is a cornucopia of goodies for the model maker ... and the 20 hp owner.

#### Radiator repairs

I have reports from two members that they were pleased with radiator re-builds carried out by a small specialist company, Bryan & Son, 165a Camden Road, Tunbridge Wells, TN1 2RG, 01892 544635. They make new cores and can re-furbish the nickel silver tank etc.

### Re-wiring

Several 20 hp owners have had their cars re-wired by Philip Cordery, a 20 hp owner and auto electrician living in North Wales, and report that they have been pleased with the results:

philip.cordery@btinternet.com 01248 717808

### Oil leak from dynamo drive

Jeremy Mitchell, who bought GZK 34 Windovers ¾ coupe in 2006, has been puzzled for some time by oil dripping from his dynamo drive. He now writes: "Just thought you would like to know that I think we have finally found the cause of the oil leak from the dynamo drive. Having stripped down the front of the engine again and satisfied myself that there was absolutely nothing wrong with the oil drainage/acme etc and reassembling everything perfectly it still leaked oil when the engine was running at fast idle. At some point an auxiliary cartridge oil filter has been fitted and I suspect that the pressure regulating washers in the oil pump had been removed at that time, thus putting more oil through the timing case. With the regulation four washers fitted in the oil pump there is no oil leak from the drive and there is still a healthy supply of oil to the rocker box. Even with no washers in the oil pump the indicated pressure was 16 to 18 psi, so I don't think any damage has been done."

#### Heavy steering

Jeremy also said his "little 20 hp GZK 34 runs very well but is let down by heavy and clumsy steering". After carefully looking into the matter and consulting various experts, he wrote: "the steering box was found to be loose on the chassis and it has

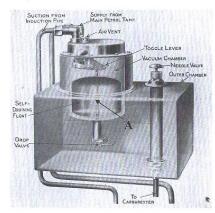
improved the steering now that it has been tightened". That really was good news because a major restorer had told him that reconditioning his steering box could cost £3,000 - £4,000! So if your steering feels wrong, check the box mountings first!

# Check inside your Autovac: floats and inner tanks don't last for ever A: Float

On the Spanish Pyrenees rally, Rob and Ivonne Webb's 20 hp gradually became difficult to start in the morning. One day it puffed and spluttered to a not-so-graceful halt, fortunately only a mile or two from our Parador hotel in Bielsa. The problem was due to cracks in the Autovac float: petrol was entering the float; the float gradually got heavier and eventually it failed to close the inlet toggle valve. Hence neat petrol was being sucked into the inlet manifold, and was even dripping from the rocker cover on to the spark plugs!. This is exactly what happened to John Whetton, as reported in 20hp Newsletter 17, May 2007. John was particularly unfortunate because the dripping petrol caught fire inside his engine compartment.

The Webbs were quickly surrounded by experts, who drilled into the float to let out the petrol, and then sealed the holes and splits with Leak Fix. The engine oil was heavily contaminated with petrol, so the oil was replaced. No problems for the rest of the trip!

The moral is: if your car becomes difficult to start, and unusual white fumes are emitted from the exhaust pipe, suspect a punctured Autovac float. The original brass float is susceptible to wear and metal fatigue. New-old-stock floats are readily available. So, if you are embarking on a long rally to foreign climes, you might consider checking inside your Autovac and maybe carrying a new float in your box of essential spares. Martin Hull wrote an article on how to look after your Autovac in 20 hp Newsletter 19, May 2008.



In the 20 hp Instructions book, the Autovac float is described as "self draining". This is true to an extent – if a *small quantity of* petrol enters the float, the vacuum sucks it up and out, via two small holes visible in the hollow spindle A, Figure left, which passes vertically through the float. However if the float becomes cracked, and larger amounts of petrol are sucked into the float, then the self-draining mechanism cannot always cope. Also note that in the late 1920s, the material of manufacture of the float was changed from brass to tinned steel; new-old-stock floats are tinned steel and should not suffer from metal fatigue.

## B: Inner tank ("vacuum chamber")

Another potential problem with old Autovacs is corrosion of the steel inner tank, because water from the atmosphere condenses on its outer surface. The corrosion can

be sufficiently severe to perforate the inner tank, allowing air to leak in and thus reducing the strength of the vacuum which pulls petrol up from the rear tank. In severe cases the Autovac may cease to work efficiently. Could this be the cause of some reports of fuel starvation? If you ever need to replace the inner tank, Martin Hull of the Autovac company told me that it is worthwhile considering the longer tank, as fitted to Autovacs designed for diesel engined buses and lorries up to the 1950s. The longer tank gives the float more room to move, with a more positive shutting action of the toggle valve, and this overcomes the tendency of diesel to foam.



The longer tank does fit into the standard 20 hp Autovac box, with just a few millimetres to spare, as shown in the photograph. The extra room inside the tank and the more positive shutting action of the toggle valve has two advantages with modern petrol. Firstly the ethanol content of modern petrol reduces its specific gravity, so your Autovac float might sit slightly lower in the liquid. Secondly modern petrol, like diesel, sometimes has a tendency to foam. If foam is drawn via the suction pipe into the inlet manifold it gives an over-rich mixture.

### Engine Thermostat for the 20 hp - Update

From the Editor: It was reported in Newsletter 22 page 31 that Alan Murcott was developing a thermostat system to replace the front water jacket cover of the small hp cars. (See also Newsletter 19 page 22.) Several members have fitted pre-production units for testing, including one to my GXL 39. After more than three thousand miles of motoring in the Pyrenees, and around Western Scotland, I can report that it works well! Simon and Angie Slaffer have covered a similar distance with equally good results. For more information contact

alan@vintageaccessoriesltd.co.uk

### **Foaming Coolant**

From David Else: "When I first started using my 20 hp in 1993 water was lost through the radiator overflow. I had read somewhere to stop this add a teaspoon of castor oil. I had forgotten this. On the recent 20 hp rally to Spain the car was using about 1 litre of water a day. I mentioned this to Len Meades and he reminded me about the castor oil. I was unable to find castor oil in Spain so I tried a few drops of olive oil. This worked and since returning home I have added castor oil. The car didn't use any water on the 1,362 mile round trip on the 20 hp Scottish Rally."

#### Rally DVDs

From David Else: "Over the years we have sent out many DVDs of 20 hp, Euro and other rallies. All these have had a printed label with the title and date of the rally on the

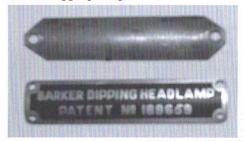
disc. Some of my older DVDs have started to freeze or not play. I investigated this and it appears that as the paper label dries out with time it shrinks. This very slightly distorts the DVD. The tracks being so minute they cannot be read accurately. All is not lost! The solution is simple. Soak the DVD in water and peel the label off. Clean the remnants of the glue off and write the title of the DVD with a special CD/DVD pen on the disc. After this treatment my DVDs play perfectly."

### Edging Strip for running boards, tool box lids etc

Chas Vyse has obtained nickel silver edging material, manufactured specifically for running boards, from James E Pearce who specialise in restoring pre-war Bentleys. It costs £132 per 8 foot length and the ribbing is on the top edge only, which means that you can cut and mitre the top edge and fold the bottom piece to produce an uncut corner. For an additional charge Pearce will do this for you.

http://www.jamespearce.uk.com/Pages/Products.html Telephone: +44 (0)1403 700479

### **Barker Dipping Badge**



From Nick Stow: "I found at Beaulieu Auto Jumble an old Barker dipping badge, pictured. One of our cars is missing theirs. With Christmas coming, I thought a Christmas present was in order. I contacted Pamela and David Enamels and commissioned a replacement badge. New artwork was produce from the almost polished out words and numbers, the

cut corners reinstated. A splendid new badge was produced by an acid etching process."

# Fitting a 20/25 engine into a 20 hp chassis by Ralf Storandt

I bought GYL 36, a 1928 20 hp in 1986 when it already had an engine G1080 of 1924 origin. I do not know at what time it was fitted. GYL 36 has a non-original second

rpm	speed (with 19" wheels)						
	standard	11/50 axle	12/43 axle				
	km/h	miles/h	km/h	miles/h			
1000	- 32	20	41	26			
2000	65	40	82	51			
2500	81	51	103	64			
3000	97	61	123	77			

body from a 1932 Sunbeam sunshine-roof coupé (chassis No. 7244) fitted in the 1930s by Paddon Brothers. They also altered the radiator (Figure 1, page 15).

The engine was completely overhauled in 1986/87, the rear axle ratio was changed to 12/43

(RREC Bulletin No. 194) and I used the car until recently like this. It is really a nice car to drive and the faster rear axle gives low revs. Normal cruising speed was about  $50-55\,\mathrm{mph}$  which corresponds to about  $2100\,\mathrm{rpm}$ . I made a little spreadsheet which shows the correlation. The car weighs  $1570\,\mathrm{kg}$ .

I always hoped that one day I may find the original engine of my car. But it does not seem to exist any more and I started to look around for an engine which would be at least from the correct year 1928. But then I moved to Switzerland and in the place here where I live we have many mountains. It soon became clear, that a bit more power wouldn't be bad.

The new idea was then to look for a 20/25 engine. From the outside the 20/25 engine with the RR carburettor (without the big air filter) looks almost as a 20 hp engine. Only the specialists notice the difference. Having driven quite a few 20/25s with engines from different years I knew that there are quite astonishing different engine stages. I calculated a little comparison with the 20 hp.

from: "The Rolls-Royce			hp and 20/2			eries No. 8"
	hp open exhaust	hp with exhaust	loss by exhaust (calculated)	max rpm	Compression	in relation to the 20hp
20hp	50	45	10%	2750	4,75:1	0
20/25hp						
first cars	57	53	7%	2750	4,75:1	18%
from 3/1930 GLR26	67	62	7%	?	5.25:1	38%
from 4/1932 GKT22	78	73	6%	3500	5.75:1	63%

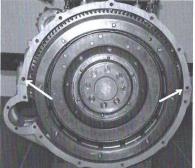
The four italicised values could not be found in the literature and were calculated. The 6% value is an assumption of 1% less than the previous 7% as these engines had low-loss exhausts. Also the  $3500\,\mathrm{rpm}$  figure could not be found. But top speed in period tests was  $> 74\,\mathrm{mph}$ . Accordingly,  $3500\,\mathrm{rpm}$  (or even a bit more) for these late engines is realistic.

So of course my target was a post-April 1932 engine which supplies about 60% more power than a standard 20hp engine. And of course there is also more torque, which probably is more apparent than the pure hp value. But engines after June 1933 had a big air silencer on top of the engine. Without doubt this is an improvement – but it does not look like a 20hp. Consequently the engine to look for must be between April 1932 and June 1933. There are not many, but there is another chance; the standard RR 20/25 carburettor without air silencer can also be fitted to later engines, but only engines up to April 1934. From then on the block was changed for the later SU carburettor (3 stud fastening). So I looked for an engine from the 2 year period April

1932 to April 1934 ... and I found one! Somebody in Germany had bought a few years ago a spare engine. He had never used it and it was standing around in his garage.

The engine is G8M and it was a wreck. The former owner had bought it from a well known dealer of mainly pre-war RR cars. It was sold to him as being in good usable condition "... and has still plenty of life in it ..." A nice description but far from reality. Only after a long overhaul was it ready to be fitted in the 20 hp chassis.

Out came the 20 hp engine. I removed (and installed) the engine as a complete unit with the gearbox attached. You have to loosen the steering column under the dashboard, loosen the gearbox from the frame and separate the steering drop arm from the ball joint below. Then you can tilt / lift the complete steering column and steering box enough to give the engine a free way to come out (or in). The main question now was: does my original 20 hp gearbox from 1928 fit the later 20/25 engine? Front and rear engine supports look different – how to solve this problem? And in the end I also found out, that there was a problem with the fan.



I was more than pleased that gearbox, clutch, splined shaft, just everything fitted to the "new" engine. No problem at all except for two bolts which go through the gearbox and engine. The 20/25 engine uses two special bolts with a bigger diameter in the middle for centralising everything. With a normal drill you open the 2 holes in the gearbox a bit or you take the 20 hp bolts. That's it.

Next came the rear engine supports. The arms or outriggers on both sides of both engines are almost identical - but the "eyes"

at the end of these arms are completely different. I took all measurements of chassis frame and engines as accurately as possible and made a drawing. There is a difference of 14mm per side and no chance to fix the 20/25 engine on the existing 20 hp engine supports. So new supports had to be designed and made. I used high tensile aluminium and painted everything black. The elongated holes allow fine adjustment of the engine position (Figure 2, page 15).

I thought it a good idea to use a rubber filled engine bearing between engine support and engine. A slight bit of elasticity will reduce the vibrations which you feel inside the car. But you have to choose these bearings carefully as they should correspond to the weight of the engine. I supported the engine in exactly the way as it is held in the frame and measured the weight on the rear supports: 106 kg per side. Then a modern rubber filled engine bearing was chosen. It will compress vertically 1.6 mm under this load but it gives a quite accurate fixation in forward/backward direction. This is important, as all the connections to the engine (clutch / brake pedal shaft, accelerator and timing rods etc) need a precise position and are definitely not designed for a considerable movement of the engine.

Figure 3 shows the new engine support with rubber filled bearing assembled in the frame. Screws from the outside go through the existing frame holes into threads in the support.

And of course there is the front engine bearing. This gave no problems. I used the existing U-shaped tube of the 20 hp engine with the central bearing in front. It fitted perfectly to the 20/25 crankcase. The bolts which hold the fixing bridges to the crankcase should be fully tightened but it should be possible to turn the tube by hand without any play. This is adjusted by shims under these fixing bridges and the use of a file and a bit of patience was all I needed.

The next step: the engine goes into the chassis, Figure 4. For the first time everything is assembled and no nasty problems. Figure 3 shows the engine arm on the right hand side bearing. The screw is not yet fully home and if you look carefully you see a thick washer under the outrigger and above the bearing. I designed the supports in such a way, that they are a bit too low and the engine height can be adjusted by this washer. Much easier than vice versa!

The next step was to fit the engine  $\tan - 3$  screws and 10 minutes I thought. But what a stupid thing – both fan axles are much too long (Figure 5) and the fan does not fit between radiator and engine. The only chance was to shorten everything. That's not as easy as it sounds as there are ball bearings inside. A solution was found, drawings were made and everything machined. The space between belt and radiator is really restricted, but it is just possible to position the fan exactly between both. The distance to the radiator is around 10 mm and it should be not much less, as a slight movement of the engine or of the fan blades shouldn't allow the blades to touch the radiator.

There are a few minor things, which I think need no explanation. For example there are some rods which have to be connected to carburettor, ignition etc. There are minor differences between the  $20\,\mathrm{hp}$  and 20/25 engine. But everything is really obvious and simple to correct.

One of the last jobs was the installation of the starter switch. Its place in the 20 hp is centrally on top of the left hand rear side engine bearing bolt. But of course this bolt is now 14 mm nearer to the frame. So a little distance piece was made from steel (grey in Figure 6). It is held by the screw which goes through the engine arm into the bearing. And it has a thread (left in the picture) which brings back the starter switch in its normal position. It should not touch the engine arm, so its position is about 3 mm higher. But this is no problem as the length of the actuating rod to which it is connected can be adjusted.

And then came the first test drive. What an experience – my beloved 20 hp with ample power and torque. Mountains are no longer a problem. And with only 2500 rpm GYL 36 seems to fly – well actually she does 64 mph. But that is more than enough. I think Henry Royce would have loved such a 20 hp – at least I do.

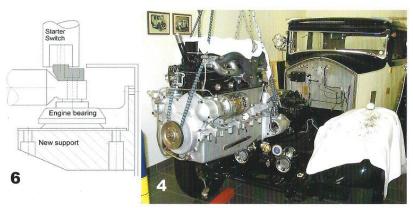
[Ralf is offering for sale his 1924 engine G1080. See page 23.]



Ralf and Susanne Storandt in GYL 36



New engine support



20/25 engine being installed into GYL 36







# Argyll Rally June 2010

Top:- On the Isle of Mull – heaven

Middle:- 20 hps at the Lithgow family home, Ormsary

Left:- Bill and Mary Claire Lithgow's GTM 39, a Thrupp & Maberley coupé





**Top:-** Lone piper on the hotel veranda

Middle:- Thanking Bill and Mary Claire (second from right) with a model boat

Bottom:- Bill's 1922 45 hp Daimler, fitted from new with a 1914-style body. Initially owned by Sir Joseph Robinson who notoriously tried to buy a peerage from PM Lloyd-George – unsuccessfully



# Colourful Spain

# 20hp Rally May 2010

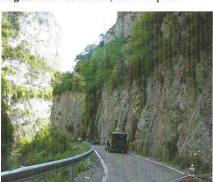


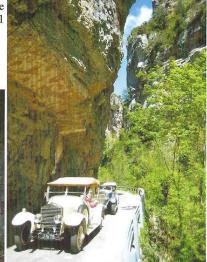


Top: in Laguardia we were visited on separate days by Basque TV, left, and Spain's National TV, right. Images from TV news broadcasts

Below: Desfilarado de Vellos

Right: Alto Los Tornos, a Slaffer photo



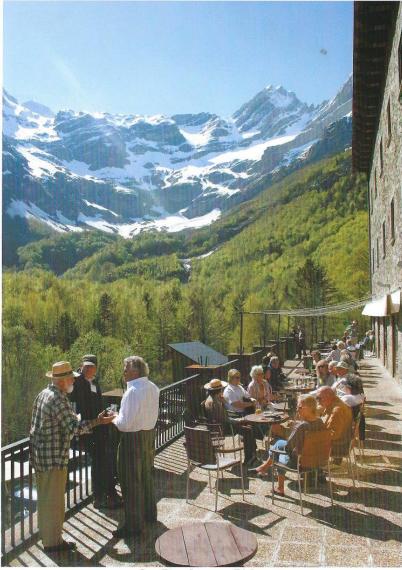






Thwarted: our valiant attempts to cross the high pass into France

And after rallying in the heat, the sun, the snow and along narrow mountain roads and canyons ... is this not the perfect way to end the day?



Our Parador near Bielsa

## **Summer Shots**

So far, summer 2010 in the UK has turned out to be ideal for vintage car motoring.



John Riley sent this photograph of three 20s attending the Wessex Section meeting at Barrington Court on 6th June. From left: Andrew Lockyer's 1927 Barker style tourer GHJ18; John Ryley's 1926 Park Ward three quarter coupe GZK54; Mike Norman's 1927 Brewster brougham GAJ15



At the Rockingham Annual, Geoff and Jenny Allo won the Maurice Booth Memorial Trophy (20 hp concours). Their Rippon saloon GRJ 21 has just been treated to a major engine re-build. Graham and Mary Moore won the 20 hp Touring trophy, and David and Jane Else won the Hugh Kellner trophy for covering the highest mileage.







Above: Michael Sapsford's GA 11, as it is today

See page 30

Left: Top Secret photographs of Michael Forrest's

See page 28



# THE ADVANCE OF THE SPORTSMAN'S COUPE













UU 20

Peter Wright's GEN 81 today

Right:- as it was in 1929, see page 23





Above:- Robert Watson's GFN 81 and GEN 80 today, page 23

Left:- GEN 80 in 1992 in La Musee de l'Automobilist, Mougins, France Photograph taken by John Banner, and reproduced from 20 hp Newsletter 13, 2003

# Two GENuine 20 hps

As described in Bulletin 300 page 65, Peter Wright owns GEN 81. Until recently Robert Watson thought his 20 hp was also GEN 81, but it was found that Robert's car is in fact GFN 81, and the confusion probably resulted from a typographical error by an earlier owner. (Note, in the Bulletin report I also got confused, and wrote GFN where I should have written GEN, and vice versa.) Here is more information on Peter's GEN 81, and Robert's two 20 hps, GFN 81 and GEN 80, see also photographs on page 22.

Peter Wright writes: "The colour photograph is of GEN 81 in its present condition. The b&w photographs show the car just after we collected it in November 1968. The review in the Autocar of July 1929 shows the car when it was virtually new (registered 15 June 1929). It was built for Geoffrey Smith, editor of the Autocar, who seems to have a hand in the design also. The car also features in Fasal, pages 291 and 325".





Robert Watson writes about his GEN 80, a 1929 Barker doctor's coupé with French registration: "I've been looking back in the 20 hp Newsletter No.13, April 2003. There are two interesting pictures of my Barker DH coupé at La Musée de l'Automobiliste, Mougins, France. I bought this car in Marseille in October 1999 and it has been in storage ever since. My step-son Adrian Bull is now the proud owner of this car and has just commenced working on it. It is his plan to get if fully sorted mechanically and then gradually progress tidying up the body and interior at a later a date. It's going to be a labour of love as the car has probably not been used since the 2nd world war! He is also going to research the history of the car were possible, as we have already unearthed one or two interesting stories relating to the vehicle."

20 hp Engine for Sale

Ralf Storandt is offering his 1924 engine G1080 for sale (the one he replaced by a 20/25 engine, see page 12). He writes: G1080 was overhauled in 1987 (photographs etc available): extensive cleaning of block and re-tubing, new pistons, new bearings for crankshaft and conrods, new cam follower rollers, bushes for the camshaft-rockers, overhaul of slipper drive. The original head is OK, and new valves fitted. A modern oil filter also fitted; oil pressure is always around 20 psi with a hot engine. The engine never showed any tendency to overheat. I would like to sell the engine with no dynamo, starter, or distributor cover, as these parts may be useful as spares for my car - but this can be discussed.

Contact Ralf on storandt@ticino.com

# All about 20 hp Mascots

Barrie Gillings has extensively researched the RR mascot. In 2007 he published his findings in a series of four articles in the RROC(Australia) magazine Praeclarium, issue numbers 2 - 5. They can be freely downloaded from the RROC(A) web site.

Barrie covers such topics as: Charles Sykes the artist; how the RR mascot was introduced; origin of the name Spirit of Ecstasy; its many nicknames from around the world; inscriptions on the mascot; Springfield mascots; manufacture; metallurgy; numbers sold with new cars; replicas and forgeries. The first Sykes mascot was fitted to a Silver Ghost in February 1911, and until 1939 they could be purchased from Rolls-Royce. They were never fitted as standard, but were always an optional extra.

Barrie has kindly given permission to reproduce the extracts below, chosen to be of particular interest to owners of 20 hp cars.

From the foregoing I have estimated that about 40% of purchasers of the approximately 20,000 cars sold between 1911 and 1939 ordered a mascot. Jo Phillips said that production when she started her mascot activities was about seven per week, which conforms, approximately, to the above 40% mascot uptake figure. The corollary is that more than HALF of the chassis ordered did not, originally, have a Sykes mascot adorning their radiators. Of course, some purchasers may have ordered a mascot later in the car's ownership and the many owners who kept their original mascots may have fitted them to their new purchase, but these are probably not enough to result in the situation today where almost every pre-WWII R-R one sees at rallies wears a mascot. But the Sykes group ceased mascot manufacture in 1939. So, even assuming that a percentage of pre-war cars were scrapped, where did the additional 5,000-10,000 mascots come from? I believe that the answer must lie in the widespread replication of mascots over the 67 years that have elapsed since 1939.

We must conclude that we now see a lot of mascots that were not made by the Sykes group. But this should not evoke shock and horror. It must be remembered that Sykes made his mascots by preparing a jelly mould from his master mascots, then making wax patterns, and investing, casting, and finishing them. If an owner has a nice mascot, makes a jelly mould of it, and does what Sykes did, he too will have a replica of a mascot but it will be a replica of a Sykes replica. If done properly, and finished and polished with the same skill and care of the Sykes group, it will probably be indistinguishable from an original Sykes, but just a little bit smaller and cast in a modern alloy, rather than one of the alloys used by Sykes.

One in four purchasers of the newly introduced 1922–23 20hp ordered a mascot, according to the sales records, but by the GAK series of 1924 the number was one in two. I made an assumption that this mascot acceptance level would continue, and skipped to the 1929 GXO series. I was reassured. This series also had a one in two mascot acceptance level.

### Metallurgy

Both Jo Phillips and Morton agree that mascots up to 1919 were silver-plated. If you look at a nice Sykes specimen, you can usually see traces of the silver-plating in the mascot folds, nooks, and crannies. Phillips and Morton also agree that from 1919 to 1929 the mascots were nickel-plated. Where the nickel has been polished away you can usually see the underlying yellowish tinge of the copper/zinc/nickel/tin alloy or whatever alloy it was that Sykes used.

The book Brassfounders' Alloys has this to say about German silver: "While the alloy is essentially a mixture of copper, zinc, and nickel, other metals may be added within certain limits with good results; from 2-3% iron gives increased hardness and whiteness, the same proportions of lead or manganese are helpful in producing sound castings while a like quantity of tin adds to the brilliance of polish obtainable." It is possible, indeed probable, that Sykes' foundryman (Angeloni at first, then later LeMonier) obtained his casting alloy from a metal supplier who followed this standard text when making up the ingots. That would explain the presence of tin, lead, and iron in these mascot castings.

	Copper	Tin	Lead	Zinc	Nickel	Iron
Mascot 1	62	5.4	1.3	20.5	10.5	0.6
Mascot 2	60	6.7	1.4	18.7	12.2	0.3
Mascot 3	64	1.5	1.1	19.8	12.5	0.3
Cap 1	79.6	=	=	-	19.6	0.1
Cap 2	79.2	-	0.2	0.1	18.5	0.1
SG Radiator	62.4	-	0.3	23.2	14.3	

### Mascots fitted as original equipment to 20hp cars



Ed: If you ever wonder what type of 20hp mascot you have, or whether it is original or a later replica, the following section could help.

N-T is the nose-to-toe distance.

#### THE SMALL PRE-WWII MASCOTS

I will describe these from small to large, which I believe was the way they were developed.

9. Nickel-plated; N-T 74 mm; base cylindrical, 28 mm dia., 5 mm thick front, 8 mm thick rear, RHS base: ROLLS ROYCE L<sup>TD</sup> FEB 6 1911; LHS base C Sykes TRADE MARK REG under right wing; REG US. PAT OFF under left wing; No Alice Band:

Comments: This is the smallest mascot I have seen on a pre-WWII car. It was on a very early 20hp, probably original equipment and has a delicate appearance. It is unusual in that the date is written FEB not Feb, the signature is not 'Charles Sykes' as used on pre-1930 mascots, but 'C Sykes' as used on post-1930 mascots, and no periods are used. It is somewhat larger than Cloud and Shadow mascots, .

10. Nickel-plated; N-T 76 mm; base 33 mm dia, cylindrical and uniformly 8 mm thick. RHS base: ROLLS.ROYCE L<sup>TD</sup> FEb 6 1911; LHS base 'Charles Sykes'; TRADE MARK REG. under right wing; REG. U.S. PAT. OFF. under left wing. No Alice band.

Comments: This too is from an early 20hp and probably original equipment. The most noticeable feature is the thick base, and I have seen examples with even thicker bases. The FEB and C Sykes of No 9 have changed to FEb and Charles Sykes.

11. Nickel-plated; N-T 82 mm; base 35 mm dia., cylindrical and 7 mm thick all around. RHS base: RRL<sup>TD</sup>6·2·11; LHS base Charles Sykes TRADE MARK REG. under right wing; REG. U.S. PAT. OFF. under left wing.

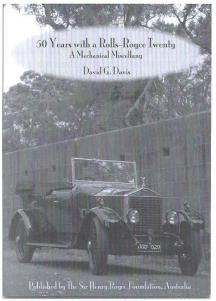
Comments: This mascot features very large lettering, twice the height of the earlier mascots, both on the base and under the wings.

# Also from Australia: A New 20 hp Book reviewed by Tom Clarke

**David Davis** from Australia wrote: "Following the 20hp technical seminar in Albany at the RROCA 2009 Federal Rally, it was suggested to me that I should put down on paper all the things I knew about Twentys. I have done that now with a booklet called Fifty years with a Rolls Royce Twenty: a Mechanical Miscellany.

My intention was to write something that would help non-technical owners of Twentys get confidence in their cars, show that they are reliable and that they can be a lot of fun. As no doubt you have, I have met a lot of owners who are scared that something will go wrong, and that is not the case if the car is properly seen to."

(See feature on David Davis and his 20hp 42G1 in Newsletter 16, November 2006)



by **David G Davis**, Sydney Reviewed by **Tom Clarke** 

Published by the Sir Henry Royce Foundation, Australia, 2010. 40 pages, with colour illustrations and index, 150 x 210 mm (6 x 81/4 inches). Available from

http://www.roycefoundation.com.au \$A20.00 including p&p

or RREC shop: £15 including p&p to UK

This is the remarkable story of a 1922 Twenty (42G1, one of the oldest surviving cars) in virtually continuous use since new in Australia. More to the point, it's the story of a continuous maintenance programme from 1959 onwards. When David Davis bought the car in 1959 it became his every-day car for many years. He was fortunate to have the advice of the late Bert Ward, the legendary Rolls-Royce engineer. Ward had trained under the

official company representative B A Peat from 1916 and later formed a partnership with Alf Appleby. Both Peat and Appleby were apprentices during Royce's time at Derby pre 1914. So the maintenance Ward suggested to David was broadly Royce's approach: if it ain't broke don't fix it, and if you have any work done do it to the highest standards and don't skimp. During its continuous use, especially after prewar accidents, it has had two replacement chassis frames and four bodies. David had all major work done by Ward and his successors. Today Alf Appleby's grandson has in turn followed his father to maintain the car - quite a record.

The maintenance notes and observations in this nicely-produced booklet guide the non-technical owner through the best approach to routine maintenance and good driving techniques. All of the advice is drawn from Ward's approach to getting the best value out of a car, and when you've owned and driven one car for 50 years, as David has, you build up unrivalled experience. David guides the owner through problems large or small, serious or just irritating, so that the non-technical can have confidence in mastering such a charming car. The advice on technical issues refers to David's own 3-speed early chassis but much of it applies to the later cars as well.

The booklet combines philosophy, anecdote, history, and practical engineering to make an inspiring story. How many Rolls-Royces from the 1920s are there that can claim such a continuous record of use and a matching record of maintenance? Highly recommended.

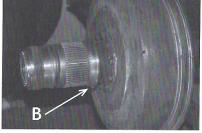
# Michael Forrest on wheel splines, the 20hp car, and his Phantom I, 37LC

In 20 Newsletter 18 (May 2008) I wrote a short piece on how to fit wheels to the hub properly, so as not to damage the splines, see shortened version below.

"The wheel splines are designed to hold the wheel in the correct position on the hub; they are a relatively loose fit and are **not** designed to transmit torque between the axle hub and the wheel hub. Most of the torque is transmitted by friction between the female cone inside the wheel hub (A) and the male cone (B) on the axle hub (see photograph next page). The friction comes from pressing these conical surfaces hard together by correctly torqueing the large wheel nut. The pressure is sufficient to emboss the outline of the hub splines on the surface of cone (B).

If the nut is not fully torqued, the wheel will rock back and forth slightly on its axle. This can wear the splines. To prevent this problem it is essential that wheels are serviced at regular intervals. The splines should be cleaned and very lightly lubricated with oil or grease, but the two conical surfaces A and B should not be lubricated, in order to maximise friction between them. Lubricate only the wheel splines (ie do not lubricate the axle hub splines) so that any excess lubricant is not pushed along the axle, and on to the conical surfaces, when you slide the wheel into place.





The nut should be cleaned and lubricated; its main purpose is to push the conical surfaces hard together, not to transmit torque itself. So the nut should be screwed up tightly, by judiciously applying a mallet to the spanner.

Regular servicing also reduces the possibility of moisture penetrating in between the splines and corroding them. Rust can seize the wheel onto the shaft (and in extreme cases rust can expand sufficiently to split the wheel hub)."

**Michael Forrest** wrote an article about wheel splines, and how to lubricate and fit wheels, in the Silver Ghost newsletter, Issue 46, January 2010. However Michael's ideas on the role of the splines and the conical mating surfaces were significantly different to mine! Below is a short extract from Michael's Ghost newsletter article. If you wish to read his complete article, contact me and I will email you a copy.

"Unless a wheel hub is an exceptionally tight fit (shrunken or otherwise preloaded so that the preload exceeds the applied load), then when rotated under load, as it is slightly larger in circumference than the inner hub, it will tend to rotate ... Of course,

the splines will resist this ... Now you may belabour the wheel spanner as hard as you like, but the friction between conical elements of hub, wheel and nut will never be enough to eliminate all relative movement."

After reading the above, I drew Michael's attention to the article in the 20 hp Newsletter, and he sent the following reply (slightly shortened, with his permission):

"My thanks for your letter, and sight of the 20hp Newsletter. What a pity the Registers do not pool articles of general interest, for most of the articles in the 20hp Newsletter apply directly to most of the pre-war cars. I had no idea you had written that article, for example, and it followed from a request from Australia for my views, which I had hastily to formulate, having never before given it serious thought.

I am afraid I cannot agree that most of the drive is via the conical sections. Even if perfectly matched, carefully ground, and immaculately maintained in ideal workshop conditions, tapers at such a steep angle and of very limited area would fail to move the car even under a top gear start and a whiff of throttle. Their function is simply to hold the wheel accurately on the hub and to prevent lateral rocking on the splines under lateral load, as well as radial movement from the epicycling movement if the preload on the wheel nut does not exceed the deadweight and shock loading on the wheel.

I have yet to see a wheel/hub combination which does not show wear and fretting corrosion from relative movements. Of course virtually all have seen a long life, and usually neglect, so we shall never know how a pristine hub/wheel, perfectly maintained, would fare.

Both the wheel hub and the wheel are of very light section and will deflect and stretch either elastically or permanently under extreme tightening, to limit the applied forces.

Anyone having a sacrificial hub with splines removed may care to fit it to a rear wheel and see how far they go - or to a front wheel and put the brakes on; I have made a spline-less dummy hub to mount the spares on the back of a Phantom I, using an original wheel nut to hold it. Tapers are newly machined and a close match. In situ, it can just be pulled round by hand, with the wheel nut pulled up tightly.

If the tapers are to transmit the torque, it follows that the very much smaller tapers at the wheel nut end will have to take some share, and as the nut is locked against rotation by the spring-loaded, splined centre and is otherwise free to rotate on its own screw threads, then it follows that substantial driving torque is taken by the locking barrel splines, both externally and internally – which they are clearly not designed nor sized to do.

It also follows, if we accept the above, that lubricating these tapers will do no harm, but will inhibit normal corrosion, and limit the stress corrosion always seen on any heavily loaded surface where slight relative movement takes place (itself indicating that the tapers are not capable of taking driving deadweight loads).

Apologies for taking such a diametrically opposed view to your own.

Years ago, when I was younger (80 next year) I decided that when my 3-year restoration of 37LC was finished, I would find myself an early 20 hp for restoration. But the 3 years has stretched to over 25, with completion still far off (devil in the detail), so any time remaining is unlikely to see a 20. But they are most desirable. The nearest I ever came was a 1933 20/25 with an HJ Mulliner sports saloon (GBA 37), which was a delight, long used as an everyday vehicle, and far faster cross-country than a colleague's Alvis Speed 20, even though it wore out rear tyres in 3,000 miles.

Also enclosed photographs of 37LC so far. While the aluminium body looks well enough in the photographs, it is not good enough to leave in bare metal and will be filled and painted. The original body was Gallé, a monstrous cabriolet which died in the 1930s. This body is based very loosely on a sketch by Gallé of a body he proposed but never built on a very different Bugatti. The 20 hp on the cover of your Newsletter 19 (GUJ 30 from Brazil) has similarities in style, but carrying four - while 37LC has rather less space and comfort than my 2CV.

Photographs are still on the secret list [although Michael has given permission to publish the two views of 37LC, see page 21] but you will note the rear mounted spares on aforesaid unsplined dummy hub securely tied in to the main frame and clear of the body and fuel tank. Rear wings give me some concern, as they do not exactly comply with Construction and Use Regulations, but they were built like that in the 1920s ... Officer. And GUJ 30 is at least as bad. Just don't drive too close behind me."

### Michael wrote again, later:

"I have sought in vain guidance on wheel splines and tapers, even the comprehensive Maurice Olley collection of data sheets ignores them. Springfield used the Dunlop system on their early productions before changing to their more rational system (Buffalo wheels?) which used undulating knobs on the hub, filling corresponding hollows on the wheel centre. I believe BMW used a system similar in principle on their pre-1939 sporting vehicles — a ring of cones with a matching ring of cavities. Parallel splines are inherently fallible in this role, surviving because of their generous dimensions, but sadly deficient in the less robust Rudge-Whitworth hubs. I do not know if these hubs were used in other high-quality cars."

# How GA 11 was twice rescued from scrapyards and twice purchased ... by Michael Sapsford

I thought I would like to write and thank you for making such interesting reading in the 20 hp magazine. I know how much is involved in these sorts of things; in the early 1960s I was due to take over 'Early and Late' for the Rolls Royce section of the VSCC. My first effort was in conjunction with Joe Stead, the retiring editor, but the committee of the VSCC decided to shut down the Rolls-Royce section at that time. I hope their decision was taken before the committee saw my effort.

The acquisition of GA 11 is a small story in itself. During my National Service at Dover in 1957 my brother officer had an Alvis TG 12/50 wide two-seater. He dragged this machine off a scrap heap in the Chichester area for £15. The reason for it being abandoned quickly became apparent - a run big end. Also in the scrap yard was another 12/50 engine. Quick removal of both sumps enabled one rod to be changed over. We did that sort of thing in those days. I cannot recall what happened to the pistons, not being present at the time, though it ran well enough.

After parties I was allowed to drive, and got on well with the gearbox. As we were trying to get to know some girls at the time, a two-seater had its drawbacks even for the more athletic. Needing a few spares we soon found one John Lott who ran a garage at Lyminge, near Folkestone, and also the VSCC meeting at Elham. We went along to the next meeting to find many fine cars outside the Rose & Crown. Later in the evening a rather effete young man turned up in his mother's early 20 hp coupé by H J Mulliner (see photograph). I was really turned on by this - the 20 not the effete young man - and said to the person standing next to me: "That's what I would really like". "Funny, you should say that for I have one for sale."



GA11 (front) with the H J Mulliner ¾ DH coupé 66H5 at Old Park Barracks, Dover, in 1964

Upon inspection it turned out to be a Hooper two-seater looking rather sad. A tatty hood, rust on the wings, tyres well worn, etc. I was assailed by doubt. How would I get the hood done and what about the tyres? "Better have a ride" said John Tonkin. He plonked a battery on the running board and put two crocodile clips on to the ballast resistor and pressed the starter. I looked round for the nearest fire extinguisher expecting the wiring to explode but no, the

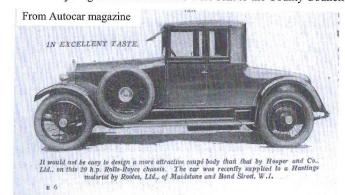
thing started up and ran well. We proceeded through Folkestone and all the way up the Dover hill in top gear. I was weakening, but about the hood and battery? "OK I will put on a new hood and battery and reduce the price to £90". I succumbed and proud of my new possession I drove it home to be greeted by my Father who took one look and said: "You needn't think you are going to keep that thing here". I subsequently found out that at his next board meeting he was telling all and sundry that his son had a Rolls-Royce.

The tyres, then on  $5.25 \times 21$  well-base wheels, were a bit low although, unlike today, showing a bit of canvas was a badge of honour. But sight of the inner tube was somewhat less so. However frequent visits to scrap yards found several Austin 20

hearses being broken up and many a good Dunlop was available for 50/- (£2.50). Most times you had to take the wheel as well, and change the tyre yourself. This car was my only transport and being stationed at Dover I frequently drove home to Sussex at the week ends, across Romney Marsh. I recall much snow one Sunday evening when many a modem car was stranded by the side of the road but with my big wheels and narrow tyres I sailed through. I did get the impression that those who were stranded did not entirely wish me well.

Fairly soon after, I joined the VSCC Rolls-Royce section run by Jimmy Skinner, and found much help and advice. I went to London and met Jack Compton who was able to supply such new or second hand spares as were needed. At this time, late 1950s, Rolls-Royce would supply individual owners with bits and pieces at quite reasonable prices. From these two sources I was able to replace the king pins which are complicated and expensive on the two-wheel-brake cars. Believing in the RR myth, I was expecting my engine to be inaudible which it definitely was not. An Austin 7 was dragged off the beach at Pevensey for £4 (I won the toss) to provide transport while a rather protracted engine overhaul took place as funds permitted. This involved a rebore but the pistons supplied by Rolls Royce would not begin to enter the bores. Measurements showed them to be between 3 and 5 thou oversize. I complained and was asked to get the block to Hythe Road for inspection. Advised that the job was done I found the accompanying bill involved pickling out and pressure testing as well as honing to fit the pistons. The bill was for £15. I still cringe today at the rude letter that I wrote to Ron Haines but it did result in part withdrawal of charges. The usual crank grinding and white metalling was done. There were many shops offering this sort of service in the 1950s. I cannot remember where it came from, but I had a sintered bronze clutch lining, which was an after-market offering by Tyzack. Today one often replaces the centre driven plate but I do not recall doing so at that time. The clutch works well but squeaks when provoked.

In those days registration documents were sent to the County Council where the vehicle



resided. I went along to East Sussex Council Offices at Lewes and asked to see "my file". All the history was there from the first log book; only one from the mid thirties missing. was Although I had forgotten, I must have sat down

and copied all this out, not realizing that one day it would be destroyed. I pointed out

to the officer in charge that I had never seen a log book from the early twenties with but two spaces for change of ownership. "I don't suppose we will miss that, so take it if you like". It is still in the file, as are my notes of the previous ownership up to the present. Here it is worth recording that not too much attention should be paid to the RR build sheets; this car has no less than three. The first says "Cockshoots, Allweather body 8cwts 21/9/23. Cancelled GA 7 taken in exchange". The second says "Hoopers springs for saloon body 9cwts 17/10/23 delivered 6/11/23. Given to Rootes replaced by GMK 18 (Sold into Croall area)". The third says "Rootes, Springs for saloon body 9 cwts 15% discount. Delivered 6/11/23. Balance of car price paid 23/4/24"! Nowhere is there any reference to a two-seater. Mercifully, Hoopers records show "two-seater No 5858 fitted to your chassis GA 11 for Rootes Ltd". The price for this was £686-12s-0d less 10%.

The quality of this body shows in that it can be traced, from the aforementioned records, as being in almost continuous use up to and after WWII. It survived being scrapped in 1939 by its purchase for £15 by Surgeon-Commander Brian Weston. He put some tyres on it (bill in the file) and took it on his honeymoon. As he was in the Navy, post war use was spasmodic but there are some considerable bills from Caffyns locally, and Hythe Road through the 40s and 50s. A new Exide battery was £11-l4s-6d in 1947.

Nemesis arrived in 1955 when the engine froze up damaging the block and head, at which stage it was written off and sent for scrap. Fortunately in the same scrapyard was a tired limousine but with a sound block and head. GA 11 and the good block and head were bought by Tony Burt of Burcers of Tenterden who roughly put it together and sold it to John Tonkin from whom I purchased it in July 1957.

Over the years I was able to buy the correct  $32 \times 4.5$  wheels and the Lucas egg-type sidelights. I also repainted it. When it came it was Admiralty grey all over but the first log book said grey green. So a sort of sage green was arrived at with black for the wings, valances and superstructure.

Having got married and had one son, it was incumbent upon me to house this lot, so the car had to go. I sold it to Robin Ball for as I recall £750. My Father was gobsmacked: "My God, you'll never do that again". Ball had a garage and filling station on the A2 at Gillingham which must have been doing fairly well for he ordered a new Cloud III from James Young, more or less as they were closing down. Young were persuaded to do work on GA 11. They reupholstered the interior, put a new leather hood on, and made the windscreen back into a three piece affair. Unfortunately the car was put into rather damp storage causing the paint to blister but I do not think that it did more than 500 miles between 1964 and 2003.

Robin Ball died some twenty years ago. His family kept a few of his cars including GA 11. About six years ago Mrs Ball telephoned me out of the blue and said that she remembered when they bought the car I had asked to be informed if they were going to sell it. I was offered the car at a reasonable price so it has returned home. I have done about 5000 miles since then. My fifty year old engine rebuild seems to be holding up

well. It will cruise at 45-48 mph but does not like 50, using much more fuel and oil. In spite of the elaborate friction washers in the king pins it can still get the "jaggers". Some tension on the track rod ball joints is necessary.

The body is still remarkably sound although there are some fatigue cracks around the dicky seat; the door fit is still very good and the elaborate hood mechanism is free from rattles. Second speed in the gears is noisy and scheduled for attention. Derek Thorpe has kindly allowed me the remains of his three speed box so I hope to have enough spares to do the job soon.

Because it is not too smart, this is the car that I use most, apart from the veteran De Dion Bouton, but I see the 32 ×4.5 tyres are getting down a bit and they are somewhat pricey so not many outings this year. See photograph of GA 11 today, on page 21.

### Letter from Craig Hannum, Oregon USA

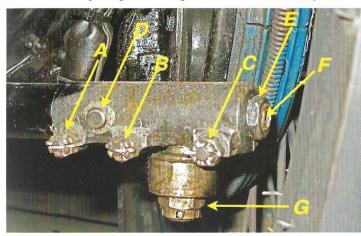
I'm enclosing my donation for continued membership with the 20 Register. I hope it's enough to cover the higher postage cost to the States.

I want to report progress with restoration of GMJ 6 (see Newsletter 18 pages 13, 15). It's painted, new glass installed and I'm down to the upholstery part. That's turning out to be a bigger issue than I thought, as the original was all-leather (except the headlining) and I'm having a difficult time finding an experienced trimmer who can do the job and retain the old springs and cotton/horsehair padding. They all want to use foam. In fact, one very well regarded auto upholsterer here in Oregon effectively wasted three of my matching top grade hides (I bought six) by rebuilding with foam and 3" pleats. Moral: don't assume anything when dealing with craftsmen! And there are few apprentices coming on board.

Here is a better story. We have just returned from a cruise that looped round southern Australia, stopping for a day in Melbourne. Since we visited Melbourne a few years ago, I started looking for an alternative to the usual city bus tour and what better place to start than the Twenty Directory! George Forbes of Melbourne owns two 20s- and also a Bentley, a Silver Ghost, a Silver Cloud and several more collectable vehicles. I emailed him to ask to see his Twenty on our day in port and the timing matched perfectly their Section's monthly Sunday RR outing. He not only invited my wife and I to join them, but he also picked us up at the dock in his Silver Cloud.

What a day in the countryside with a picnic and gathering of about 25 members and their cars, not counting the host's collection of Stanley Steamers, Rolls-Royce, a Bentley and half a dozen pre-vintage cars. Thank you George and Fiona Forbes! Years back I had a similar opportunity during a visit to England when Clifton and Isabel Spencer hosted me for a Sunday dinner, with information about, and adventure tales of, their 20 hp.

Wheel Wobble: adjusting the steering cross tube, contributed by David Else



Low speed wobble in the front wheels has long been a problem with some 20 hp cars. The subject was discussed in an RR paper\* published in the 1920s. One contributing factor is a loose cross steering tube, which normally provides damping to the steering. A loose tube can also give incorrect alignment of the front wheels, resulting in rapid (costly) tyre wear. If you can twist the tube with one hand, it needs tightening. It should be difficult to twist with both hands. David has provided the photograph, and instructions below for tightening.

- Support the front axle on two axle stands and remove both wheels.
- Near side remove split pin in nut C and slacken nut.
- 3 Slacken anticlockwise lock nut E. Insert 6mm square key into F and turn anticlockwise half a turn. This should loosen the cross tube.
- 4 Off side remove split pin in nut C and slacken nut.
- 5 Slacken anticlockwise lock nut **E**. Insert 6mm square key into **F** and turn clockwise until you can only just twist the cross steering tube with one hand.
- 6 Tighten nut C. Tighten clockwise nut E. Check you can still just twist the cross steering tube with one hand. If it is slack or you cannot twist it with one hand do some slight adjustments as before and check again. Tightening C and E does sometimes affect the ball loading.
- 7 Near side insert 6 mm square key into F and turn clockwise until you can only just twist the cross steering tube with two hands.
- 8 Tighten nut C. Tighten clockwise nut E. Check you can still just twist the cross steering tube with two hands. As above, if it is slack or you cannot twist it with two hands, do some slight adjustments as before and check again. Replace the split pins in nuts C.
- \* The book Fundamentals of Car Performance, p 91-96, discusses other adjustments to cure low speed wobbles: viz removing slack in the side steering tube springs; making sure the castor angle is no more than 1° (may need to fit wedges between axle and springs); increasing front tyre pressure to the maximum (eg 40-45 psi for a 20 hp). Also, a side tube worn on the *inside*, where the springs etc are located, can cause wheel wobble.

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