

1960's

# SIXTIES

Letter from W. Ronald Flockhart, BSc, AMI, Mech E. (Ron Flockhart - Ecurie Ecosse driver and winner of Le Mans in 1956 and 1957)

7th April, 1961

Thank you for your letter of 31st March, – I apologise for the delay in replying but I have only just returned from honeymoon.

One impression I have of the D-type Jaguar which is probably unique, is that its handling characteristics are similar to that of the "D" type ERA.

I found at Le Mans, particularly with the tail fin, that the faster it went the more stable the car became. It was my practice to relax completely down the Mulsanne Straight (race traffic permitting!) and flex my fingers and arms, the car steering itself at around 170 mph. A good personal test of the Chicken or Hero Driver was to take the slight right hand kink at the end of the Mulsanne Straight absolutely flat – an honest 5,800 rpm on the 1957 3.8 litre. It could be done, but only just. If the track was damp, then this game was for Chicken Drivers only. Both Ivor and I discovered this in our own fashion – something the spectators missed! However, in conditions of crosswind, this was not possible and I recall once at Goodwood one blustery day at practice where the Jaguar tail fin was a handful through Fordwater and past the pits.

The 3.4-litre Jaguar engine (and the later 3.8 litre) in my opinion come under the same category as the Gipsy Major and Rolls-Royce Merlin aero engines – it feels as if it would go on for ever. However the 3 litre version was never as successful. I don't think the design lent itself to continued operation above 6,000 rpm.

There was no marked difference in performance between the Lucas fuel injection 3.8 litre Jaguar and the normal Weber carburettor D-type. The only noticeable difference was that the Lucas injection gave smoother acceleration with no spitting back and hesitation round a slow corner on part throttle.

I still consider the 3.8 litre Jaguar engine to be capable of winning Le Mans at a higher speed than our 113 mph of 1957, if mounted in a suitable chassis – the E-type perhaps?

RON FLOCKHART

#### The 26th Annual General Meeting of the company was held on Thursday, 31 March 1960

The Chairman, Sir William Lyons, stated: 'Before opening the meeting, I would like to refer to the sad loss which our company has sustained by the untimely death of our Director of Home Sales, Miss Fenton. For over 35

years Miss Fenton served me, personally, and our company, with such single-minded loyalty and devotion to duty that I find it difficult to pay tribute to her in adequate terms.

I feel sure you will wish to join me in offering sincere condolences to her relatives, and will agree that our deep regret at the loss of a loyal colleague be recorded in these proceedings.' Following the meeting Mr S. Glover proposed a vote of thanks with these words: 'On behalf of the shareholders, I take this opportunity of congratulating you, Mr Chairman, your fellow Directors, Executive Directors and Staff for the inspiring manner in which you have so ably and successfully conducted the affairs of this company. and I convey to you our sincere wishes for the future."

The full meeting signified their unanimous approval of Mr Glover's remarks.

#### DAVID MURRAY of ECURIE ECOSSE; extracts from comments made in correspondence

#### THE RELATIONSHIP

'There has never been any official liason between Ecurie Ecosse and Jaguar Cars Limited. Ecurie Ecosse has simply been a customer who has been given the first opportunity of purchasing the previous year's competition cars from the factory.'

TECHNICAL CO-OPERATION

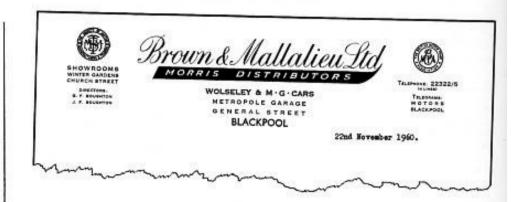
'In cases, Ecurie Ecosse has been able to point out to Jaguars certain suggested improvements but on the other hand Jaguar developments and improvements passed on to the Ecurie Ecosse greatly out-number the former.' ON THE 1957 MONZANOPOLIS

The Monza cars ran virtually standard in 1957. A dash from Le Mans to Monza was followed by a quick decoke and the transferring of scoops which were used at Le Mans to cool the brakes, to act on the tyres.'

ON THE 1958 MONZANOPOLIS

LISTER

'The Ecurie Ecosse Lister Jaguar Monza single-seater was converted after the Monza race into a two-seater



sports which was eventually crashed, as many of the other EE Jaguars were, by Masten Gregory!'

ON THE 3-LITRE ENGINE BUILT FROM A 2.4-LITRE UNIT:

'The bored and stroked 2.4 model was the idea of Ecurie Ecosse (not necessarily the idea of W.E. Wilkinson!) and was carried out by Wilkie.'

ON POWER OUTPUTS

'The highest brake horsepower which was obtained from a Jaguar was from a 3.8 engine. This was 314 bhp but one must remember this engine was tuned for reliability and not for maximum speed. It is certain that more horsepower could be obtained from this engine if it was tuned for short periods and not for the longer distance races Ecurie Ecosse has been competing in.

'Regarding the 2.4 engine which was modified to 3 litres, a horsepower in excess of 265 was obtained but again this engine was prepared for 24 hours of Le Mans. This particular engine was lying second after 131/2 hours during the 1960 race when the car retired with a mechanical fault."

ON MAXIMUM SPEEDS:

'I believe the maximum speed obtained from any D-type was 192 mph. This was achieved by the late-Mike Hawthorn in the 1956 Le Mans race. The car was a fuel injection model with a small wrap-round windscreen. After Young William Lyons had worked for Brown & Mallalieu in Blackpool and later appointed them to be agents for his Swallow cars.

the 1956 race, the regulations were altered and larger screens had to be fitted. This brought the speeds down and our maximum speed on the Mulsanne Straight was 180 mph in 1957. In later years, the engine capacity was reduced and the highest speed officially recorded on the Mulsanne Straight. from a 3-litre Jaguar engine, was 160 mph. This was recorded by an Ecurie Ecosse car and is officially faster [see below] than the time set up by the 3-litre prototype E-type Jaguar which was entered for the 1960 race.

The 1958 Lister-Ecurie Ecosse-Jaguar single-seater car which was used at Monza was, in fact, no faster than the D-types, due to the fact that the front wheels used in this race were out of proportion to the size of the car and were, therefore, a handicap. A slightly smaller wheel would have produced much greater speeds, mainly owing to reduced frontal area.'

DAVID MURRAY

N.B. According to the factory paperwork on the 1960 Le Mans race, the prototype E-type, E2A, achieved a speed of 167 mph.

On 24 October 1960, a year after the 3.8-litre engined version of the Mark II had been introduced, a Project Specification was issued by Claude Baily, together with instructions to proceed, to the Competition and Production Departments. The internal order number ZX548/02/2 was for 'One 3.8-litre Mark II Grand Tourismo Project car. R.H. Drive'.

'An unpainted bodyshell was modified by the Competition Department. All the following points to be checked for effective welding, and augmented where necessary with extra welding

and stiffeners. Front body crossmember welded along top and bottom edges, longitudinal members edge welded inside and outside over whole length of engine compartment, diagonal brace to valances and rear cross-member to seat pan welded every two inches. Torque arm brackets on seat pan, rear upper damper fixings, and rear road spring channels fully welded.'

Additionally, the nearside valance was to be modified for air duct trunking from the radiator, and that on the offside was to be altered to give

clearance for the three SU carburettors. Alterations were to be made to the boot to accept the battery and an auxiliary petrol tank. Additional kickup channels were to be welded into the rear wheel arch area to form a box section with adequate clearance to handbrake cables. A stiffening plate was to be added to the dash structure and provision made for a horizontal clutch master cylinder. Not surprisingly after the problems experienced with the Panhard rod mounting, a new design of bracket and pin were to be welded in place.

Special fitments included a laminated screen and competition bucket seats trimmed in leather.

Inspiration for this concept may possibly have been provided by the Coombs modified cars, though apart from their own competition cars, only one Mark I was modified and the first Mark II did not receive the "Coombs treatment" until 1960.

Whatever the inspiration, a single car was commenced though the project, obviously, faded away.

The Daimler company was purchased on the 4 July 1960 for £3,110,000 and 'the excess of current assets over current liabilities'.

D-type Jaguar in immaculate condition, finished in pale blue, fitted 3.4 engine. Powr-Lok diff., R5 tyres, total mileage 6000, first registered May 1960, any trial, £1550 ono. Exchange considered, HP can be arranged.

November 1960

C-type Jaguar. D specification. Fitted 45 DCOE Weber carbs. Dark blue. good tyres. Chassis No. 021 Immaculate condition. Full width perspex screen, also touring screen and hood, full tonneau. Taxed to March 1963. £575.

C-type Jaguar. Very good condition. History known, never bumped or damaged. Sell or exch. vehicle with more weather protection.

August 1962

## Extract from 'LIST OF INFLUENTIAL OWNERS OF JAGUAR CARS' 1960/61

H.M. Queen Elizabeth, Queen Mother Jaguar Mark VII H.M. Queen Marie of Yugoslavia Jaguar Mark VIII H.R.H. Prince Georg of Denmark Jaguar 2.4 Litre Viscountess Plumer Jaguar 2.4 Litre The Lord Ogilvy Jaguar Mark VII The Marquis of Cholmondley Jaguar XK 140 Lord Allerton Jaguar XK140 Lord Kimberley Jaguar XK 150 Sir George Young Jaguar Mark VII H.E. The Argentine Ambassador Jaguar Mark VIII H.E. The Iranian Ambassador Jaguar Mark VIII Cornelia, Countess of Craven Jaguar Mark VIII Lady Seabright Jaguar XK120 The Marchioness of Bute Jaguar 2.4 Litre & open XK Lady Hulton Jaguar XK 150 The Nawab of Bhopal Jaguar XK 140 H.E. The Mexican Ambassador Jaguar Mark VIII Robert Morley Jaguar Mark VIII & 3.4 Litre Louise Rainer Jaguar Mark VII Lloyd B. Nolan Jaguar Mark VII Alfred Marks Jaguar 2.4 & 3.4 Litre David Nixon Jaguar Mark VIII Norman Wisdom Jaguar 3.4 Litre Ronald Colman Jaguar Mark VIII Yvonne de Carlo Jaguar Mark VII Anita Eckberg Jaguar XK140 Count Ladislas de Hoyos Jaguar 2.4 Litre Air Commodore Douglas Iron Jaguar 2.4 Litre Marquis of Bristol Jaguar XK? F.H.C. Count Munster Jaguar 3.8 Litre Spencer Tracy Jaguar XK? D.H.C. Stan Freburg Jaguar 3.4 Litre Uruguayan Ambassador to Holland Jaguar 2.4 Litre Pakistani Ambassador to Holland Jaguar Mark IX Chilean Ambassador to Holland Jaguar Mark IX Rt. Hon. The Earl of Bradford Jaguar 3.8 Litre Sir Robert Ropner Jaguar 3.8 Litre S.A.S. Prince Rainier of Monaco Jaguar 3.8 Litre Briggs S. Cunningham Jaguar 3.8 Litre Noel Cunningham-Reid Jaguar 3.8 Litre George Formby C.B.E. Jaguar 3.8 Litre The Duke of Kent Jaguar 3.8 Litre Count Pozzo di Borgo Jaguar 3.4 Litre Baron Malfatti Jaguar 3.4 Litre His Grace The Duke of Somerset Jaguar 3.4 Litre The Hon. Gerald Lascelles Jaguar 3.8 Litre The Earl of Jersey Jaguar 2.4 Litre The Earl of Strathmore Jaguar Mark IX The Hon. Marquess of Dufferin and Ava Jaguar 3.8 Litre Robert Glenton Jaguar 3.8 Litre The Rt. Hon. The Viscount Portman Jaguar Mark IX Lord Charles Spencer-Churchill Jaguar 2.4 Litre Sheikh Ghanim bin Ali Althoni Jaguar 3.4 Litre Rt. Rev. G.A. Beck, Bishop of Salford Jaguar 3.4 Litre Nano de Silva-Ramos Jaguar 3.8 Litre Graham Hill Jaguar 3.8 Litre

None of these frontal treatments found their way onto a particular car, but elements of Mark II, Mark X and XJ6 are clearly recognisable. Below: A policeman's lot must have been quite a happy one, driving around in Mark IIs all the time. Indeed they were an ideal car for dashing up and down the newly-opened M1 Motorway. Note the CID car in the centre foreground! (Jaguar Cars)

#### Test report on Daimler SP250 (chassis number 1066)

7th April, 1961

From: Mr. N. Dewis To: Mr. Heynes

Copies to Sir William Lyons, Mr. England, Mr. Baily, Mr. Knight and Mr. Simpson.

At the request of Mr. Heynes a road test has now been completed on the above car.

ENGINE:

Tappet noise very audible.

Several rubber hoses on induction manifolds show signs of leaking.

Idling on occasions very lumpy and uneven.

Performance not impressive on low speed pick-up.

Heavy vibration from exhaust system.

CLUTCH:

Slips badly during full torque gear changes.

GEARBOX:

Gear lever chatters at high rpm.

1st. 2nd. and 3rd. gears very noisy.

AXLE:

Rejected for noise - pulling light load.

STEERING:

Very sticky on lock.

Heavy steering kick.

Knock from steering column.

Difficult to manipulate steering wheel lock nut.

RIDE AND HANDLING:

Ride has much to be desired, excessive pitching from rear end, becomes airborne over long wave pitching surface, also hits bump stops very forcefully.

Damper settings and spring rates could be improved.

One thing I suspect is misalignment of the front and rear track, the rear track would appear to be offset to the N/S the width of a tyre in relation to the front track.

Far too much wheelspin is evident when leaving slow corners with full power "on", a Powr-Lok diff would be an asset.

Insufficient roll at rear end.

BRAKES:

Pedal effort rather high for low speed check braking.

Rear brakes seem to lock early in an emergency stop, what is the back to front ratio?

Axle tramp noticeable when braking on rough surfaces.

Position of handbrake restricts seat adjustment.

COOLING:

Water temperature recording 95°C during six laps of the outer circuit at MIRA driving at 100+ mph, this seems to be rather high.

Is the air entry through the grille adequate?

STABILITY:

Car moves sideways very sharply in a cross wind, movement influenced by rear end.

PEDALS:

These are set too much to the O/S, impossible to heel and toe, one has to "feel" around for the accelerator.

BODYWORK:

Bonnet shake very noticeable on rough roads.

Depth of windscreen too narrow.

Door hinges very weak - vertical shake.

Door lights gape at top edge during high speed driving.

Better insulation of the scuttle and refitting of several grommets would reduce engine noise.

100 Jaguar shares bought in 1952 at 24/- (£1.20) would, by 1961, give 900 shares at 78/9 (£3.94).

#### Codenames

Utah – Pressed Steel Fisher codename for Mark II/S-type/420 bodies Zenith – codename for Mark X saloon

XK120 Drophead, 1951, finished in Carmen Red, seat covers, wood rim steering wheel, new tyres, perfect mechanical order, £245.

£165!! 1951 XK120. Sound motor, off-white, red leather. Terms, etc.

November 1962

1938 21/2-litre SS Jaguar. We believe this vehicle, due to its incredible condition and history, to be absolutely irreplaceable. Built in 1938 it was unused during the war years until 1948, since then it has covered 58,000 miles with a new high compression engine fitted 6000 miles ago (bills available). The vehicle can only be described as looking and running like a new motor car and represents unrepeatable value to the enthusiast at £225.

May 1963

It was stated in May 1962 that 'the weekly wage bill of the Company in 1924 was £4. Today it is £150,000. 360 inspectors of quality and precision are employed, a ratio of one inspector to 10 production operatives.'

Seats very poor in respect of comfort and back support, back rest twists with body movement when cornering.

Ends of tubes unsightly and roughly finished with seat backs folded

Rear fasteners for securing detachable hard top appear unsightly. Bonnet safety catch difficult to release.

Demisters not very effective on windscreen.

#### GEORGE MASON, Superintendent of the Experimental Department and former Superintendent of the Competition Shop.

On development of the Daimler 21/2-litre saloon and fitting of the Daimler V8 engine in the Jaguar small saloon shell.

'We started with a Mark I because in those days they wouldn't give us a Mark II body to put it in!

'We had a Mark I that used to be the Dunlop air suspension car.

The car was absolutely rotten. Lofty had been talked into the idea and he was all for it. We went ahead and used that body which stood outside the mill, with all flat tyres and everything. It was practically welded to the ground, it had been there that long!

'We got it in and stripped it out. We welded up all the spare holes in the body, because it had been cut into to fit the Dunlop suspension and everything. We acquired a 2½-litre engine and popped it in. To everybody's surprise – I'll never forget it – you could walk between the fan on the engine and the radiator. It looked so small and unloved in there!

'But we went on to develop it and, quite seriously, I think it was one of the best cars Jaguar ever put together.

'It would out-perform the 2.4. It would perform as well as the 3.4 and was certainly better on fuel economy. I would think, still today, it was the quietest car we'd ever made because, if you didn't look at the rev. counter, you wouldn't know the damn car was running.

'The car amazed everybody who drove it. We went a little bit over the top perhaps with the exhaust system. If I remember rightly, I put four silencers in each bank on that car. Quite seriously, you couldn't hear the damn thing running!

'When the model was released at the Motor Show in London, they'd got a car down there as a demonstrator, but it still wasn't as good as the old one we'd got here. So we took the engine out of the old one and it went in that demonstrator vehicle. We hadn't done anything special to the engine but it was a sweet one.

'That model, when it was released, was way over the book price, even when two years old. They just couldn't get enough of those cars – it really went down well.'

'Mr Heynes, to his credit used to go round this company every Friday.

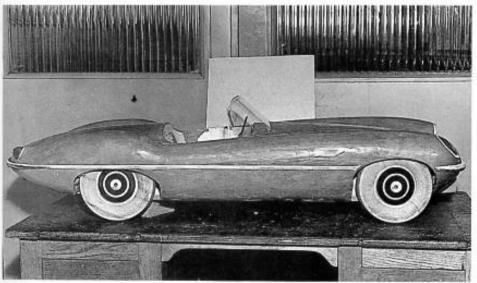
As to the Competition Shop, there were some days he used to damn well live in there. He was a different type of engineer to what you get today. He certainly wasn't remote. There was certainly no class distinction in that man.

'If you had got a good idea, he would let you go on and do it. I've got nothing but admiration for the man – he was a gentleman of the first order.

'He'd get a bit tetchy when you didn't agree with him, but that was his right, obviously.

'He used to be in our shop an awful lot, to the point we used to get labelled as his "playpen", by a certain other top man.'





Even though the process was semi-mechanised, the lowering of the massive Mark X body onto its engine and suspension units, still seemed to need at least six pairs of hands. (Jaguar Cars)

TONY THOMPSON, OBE, British born former Head of Sales for Jaguar in the US, and later vice-president of the largest Rolls-Royce dealership in the world

'The guy who was in charge of advertising at the factory, Bill Rankin, was the man who absolutely knew how to project the right mixture of image. He thought up the idea of "Grace, Space and Pace". If he had

This model, created by Malcolm Sayer, shows his first thoughts on the E-type shape. Note the two frontal treatments with the faired headlamp nearer the camera and a more traditional treatment on the other side. (Jaguar Cars) been 50 years of age today, he would probably be the head of an advertising company in America.

'He was that sort of guy. A man who had a brilliant idea of the concept. By and large the Brits didn't use to talk about advertising a lot. Bill Rankin understood that what he had to do was project the Bentley Mark VI image.

'Lofty once said that it was Sir William's great delight to put a Jaguar Mark V beside a Bentley Mark VI – which is, of course, why we never made a Jaguar Mark VI, or indeed, why they never made a Bentley Mark VII – and walk down the street. He would then say to whoever he was walking with, "I am going to ask you to turn round and tell me of those two cars behind you, which one is the Jaguar"

It was absolute plagiarism!'

Lyons was amazingly autocratic. If he had something to say, he would say it. I had a couple or three funny experiences with him. He really found it very hard to tolerate any customer criticism. He did not like that.

I would think it was at the '59 Motor Show in New York. I was on the stand as a young thing, 27 years old. Sir William came on the stand mit everybody – Jo Eerdmans and all the Vice-Presidents of the company, and when you're 27 a Vice-President seems very senior.

'There was a very difficult New Yorker, who I knew and who had been talking to me about all the things he hated about his XK140. Suddenly he turned round and said to me, "Tony that's him. That's Sir Lyons."

'I said, "Yes, that's Sir William".

'He stated he was going to talk to him and so he went over to Sir William, and I don't know what they said to start with but he came back to me with Sir William in tow. Sir William said to me, "Thompson, I want to see this man's car, which is in the garage". This was in the basement of the Coliseum which was where you parked in those days. They always had the Motor Shows there and they were held at Easter. Being Easter it was cold.

'So we went down to his car and the man said, "look, the heater doesn't work".

'Sir William said, "the heater does work".

'The car was started up, and the car had, if you remember, a Smiths heater with two little doors on it, and a control on the dash. I smoked and so he told me to light a cigarette. He held the cigarette – I'd no idea what he was going to do – he held it beside the heater and the smoke very gently wafted away.

"Look," he said, "it works perfectly"

"Sir Lyons, temperatures get to 15 below zero."

"Young man," he said, "you just put on an overcoat"

#### JOHN MORGAN, who has held a number of senior posts concerned with overseas sales, including that of European sales director

I joined Jaguar in '63 as Assistant Export Manager. I was then an Export Director for Europe for Rootes where I had been for 13 years. I speak languages, which helps, having had part of my education in Switzerland. So I feel pretty European.

'Sir William said he didn't offer people jobs, they had to apply for them!

He'd been watching my progress and spoke to me one day.

"I think you're the sort of person that would quite enjoy working with us, Morgan."

I said, "Yes Sir William, I'd love to work for Jaguar"

"Oh, you would, would you. Well, we don't offer jobs in this

company. People have to apply for them. But if you'd like to apply, I think there is a good chance of you getting a job here."

'So I did, and I got it,' recalls John with much amusement. 'At

£1400 a year!

'I took it on the condition made with Lofty that I would be, if satisfactory, made Export Manager within six months. The old boy who was the Export Manager was 76, and he'd been there since '49. All he did, frankly, was administer. He didn't like travelling. He wouldn't take a plane anywhere.

'He was a man called Ben Mason, a wonderful old chap, who was at Standard and then Singer. He was a splendid old boy who spoke about seven languages he'd learnt himself. I admired him very much and I worked with him for six months.

'Then a very strange thing happened. We had brought out a new car called the S-type, which was being launched at Paris. Mr Mason didn't appear to be going. Mr England rang down one day and said, "Mason, aren't you supposed to be in Paris? We are launching a new car there tomorrow – the dealer launch."

"I know, Mr England, but I haven't been invited by the distributor, so I am not going."

"You don't have to be invited by the distributor. You've a perfect right to go. It's your market. Now get on your bike and get a plane."

"Well, I can't possibly go now because it's too late to get the Golden Arrow today," he said. "If I take it tomorrow morning, I won't be there till the do is over."

"Mr Mason, this is 1963, not 1863." Silence. The next thing was a buzz to me.

"Morgan? Dai, get on your bike, you're going over to Paris tonight." I did my job successfully and spoke French to all the dealers, which is what they wanted, and came back. Very shortly after that we had an American advisor come in from Studebaker, a friend of Sir William's and a great friend of Bertie Henly's. He went round trying to advise Sir William and one of the things he suggested was that he should get rid of the old boys – one from Daimler and one from Jaguar.

'I came in one day from a little trip and I was suddenly told, "You are taking over tomorrow. Mr Hilton's been retired from Daimler".

'We had only bought Daimler out relatively recently and they were all complete with their own desks. It was very funny – they all had wooden desks and all the Jaguar people had steel desks, so you could pick out who were your Daimler people and who were your Jaguar people!

'A few days later Mason was retired and I took over both. Then six months later we formed a company called Jaguar Export Sales Limited, which I was a Director of. It was the first time we had had an Export Director at Jaguar. I took over all the exports, except America, and Sir William held that to himself for a long time. Eventually I persuaded him that he really ought to let me have America too, which he did.

'There was no faith in this company that America was a solid market. Sir William hated the American market because he had had some very bad early experiences with some of the distributors. One sued him – a terrible man who sued so many people and got away with millions of dollars in cases over franchising. When he didn't do the job, he was sacked, and then he'd sue the manufacturer. He got us for quite a bit of money and Sir William got served with a writ one day in the Waldorf Astoria, which he didn't like at all!

'So he did eventually hand over America, but he said, "I'm not going to accept crazy marketing plans for America, because I don't believe in it. It's a volatile market". They quite definitely and positively restricted the American market in the sixties, because they didn't trust the market as a solid market.'



Metalastik Ltd..

December 9th, 1963

Dear Mr. . . . ..

Following an illustration of our car in the Automobile Engineer we have a letter from Mercedes claiming Patent Rights on the use of the 'V' mounting for suspension unit,

I think the whole thing is pretty far fetched. I have written to them and acknowledged their letter and stated that we are investigating, but from a preliminary inspection, we do not think that infringement can be claimed.

As these mountings are of your manufacture and in fact they were designed in collaboration with your engineers, I feel that I should very much like to have your advice on this matter.

I have not yet submitted the problem to our own Patent Agents and as Metalastik and Jaguar will both be involved, I think we might make some joint approach.

I enclose a copy of the Patent Specification, together with a copy of their letter. You will notice that the Application date is December 4th, which is certainly not before the date which we started experimenting with you on this type of mounting on the Mark I 2.4. I won't say any more until you have had a chance to look at the Patent and see the letter.

Yours sincerely, W.M. HEYNES Jo Eerdmans and Sir William Lyons, who had an unusually close relationship, discuss the Mark X model, which Eerdmans today refers to as 'the lemon' (Jo Eerdmans)

Jaguar Le Mans D-type. Supplied by Jaguars direct to present owner, costing with modifications £4600. British Racing Green. Unmarked. Never raced or rallied. 21,600 miles. Fastidiously maintained. 150 – 180 mph dependent on axle ratios. Absolutely unique for road work. Any reasonable offer above £1900 or part exchange transaction considered.

May 1963



# Coachbuilding Company (1935) Limited

SIDECARS

19-31 ALBION ROAD · GREET · BIRMINGHAM 11

TELEPHONE: VICTORIA 1987-8

TELEGRAMS: SIDECARS, BIRMINGHAM

Directors: R. G. J. Watson, Chairman · G. C. Bennett, Managing · V. Watson · N. M. Stephins

#### ROY SALVADORI

Roy Salvadori was famous for his versatility which was amply illustrated on one occasion when he won no less than four races in a day: in a saloon car, a sports car, a sports racing car, and a Grand Prix car. During our discussions I mentioned that it was a shame we rarely, if ever, see the top racing drivers of today in anything other than a Formula One car.

'It is sad. It does help having the leading drivers competing as well. I am not saying that we drove any quicker than the other boy, because maybe we had better machinery, but it would be very nice if you could see Senna and Piquet in ordinary saloons.'

I reminded Roy of the BMW M1s that were run at the Grand Prix

meetings a few years back.

'Yes exactly, that was marvellous racing. I used to watch that and to me that was just as good as the Grand Prix. That was great stuff. There is so much money involved you can understand why nobody wants to have a driver hurt and they are more likely to get hurt in that sort of stuff than they are in the Grand Prix, because you feel so safe in a saloon.

'You do things that you wouldn't think of doing in an open-wheeled car. You just lean on each other, normally – you'd hardly do that with a Grand Prix car; that can turn nasty.'

'Did you,' I asked, 'literally lean on each other when driving the

Jaguar saloons?

'Oh yes, not arf! I think my greatest trophy was presented to me at a Jaguar Apprentices Dinner at the factory. The trophy was a small flat panel from the side of a Jaguar car, and it was painted in Coombs' grey. On the side there were patches of green from the Berry car, and patches of blue from the Endeavour car, and . . . .

'After the race, you'd reckon to have a few odd colours on the side! But you could do it, and it was fairly safe. If you went inside somebody, and lent on them it saved the understeer. Normally you'd be understeering off the road, but if you could nail somebody by getting inside, you just touched them and that would stop your understeer, and get you through. Otherwise, you'd be off the road – you'd be going too quick to go into the corner, so you lean on him a bit and push him over, and you're through!

'That's only if you think you're going to be quicker than the other car, otherwise he's going to be scrabbling over you, and do the same thing to you. But at least it gets you through, and if you are quick enough you can go on. But you couldn't do that in a formula car. You'd

lock wheels, and there'd be a terrible nonsense.

'You didn't do it so much in the E-type. That was a great thing for

The Swallow sidecar business was eventually acquired by the established firm of Watsonian, but they kept the Swallow name alive.

#### The Jaguar Trim Shop

Although Jaguar boasted the largest trim shop in Europe, Sir William Lyons would never allow it to be visited by those on factory tours. He felt that a sight of the mundane nature of the construction of seats, and the modest materials used in the unseen areas, would harm the Jaguar image and essential mystique.

XK120 Fixed Head. 1954. C-type modifications, 2 inch carbs, Michelin X tyres, Boranni steering wheel, musical horns, wireless, heater. Finished in pearl grey. £275.

May 1963

Trevor Taylor wishes to dispose of his immaculate 1960 3.8 Jaguar Mk II. Radio, Koni shock absorbers, gas flowed head, special exhaust system. £800 ono.

Mark I saloon, 3.8 E-type competition engine, 300 bhp. Wide angle head, etc., special clutch, overdrive and Konis. Wide track wheels and R6s, plus chromium plated wheels and Xs. 0–100 in 18.1 secs. Mark II white interior. Reutter seats, high ratio steering, rollbar, etc., absolutely perfect. Must sell. All mods under 5000 miles. £600 ono – G. Marshall.

January 1964

saloon cars. I can't remember driving like that in anything other than a

saloon car. They are pretty strong, you know.

'Twice driving Jaguars I have been very lucky with seat belts. Once was at Oulton Park when I had a tyre blow on a saloon, going into Cascades, I believe it's called, shortly after the start. A tyre blew and instead of taking the left-hand corner I went straight over the bank and into the pond! I was upside down, and trapped under water.

'You'd never get ordinary seat belts off, but John Coombs had got some very special ones from an aircraft. All you had to do was touch it, and they would "explode". I must have done that - I can't get my seat belts undone in an ordinary car now, even when it's the right way up.

'So I must have touched this and I was floating about in the bottom of the car. I was under water for a couple of minutes, and my chest was exploding. I thought this is the end. I started taking in water, and when I say water, it was foul water – the bloody pond stank so much I can't tell you!

'I'd given up and I was only half conscious when the marshalls jumped in and dragged me out of the back of the car. They'd been

looking in the front, and found me floating in the back!'

Salvadori had the misfortune to have a massive accident on someone else's oil at 170 mph on the Mulsanne Straight at Le Mans. The speed differential has often been criticised over the years and Roy retains vivid memories of the problem.

'Those bloody creepers – mostly French. If you saw a blue car you knew you were in trouble. That was the difference in racing standards in those days. If you saw a green car, you'd be fairly happy about it. But if you saw one of these little blue creepers that were on this Index of Performance – you'd wonder what they were going to do! They weren't experienced drivers and you used to go through agonies. You'd see them miles ahead and you knew they were going to take the fast car line. There was no way they could creep round the inside – no, they were going to do a big drift. They didn't, actually, drift those things because they didn't have enough steam, but they would just take the racing line.

'The red cars were normally very quickly driven because they were faster cars, so you didn't have a problem with them. In fact, they were faster than we were, than the cars I drove. They would only overtake

you on the straight.

'With the cars we were driving, nobody would really overtake you in a corner. Especially driving Astons; if you're going to be overtaken in a corner on the Aston, you're going to be sacked. That's where you made up all your time. We wouldn't expect to be overtaken in corners. You just watched your mirrors on the straight and kept to one side. The reason you are behaving is because it makes it safer for yourself if you keep out of the damn way.

'What these little creepers didn't understand was that they were going to get a sharp nudge up the chuff, and they were going to be hurt

themselves.

'In fact, I did collect one once going through the Dunlop Corner past the pits in the wet. There was one of the little blue cars in the middle of the road. I thought, "Oh no. He's not going to get over. No."

'So I tried the inside and the car started to break away, and I thought if I go on the outside I'm going to collect the hedge. So I just lined myself right up on him, braked as hard as I dared and hit him straight up the arse.

'He went straight over the hedge!

'There's this guy waving his fists for the next few laps, because it was the end of his car. Do you know, I forgot about it after a few laps, and I thought the car felt alright. When I handed over to Reg Parnell, he asked how the car was.

"Fine, Reg." I'd forgotten all about it, as you could do. It was getting dark and after about half an hour, old Reg came in and said, "All the lights are out of focus. They're shining up in the trees".

'The mechanics had a look and there was a bang underneath, and of course it had bent the headlamps and they had to reset them. I never heard the end of that from Reg Parnell, believe you me!'

I asked Roy how the DB3S and D-type compared and why the

Aston was so much quicker round bends.

'It had to be . . . because it never really had the power! I would have thought it was development. It's like any car, you can get to a certain standard and then you develop it. I think that the Aston was developed right to the very, very end. There was nothing left. I would say that with the Jaguar there was further development potential.

'Jaguar had this wonderful shape, but the brakes were much better on the Aston. It was really hard work racing against a "D", because you had to nail them. They would leave you on the straight and the advantage we had was just on braking and cornering. If you were close enough, you could always overtake a "D" going into a corner. But if you

didn't do it on the right corner, you'd had it.

'For instance, at Aintree it was no good overtaking the "D" on the corner before the straight – or two corners before the straight – because on the straight he would just muscle past. So really you had to do it at the end of the pit area and nail them there, or the next corner. Then you'd work like mad on the infield, just to be able to scrape enough time to get to the straight, and you'd see the Jaguar come tearing up on the straight. As long as you were ahead at Melling you had a chance.

'If we had clear circuits, we were on a par with each other's times on British circuits, so it was very difficult. When we were on the short circuits, it really got the Aston drivers a bad name, because you had to do some tricks to get in front of the D-types. You had to shut the door. You had to get them on the loose stuff a bit, so they couldn't use their

power.

'The favourite trick when you overtook a "D" was not to go through the corner flat out, but to go through the corner at their speed and edge them over onto the loose stuff! If you could get them on the loose stuff, that would give you half a second, and that was all you needed. If you just drift into them, and keep your car there, and just get them on the grass or the loose stuff, you'd get your half second, because they wouldn't be able to put their foot down. If you could get them off-balance, then you'd be in front. Then it was up to you.'

Did Roy, I enquired, have any particular memories of the other

driver's and the way they drove.

'Duncan was always rough. You could be rough with Duncan. I think you had to adapt your driving to the drivers. Moss was very, very good and very fair, and so was Rolt. So you would drive one way against one driver, and you'd be tough with another driver, because you were the same sort of types.

'You had the drivers who were very correct. I don't suppose I was terribly correct, but you'd have to, sort of, return the compliment. You wouldn't do a thing to Stirling – not that you'd have the opportunity because you probably wouldn't be near him – but you had to be correct with Stirling because he was a very correct driver. So you drove accordingly – at least that's what I used to do.

'If I knew anybody would chop me, I'd have the greatest delight in giving them the treatment! You'd say, "He can do it to me, so let me get

there first"!"

Of Peter Walker, 'Very good driver. Not really underrated because everybody rated him. He was a nervous driver, a bag of nerves, but on his right days and his right years, he was as quick as anybody. Very good driver. Very game. Nice to have in the team.'

On his XK120, 'I loved it. I'd had a very big accident and needed something easy to drive. I won a few races with it, but it used to roll. I went to see Lofty who was very kind. He took me to a race circuit where 1954 XK120 FHC, maroon, silver wire wheels, radio, heater, screenwashers, twin exhaust, special rear seats, £195. HP, part exhanges...

February 1964

they tested the cars and got Peter Walker to drive it. He thought it was OK and that was all I needed – someone to tell me it was OK. In those days Peter was a star and I was just starting.

'I felt very chuffed that Lofty had bothered, but he always did bother. My next memories are of driving for Ecurie Ecosse in the C-type. I think the worst position I ever had with the Ecosse car was a second. I was pretty hairy in those days, bouncing off hedges and all sorts!'



Sir William Lyons congratulates Graham Hill, that great character and driver of the winning E-type upon its début appearance – to say nothing of protagonist in numerous thrilling dices with Salvadori and Parkes and victories in Mark IIs. (Jaguar Cars)

Jo Eerdmans introduces the Prime Minister, Harold Macmillan, to the Mark X in New York in 1962. (Jo Eerdmans)



#### BILL CASSIDY - one of the backroom boys

After an apprenticeship at Armstrong Siddeley, he joined Jaguar in 1945 and worked as a Chargehand in the Experimental Department. Later he became Senior Foreman of the Experimental Machine Shop and was concerned with the building of the Le Mans cars and Motor Show cars, amongst many others.

'The Competition shop was mainly started because the competition

side was interfering with the model side in the Experimental.

'We'd build six competition cars in six weeks for Le Mans - it was

really night and day work.

'I remember Norman Dewis was once testing axles at MIRA. We were sending out axles from the shop with two different ratios, and of course they had knock-on wheels. I was walking up the shop one afternoon when we were doing these and putting the hubs on. We had fitters at MIRA who were changing the axles for testing. I didn't notice but this one axle was upside down on the trestle. The fitter said to me, "which is left-hand?"

'I said, "For Christ's sake, that's left and that's right"!

'When the axle got to MIRA the fitter said to Norman, "This hub's on the wrong side". With knock on wheels, if you have the hub on the wrong side, the wheel can come off of course.

'Norman said, "Oh, it'll be all right. We'll chance it."

'Well he did, and the wheel did come off, at 140 mph! There was a spring plate on the rear end of the C-type made of spring steel which was at least a quarter of an inch thick and about four inches deep. The car had dropped on to that. When he stopped, he'd lost two inches of it! And the wheel was found about a mile away down an air raid shelter!

'These things happen when you are working under pressure. There were times when we worked till three o'clock in the morning, then back in again at eight o'clock, and sometimes right through the night for two

nights without any sleep.

'I've been there with Sir William – he was Mister then – at two in the morning on the Show cars. He's been there as well, and he'd say, "I'll see you at seven o'clock, Cassidy". That was it. You were there, you didn't argue about it.'

'We had moved from Swallow Road up to Browns Lane in '52, and the Experimental Department was the last to move. We didn't have a Foreman then. I was working on a milling machine one day at 12 o'clock, and at ten past I was the Foreman – that was how they worked!

'I saw Lyons talking to this chap called Bill Robinson, who was the Body Shop Superintendent, and he was more-or-less looking after our department from the discipline side. He was no engineer as far as the mechanics, but a brilliant bloke on jigs and fixtures.

'They were talking together and eventually Lyons said, "All right

Robinson, I'll leave that with you".

'He came to me and he said, "Do you think you could run this shop?"

'I replied that I'd effectively been doing it for some time. "Right," he said, "there's your office". That was it.

'Once you had got Lyons's confidence, then you couldn't do anything wrong. But until you did, he was a very hard task master.

'When we used to do a show car, particularly the cars for the stand, he'd want it down as low as we could get it – the sleek look. I've even done Show models without exhausts on! I just put two tail pipes on!

'In the early hours of one morning we put the car on a ramp and lifted it up to the height of the stand. We then pulled the car down and clamped the suspension down. He said, "Now that's it, but what about those exhausts?"



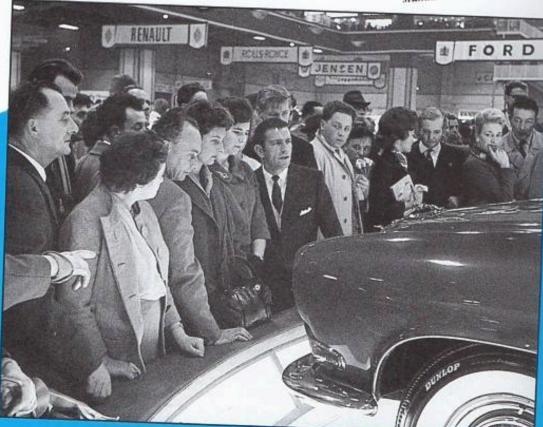
Although it seems that Lyons was generally a shy, retiring man, his taste in clothes, as well as motor cars, tended towards the flamboyant at times.

The purchase of Guy Motors in 1960 is a good example of how astute Lyons was. He purchased the company from the Receiver for £800,000, and acquired tax losses of £21/4m. In the first year of Jaguar ownership, Guy made a profit of £300,000.

new grace .. new space .. new pace



There was no questioning that the Mark X had 'space'. By British standards it was massive.



Comedian Norman Wisdom is seen (centre) examining the brand new Mark X which stole the 1962 London Motor Show.

'So I said, "Let's take them off and I can put two dummy tail pipes out the back".

"Brilliant idea. You go ahead and let me see it." That's how you got his confidence.

'We always used to get a yearly bonus because we weren't paid for any overtime, and I used to do very well on the yearly bonus. Then I had a heart attack in '67 and I was off work for 26 weeks. It happened over Easter and the day after the holiday, he was in the Shop and somebody told him.

"Oh," he said, "why wasn't I told?"

'I was in hospital and the sister came and asked if I knew anybody named Lyons. I replied that he was my boss. Apparently he had been on the phone asking how I was, and every day his secretary rang up. After a while I went back, not to work, but just to have a wander round the factory, and I saw him. Now in those days you only got paid for the first six weeks you were off and then it was up to Lyons.

'He said to me, "Don't worry about hurrying back and don't worry about your salary". I got paid the whole time I was away. He even said to me, "Are you happy with your treatment? If you're not, I'll send you

down to Harley Street".

Of course, a number of people used Mark Is and IIs for competitive

'He had been known to send his Foremen to Switzerland when they've been ill, for a week's holiday.

£165 secures two XK120s. One in good mechanical and body condition, one with scruffy body but in good mechanical order.

April 1964

1954 XK120, cream, special equipment model, fixed head coupe, wire wheels, Michelin X tyres, radio, luggage rack, twin exhausts, new batteries, original condition. Enthusiast's car. Three owners only. £245 or offer. Must be

November 1964

XK140 Roadster, 1956, new gearbox. One owner last six years, around £155. XK120. Body damaged. Four new tyres. Mechanically perfect, 120 mph. £60 ono.

October 1965



'I did all sorts of things. For example, I had put the XK engine in the first limousine and, as Lyons would say, "made it a runner". Sir George Harriman came to the works to look at this new Daimler. I had to put the Mark X suspension under it, but of course it was heavier than the Mark X, and so we didn't have the right springs on it. The chrome was stuck on with plasticine – it was just a "look at" car.

'I took it round to the front offices for Sir George Harriman to look at it with Sir William, and Mr Heynes was there of course. Heynes said to me, "Is it a runner".

'I said, "Yes, but for Christ's sake, don't take it on the road".

"Oh it'll be all right." So they took it on the road. And the bloody bonnet flew up, 'cause it was only tied down!



In what I take to be the sixties, a series of photographs were taken at the Browns Lane and Radford factories to illustrate 'Women in Industry'. (Jaguar Cars)



'I knew Mike Hawthorn well. We had the car that he was killed in back in the Shop. It was nearly cut in half by the tree he hit. The tree hit the offside and it went right through, nearly to the prop-shaft. He'd got no chance.

'It was the same when young John Lyons got killed. He'd missed the ferry on the way to Le Mans, and they didn't wait for him. They were supposed to wait in Calais, but they couldn't wait. He was trying to catch them, and of course driving on the right-hand side of the road, he pulled out to overtake and an American army lorry hit him.

'They just dumped the car in the Channel. It creased the Old Man. John had just joined the firm, and when Sir William brought him round to meet all the Foremen he said to me, "This is Mr John", but I knew him as John. He used first names with me because I'd known him when he was a small lad, when he used to come in the factory. It was the same with Jonathan Heynes. I remember him when he used to come to the factory with his dad at about three years of age. We had pedal cars in here for him before Christmas!



'I was in the Press and on television when we had the factory fire, because I rang for the brigade. We were working overtime and it was reported to me that they had seen smoke. So I picked up the phone and rang the gate, and told them to get the Brigade, and I told them to get the City Brigade as well, because it looked as if it was in the tyre stores.

'As it spread, we were pulling the finished cars out because it was travelling along the roof and the bitumen was dropping on to the cars, and they were catching fire. We got most of them out. Then the sawmill was next door, so we had to get rid of all the wood. We pulled tons of that out.

'Eventually the Brigades arrived, Birmingham, Coventry and Solihull Brigades were all there. That was a fire. It frightened you to death; when you see a wall 100 yards long, 20 foot high just glowing red . . . .

'Next day I was interviewed on BBC and ITV television as the person who'd given the alarm. I don't know who'd told them but they'd got it all wrong. They'd got me down as Chief Tester. I said to Norman Dewis: "You've lost your job"!

'I can tell you a story about the Mark V. We made the first chassis in the shop. It was about four inches wide and six inches deep, and they were using a block to hammer the metal over. Some bloody fool left the block in and welded the whole lot up!

'The block must have weighed 60 or 70 lbs. We had to cut the blooming thing open to get the block out!

'Another story I can tell you is about the D-types. We were building the cars for Le Mans and the body fitters came along with the top skins. There was the centre section, and these are riveted every 3/4 inch. Where the top met the bottom half and the door line, they had to be argon are welded.

'While this "U" section was open there were drawings in there and so many blokes around you couldn't see the car. They were round the back, under the car, putting the pedals in, and you were stepping on men to get in the car. These body blokes came with the top skin with the two cockpits cut out, laid it on, put a couple of pins in, marked it and took it away, and took some more off.

'I always remember Heynes came in the Shop and I was standing watching these men. They put the pins and marked it. "Bloody hell," he said, "they're not taking it off again. Rivet it up."

'So of course they got the rivets out and the old guns were going riveting this thing up. That was all done and they carried this body in to be welded up. Meanwhile one of my blokes kept saying he'd lost his hammer. Anyway the body was welded up and somebody happened to look down the hole for the steering column, and there was the ball end of a hammer!

'I daren't say don't weld because Heynes and Claude Baily were in the Shop. That was on the Wednesday. During the next couple of days I asked my boss and another fellow to help me split the weld and get it out. But they were too scared to touch it. Finally, it got to the Friday and they'd got the suspension on and the engine was in. So I got a fitter and apprentice to come back at eight o'clock. We chiselled the weld off and drilled out the rivets.

'We got 18 drawings out, plus the hammer, a pair of Gilbow snips, a protractor, and so on!

'We couldn't weld it up again, and Heynes came in on the Saturday morning. You couldn't see anything bar the weld had been cut.

"Morning Bill," he said, "how's the car going? Has it been welded?"

"Well," I replied, "it had been, but . . . it's going to be re-welded."

"Oh! Did you find the hammer?"

<sup>&</sup>quot;Yes," I said, "and 18 drawings, a pair of snips, a . . . . "

#### NORMAN DEWIS's daily testing logs - extracts

[Norman Dewis was Jaguar's chief test driver from 1952 until his retirement in the mid-eighties.]

- 5.06.52 XK120C No. 11 Le Mans car. Run along by-pass, 6 stops from 100 mph . . . Fit latest type header tank.
- 6.06.52 XK120C No. 1 Testing disc brakes.
- 27.09.52 Trip to Belgium for Motor road test [XK120C] and speed test Jabbeke road. Car driven to Dover. Breakfast 3/6 [17p], boat fare £1 16s 0d [£1.80], soap hotel 20F.
- 15.11.52 Blue Destruction Mark VII bottom rubbers broken after 36 pavé miles, N/R split pin sheared on damper mounting peg, top dust cap broken, all rubbers broken and fatigued, leak in brake system. Plasticine gauge fitted to record flexibility of engine mounting.
- 18.11.52 Short road test on Mark VII, LWK 173, to be prepared for Scotland Yard.
- 20.11.52 Test at Lindley on Production XK120C No. 030.
- 24.11.52 General road test on XK120 Drop Head Coupe MHP 494.
- 25.11.52 Road test on XK120 Mark III.
- 27.11.52 Re-test of Production XK120C engine only. Engine frozen at dockside.
- 27.11.52 Sump cavitation test on XK120C 011.
- 28.11.52 Steering test on Mark VI 120 Fixed Head Coupe. [This is probably an error and should read, Mark IV P.H.P.]
- 9.12.52 Cavitation test at Lindley on XK120C 001.
- 10.12.52 XK120C production test at Lindley on chassis No. 032.
- 22.12.52 Short run on Mr. Lyons's Mark VII LDU 268, investigation into vibration. Suspect faulty axle. Short test on Holden Australian car. Excessive lost movement in steering. Exhaust booms. Clutch (heavy spring). Steering and driving position very poor. Damping and suspension very hard.
- 5.01.53 Test run on Mark VII high waistline car.
- 15.01.53 XK120C head taken to Leamington station for delivery to Weslake.
- 22.01.53 Steering test with R. Knight on XK120 Mark III. Investigation into oversteer.
- 26.01.53 Collected blue 2 seater from Dunlops, HKV 455.
- 8.02.53 Trip to Boy's High School at Uppingham with Mr. Heynes XK120C 012.
- 27.02.53 Short road test on XK120C 001. 1952 Le Mans type rad layout. Dunlop disc brakes.
- 16.03.53 XK120C 001 taken to Silverstone for Dunlop disc brake test. Car driven by T. Rolt, D. Hamilton, P. Walker. Club circuit used, 1.608 per lap. Best time put up by T. Rolt, Im 18 secs. Brake fluid boiling every 10 laps approx. Water loss 6 pints every 18 laps.
- 30.03.53 Start of journey to Belgium. Boat from Dover to Ostend, drove on to Bruges, arrived 8.0 approx. Hotel St. Sherbet.
- 31.03.53 Trial and testing all 3 cars on the Jabbeke road.
- 1.04.53 Operation Day. All records broken. The Mark VII gave marvellous results. The XK120C very disappointing. Revs 5800 max. Cars used: Mark VII LWK 343, 120 ex J. Claes, 120C 012.
- 15.04.53 Mr. Lyons's 2 seater special [Brontosauraus P.H.P.] tested on the by-pass. 100 mph reached on the speedo (5100 rpm) . . . steering satisfactory, ride shade hard, insufficient cooling to exhaust silencer . . . reduce metal screen cowl, N/S tyre fouls wing valance on lock, transmission vibration at 5000 rpm, overrun very bad, gearchange very stiff. Bonnet prop rattles on bonnet. Give clutch pedal more clearance. Battery insecurely fastened. Suggest spring attachments for quick release of wing valances.

Jaguar subsidiary companies in 1965 Jaguar Export Sales Ltd The Lanchester Motor Company Ltd Barker & Co. (Coachbuilders) Ltd Guy Motors Ltd Coventry Climax Engines Ltd Coventry Climax Electrics Ltd Newtherm Oil Burners Ltd Jaguar Cars Inc Jaguar-Daimler Distributors Inc The Daimler Company Ltd Transport Vehicles (Daimler) Ltd Hooper & Co. (Coachbuilders) Ltd Sunbeam Trolleybus Company Ltd Coventry Diesel Engines Ltd Henry Meadows Ltd Badalini Transmissions Ltd (50%) Jaguar Cars (Canada) Ltd Jaguar of New York, Inc. Coventry Climax Engines (Australia) Pty Ltd (The above are wholly owned unless otherwise stated)

C-type Jaguar, ex-Duncan Hamilton, OVC 915, completely reconditioned by Jaguars. Standing quarter 12.68, standing kilo 23.36. First offer over £2000.

November 1965

E-type fully prepared and modified to Group III racing. Many places this year, superb road car. Family commitments force sale. Ridiculous price £850.

XK120, 3.8, alloy body, D/head cams, discs all round, limited slip, c/r box. On SUs at moment, as used on road only. Haggling starts £400.

Practice car from 1953 Le Mans. XKC 038 works car, recently overhauled at Jaguars, 285 bhp, £2000 including all spares.

October 1966

30.04.53 Testing multi-plate clutch on XK120 Mark III.

7.05.53 Practice day at Silverstone. Cars running very well. Moss turned car over, bodywork badly damaged, otherwise car O.K. Best lap times: Moss – Im 57 secs = 90.06 mph, Rolt – Im 58 secs, Walker – 2m 2 secs.

18.05.53 Quiet day in shop.

20.05.53 XK120C 012 - Testing at Lindley Weber carbs with J. Emerson.

19.09.53 Prepared the Lyons special for drag tests at Gaydon.

20.09.53 Drag tests on the Lyons special completed at Gaydon. Cockpit needs enclosing more.

7.12.53 Tested Earl Howe Mark VII.

4.01.54 Testing at Silverstone with S. Moss. Cars used – 120C 011 and 120C Light Alloy car.

3.03.54 Strapping additional anti-roll bar to Baily's Mark VII. Continuation of high speed test on high waistline Mark VII. Slight prang on banking. Slid off banking due to snow patch, front of car clouting the wire safety fence – very effective.

4.03.54 Short test run with Mr. Heynes on Mark VII C-type [presumably a Mark VII fitted with a C-type head – P.H.P.]

3.04.54 XKD 401 – first test at Lindley. Engine misfiring and banging, returned to works. 15 laps on banking.

9.10.54 Testing with Wally, Black 21/2 litre No.1 for rattles at rear.

24.10.54 Press day at Goodwood. Car used OKV 3. Clutch pedal faulty. Battery u/s.

1.12.54 Running Comp. Dept. XK120D with manual operated blind over radiator.

21.12.54 Pavé testing 2<sup>1</sup>/<sub>2</sub> litre No.1 with Girling dampers fitted. 42 pave miles. Two small cracks in front crossmember. Steering very heavy on both locks. Several cracks around rear body members at road spring eye fixings. Car unfit for further pave work.

26.01.55 to 1.02.55 Endurance test on petrol injection.

14.03.55 B.B.C. recording made for Alan Dixon. Car used XK120D OVC 501.

12.03.55 Testing 3 litre Ferrari at Lindley. Gearbox very noisy, whines and chatters, gears difficult to select. Engine very noisy and rough. Steering very heavy unless overdone on corners, then goes light. Cornering very good, rear end holds the corner with no sign of breakaway. If anything the front would go first. Oversteer very prominent. Brakes – very hard pedal. Suspect early fade. Engine vibration. Ride very hard. No kick in steering. Driving position very good, also visibility very good. 120 mph max on straight.

28.03.55 Short run on Merc 220 Saloon with R.J.K. [Bob Knight]

3.04.55 Testing 1st Production XK120D.

17/ Deliver Mercedes 220 over to France. Return with Duke of

18.04.55 Sutherland's Mark VII.

27.04.55 Testing OVC 501 and Comp "D" for tyres and handling. Hawthorn driving.

8.11.56 3.4 No. 2. Belgian test car. 127 mph at 4600 rpm.

17.11.56 Testing I.R.S. on D-type (swing axle).

30.11.56 Running petrol injection D-type for Shell film.

4.12.56 XK140 PRW 477 - run to Bletchley. Wrong day!!

 Testing at Bletchley with XK140. Dynanometer again broke down at 140 mph.

1.01.57 Short road test on XK150.

18.01.57 Running XK150. Bonnet opened at 104 mph!!! Roof badly dented, bonnet wrecked.

11.02.57 Factory fire.

18.02.57 Performance test on 300SL Mercedes. The performance is not as good now that MIRA have returned the engine as were the previous tests. Also seems heavy on consumption. Gearbox —

II, I.R.S. Mark II tested. Sir W. Lyons present. 3.8 Mark II gave best results.

29.02.60 First run on Competition E-type [E2A]. Not very impressive at this stage. Meeting with Cunningham, Hansgen & Momo.

9.03.60 Short road test on Rolls Bentley.

22.03.60 Meeting with all production supervisors and personnel to go over and sort out 3.4 production car. Improvements will be made to ensure a better quality car. Conversation with Sir W. Lyons re. production.

22.04.60 Film work with World Wide Pictures (XDU 984).

30.05.60 Running Aston Martin DB4. Steering niggle. Axle whine - 70 mph (bad). Ride shade hard. Some shake. Backlash in diff unit wind up. Car understeers. Steering direct and positive. Seating and pedal layout very good. Visibility good. Gear selector good. Some gearbox noise overrun. Exhaust note reasonable. Storm noise reasonable. Engine layout and finish good. Squeak from water pump.

MIRA - members and press Open Day. 3.8 Mark II banking. 15.06.60 132 laps (396 people as passengers).

16.06.60 Blue E-type - Dunlop tyre tests M1 motorway.

Short test on Daimler Dart V8 SP 250. Very bad scuttle shake. 29.06.60 Steering has no self-centring when cornering. Engine performance not impressive. General finish of car very poor.

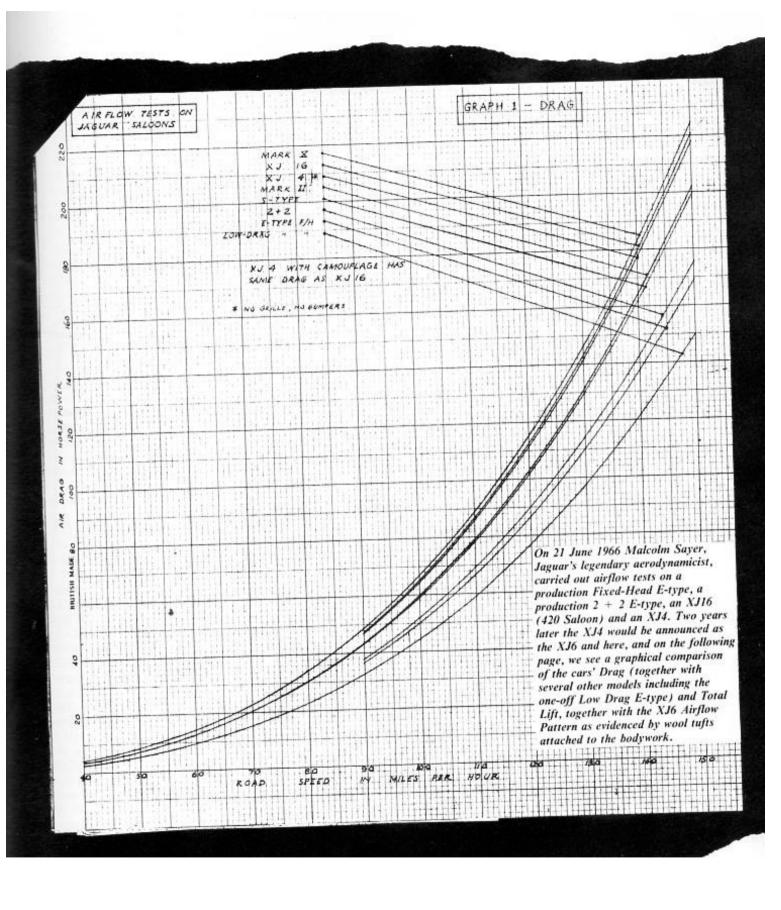
MIRA - performance test on Daimler Majestic Major V8 4.6 4.07.60 litre. Figures identical to Mark IX 3.8. Heavy judder on drive away - engine mountings. Steering has strong castor feel, front tyres squeal readily when cornering.

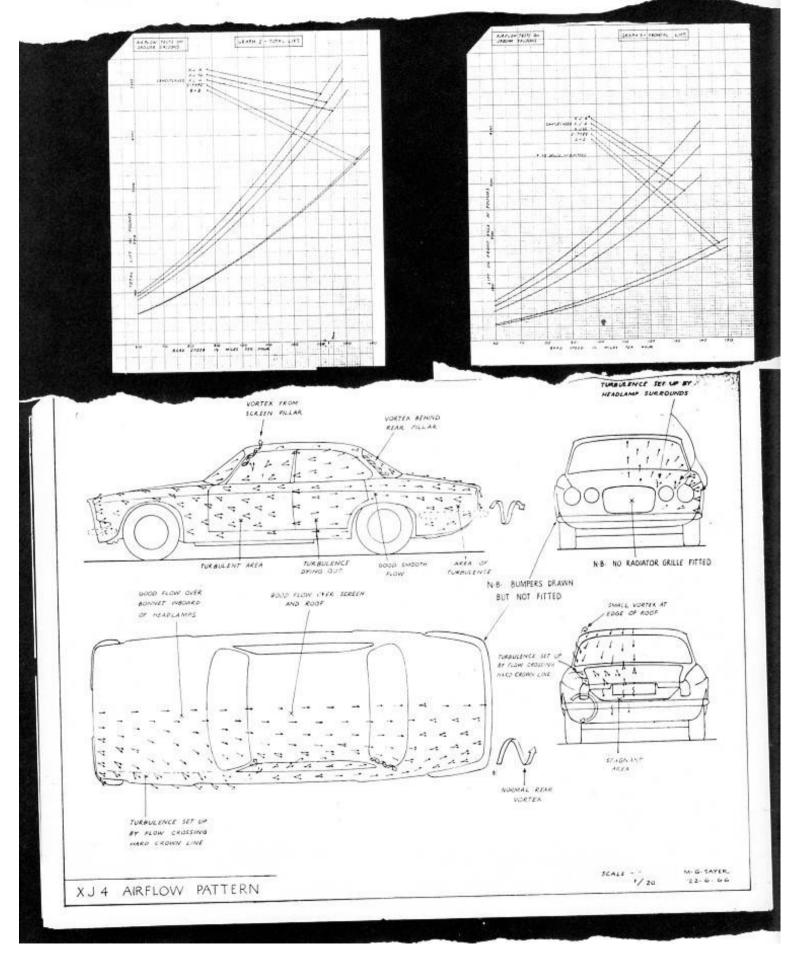
E-type pavé testing - bonnet fitted having bonded diaphragm 29.05.61 brackets in place of spot welds.

18.07.61 E-type water splash test - 10 leaks.









24th June 1966 To MR. W.M. HEYNES

From M.G. SAYER

Copies to: Sir William Lyons, Mr. Knight, Mr. Thornton, Mr. Croft WINDTUNNEL TESTS OF VARIOUS JAGUAR SALOONS Tests were made at MIRA on June 21st 1966 on a production Fixed Head E-type, a production 2 + 2, an XJ16 and an XJ4 with and without camouflage. The XJ4 also lacked a radiator grille and bumpers.

In each case drag and lift were measured and wool-tuft behaviour

was observed in the case of XJ16 and XJ4.

Results are compared with previous tests made by MIRA on Mark X, Mark II and S-type.

SUMMARY OF RESULTS

DOMESTICE OF THE OF			
Model	DRAG/HP at 100 mph	LIFT (lb) at FRONT	100 mph REAR
E-type	50.17	84.0	82.2
2 + 2	52.01	76.9	86.8
S-type	58.97	-	-
Mark II	59.87	÷	-
XJ4	64.63	212.0	63.4
XJ4 + Camouflage	65.19	188.1	51.7
XJ16	65.30	158.2	99.0
Mark X	66.57	-	-
MOTEC ON DECLUTE.			

NOTES ON RESULTS:

1. XJ4.

(A) Airflow pattern – see diagram. The hard crown lines of the wings, coupled with the rather abrupt change of curvature above and beside the headlamps, caused a large area of turbulence on the side of the car, extending to halfway along the rear door. This would have the effect of increasing drag and possibly giving rise to buffeting wind noise on the windows as compared with a more rounded front such as a Mark II. However, it is characteristic of most cars having the more angular modern lines.

The effect of hard crown lines was demonstrated by the performance of the car when fitted with camouflage. This gave the front wings a rounded top, by padding, and despite very sharp rectangular front and rear ends, the drag of the car rose by less than 1%.

(B) Drag. The high drag recorded was largely due to the turbulence described above but may be reduced by the following:-

 a) Fitting a radiator grille should reduce the volume of air passing into the bonnet.

b) Fitting a front bumper may reduce the drag induced by frontal lift and may also help to smooth the flow along the lower part of the side.

c) It may be found possible to improve conditions at the front of the car below bumper level once tests have been made with the bumper fitted.

(C) Lift. The frontal lift was very high, and unless this is found to decrease considerably when bumper and grille are fitted, stability at high speeds will be difficult to achieve. It must also be borne in mind that lift figures from MIRA have not always been reliable, and a dimensional check on lift experienced on the track would be reassuring.

2. XJ16

(A) Airflow pattern. The new front had almost identical characteristics to the XJ4 (q.v.) except that the presence of the bumper smoothed out the flow over the lower part of the side. The area of turbulence on the side extended some 18 inches further back than on the S-type.

(B) Drag. This was 11% higher than the S type, mostly because of the turbulence already described, but partly due to the larger intake for the

improved cooling system.

(C) Lift. Total lift was lower than for the XJ4 and it was more evenly distributed with 66% on the front axle compared with 77% for the XJ4. Unfortunately, MIRA could not provide reliable lift figures for the E-type for comparison.



#### Extract from the Chairman's Statement at the Annual General Meeting held on 25 February 1966

'In this year our car production would have reached an all-time record, exceeding the previous figure by a considerable margin, had it not been for the fact that, in June, we suffered an unconstitutional strike of five weeks duration. The effect of this strike on our profits was considerable, particufarly as it came at a time when we were enjoying the highest rate of production that we had ever achieved. Over £5 million in turnover was lost by Jaguar as a result of this and the unconstitutional strikes at certain of our suppliers, and it is perhaps appropriate that I should mention that £600,000 was lost in wages by our employees. There is no doubt that, had we been able to maintain full production, our profits would have reflected favourably the increased capacity which has been brought into use during the year.

'We continue to be concerned by the very considerable rise in costs, mainly outside our control, which we are called upon to absorb, represented by increases in production materials and wages, and in almost every element of establishment charges. Unfortunately, there is no evidence of these costs becoming stable in the near future.

'In my view there is no doubt that until we can establish in this country an effective control of wages relative to productivity, which I do not believe can be achieved by any voluntary system, the competitive position of the country must be insecure.

'However, there is to be found considerable encouragement in the fact that, in the main, the heads of our Unions now recognise the need for establishing discipline within their ranks. We must hope that this will lead to some integration between Unions, and the introduction of some system of penalties which will enforce compliance with the Procedure System laid down in the National Agreements.

'Unfortunately, there is still a belief amongst some of the highest Government and Union circles that strikes are less prevalent here than in other countries, and statements to this

The front cover of the sales brochure which introduced the XJ6 to the British motoring public.

effect make no contribution towards bringing home the fact that we cannot afford them if we are to stay in business successfully. I believe it to be true that, whilst the number of official strikes may be less in other countries, our total of unconstitutional strikes is vastly greater.

I would summarise the position by saying that with modern, wellequipped factories and an established and very successful range of cars at our disposal, we are in a very competitive position. I hope the day will not be too long delayed when I can safely state that we and the industry as a whole have resolved satisfactorily the two major factors endangering our future livelihood - rising costs and unconstitutional stoppages of work. A solution to both must be found before the Company and its employees can be assured finally of the prosperity for which we strive and which we know can be achieved.'

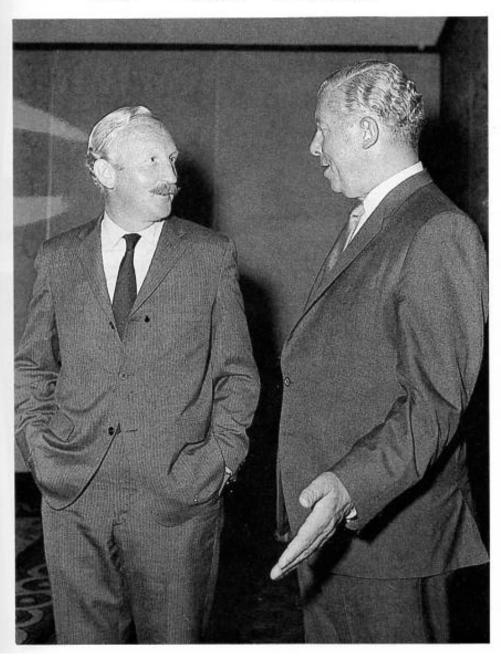
W. LYONS

Cars of interest that were, at various times, under the control of the Experimental Department, together with their rate in some instances (as stated on Company paperwork)

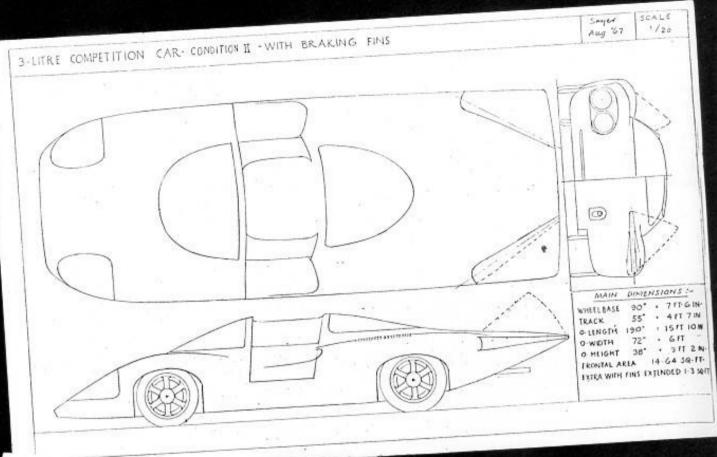
COMPET	ITION CARS			
	XKC 201	Green - beir	ng reduced to produce	
	XKC 301		eloping body design, being broduce by Service Dept.	
OVC I	XKD 401		oan to Montagu Motor Museum	
OKV I	XKD 402	Green - solo		
OKV 2	XKD 403	Green – sold		
	XKD 505	BRG - sold		
	XKD 506		Blue; body only – scrapped	
	XKD 601	Cream and I	Blue; Briggs Cunningham –	
	12122221112	scrapped	- U 922 81	
	XKD 605		oan to Turin museum	
	IVO CHASSIS IVO.	riore-giass t	oody – scrapped	
XK TYPE	S			
HKV 455	660001	On loan to I produce by !	Dunlop (crashed) – reduced to Service Dent	
JWK 675	670172		en-off whilst on loan to Dunlops	
MHP 494	667001	Black Drop Head Coupe - last used by M		
	804001	J. Lyons	ton monute and and to	
	004001	produce	top - recently reduced to	
	804004	Blue Hard-to	an eald	
XK150	004004	Diuc Haru-it	op – sola	
ARISO	No chassis No	Pourl Grov El	HC - reduced to Produce	
No. 1			Mike Hawthorn	
140. 1	3037003	red – sold to	MIKE Hawthorn	
MARK VI	II/VIII/XI			
	710002	Black	High Waist Line Body	
	No chassis No.	Black	Integral construction	
			Scrapped	
KRW 621	710006	B.R. Green	Light Alloy Body Sold to R. Berry	
	750001		Drop Head Coupe	
			Reduced to Produce	
	750002		Drop Head Coupe	
			Reduced to Produce	
LHP 3	710177	Battleship		
		Grey	On loan (?) to Mr Weslake	
MKV 617	713757	Green	Sold to Duncan Hamilton	
	727554 BW		Unfinished car intended for	
			Queen Mother	
SWK 280	75052 DN		3.8 L 9:1 engine	
2.4 LITRE	SALOONS			
	900001	Black		
	900002	Birch Grey	Reduced to Produce	
	900003	Pastel Blue	Reduced to Produce	
	900004	Battleship	reduced to Froduce	
	- 0000	Grey	Sold	
	900005	B.R. Green	Reduced to Produce	
	900006		Reduced to Produce	
	900009	Pearl Grey	Sold to Mr Whittaker	
	900019	White	Pavé Test Car	
	200012	· · · · · · · · · · · · · · · · · · ·		
			Reduced to Produce	
	908558	Pearl Grey	Reduced to Produce Wrap-Round Windscreen	

VDII 204	07/012	P.P. C	CIIbtt
YDU 294	976913	B.R. Green	
SWK 765	970690 BW	B.R. Green	SP 250 engine
	120852	Warwick	2.L. amaina Guad
		Grey	3 L engine fitted
3.4 AND 3	8.8 LITRE SALC	OONS	
No.1	No chassis No.	Pastel Green	Reduced to Produce
No.2	900163	Battleship	
		Grey	Sold to Dunlop
No.3	No chassis No.	Battleship	
		Grey	IRS Reduced to Produce
TVC 420	S970095 DN	Sherwood	
		Green	Light alloy doors, etc
			Sold to R. Blake
	S970690 DN	B.R. Green	On loan to Dunlop
			Light alloy doors, etc
			Air suspension
			SP 250 engine Sold
	No chassis No.	Black	Convertible
			F. Gardener's dept.
			Redaced to Produce
Body No.	E004182	Black	Wide Rear Track Fuel
			Injection IRS
			Reduced to Produce
	975760	Cotswold	
		Blue	P.A. Steering
	976913	B.R. Green	Competition type
	993346	Pastel Blue	Competition type
	978688	Carmine (?)	
		Red	Competition type
5861 HP	201300	Battleship	12: 7 (27)
		Grey	Specially welded body
Lamaki	I body shell	Unnainted	Sold Not numbered (For modification
I OH MK I	i oody snen	Unpainted	to GT type)
	104892	B.R.G.	Restyled boot, etc
	213291	Cotswold	Resigned boot, etc
	21.221	Blue	Air conditioning
	207515	B.R.G.	Estate Car
Mark III N	No.1 Exp III/I	Gunmetal	IRS Borg-Warner
	Ton Lap III,	Cumetar	(proto S-type)
			Scrapped
Mark III N	No.2 Exp III/2	Birch Grey	IRS Manual gearbox
	210002 BW	Cotswold	2
		Blue	3 carburettor mock-up
E-TYPE			
VKV 752	No.1	Pastel Green	returned to Produce
	No.2	Pearl Grey	Returned to Produce
	No.3	Unpainted	Scrapped
	No.4	Cotswold	0525000 \$1.000 E00
		Blue	Fuel Injection
			Returned to Produce
	No.5	Red	Corvette Gearbox
			Scrapped
	No.6	Metallic	FHC Low roof line
		Grey	Scrapped
9600 HP	No.7	Metallic	FHC Press Car Sold
		Grey	
	875001	Mist Grey	Pave Test Car
			Dismantled

	885007	Bronze	Scrapped
4133 RW	850025	B.R.G.	3 L engine
			5 speed gearbox
XJ8(2 +	2)		27-97
No.1	1E 50001	Sand	Scrapped
No.3		Pearl	Crash Test Scrapped
MARK X			
	No.1	Black	Daimler engine
	302485 BW	B.R.G.	Lightweight Body
MARK II			1000 1000 1000 1000 1000 1000 1000 100
3339 KV	1B 50010 BW	B.R.G.	4.2 L engine
XJ5			- 55
No.4	ID 50003 DN	White	Prepared to receive V12
No.5	ID 50002 DN	Sand	V12 engine
DAIMLE	R SECTION		0.0000000000000000000000000000000000000
1902 HP	100666	Red Hard	SP 250 Sold
		top	
	100571	Green Hard	
		top	SP 250 Sold
	100003	Black	SP 252 Restyled
	100004	Maroon	SP 252 Restyled



In 1968 the former Jaguar Cars Inc., became one of three divisions of British Leyland Motors Inc., and Eerdmans, who was approaching retirement, stood down and proposed Graham Whitehead as President of the newly-formed company. Today Whitehead is in charge of Jaguar's US operations. (Jaguar Cars US)





In late 1967 Malcolm Sayers designed three more mid-engined sports racing cars with a view to following up his XJ13 design. Of these three, the one described as 'Condition II' had the novel idea of 'braking fins'. An airbrake had been used, of course, by Mercedes-Benz on the 300 SLR at Le Mans in 1955 when attempting to combat the effectiveness of the D-type's disc brakes.

In the early sixtics Jaguar's entire engineering and development division comprised just 30 people.

Warren Pearce face to face with the opposition at Crystal Palace in 1967. (Laurence Pearce)

#### LOFTY ENGLAND

'Sir William drove everything we made, including the Brontosaurus. I remember him belting round the factory in it!'

'I first met Michael MacDowel in 1959 when Lister were running at Le Mans with 3-litre Jaguar engines we loaned to them — which unfortunately proved a bit unsatisfactory inasmuch as all the titanium connecting rods broke — and he was then their reserve driver. A very quiet, unassuming, nice bloke, who just stepped in when asked to and went as fast as anybody alse.

'At that time, he was doing a short service commission as an engineering officer in the RAF. Some little time afterwards he wrote to me and said that he was finishing his commission and he wondered if there was any job for him in Jaguar Cars.

'In actual fact, we wanted someone in the Service Department so I offered him a typical Jaguar job: You worked seven days a week, 24 hours a day, for nothing!

'By then I'd been elevated to Assistant Managing Director. We weren't racing ourselves then, of course, but I got him to take over the competition activities. He was responsible for all the Tour de France successes with Consten; he and Ted Brookes.

'Then we launched the E-type in '61 and the first few cars we delivered, I had arranged to be delivered to people who might do some good with them, which included Coombs, Sopwith, McLaren and one or two people like that. So MacDowel became involved in that and then it went through the stages of being upgraded to the first Lightweight "E" that we did and which Coombs ran. So MacDowel got to know Coombs very well.

'About '63 MacDowel talked to me about John Coombs having offered him a job as General Manager. So I said, "Oh yes, but you do realise that the average life of a General Manager at Coombs of Guildford is something like three months". John always fell out with them.

'Coombs came to me, quite rightly, and asked if I was prepared to release him. So I said, "To do what and for how much?"

'He said it was to be General Manager, and at three times the salary I was paying him! I couldn't really foresee that he was going to get that for a long time at Jaguar, unless he took my job. So I said to MacDowel, "You go ahead. You're sticking your neck out, but if you can stick it out, you're home and dry."

'On a couple of occasions I had to go down and give him a pep talk. Anyway they got on very well, and later in the piece Coombs provided him with his hillclimb cars in which he became British Hillclimb Champion.'

John Coombs has now retired and lives in Monaco. Michael MacDowel became Managing Director many years ago, though sadly due to British Leyland, this famous and very successful garage is no longer a Jaguar dealership.

'Jackie Stewart introduced me recently as the first man who gave him a works drive.

'I said, "That's not quite true, Jackie".

"Well," he said, "the first works-supported drive."

'That's quite true. His first works-supported drive, in effect, was with Coombs in the Lightweight "E".'

In March 1967 a sheet of performance figures for the Jaguar saloon cars, Rover 2000TC and Mercedes-Benz 250S and 250SE models was prepared and sent to Messrs Whittaker, Heynes, England, Hassan, Knight, and Mundy with an information copy to Sir William Lyons. Attached to the report was a memo which stated the following.

'The performance figures for the 2.4-litre saloon are those of the Mark I model since no Mark 2 version has been tested. This is due to the fact that, despite very serious investigations, it has never proved possible to produce a 2.4-litre Mark 2 saloon with a performance in line with that of the Mark I.'

#### ON THE FACTORY FIRE

The only thing that kept the whole damn place from going up was the cars hanging from the roof. We were just changing from the 140 to the 150 and in those days we always used to keep a few bodies-in-white, complete shells. So the easiest thing was to hang them down from the roof girders.

'At that time there were no sprinklers and none of the release panels that automatically open and let out the fire. We hadn't done any of that 'cause it was a wartime building, and the underside of the corrugated iron roof was bitumastic painted, which doesn't half go!

'I was there when this happened. We had 16 fire brigades and it was a roaring furnace. The only thing that saved it was that the whole roof structure got so hot the weight of these bodies pulled the roof girders down, and the fire went out of the top. Otherwise, they weren't stopping it.

'My office was on the right-hand side by the Service entrance. We lost the Service Department and it got to the point where I didn't think I was going to have any records. So I moved all my records out of my office over the road to a little cafe place we used to have.'

I asked Lofty how it had started.

'Nobody's very sure. There was the Service Department and the Saw Mill, and a press board wall between them, and for some reason that got on fire – whether it was a cigarette or what, I don't know. Nearby was the tyre stock and that got on fire, and that got the roof on fire, which was bitumastic, and in five minutes it was neither here nor there.

'As it happened, it was just the moment we were launching the 3.4 Mark II with automatic transmission, and we had a modification on it. They were all round the building!

'It was six o' clock in the evening and there were only about 20 or 30 people there. So we had to get all these bods: "Driven an automatic?" "No!"

"Get in! Don't worry about. Get the hell out of it". And they just drove them away and stuck them anywhere, on the road or anywhere.

'The lucky thing was that it didn't get to the paintshop which was nearby. If it had got through to there, we'd have had it. But we didn't lose anything that wasn't easily replaceable, fortunately. The cars didn't matter. Everybody pulled together and was wonderful. We only lost two days production.

'Dunlop, who had bought our old factory at Foleshill, had extended it but they said, "We haven't moved in yet, so you move in". So we moved the test and rectification to Dunlop, and we had a new building – 100,000 square feet or something – put up in 13 weeks from the word go. Wonderful, the help was fabulous.

'So production went up, instead of down! Successful fire!'

#### ON THE JAGUAR/LOTUS CONNECTION

'We were one of the first people to use monocoque construction, and I remember Bill Heynes talked Colin Chapman into going monocoque. He was a good friend of ours. Colin was at Silverstone once and tried our car soon after he got started.

'We bought Lotus.

'Old Sir William was no fool. The most important thing is the engineering. If you haven't got the right engineers, you needn't even start. He felt it was no good waiting till Heynes retired, he wanted some bright boys to follow on. So he tried talking to John Cooper and he was quite impressed with Cooper, but they'd got their own business and they didn't want to know.

'Then he talked to Gordini - good firm, very good. He and I went to see Gordini when we were in Paris. 'Then one day Chapman came up in conversation. I was Chairman of the Motor Sport Committee and so came across him. At that time he was down at Hackney underneath the railway arches, so I arranged to go and see him. Graham Hill was then working for him as a mechanic.

'So I took Chapman out to lunch and suggested that he might like to come in with us. "No," he said, "I've got this far on my own. I'm scratching through at the moment so I'd like to carry on." Fair enough.

'Then he got to the Elan and by this time he'd moved out to Cheshunt. I was still seeing him and he mentioned he was having a lot of trouble with the body of the Elan and the paint bubbling up when it got hot. So I said, "Look, we had exactly the same trouble with the SP250. We've put it all right. So bring your blokes up and we'll tell you anything you want to know".

'So he does this and then he said, "What about coming to see my place". So I went down. It was one of these modern industrial units, not

very big - not bad.

'When I got back I said to Sir William, "I reckon we could buy this lot for £1/2 million, complete with the motor racing side". He said he'd better have a look at it, so I took him down.

"I think you're right," he said. So we then negotiated with Chapman and got to the point where they actually shook hands. It was a share deal. The Old Man then went off to South Africa, or somewhere, and about a week later a letter came from Chapman saying that they'd reconsidered this and would we be good enough to let them withdraw.

'So I thought to myself, "He's not coming in on the right foot if he doesn't want to do it". So I said, without asking the Old Man, "fair

enough".

'I'm very glad I did. I can't imagine Colin Chapman and British Leyland, can you?'

### CYRIL CROUCH, who joined the Company in 1948, on the two Mark VII convertibles that were made

'I had quite a lot of input on those.

'We had a screen in front and also some peculiar device I devised for the side windows. I had a cam arrangement and two shields came across. With the window down they snapped back into position and went down into the door. It had an hydraulic linkage on it and a driving system that was developed by an offshoot of Wilmot Breedon.

'There were two fully prepared cars. The reason we didn't go ahead with them was that there was a lot of scuttle shake, and we had to do a lot of reinforcing. We didn't have any assistance from the chassis itself, being a separate chassis, but the Old Man decided they looked pretty and were a good exercise. But then they were broken up, which was a great pity, and there were never any photographs taken of them.

'The linkage I did for the hood was very much along the theme of the big American cars. It was fully automatic – all you had to do was release two catches, press a button and the whole thing went down. The interior of the hood sticks were lined, and it was a very smart looking

car.

'But the scuttle shake was considered to be too bad for a Jaguar.'

'We were then beginning to concentrate on the little car, the 2.4 as it came out. It started life built around a 2-litre, four-cylinder engine. Before it came out, we abandoned the four-cylinder engine and went for the 2.4, six-cylinder.

'This was the first unitary construction that we did, of course, and I designed the body, particularly the front end around the 2-litre, four-cylinder engine. It went to a 2.4, then a 3.4, then a 3.8 and then a

It was calculated, in the late sixties, that the Jaguar V8 engine was going to cost £132 2. 3. in material and £29, 0. 4. in labour.

4.2, still in the same body construction that I did around the fourcylinder!

'I once said to Bill Heynes, "Look, Mr Heynes, you remember that I did this body around a four-cylinder, 2-litre engine. Now you're talking about putting a 4.2-litre engine in it".

"Oh, well Cyril, if you've done your job right, it'll be all right. By the way, this V12 engine we're beginning to look at - will that go in?"

"No it won't!" I replied,' recalls Crouch with much mirth.

'Space has always been a problem with Jaguar. We couldn't fit automatic transmission to the E-type until we did the 2 + 2. We had the same problem with the old Mark I/II. When that started out, automatic gearboxes were still in their infancy.

'Bill Heynes asked me why I hadn't catered for the automatic gearbox on that model, and I replied that it wasn't even in existence when I did the tunnel.

'The next model came along and I said to him, "Are you going to put automatic transmission in this?"

"No, I shouldn't bother with that. . . Where are you going?"

'I said, "I'm going to switch the tape recorder on!"

'Similar things happened with the XJ40. I asked if we were going to put the V12 engine in it. "No no," I was told, "we've got a power unit coming along which will do everything that the V12 does."

'I said I was pleased to hear that because we'd have a lighter motor

car. Now, of course, they're trying madly to put the V12 in!"

#### ON OTHER PROJECTS

'Sir William started working on a little runabout, van-type body. This was the time when his son was given a sort of free hand, and he started to develop a lightweight, van-type thing.

'It never got to anything, but he had this thing built up. I don't

think it ever went on the road - peculiar looking thing.

'The Old Man would play around with various shapes and projects

he was a ball of fire, of course, all the time. He'd have several projects
going at the same time. He would take a current car and start to carve it
up, see what he could make of it, realise it was a waste of time, stop that
one and start to think about something else.'

I reminded Cyril of a small sports car that Norman Dewis had once

mentioned to me was built in the mid-fifties.

'Yes, I remember that. I think that one did go on to the road. It was only a one-off again. I think Sir William decided we've got to earn some money somewhere.

'It hadn't got the revolutionary design or flair that Sir William produced with the XK120. It was the sort of size of a little MG at that time. It was a very small car, very low and had a separate chassis, which was bought in.'

#### ON THE DAIMLER SP250

'That was another acquisition, but it was like a bit of jelly on the road!

'I remember one Saturday morning, not long after we'd completed the purchase of Daimler, I went down with Bill Heynes and we got into one of these Daimler Darts. We went round this sort of perimeter track.

"Good lord, Cyril. The first thing you've got to do is put some

steel reinforcings in.'

'Of course this was the time when they were very much involved in bus work, and they were doing a bit of armoured car work as well.

'I said, "What are you going to do with this, with the military

stuff?"

<sup>&</sup>quot;Oh that's the only profitable thing that he's bloomin' bought, he says!"

'The Mark X wasn't a success really. The body was very heavy. Bill Heynes insisted on 16-gauge sill panels and so on. The heating distribution was pretty poor. It was too large for this country really, and it wasn't quick enough off the mark for the Americans. It was sluggish.

'The 4.2 engine made it a nice motor car, but by then it had got a name, and whatever we did to it, we couldn't do much of a rescue act on it

'That was one of the non-successes of Jaguar - about the only one, I would think.'

'Then we did the 420 with a facelift on the front end, and the rear end. I think we ran out of ideas on how much further we could modify that car! So we had to start afresh on the XJ6.'

'There were six prototype XJ Coupes made, which had "M" registrations. Tom Jones wrapped his round a lamp post and wrote it off. I hit some parking meters and wrote mine off and Ted Willday's example rusted away. I don't think there are any of them left.

'There was a long delay in bringing them out because there was a production problem at Castle Bromwich. We were in the throes of introducing the long wheelbase, and that was eventually the reason why we dropped the thing. Overall we didn't make many because it didn't fit into the production run at Castle Bromwich. It needed a separate track.

'The Americans really instigated the model. They persuaded us to do a two-door, pillarless saloon. But the price we put it into America caused problems. They said that they didn't expect to pay more for a car like this. They expected to pay less for it than the normal sedan!

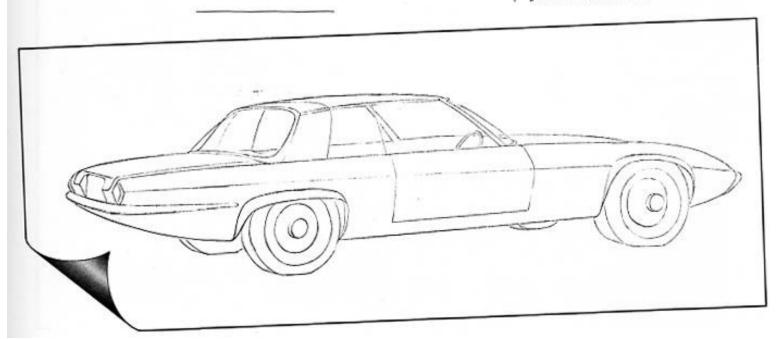
'They lost their initial enthusiasm for it and, with the production problems, we dropped it.'

'I've always been totally committeed to everything body - from body-in-white to what I used to to call the last bit of rag trim we put on the floor.

'John Egan joined us and said, "Cyril, I wish you wouldn't call our expensive carpet and cloth, rag!"

'So I said, "Well John, you're new to the game. It's always been known as rag trim, and it always will be."

In September 1968 Malcolm Sayer sent Sir William Lyons his first thoughts and sketches for a '2 + 2 sports car based on XJ4 parts'. This was the beginnings of the XJ-S and amongst the variety of designs put forward was this one.



A 3-litre production version of the XK engine was considered for production and was fitted in a Mark II saloon for assessment. Norman Dewis, the Chief Tester, was impressed as can be seen from his interesting conclusions. (Norman Dewis)

#### In April 1967

The Mark II 2.4 with Ambla trim was costing £690 14, 9, to produce, and selling for £1341 10. 3. incl. Purchase

The Mark II 2.4 with leather was costing £705 4. 6. to produce, and selling for £1393 11. 4. incl. Purchase

The Mark II 3.8 was costing £726 15. 612. to produce. (Materials £605 4. 01/2./Labour £121 11. 6.) and selling for £1541 17, 4, incl. Purchase Tax The XJ6 was estimated to cost £788 4. 512. to produce. (Materials £677 0.

101/2./Labour £111 3, 7.)

If the following items are deleted: Mouldings, Bonnet Pads, Rim bellishers, overriders, clock and the minimum amount of felts are used then a further saving of £12 0. 0. could be made.'

From: Mr. N. Dewis.

EXPERIMENTAL DEPARTMENT.

5th January 1968. EXP/2469/ND.

To: Mr. Hassan. Copies to: Mr. Heynes, Mr. R.J. Knight,

Mr. Mundy, Mr. Wilkinson.

#### 3 LITRE ENGINE PERFORMANCE TESTS.

Tests have now been completed on the Gold head and "Small inlet port" head which in turn have been performance tested on the 5 litre engine.

Vehicle:

Warwick Grey MK II.

Ingine:

3 Litre No. E 1317 C.R. 9:1

Carbs:

Twin H.S.8.

Needles:

Axle Ratio:

4.55:1 with Overdrive.

Puel:

Shell Super.

ACCELERATION TOP GEAR	AV. SSCS.	*SMALL INLET PORT*.
10 - 30 m.p.h.	6.18	6.1
20 - 40 .	5.9	6.0
30 - 50 *	6.0	6.2
40 - 60 .	6.4	6.3
50 - 70 *	6.3	6.3
60 - 80 "	6.7	6.9
70 - 90 *	7.1	7.7
80 - 100 *	8.2	8.8
90 - 110 *	12.7 O/D Gear.	13.3 0/D Gear.
GEARS  0 - 30 m.p.h.	3.4	3.4
0 - 40 *	5.6	5.7
0 - 50 *	7.3	7-2
0 - 60 *	10.4	10.3
0 - 70 *	12.8	12.6
0 - 80 *	16.3	16.05
0 - 90 *	20.6	20.2
0 - 100 "	25.5	25.3
0 - 110 *	34.9	35.4
Standing + mile	17.2	17.03
Max. through timing I Max. at the end of at	ights 118.7 m.p.h. )	.,,,,
Weather Condition.		

#### Weather Condition.

34°F TOOL Atmos. Temp. S.W. Gusting 10 m.p.h. Wind. Zero

Baro.

Instrument not recording.

#### CONCLUSION.

From the above results there is no performance gain in favour of the "small port head", I would therefore recommend we use the standard Geld Head.

The general driveability and pick up is very good, also the engine is smooth and free from vibration periods throughout its speed range.

Contd....

For a 3 litre engine the performance figures are very impressive even allowing for the 4.55:1 axle ratio which is well suited with the overdrive which gives an overall ratio of 3.54:1. It was possible to record 90 m.p.h. to 110 m.p.h. in normal top gear but the best timed figures for this speed range were recorded in overdrive.

I feel there is a wide interest for a good 3 litre engine for which this unit would be most promising.

The maximum speed of 122 m.p.h. recorded at N.I.R.A. is not the ultimate maximum that could be achieved given a longer straight than is available at N.I.R.A.

M. Dewis.

N. DEWIS.

XJS with camouflaged body-lines. Always controversial as a styling exercise, even some Jaguar-lovers might think this a positive improvement/



#### BOB BETT, who for many years ran the advertising agency retained by Jaguar Cars

'It was my brother who started our business and he called it Nelson Advertising. He had been with Henlys, the motor people, who were then sponsoring Swallow Coachbuilding. When he started up his own business, he did Henlys' advertising and started off with Swallow as one of the firms we worked for. My brother started in 1928 and I joined him in 1932. By that time, they had become S.S. Cars.

'My brother was very friendly with Bill Lyons personally and I remember, in the first year I was there, doing our budget for S.S. Cars which came to £1000 for a year - 13 pages in *The Autocar* and 13 pages

in The Motor.

'In 1935 they brought out a different version of the S.S. The first ones had had the low-slung bodies and they had the nickname of the "Sexy Six" or the "Sissy Six", or whatever. Apart from that S.S. was a bad name in Europe at the time, with the Nazis being around.

'My brother decided that they should change the name from S.S., and Bill Lyons said, "All right, come up with some ideas," - which we

did.

'I, in fact, was the one who produced Jaguar. We had a few other names because we wanted something you could get your teeth into, an animal preferably, but a lot of them were taken up, and Jaguar happened

to be available, although it was used by Alvis for an aero-engine.

'Anyhow Bill Lyons didn't like it, but he was always a man who wanted other people's views, including Bertie Henly, and a few others. They were all against it, because they thought S.S. was a good name. My brother spent two or three days in Coventry staying with Bill Lyons to insist that we got this name, and he eventually agreed. So we then said that we would call it the S.S. Jaguar, and we came back.

'The next day Bill Lyons phoned up my brother and said, "I've

changed my mind now".

'My brother, who was called Bill too, said, "You're too late. There's an advertisement in tomorrow's Daily Mail." And that was that!

'My brother really took a chance because we could have cancelled it, but he was so insistent on it, and of course it was the best thing that ever happened to them.

'Lyons didn't know much about finance. It was my brother who promoted Jaguar to a public company. He had spent a year or two in the City and got to know finance very well. When Bill Lyons wanted to go public it was my brother who coped with it all for him. He had no business feeling in that way at all.

'The reason for going public was to raise money. It was Henlys, of course, who started him off and Bertie Henly always felt that. It was one of the things that he did to help Lyons, and it was quite true.

Bertie was a very able man and very shrewd.

'The worst thing that happened in racing was the disaster in 1955. I was at Le Mans that year. Mike Hawthorn and Fangio were having a colossal battle at a tremendous speed and they were just neck and neck. I was in the pits when it happened and we didn't quite appreciate how bad it was.

'Lofty, who was in charge of the pits, called Hawthorn in and Mike was very distressed and he didn't want to drive any longer. But Lofty insisted, "Mike, you're going out again".

'Then the Mercedes built up a lead and pulled out, to everyone's astonishment at about two o'clock in the morning. Then Jaguar won the race and it was called a hollow victory, which it was in a way. But it didn't mean to say, in my opinion, that they wouldn't have won.

'At the time we had all agreed that, whoever won, we would advertise the race. But when I came back and saw the headlines in the Daily Express, "Disaster at Le Mans", I changed my mind a bit.

'Next morning, I got in the office a bit quick. Bill Lyons was on to me very early on and asked me what I thought about the matter. I told him that I had changed my mind because there was a lot of blame attached to Jaguar, in people's minds, being involved with this big fight with Fangio. I said that I thought we should cancel all the advertising space and he replied that he would phone me back in an hour's time.

'He phoned back and asked if I still felt the same. I said that I did and that all the papers would accept cancellations. So he said, "All

right".

'In my opinion, that was about the best decision I ever made.

'Bill Rankin was the Publicity Manager. He was a terribly good fellow and very able. He was the one who had the concept of the Jaguar for the front of the car. We got on famously and I went all over the world with him to all the exhibitions.

'I was the first one to take a Mark VII over to America. I was planning to go and Bill Lyons heard of this and there was a possibility of a dock strike in New York and so he asked me to take it over as my private property. I went on the *Queen Elizabeth* and had a pleasant journey, and they took over the car in New York.

'Bill Rankin certainly played a very large part in creating the Jaguar image. We tried to build an image around Jaguar. We never compared it with other cars, we just built an image around the car, and that was that.

'We came up with the phrase, "A Special Kind Of Motoring". That is different from anybody else, we're not comparing it with anybody. It's just a special kind of motoring, which it was. It was a perfect image of the car.

'Sir William was a great believer in advertising, a very great believer. In fact, during the war, when newspapers were only four-page papers, we had an advertisement every month in the *Daily Mail* and *The Telegraph*. It was just a three-inch double column but that was as much as you could get.

'After the war we adopted the idea of a special size of advertisement which was a quarter of a page across. The publications were loathe to accept it, but it gave you a big image for less money.

'We also gave the name Sovereign to Daimler. Lyons didn't know what to call it and Eric Colbon dreamed it up. But Lyons didn't like long names and he though it was a bit long.

'I said, "It's not because, although it has four syllables, it always sounds like two when you say it". He accepted that, and it was adopted.

'I used to go to all the motor shows around the world, and I was the first advertising man to do this. I well remember the E-type launch at Geneva. It was held in a great park and Eric and I sat in the car that was used for the launch and registered 9600 HP.

'I got in by putting my legs in first, and then my bottom.

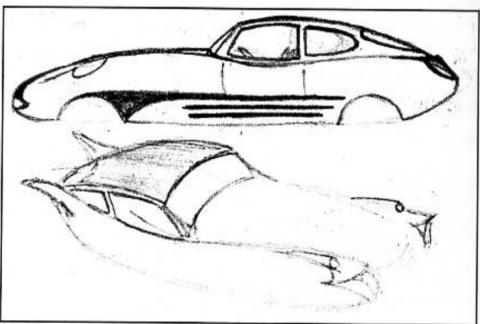
'Sir William said, "You don't do it like that, Robert. You put your bottom in first, and then your legs!" 'We often had to do drawings and paintings of a new model even though we didn't have a photograph because the car wasn't built! We had to take the paintings to him for his comments. Maybe we decided the eventual shape of the car!

'Sir William didn't like being projected himself. He was a bit backward about that. That's why, at the XJ6 launch, Bob Berry dreamed up the idea of recording his voice, instead of him having to speak at all the sessions which went on for four days. His image was projected up on the screen, the lights went out and the recording started. It was a good idea.

'Sir William was always very proud of his cars, and he alway wanted everybody involved to be very proud of them.



Bob Bett and Eric Colbon made a presentation to Sir William Lyons following a long and fruitful business relationship between Jaguar Cars and the Nelson Advertising Agency. (Bob Bett)



These sketches, or flights of fancy, were discovered in Norman Dewis's testing logs. (Norman Dewis) DR SAMIR KLAT who, whilst doing research at Imperial College, London, developed one of the privately-owned Lightweight E-types to a fascinating degree (as described in the Jaguar E-Type - The definitive History) and during a distinguished international business career, held the position of vice-president of the largest General Motors dealership outside the States.

'If it wasn't for William Lyons's sense of shape and eye, Jaguar wouldn't exist today.

'It is style that sells cars. Ninety per cent of people buy a car because it looks good.

'I think the XJ40 is a very nice car, but I do not think it is as far ahead of the opposition as the original XJ was when that came out. When that car came out, I would say it was aesthetically by far the most beautiful saloon car on the road. It is, of course, a question of opinion.

'I still think that 20 years later, though. Its road comfort was far superior to anything else. It had a reasonable performance. But it had two things going horribly against it. The car was about the most unreliable form of transport one could imagine, even from day one. I was in the Lebanon at the time and they sold quite a lot there. It was a powerful car, but they were as unreliable as hell. They had nothing but troubles.

'The other thing was that they had appalling, badly designed small details that would fall off or break, which was a shame. In fact if that car had been produced by the Japanese or the Germans, every six months they would have developed small details. There would have been an evolution.

'My criticism, if I can say it, to the British motor industry generally is that they have *brilliant* ideas on cars. These things are like a child. They arrive, they are born: and then they are left – like the Mini. Today it is exactly the same Mini which Issigonis developed in 1958. It is exactly the same car; but the world has moved.

'The original "Beetlewagon", when it first came out, was an abortion – but every few months it was developed. If you look at a Volkswagen or Porsche manual, every three months you get new bits and pieces. They are constantly upgraded. This they never do here.

'Some of the XJ6s, when they went to the Lebanon, had an oil consumption problem. The dealer was having quite an argy-bargy with Jaguar and I suggested that we bored the engines out just slightly, so we had a bit of clearance, on two of the cars. It cured the problem.

'On all the early batches he sold, before they were delivered, he used to whip the head off, send them in, and have them bored slightly oversize. In the absolute sense, they were probably more noisy, but let's look at it in the right perspective. They were noisy, probably for the first half minute, until they warmed up. The other thing is, of the overall noise of an engine, this constitutes, probably, 5-10 per cent of the noise. So if the 5-10 per cent is itself noisier by 5-10 per cent, you are talking about 1 per cent extra noise. Who detects 1 per cent for half a minute?

#### ON WALLY HASSAN:

'There were stories around that Jaguar only bought Coventry Climax to try and get Wally Hassan back. He was probably the only real engine designer they had. I think he was head and shoulders above all those that came after him. You have the evidence. He was the creative brain behind the concept of the XK engine, he was the brains behind all the race winning Coventry Climax engines. Now when a man has so many successful engines, all different types, he must have something. You don't hit it by luck so many times.

'How many other people can be credited with such a successful range of engines?'



Mr Heynes to Sir William Lyons upon the impending retirement of the former. The paper is undated but would be about 1968

#### DEPARTMENT RE-ORGANISATION

'The question of my retirement and the most suitable successor to the position of Technical Director of the Company is, as we are both aware, a very difficult problem to solve but in the plans which I had in mind, this is completely overshadowed by the question as to how long you yourself intend to remain in control of the Company.

'If you are proposing to be here another three or four years, which I cannot believe, I would offer one solution. If, on the other hand, you intend to retire within the next twelve months, I would certainly be prepared to stay, if you wished, and help in the integration of engineering control in the best possible way, to Jaguar's greatest advantage, in what is apparently going to be the specialist car group.

This question of the merging of the specialist cars, which I know Sir Donald has agreed will not take place so long as you are in charge, will, I feel, almost certainly be one of his first moves when you relinquish control and I am not at all sure that it will be as bad for the Jaguar name and the Jaguar personnel as it would at first appear. We have a pretty sound group of people here on the engineering side who are quite capable technically of holding their own with the people at the other companies and I think there is little fear of them getting swallowed up into an unidentified amalgam. I feel quite sure that the identity of the cars with their special individualities will be allowed to remain and let us

hope that people have sense to leave the name Jaguar without putting an "L" in front of it, which would certainly ruin our image in America.

'There is little doubt that if this merging of the specialist cars into a single group takes place, it would be much better for it to take place whilst you were still at the helm and I feel I could be of very considerable assistance in supporting the Jaguar engineering group in such a union, and I feel that you could look after the interests of the employees, particularly the senior staff, very much better than by simply handing over the Company as a going concern.

'Even supposing you were to stay with the Company another two years and the Company was to show an extraordinarily good profit, and the new models did exceptionally well, as I believe they will, this is no guarantee that the three firms in question will not be unified – neither is it any guarantee that when you have gone the best people on the Jaguar staff will be given senior appointments. I believe if the integration took place whilst you were still in the chair, you could lean heavily on the side of the people who have served us so well for so long.

'I would like you to give this matter some thought. Perhaps we could again discuss it when we have our meeting. I am equally anxious, as you are, to do the best I can for the Company which I feel, as you do, is very much a part of me, but a lot must depend on your personal decision on this matter.

'I would assure you that I have not dicussed this matter with anyone else but there is quite a lot of surmise inside and outside the factory as to what is going to happen and the feeling of uncertaintly is not assisting the Company to look to the future as it should be doing.

SCHEME ONE

'Assuming that you are remaining with the company a minimum of three to four years, I would not see that there is any point in my staying beyond the launching of the V12 and V8 engines. Someone has to take over some time and this is probably the best time to make arrangements.

'I believe to get satisfactory performance, it would be necessary to have two Technical Directors, who would have to be on the main board. which would be Mr. Knight on the vehicle side and Mr. Hassan on the engine side. We may be faced also with putting someone in charge of styling. I cannot believe that you would want to carry on any longer the styling as it is done today. I think we should start a proper Styling Department run as a unit but with someone in control, so that you could deal with a single man instead of having Mr. Gardner, Mr. Thorp, Mr. Saver, Mr. Rogers and anyone else who likes to enter into the fray, and by this means we could possibly weld the styling into a single unit. For this job I would recommend Mr. Sayer who I think is the only one wiith originality on the staff, and who has the ability to produce a workable drawing from a model which can be made without a lot of fiddling. His designs are drawn to scale and he talks in the language of the present-day body designer and has a strong engineering background. The only problem is whether his health would stand up to such an appointment, and whether he could adequately control staff.

'Below Director level the split up would be much as I have discussed on many occasions and the suggested family tree is given separately. SCHEME TWO

'If a merger of the three companies were to take place, I believe there would be strong pressure from the Leyland Group to put in Spencer King, now Technical Director of Triumph, one of the engineers responsible for Rover development in the past, either as Technical Director or Chief Engineering Executive.

'If the merger takes place at an early stage, there is little doubt that the power unit group to handle the specialist car engines could be formed with either Mr. Hassan or Mr. Mundy as Chief Executive. This, I believe, would be most satisfactory from Jaguar point of view. On the chassis side, Mr. Knight's capabilities are well known to Dr. Fogg and to quite a



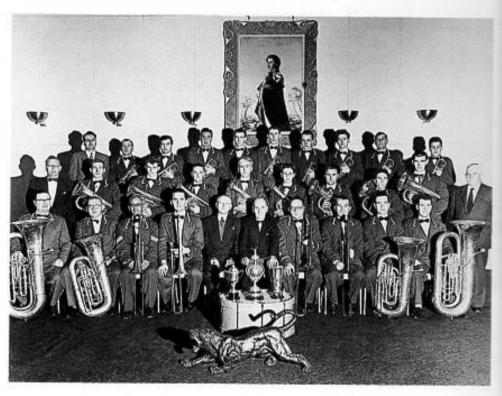
The chef rose to the occasion and appropriately presented his version of the 'leaper' in ice (Jaguar Cars US)

number of other people in the engineering heirarchy and although it is not quite so certain that we could get him heading the suspension group. I believe we could use considerable influence and with Dr. Fogg's backing I think we could easily be successful.

'On the body side there is little doubt that it is intended that body engineering as such, for all companies, will go to the Pressed Steel Co. and their satellites. This leaves only styling and the decision on models must inevitably remain with the management and the styling department of the individual firms. You would obviously look after this company whilst you were here but it is necessary that someone or some group of

people are trained to follow in your footsteps.

'I am afraid this is not quite the direct answer, which I had hoped I would give you, but this matter, which concerns the whole future of the Company, has been so uppermost in my mind, that the positioning of individuals lower down the scale is to me relatively unimportant.'



The feline conductor seems to be having a harsh word with the Jaguar works band. (Jaguar Cars)

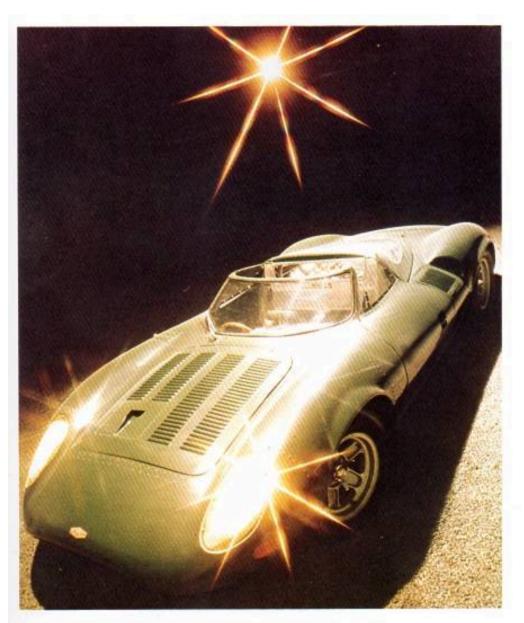
From Mr Heynes to Sir William Lyons - 12 August 1968

#### POINTS FOR DISCUSSION

 From your note it appears that you are now prepared to give Engineering fuller control of the situation than you have been prepared to do in the past, and I believe, and always have believed, that this is necessary.

Whilst you had your finger completely on the pulse, it operated satisfactorily but such delegation as you have given has not been complete enough to permit the various Directors to operate completely and prove whether they can, or cannot, carry the job.

- 2) There is no doubt the Company is badly missing Mr. Whittaker who was responsible more than anyone in the organisation for welding the various departments into a single unit. He could, and did, discuss with all the Directors the various day to day problems without any personal aggrandisement, and was virtually the second step in the ladder, which gave cohesion.
- 3) Mr. Silver as overall Director of the production side, has never been effectively replaced and there is no single man on production who is capable of, or willing to, force through a programme.



Not only were Malcolm Sayer's designs aerodynamically brilliant, but they were so damned beautiful as well. (Jaguar Cars)

One of George Thomson's sketches from his early days in the styling studio. 'This one was done in 1968 when we were doing the XJ27 (XJS). This was the Styling Studio proposal that went up against the one that Malcolm Sayer did and was based on the same package. We did a quarter scale model with Malcolm's one side and on the other side the studio's design, which was mainly Ollie Winterbottom's at the time.'

