

40 miles of England

President

TOM LUSH  
U.K.

THE ALLARD REGISTER

Hon. Secretary

R. W. MAY

8, Paget Close, Horsham, West Sussex, RH13 6HD. ENGLAND. ('phone Horsham 61372)

Mid-West U.S. Correspondent: Don Hudgins, 130, E. Bodley, Kirkwood, Missouri, 63122. U.S.A.

Vice-President

FRED G. WACKER, Jr.  
U.S.A.

THE BULLETIN

July/September, 1980

Page 1.

MEMBERS MEETING

Member Mr. Brian Sharp has kindly invited fellow members and friends to meet at his home, Bibsworth House, Broadway, WORCS., on Sunday, 21st September next.

Brian has suggested that members may arrive from mid-day onwards as he has ample parking area in the vicinity of his house, for Allard and non-Allard cars. Bring your own food, or there are restaurants in Broadway town. Impromptu Concours 3 p.m. approx.

From the T junction in Broadway take the Stratford-on-Avon road A.46, and shortly after passing the speed de-restriction sign, a flagpole on the right hand side denotes the entrance to Bibsworth House. There will also be an Allard sign to assist members.

Our Hon. Secretary writes: "I do hope to see a fine turn-out of members and friends on this occasion, and we do thank Brian for his very kind offer".

It is with very great regret that we have to report the sad death of Club member Mr. Jean Davidson. Jean campaigned a tomato coloured Cadillac J2 Allard in the late 1940's and early 1950's in America when he was working as the White House correspondent of the New York Times.

Our Hon. Secretary writes: "Of latter years Jean and his family have lived in France, and when my wife and I are motoring on holiday in that country each year, we always look them up, and we talked Allards and of the old times of racing his J2. He was most interested in high performance cars and only last year he took us for a ride in his big B.M.W. sedan. The previous year (1978) when we called he was suffering from a slipped disc and was unable to drive. He then had a V8 Maserati, and on seeing it, I thought that we were not going for a run in it. Not a bit of it; Jean said 'Ray, you're an Allard racer of yesteryear, here's the ignition key, give it a good run. Watch the rev. counter; max. speed in 3rd is 100 mph, 4th is 145, and 5th is 170 mph, respectively'. With me settled at the wheel, my wife and I had a memorable run through the Loire countryside.

It was on this visit, that I was able to inform Jean that his famous J2, Chassis No. 1574 in which he had considerable successes had suddenly re-appeared in New Jersey, and was being restored after many years of neglect. His second 'J' type (Chassis No. 2191) is owned by member Mr. Jean-Pierre Mondonnet, who lives near Poitiers, France".

Member Dean Butler of Cincinnati, Ohio, U.S.A., in a letter which took 2½ months to reach England, writes as follows:-

"I very much enjoy the Bulletin and I do appreciate the considerable work you put into getting it out.

Some time ago you asked if I could advise about building a hot Cadillac engine, and the key points are:-

1. If possible, start with a 1959/62 engine, as it has a full-flow oil system. Earlier engines are only partial flow (only excess oil is filtered). This engine gives you 390 cubic inches, with plenty of potential to bore for more cubes.
2. At worst, use 1954 or later heads. The earlier heads had very small exhaust ports, and that cuts down greatly on power. Note that all 1949-62 heads are interchangeable. In fact, it takes an expert to tell the differences in the various 1949-62 engines, as they all look the same. The 1963 engine is entirely different.
3. Use two 4 barrel carbs. A number of aluminium manifolds are still available for this set-up. Four 2 barrel carbs. are o.k. but more difficult to keep in tune.
4. Use a light forged steel or aluminium flywheel (for acceleration). I have some spares of each type, if anyone is interested (and spare competition pressure plates).
5. Modern "high-rev" hydraulic tappets and a cam of 265° - 285° duration are good for a hot street engine. Iskenderian can still provide a good range of cams.
6. Flat top pistons in a later engine will provide about 10:1 compression - plenty high with today's petrol.

With careful building, the above engine should be streetable and provide about 450 genuine horsepower. The late 1950's engines, with three 2 barrel carbs. put out 335 horsepower straight from the factory. With a hotter cam, better carbs, a light

"continued on Page 2.

/continued from Page 1.

flywheel and careful "blueprinting", 450 b.h.p. is available.

'Ohio' George Montgomery, in the early 1960's got over 700 b.h.p. from these engines in drag racing. Of course, he used 6 - 71 GMC superchargers, really wild cams, etc.. As I believe I've mentioned before, George Montgomery still has a shop in Dayton, Ohio (about 60 miles from here), and he will be happy to build any kind of Cadillac engine and ship it to anyone, anywhere. George is probably the best Cadillac engine man in America."

Thanks a lot, Dean for your letter and the technical data on hot Caddies. ED.

-----  
In a letter from member Roger Morello of Mason, Ohio, U.S.A. we extract the following:-

"Some time ago, I spent many enjoyable hours reading through an almost complete set of 'Road and Track' magazines from 1950 through 1954. In those years, many of the local and regional sports car races were reported, and there were dozens of action photos of J2's and J2X's. The list of wins and high placings was really impressive. Towards the middle of 1952 the C-Jags and Ferraris (250man/4.1/4.5/4.9) began to win the longer races where their speed could be used to advantage, but the Allards were still tough to beat on the short airport courses that were prevalent in the U.S. at the time. By 1953 the big Cunninghams were beginning to win even on the shorter courses, but since there weren't very many Cunninghams running, the Allards could be counted on to place second as a rule. I urge anyone who can do so to borrow some of these early magazines if they can find them - they make fascinating reading.

My J2X restoration is coming along nicely. All that's left is to put on the color coats of paint and get some minor items plated....."  
Yes, Roger, these were great days for Allard successes. Glad to read that your restoration job is progressing well. ED.

-----  
GILDING THE CADDIE - by ROGER HUNTINGTON. (Continued from April/June issue)

We all know that 'pump-up' is an ever-present difficulty with hydraulic lifters. However, Connell mentions some new angles to the problem: When the tappet first begins to pump up it is due, not to valve 'float', but to a sudden increase in oil pressure from the pump caused by the relief valve reaching its full capacity. This set in at about 4200 RPM. Then, with the valves barely on their seats, when the valve train begins to float a little at around 4500, the whole assembly opens up like a telescope and torque takes a nosedive.

Obviously this can be combatted in two ways without going to solid lifters:

(1) Drill out the oil pump by-pass to increase capacity, and (2) lighten the valve reciprocating parts and increase the spring tension to prevent floating. Detroit Racing Equipment uses both methods.

Reworking the pump by-pass reduces oil pressure to 30 pounds at all times and using light tubular push rods, along with special springs having 50% higher tension than stock effectively delays valve float. Heavier springs also can be used in the lifter. They have operated hydraulic lifters as high as 6200 RPM at D.R.E. Incidentally, the chilled iron Olds lifters are always used in place of the steel Cadillac units for longer wear. Some owners insist on these hydraulic tappets because they're supposedly quiet in operation, although Connell says you can't tell them from solid lifters if everything is set up right.

For high-RPM competition and hot road jobs he uses the light solid lifters. They've turned up to 7000 with these.

The last basic modification generally undertaken by D.R.E. for their road engine customers is to increase the piston displacement. This trick gives the unbelievable acceleration with these big bruisers.

Connell says you can safely bore out the Caddie and Chrysler blocks 3/16 inch to 4/16 inch, but the Olds is limited to around 1/16 inch due to thinner cylinder walls. The Cadillac crankshaft can be 'stroked' 1/4 inch by the metal-spray method, but the Chrysler is limited to 1/16 inch because the rods contact the camshaft.

Actually, the Caddie is the only one of the three on which it is really practical, from a dollar standpoint, to increase displacement. Maximum potential in this case (3/16 inch overbore x 1/4 inch overstroke) is 390 cubic inches. That can mean better than 400 foot pounds of torque.

Insofar as lower-end trouble with these big engines is concerned, Connell said no changes are necessary over the stock set-up for road engines, although he prefers Bohnalite copper-lead bearings to the G.M. Dureux. Only one case of metal-spray failure has been reported.

For racing, he increases bearing clearances 0.001 inch and ups the sump capacity for better oil cooling: he also mentions that the undercut fillets on the Chrysler crankpins are weak points for high-RPM work because of stress concentration.

You're probably wondering about the actual dynamometer performance of some of these fabulous mills. D.R.E. has a water brake in the back of the shop, correct within 3%, and the Cadillac Engineering Department opens up its facilities to them now and then. So there are some reliable figures to draw from.

Their 'three-quarter' Cadillac road engine has stock bore and stroke, stock '52 head

with dual quad carbs., Mallory ignition, and a  $\frac{3}{4}$  cam. No figures were available for this particular modification, but I'd estimate the peak output as about 240 HP at 4500 RPM. This engine can also be had with oversize bore and/or stroke. The full-race road version is as above, but with reworked heads, 9:1 compression ratio, full-race cam, and light valve train with solid lifters; this one was certified to develop 254 HP at 5200 with stock displacement on pump fuel in 1951 trim. It should pull 270 HP now.

Connell's all-out competition engine for pump gas is similar to the above, but features a radical roller-tappet cam, high-lift rockers, modified oil sump, 30° valve seats, blocked manifold heat and magneto. He claims it shows a peak of 310 HP at 5400 RPM, and a maximum torque of 354 foot pounds at 3200.

As for the Chrysler engine, this will give slightly higher performance, perhaps 5%, than the Caddie under similar conditions, due to the large valves and cleaner porting layout. A D.R.E.-modified full-race Oldsmobile road engine with conventional Edmunds manifold showed 220 HP at 5200 RPM. This is a bit below its potential.

That's how D.R.E.'s souping ability stacks up.

I might mention that this terrific engine output calls for certain modifications in the Hydra-Matic transmission to get the maximum benefits in road performance. Internal valving, controls (centrifugal and throttle) and spring tensions are generally altered to raise the full-throttle shift points from 4000 to 5000 RPM and to get quicker, more positive shifts. When Connell does a job on a Hydra-Matic, that tach needle drops on a shift quick as any hot rodder can throw a cog. He also removes some of the blades from the fluid clutch unit to give more slip at low RPM when the radical cams won't pull anyway; this raises the lock-up speed, but has no effect at higher RPM.

Connell has big plans for Indianapolis this spring. He had hoped to enter a Cadillac-powered car in '52, but couldn't get it ready in time. He swears he'll be ready this year. However, since the latest AAA Contest Board ruling denies the displacement advantage that had been expected for stock-based engines his job won't be simple.

His car design will help a lot. It's a super-low-built Kurtis-Kraft with off-set drive line and an overall height of 27 inches. Connell says it will be especially fast in the turns and easy on tires.

It will be an extremely interesting project to watch. In fact, this whole Detroit Racing Equipment business is a fascinating thing.

THE END.

Member Dr. S. Jewell-Thomas, of Glendale, California kindly sent us a copy of the programme of the Warner Hodgdon Historic Sports Car Races held on 26th April at Riverside, California. In his letter he writes:-

"...Bill Harlan of San Francisco drove an excellent race in his 1952 Allard J2X, to really run away from some quite stiff competition. He also won this race last year at Riverside and performed very well at Laguna Seca races last August. I can't remember if he won there or not. He also drove an excellent race in Group VI to win in his 1958 Lister-Chevy.

My 1952 K2 is still running excellently and gives me, as before, a lot of pleasure.."

Thank you very much, Stephen for this interesting programme - we note Bill Harlan's J2X was the only Allard entered. Glad to know your K2 is still giving good service. ED.

We extend a very warm welcome to the following new members:-

William H. Ward	of Elyria, Ohio, U.S.A.	M2X M.2001.
Roger Gilks	" Staple Hill, Bristol, ENGLAND.	91P 1795.
John C. McGregor	" Springfield, Ohio, U.S.A.	J2X 3155.

From the Bulletin of the National Motor Museum Trust, of Beaulieu, Hampshire, England we extract the following:-

"We have obtained on loan, this country's original dragster, namely the car developed by the late Sydney Allard in the early 1960's. This car, along with Sydney's enthusiasm and the promotional ability of Gerry Belton, put drag racing on the map in this country. The Allard Dragster was offered for sale at an auction some months ago, and failed to reach its reserve, but was bought privately by a great Allard enthusiast, Brian Golder, who has kindly loaned it to the Trust. It will be on show from the Summer of 1980."

Our Members are invited to the following events:-

- (1) The Transport Trust are holding a major transport event at Blenheim Park, Woodstock, Oxon. on Saturday and Sunday, August 30th and 31st next. Full details from Mr. J. B. Hill, 6, Chapman Crescent, Kenton, Middlesex. ('phone 01-204-9440)
- (2) Horsham Lions Vintage Transport Rally, Bank Holiday Monday, 25th August next. Entry forms from Mr. Nicholas Symes, Greenfields, Lyons Road, Slinfold, Horsham, W. Sussex. ('phone Slinfold 790262; Daytime Horsham 2547)

We apologise for the incorrect telephone number of our Hon. Secretary in the April/June issue of the Bulletin. It is, of course, HORSHAM 61372.