



# Western Model A News

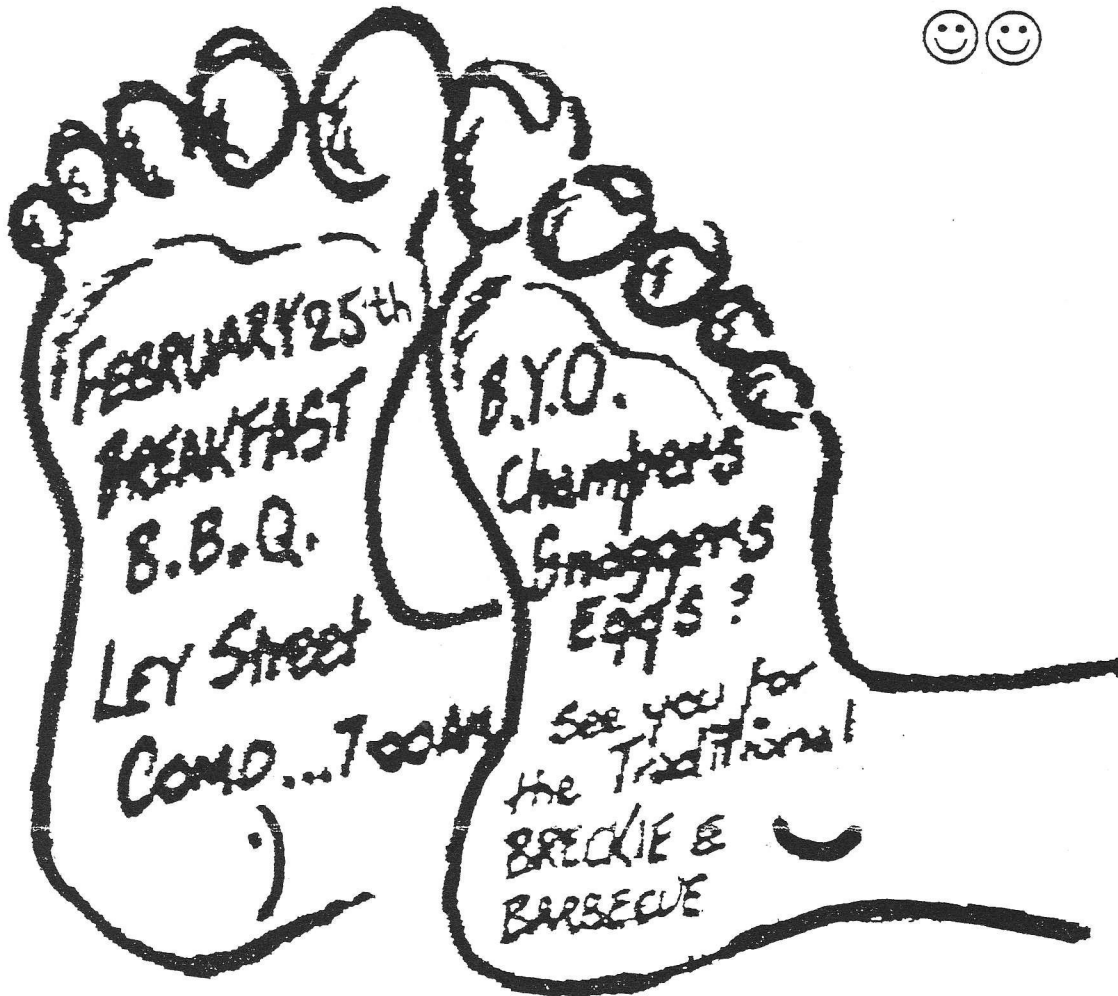
Official Newsletter of the

MODEL A RESTORERS CLUB OF WESTERN AUSTRALIA, Inc

Year XXI Number VII

FEBRUARY, 2001

SEE YOU THERE!!!!!!!



Next Meeting/Run: Sunday, 25<sup>th</sup> February

Place: McDougall Pk, Ley St, Como Time: 7.00am

This Club is the WESTERN MODEL A-s Chapter of the Model A Ford Club of America, Inc.  
MAFCA - 250 S. Cypress St., La Habra, California, 90631-5586. USA - Foreign Membership US\$34.00 per year

OFFICE BEARERS: *President:* PETER SARTORI *Secretary/Treasurer:* TONI MAHONY

*Vice-President:* RAY MAHONY *Vehicle Examiner:* STEVE READ *Editor:* LOUISE READ

COPY DEADLINE: By the first day of the month to

Thornlie, W.A., 6108

VIEWS EXPRESSED HEREIN ARE NOT NECESSARILY THOSE OF M.A.R.C. of W.A.

**SATURDAY, 17TH FEBRUARY, 2001**

**BIG AL'S POKER RUN**

See secretary for details

**SUNDAY, 18TH FEBRUARY, 2001**

**AVON VALLEY VINTAGE & CLASSIC FAIR**

Secretary has details

**SUNDAY, 25TH FEBRUARY, 2001**

**BREAKFAST BBQ**

Time: 7.00am Place: McDougall Park, Ley St, Como

**SUNDAY, 11TH MARCH, 2001**

Meet Causeway Carpark at 9.00am for 9.30 departure

Organised by Merv & Kath Ward



**SUNDAY, 18TH MARCH, 2001**

**CLASSIC CAR SHOW**

Marshals needed.

Contact David Bussard if you wish to participate

**WEDNESDAY, 4TH APRIL, 2001**

Here's a great run mid-week for those who can make it to:  
Midland Gate, 10.00am for a leisurely run to Toodyay with  
lunch at Katrine. Organised by Barrie Byers.

**EASTER, APRIL 13-16, 2001**

**KIRUP IS ON AGAIN**

Please contact Edith Jeffree to book your spot  
in the shearing shed

**WEDNESDAY, 25TH JULY, 2001**

**CCC QUIZ NIGHT**

**SUNDAY, 4TH, NOVEMBER, 2001**

**MOTOR MUSEUM RUN**

**EASTER 2002**

**17TH NATIONAL MODEL A MEET**

**TOOWOOMBA, QLD**

Registration form & information available from  
Rally Secretary, MAFC of Qld,

██████████ Carina Qld 4152

## **RAY ABBOTT ENGINE RECONDITIONING**

*\* Specialising in Veteran and Vintage engines*

*\* Cylinder Head Service \* Reboring and Sleeving \* Crankshaft Grinding*

*Recommended by MARC member*

Established 1973

**18 RIO STREET, BAYSWATER**

**9272 4566**

34 years Experience

**Model A Restorer's Club of WA (Inc.)**  
**GENERAL MEETING – SUNDAY 28<sup>th</sup> JANUARY, 2001.**  
**MANNERS HILL PARK, MOSMAN PARK**

**Meeting opened** Peter Sartori in the chair.

**Attendance and Apologies:** 41 members, apologies as per the attendance book

**Visitors:** Bevan Sharp and David Wensley

**Previous Minutes:** as per newsletter report. Moved Dora Annear, seconded Frank Farrelly that minutes be accepted. Carried.

**Business Arising from Minutes:** None

**Correspondence In:** MAFCA Chapter registration and minutes; Park Road Media – data collection for Ford Australia Car Club register; BankWest statement; CCC – Minutes 18/12/00; Go Bush – Dowerin 23-25 March; Avon Valley Vintage & Classic Fair 18/12/00; Ena Sportswear; WestTarp; Healy Maher Publishing (for CCC); Ravenswood Sactuary Park – advertising information.

**Correspondence Out:** Membership Letter for John Moorehead; Park Road Media – faxed information for Ford Australia Car Club register. Moved Pat Bussard, seconded Peter Sartori that correspondence be accepted. Carried.

**Financial Report:**

December/January income	\$1782.50
December/January payments	\$1734.90

Balances ANZ Term Deposit	\$11,425.80
BankWest	\$ 1,272.35
Cash in Hand	\$ 273.00
TOTAL	\$12,971.15

Moved Max Annear, seconded Barbara Forbes the Financial Report be accepted. Carried.

**General Business:**

**2002 Toowoomba Meet:** Probability at this stage of six vehicles travelling to Qld. Need to form a small working party to concentrate on organisation to get there. Those interested to meet after today's meeting.

**2004 Perth Meet:** Ray Mahony – reported the first meeting of the working committee has met. Emphasized that the Meet is a Club event and that all members should be thinking of offering their ideas and services now in any way possible. Ideas for logo and badge sought from members – Ross Letch has agreed to draw up badge design. Other information will be in next month's magazine. David Bussard reported his communications with the US Model A Touring group, encouraging them to make the Perth Meet a must on their calendar in 2004. Requested approval from the membership present that \$2,000 be withdrawn in April from the club's term deposit to be used as an advance for the Rally Meet expenses. A separate account will be set up for the National Meet activities. Moved Steve Read and seconded Dora Annear that the funds be made available. Carried.

**Classic Car Show 18<sup>th</sup> March, 2001:** Marshals are required for this event. Those planning on participating for this event to see David Bussard after the meeting to make arrangements on the type of display for the day.

**Wildflower Run 15-20 October, 2001** John Laurie is organising this event. Forms available from the Secretary. Please see John for all details.

**2001 Monthly Meetings:**

February 25<sup>th</sup> – Breakfast Meeting at Ley Street, Manning.

March 18<sup>th</sup> – organised by Merv Ward for those not attending the Classic Car Show.

April – Easter at Kirup – Jeffree family organising.

May – Bob and Val Newton organising – well done, new members!

June – Steve Read

July 22nd – AGM and car examination day at VCC Headquarters, Forrestfield.

August – Don Sutherland

September – 1st Sunday – Chris Butler's Fathers' Day Run

October 28th – Peter and Elaine Gilberthorpe

November – Max and Dora Annear.

*Thank you all for your cooperation!*

**Production of Magazine in June and July:** David will produce this in Louise's absence with Steve Read assisting.

**Midweek Run:** Barry Byers is proposing a midweek run for those lucky people who do not have to go to work. Considerable interest shown, please contact Barry direct.

**Christmas 2001:** We know that last year's dinner hasn't settled yet, but Dora gave us various options for this year's event. With comments from some that a change would be nice, the members gave their approval for Dora to make a decision where to gather for this year's dinner. Peter Sartori commended Dora on her ongoing efforts in this regard.

**Club Participation Award from Wodonga Meet 2000:** Steve Read displayed the trophy which the Club won at the Meet.


**Whiteman Park:** Peter Gilberthorpe advised that he has space at Whiteman Park for displays of the Club's trophies and other paraphernalia.

**Friends of the Club:** Robert and Christy McLaughlin of the US were declared "Friends of the Club" some time ago for their various donations and friendship with our club; our thanks to them being expressed in a free copy of our magazine being sent to them regularly. Moved Alan, seconded Barbara Forbes that we continue this action. Carried.

**Lotteries Commission:** It was agreed the club should still go ahead with the application for the \$1000 grant from the Lotteries Commission for display cabinet at Whiteman Park, now we have an ABN. Moved Steve Read, sec'd Ray Mahony.

**Easter at Kirup** – Alan Jeffree reminded all that Easter was on at Kirup and to contact them if they plan on attending.

Meeting closed at 1.35pm



MAFCA NEWSLETTER  
CERTIFICATE OF MERIT

In recognition of exceptional effort,

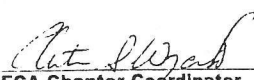
**Louise Read**

2000 editor of the

**MAFC of Western Australia, Inc.  
Western Model A News**

is presented MAFCA's award for meritorious  
achievement in the publication of this superior newsletter.

  
MAFCA President

  
MAFCA Chapter Coordinator

## NATIONAL MEET PERTH, 2004

Your National Meet Committee held its first full meeting on 23<sup>rd</sup> January and discussed several issues relating to the 2004 National Meet. Probably the most important issue discussed and agreed on was the vision or philosophy for the meet.

It has been agreed that the 2004 National Meet is being presented by the Model A Restorers Club of Western Australia, NOT the National Meet Committee. The committee is there to coordinate and put together the thought, ideas and wishes of the members of the club. To this end we need your thoughts and ideas.

We cannot guarantee that every idea put forward will be used, but we do guarantee that if you put forward an idea, suggestion or thought it will be considered and if appropriate used in conjunction with the overall plan for the meeting.

We further guarantee that if you have an idea, suggestion or thought about what is needed and you do not let us know, we will not use your idea.

So come on right from the word GO, give us your thoughts.

### THIS IS YOUR MEET.

“Where can I help?” You ask. Well

Do you know someone who might be in a position to offer sponsorship?

Do you have ideas for outings or activities?

Do you know of any good caterers and/or venues that can cater for about 400 people? We will need that for the presentation dinner.

What should our rally badge look like?

What should be in the rally bag? Etcetera, etcetera.

If you have any thoughts on any of the above contact the appropriate committee members listed below or ring me on [REDACTED] and I will pass it on.

Your Meet Coordinators are:

Accommodation and meals (Noalimba) – Dave Bussard

Fundraising/Sponsorship – Peter Sartori

Events and Tours – Alan Jeffree

Presentation Dinner – Germaine Jeffree

Concourse Judging – Steve Read

Other members of the committee are John Moorehead – Treasurer, Toni Mahony - Secretary and myself, Ray Mahony – Rally Director.

We have yet to officially appoint someone for Publications, but Chris Butler, I believe, has agreed to work in that area.

There will be plenty of opportunity for you to help so stay tuned.

*Ray Mahony*

# CLUTCH CHATTER

## MODEL "A" VALVE TIMING

by Doc Wishon, Palos Verdes, California

Soon after its introduction, the Model "A" was widely acclaimed for its acceleration and speed. While certainly not the fastest, it was one of the *quickest* cars on the road. In his newspaper announcement of the introduction of the "A," Henry Ford stated that the "A" had been tested to 65 miles per hour. Many police departments throughout the nation used the new Ford as pursuit cars because of their quick acceleration. There are many published accounts by owners of new Model "A's" claiming speeds in excess of 70 miles per hour.

Why is it then, that many restored and well cared for "A's" today can't maintain 50 with the throttle wide open? One would think that with modern roads, gasoline, oils and lubricants and fanatical attention to detail that the modern Model "A" would outdo its original performance. On the contrary, many owners have resorted to Cragars, Columbias, or even Pintos to bring their cars up to freeway speed. On tour, the slow pokes are usually heard to blame distributor cams, carburetor jets, and a host of minor ailments for their cars' lackluster performance. There is a much more fundamental problem that they may be overlooking. That is the question of valve timing.

The efficiency of a gasoline engine is affected markedly by its "breathing"—that is, the ease of drawing in and expelling gases. The full potential of the "A" engine cannot be realized if the valves don't open and close in the most efficient manner. This is best demonstrated by bolting on a Cragar overhead valve head. You maximize valve area and dwell (as well as boosting compression a bit) and horsepower and torque are greatly increased.

How can you get the most out of your *stock* "A" engine? Look at your camshaft. Chances are it is either well worn or reground. If it is worn, then you *know* it can't be delivering full breathing efficiency. If it is reground, how was it reground? The cam grinder attempts to even up and smooth the lobes and to restore the original life. He also imparts a profile to the lobe which will determine when the valve opens, how fast it opens, how long it stays open, and when and how it closes. Over the years the term "stock Model 'A' grind" has been used to mean the correct profile for a Model "A" cam. Each cam grinder supposedly knows what a "stock Model 'A' grind" is — but how does he know? To my knowledge, precise data has never been

published on the profile of an "A" camshaft. I looked through 20 books on Model "A's," the "Service Bulletins," and 15 years of **Model "A" News** and **Restorers** and found no data on this. I, therefore, decided to obtain the information on my own.

Two figures do exist. The "Service Bulletins" state that lift at the cam lobe is .302 in. and that valve lift is .287 in., indicating a lifter to valve gap of .015 inches. The recommended range, though, is .010—.014 in. Thanks to Murray Fahnestock, valve opening and closing data for the Model "T" and for the then famous 4 cylinder racing Stutz are known<sup>1</sup>, and this data is included in Table 1.

Table 1 Valve function at degrees of crankshaft rotation

	Stutz	T	A Std	A Adj	B	R
Exhaust Opens	125	142	121	128	119	118
Exhaust Closes	10	0	10	356	18	349
Intake Opens	10	13	353	355	356	337
Intake Closes	235	231	230	226	239	215

Stutz = 1922 4 cyl, T = Model T, A Std = NOS A standard lifter, A Adj = A adjustable lifter, B = Model B, B lifter, R = reground A standard lifter

To obtain the necessary valve timing data, I performed the following experiment. Into a freshly rebabbitted and sleeved-to-standard Model "A" block were placed a chromed-to-standard "A" crankshaft sporting a NOS crank gear, a rebabbitted, straight connecting rod with a new pin and piston in cylinder #1. Various camshafts were fitted to a NOS timing gear and installed with a tested gear backlash of .004 in. Various combinations of camshafts, lifters, and gaps were tested. always on lobes #1 and #2.

Fig. 1 shows the engine assembled on the KRW engine stand, with a degree wheel held to the crankshaft by the crankshaft nut. A piece of bent welding rod clamped by the main bearing nut acts as a pointer. Top dead center (TDC) of piston travel is found using the dial indicator, and the degree wheel is then set at 0 degrees.

<sup>1</sup>Fahnestock, Murray, *Fast Ford Handbook* Post Motor books, 1968, pg. 7.

In Fig. 2, the dial indicator has been moved over the exhaust valve, the crankshaft has been rotated 198°, and a reading is being taken from the dial indicator. Using this method the degrees of crankshaft rotation at the instant of valve opening or closing can be determined to within .5° or .0005 in. Table 1 compares the 1922 Stutz, Model "T," Model "A," Model "B" and a "stock Model 'A' grind." Table 2 gives an idea of the cam profiles by comparing valve lift per 10° crankshaft rotation.

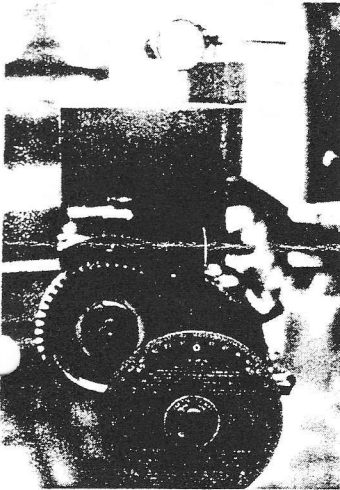


Fig. 1

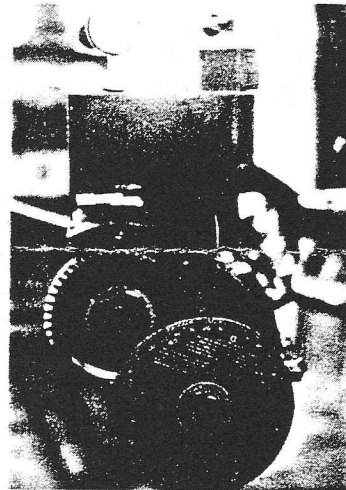


Fig. 2

Table 2a Intake Valve

Degrees	A Std .010	A Adj .010	A Std .012	B .012	R .012
340	.000	.000	.000	.000	.001
350	.0005	.000	.000	.000	.011
0	.009	.0085	.006	.0045	.035
10	.032	.033	.029	.0275	.066
20	.070	.048	.066	.065	.100
30	.112	.110	.108	.105	.134
40	.151	.150	.148	.145	.162
50	.186	.185	.184	.177	.188
60	.216	.211	.214	.204	.209
70	.241	.241	.239	.229	.224
80	.262	.262	.259	.2485	.235
90	.276	.276	.274	.264	.241
100	.285	.285	.283	.274	.2435
110	.288	.2885	.286	.280	.240
120	.286	.286	.284	.280	.230
130	.279	.280	.277	.277	.228
140	.266	.265	.264	.268	.199
150	.2475	.2465	.2455	.255	.178
160	.225	.222	.223	.232	.149
170	.197	.196	.195	.210	.119
180	.164	.161	.161	.183	.085
190	.126	.120	.124	.152	.051
200	.0835	.075	.081	.117	.020
210	.042	.038	.040	.0775	.004
220	.015	.011	.013	.037	.000
230	.001	.003	.000	.009	
240	.000	.000		.000	

Fig. 3 shows two camshafts. The one of the left is a 1928 5-bearing cam reground by a local specialty shop as a "stock Model 'A' grind." The one of the right is a new old stock Model "A" cam. Compare lobes 2 and 3 on each cam and notice the marked difference in profile between the two. Fig. 4 also shows this difference. The actual numbers will be apparent from Table 2.

Data was obtained from the following:

- Model "A" cam; "A" lifters .010 in. gap
- Model "A" cam; "A" lifters .012 in. gap
- Model "A" cam; adjustable lifters .012 in. gap
- Model "B" cam; "B" lifters .012 in. gap
- Model "A" regrind; "A" lifters .012 in. gap

Fig. 5 shows the difference in Model "A" lifters. The left and right lifters are stock Model "A," with similar heights, base diameters, and are drilled for oil. The AR lifter, on the left, is a forging and has Ford script in 4 places around the base. In the center is the only presently available type of adjustable lifter. It has been said that the smaller base diameter of this lifter has a detrimental effect on valve timing. The "B" lifter, not pictured, looks much like the "A," except that the base diameter is slightly larger and the length is greater. It too is a casting.

It can be seen from Table 2 that while the "B" and reground cams open a little faster and close a little

Table 2b Exhaust Valve

Degrees	A Std .010	A Adj .010	A Std .012	B .012	R .012
110	.0000	.000		.000	.000
120	.0015	.000	.000	.001	.002
130	.005	.0025	.003	.012	.017
140	.018	.014	.015	.034	.043
150	.046	.041	.043	.0665	.072
160	.087	.080	.085	.102	.102
170	.128	.121	.125	.137	.131
180	.170	.161	.168	.169	.157
190	.201	.193	.199	.197	.179
200	.231	.222	.228	.222	.195
210	.254	.248	.251	.243	.210
220	.272	.266	.269	.259	.218
230	.2835	.279	.281	.2705	.223
240	.291	.286	.288	.2775	.222
250	.292	.288	.289	.279	.218
260	.287	.284	.284	.277	.208
270	.277	.275	.274	.270	.194
280	.2605	.260	.258	.257	.177
290	.240	.239	.237	.2405	.153
300	.212	.213	.212	.218	.125
310	.182	.182	.179	.193	.098
320	.146	.147	.143	.165	.069
330	.106	.106	.103	.130	.036
340	.062	.056	.059	.096	.012
350	.026	.023	.024	.068	.000
0	.066	.003	.005	.027	
10	.0015	.000	.0005	.010	
20	.000		.000	.000	

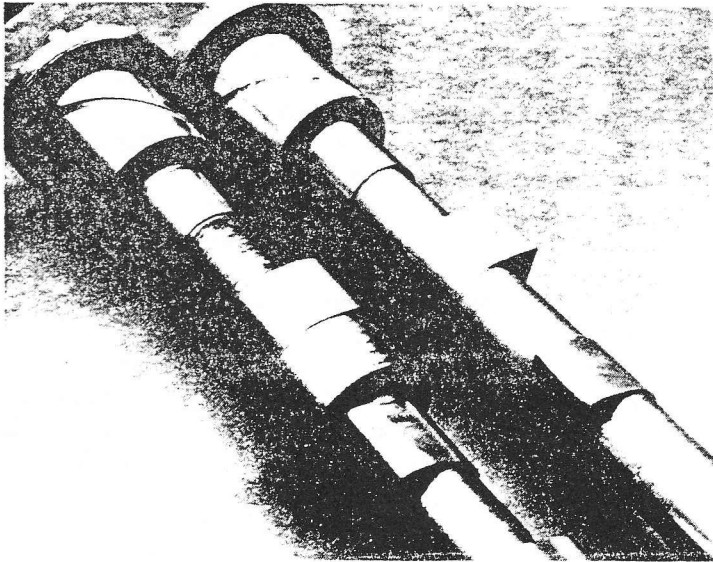


Fig. 3

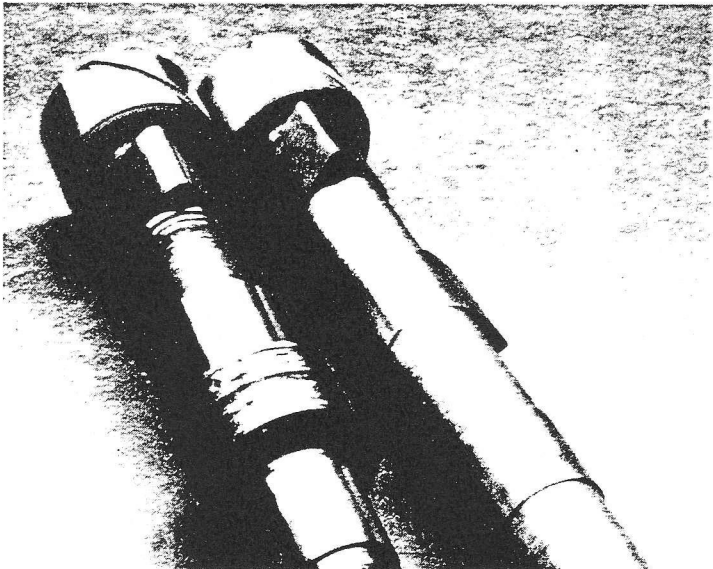


Fig. 4

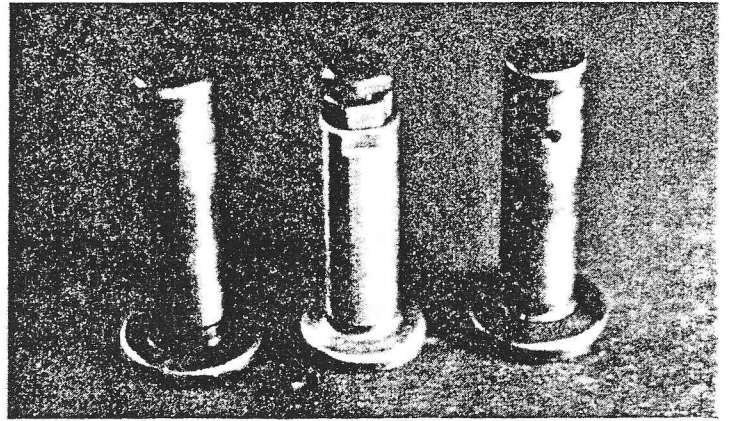


Fig. 5

slower, there is really very little to be gained with a "B" camshaft. Fig. 6 is a graph representing lift as a function of crankshaft rotation. The area under the graph represents the relative "breathing" of each camshaft and lifter combination. The data is for the intake valve. The exhaust valve data is very similar except for the degrees of crank rotation. For clarity only three combinations are include. The NOS Model "A" cam seems the best of the lot! I don't own a Winfield or other performance camshaft, and if anyone who owns one would like to generate similar data, I would appreciate hearing from you. We might update this article in a future issue.

Henry Ford had always like speed. He held the land speed record in old 999 and was photographed in a racing Model "T" which competed in the Indy 500 in 1924.<sup>2</sup> When he publicly announced his intention to make the new Model "A" fast, I'm sure he and the engine designers did not overlook the camshaft, and took pains to make it as efficient as possible. I hope you can use the above data to obtain a good regrind and optimum performance from your Model "A."

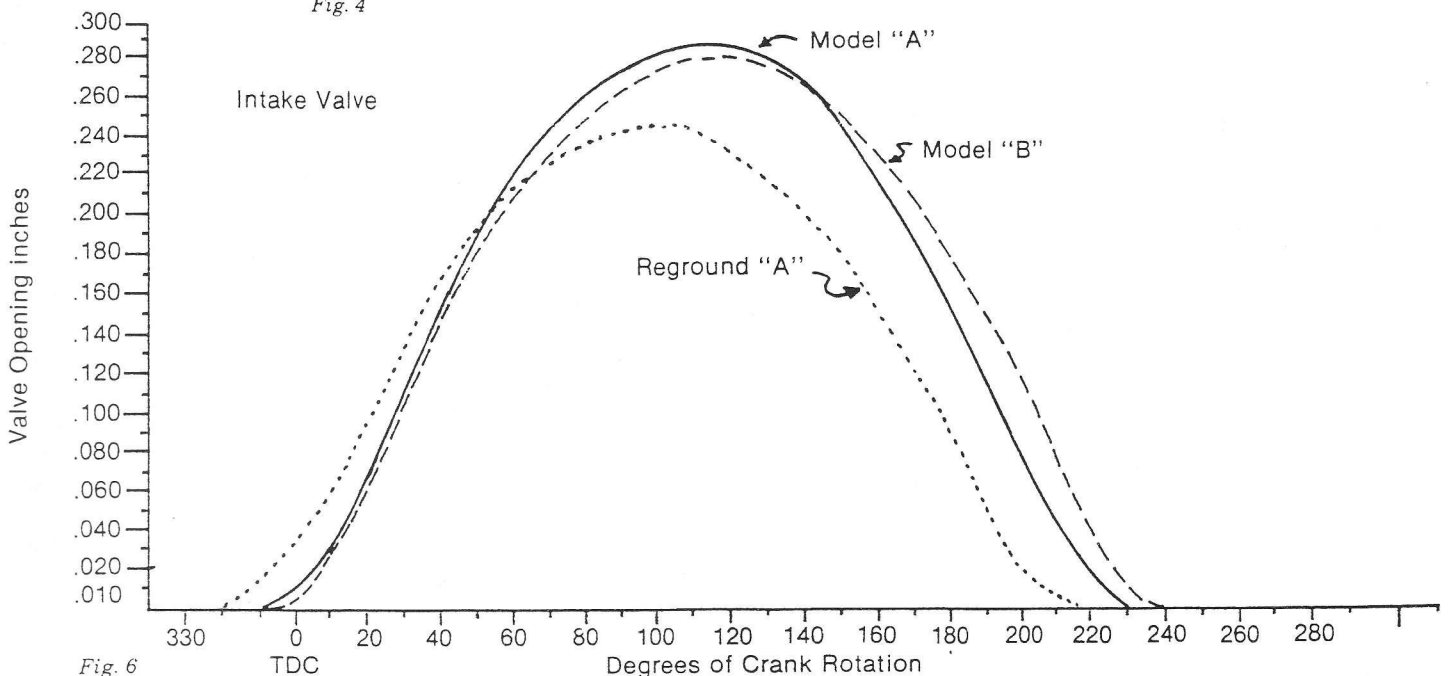


Fig. 6

<sup>2</sup>Fahnestock, Murray, Ibid, pg. 81.



# Notebook

**BIRTHDAYS for February: Birthstone: Amethyst; Flower: Violet**

Jack Berkshire, Lindsay Blacklock, Sylvia Bristow-Stagg, John Brown, Lorraine Chamberlain, Mike Cooke, Val Cowlin, Alan Duns, Tom Eastough, Peter Gilberthorpe, Linda Kirkwood, Pat Laurie, Ian Paisley, Alan Smith & John Timmings.  
Many happy returns of the day.

**CHANGE OF ADDRESS:** Tom Eastough, [REDACTED] Nollamara. 6061  
Phone: [REDACTED] Please alter your registers.

**FOR SALE:**

1928 PHAETON \$17,000 Phone: Peter Sartori [REDACTED]

1928 PHAETON P.O.A. Phone: Lionel Barendse [REDACTED]

**WANTED:**

2 x Tudor Doors, horn, set of '28 Roadster guards.  
Phone: Matthew White [REDACTED]

**CLASSIC CAR SHOW:** We require approximately ten vehicles for a static display, to be in place at 9 am until 4 pm. Also require a marshal to help direct traffic from 7 am, preferably some club member who lives relatively close to Whiteman Park.  
Details and entry forms from David Bussard at the February 25 breakfast run.  
As we are celebrating 100 years of Federation and the Classic Car Show is using this theme, perhaps we could dress the cars up for the occasion.

**SUBSCRIPTIONS:** are now overdue, please remit, with your information sheet, to the secretary today. Country members \$20 and metro members \$25.

**LUNACY OF THE LANGUAGE:** Here's the end of the story:-

And where are those people who are actually spring chickens? You have to marvel at the unique lunacy of a language in which your house can burn up as it burns down, in which you fill in a form by filling it out and in which an alarm clock goes off by going on.

English was invented by people not computers and it reflects the creativity of the human race, which isn't a race at all.

That is why when the stars are out they are visible, but when the lights are out they are invisible.

That is why when I wind up my watch I start it, but when I wind up this essay, I end it.

**NAME BADGES:** I have started a list for those members requiring name badges. We need a minimum of ten for cost effectiveness, at this time I only have two names. If any recently joined families require a badge, please let me know. *Louise*

**YELLOW CLUB T-SHIRTS** are available for \$18 or \$20 posted. Also we have **LAPEL BADGES** at \$5, **CLOTH PATCHES** at \$3 ea and **CAR BADGES** are \$15. All available at club runs or phone Louise on [REDACTED]

**KIRUP:** Edith is still taking names for the Easter weekend away. If you have never been to Kirup why not go this year. It is lots of fun, a great get away for four days!



Western Australia, 6108  
Thornlie  
If undelivered, please return to:

MURDOCH WA 6150  
SARTORI Peter & Lorraine



**Western  
Model A News**

**PICNIC IN THE PARK**  
28<sup>th</sup> January, 2001

The first meeting for the year was as per usual well attended. The group had moved away from the selected spot amongst the trees, possibly because of a family of amateur cricketers.

The weather was kind to us, neither too hot nor too cold and lunch was eaten before the commencement of the meeting due the fact that neither the president or the secretary had arrived. This gave us all plenty of time to natter and catch up on all the gossip.

Frank Farrelly brought along an English visitor who had only been in Perth a couple of weeks and hadn't come across any real hot weather. He might have noticed the warmth this week! It was great to see Bevan Sharp on a flying visit from PNG.

President Pete arrived with his lunch but no chair and the Mahonys straggled in later, having driven up that morning from Albany.

Frank sold tickets for the raffle and then the meeting got underway. All business over and done with, raffle drawn and packed up for home by 2.30pm.

Thank you for the presentation of the newsletter award (there's a copy of it inside the mag) by Peter. Thanks also to my able proof-reader, co-editor, Melissa and to my predecessor Bevan Sharp.

*Louise*

If you have not paid your annual subscription,  
it is now overdue.

Please send it, with your update sheet, to

**TONI MAHONY**  
[Redacted]  
**BEDFORD WA 6052**

So we comply with Transport regulations, please  
ensure vehicle details are supplied and correct,  
or your form will be returned

Secretary/Treasurer: Toni Mahony, [Redacted] Bedford WA 6052  
Ph: [Redacted]