



THE RACING '50' MOTOR CYCLE CLUB  
NEWS LETTER  
SPECIAL CHRISTMAS EDITION

December 1962

EDITORIAL

Dear Club Members,

Let me begin my comments for this 'Bumper' December issue by wishing all members and their families a Happy Christmas and good health, with Santa Claus answering all your requests correctly and everybody awakening on Christmas morning and finding their stockings, pillowcases, or garages bursting with all the good things which they have longed for to enable them to enter the New Year fit and ready for the 1963 racing program. I personally feel somewhat unhappy in giving up the warmth of the Editorial chair, and in leaving, trust the impressions I have made not to be too unsuited to my successor, whom I much regret at the time of going to press with this issue, is unfortunately unknown to me, May I however wish him (or her) every success in the New Year and I sincerely hope these monthly Newsheets which have gone out during the last year, will grow together with the future prosperity of the Club, and 1963 will see once again the re-introduction of the monthly Club Magazine. That has been my constant aim during my term of office and I hope my successor be also inspired with similar feelings.

I trust to have been of service to you, and thank you all for the pleasure it has given me.

Yours sincerely, **JACK LEARY.**

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**A.G.M. - SUNDAY Nov. 17th 1962.** ..... As reported by your Secretary, **Brian Woolley.**

The meeting started at 3.30pm with all the 1962 Committee present except for Roy Nicholson flu bound. Despite the fairly beastly weather, as fair number of Club members were present, though as my brother remarked - "exactly the same faces as you see at every race meeting.

Harry Penton was in the chair, and proceedings opened with a brief recapitulation of the events leading up to last year's AGM, and what took place at that date. As Secretary, I made a report upon the year's progress, as I think it may fairly be described. We have run FOUR closed to club meetings - two at Gosling, one, The 'Enduro', at Snetterton and one at Mallory. The Club Magazine has ALWAYS gone gut and has been well received by most people. We have finished the year, not with fortune in the bank, but NOT "in the Red", and indeed as of December 1st we have approx. £100 at the bank, plus a few assets AND A CONSIDERABLE GOODWILL.

I closed by romancing that it might be the case than in later days we would have to cater for other classes besides 50cc, but that was not for me to say.

Assistant Secretary (and Racing Secretary) Brian Brader had little to add, but thanked all who had worked with him to make a success of the 'Enduro' and Mallory and mentioned a few of the difficulties that organisers are subject to. A vote at thanks was proposed by Jack Leary and seconded by Harry Penton towards Brian and Audrey Brader, for their truly sterling work this season, and it was announced that they were the recipients of the "Chilton Merit Trophy for 1962.

Balance sheets were before everyone present, and Treasurer, Charlie Surridge, took us through the balance sheet in meticulous (and occasionally amusing) detail. As of November 14th - the end of our financial year, we had assets of £247.4.7 (of which over £230 was cash) and an immediate although not pressing liability of £94.16.7d owed to Jack Leary for expenses which he personally shouldered on our behalf earlier this year. Other (not immediate) liabilities were a deferred bill for printing, of £17.15.7d and the cost of trophies for the 'Enduro' and Mallory. In short, the Club's liquid assets were, it was fair to say, around £90, at this the 'poorest' part of the year, with no money coming in. This gratifying news was well received and a vote of thanks given most heartily to Charlie Surridge who has WORKED, few people know how hard, for the Club. So far questions and comments from the floor had been of a routine and easily answered type, or had otherwise been suggestions for future consideration.

Officers were then elected. Peter Lucas, Audrey Brader and Brian, Jack Leary and Harry Penton, very regretfully were not wishing to stand for the next year.

## LETTERS TO THE EDITOR

Dear Sir,

It is with regret I read in last months issue of the Clubs Newssheets the letter which C ,Robinson wrote he thought three laps of the T.T. circuit being too much for 50cc machines. Does he not realise that with such a high proportion of finishers which the Club gets in its annual 50cc 'Enduro' of more than twice the distance of three laps of the Isle of Man, I for one hope the day not far distant when the 50cc T.T. is over the full six laps to bring it in line with the full race distance of the bigger classes.

M. Charles.

Dear Sir,

Regarding the 50cc T.T. next years I feel that unless the various manufacturers come quickly to the aid of our members that the majority of those who entered this year will not race again, and I think Brian Woolley in his 'Usual Rollicking' article hit the nail on the head when he said — we hold ourselves up to ridicule in the face of Honda opposition.

E. Jones.

Dear Sir,

It seems a pity to me that Soichiro Honda has decided to price his new 50cc Racers in, to the British, the old fashioned Gns. (I don't even know how to spell the word in full) which is a system which we have come to accept as a method usually employed by the 'wide boys' in the S/H car business and most professional trades, which amounts to the same thing. I can only assume that with all the American Aid dollars which have passed into Japan since the end of the war, he has been too busy to realise that the blokes in this country who wish to buy his Honda 50 Racers don't get paid in Gns, Anyway, this I thought he would have known after telling us his blokes don't work for a bowl of rice.

This surely is a retrograde step coming from a man who boasts in his adverts — "Honda have no past - only the future". Maybe the true meaning behind his thinking goes a little deeper, because to change Gns to pounds sterling needs a sum consisting of a vertical column of figures which may be his way of giving us a Japanese lesson before we start.

It is a pity to think that the British Government have waited until our most famous manufacturers of racing machines have had to sell up before the Government decide to take purchase tax off racing machines to leave the market wide open for a foreign invasion.

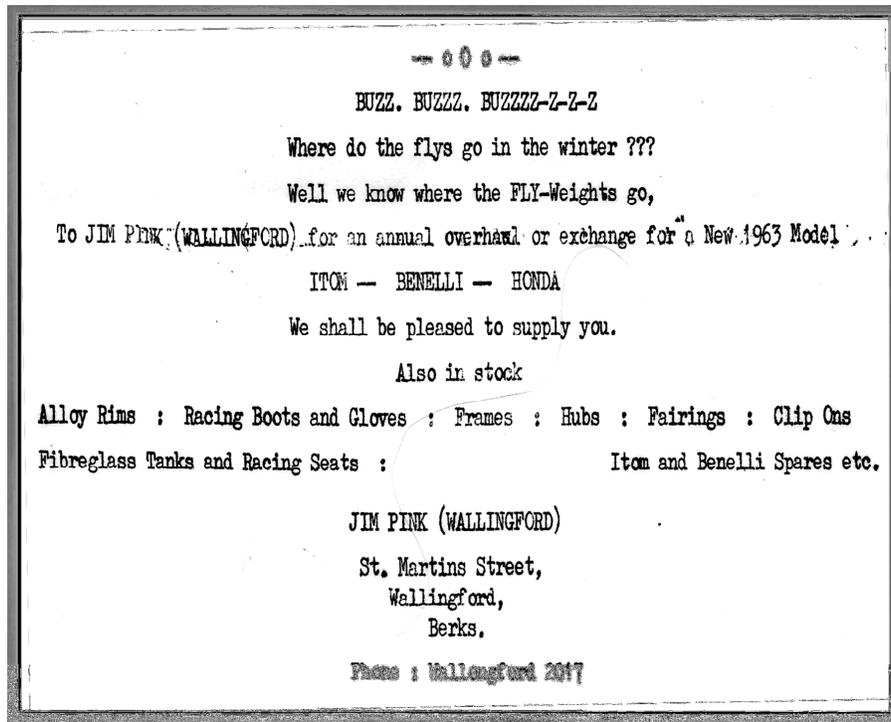
U. Thunt.

P.S. 380 gns, will make a hole in 400 quid (1150 American dollars).

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The Editor does not necessarily agree with the views expressed so admirably by the contributors.

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### "Save your Money"

Review of "Scientific Tuning of Exhaust Systems" by Philip H. Smith.

Foulis - 35/-.

This book, by its title, may well stir the interest of the amateur tuner, as indeed it stirred mine. A "rave" review in 'Motor Sport' and the personal recommendation of a personal friend combined with a deep interest in the subject matter hastened my purchase. What a disappointment!

The book is largely devoted to the subject of exhaust and inlet MANIFOLDS for multi-cylinder engines. It is an excessively boring in style, and where technical information IS actually dribbled out (in minute doses) it is so badly presented that the tuner can hardly recognise the reasoning behind the equations! There is not a single solitary reference to the competition two-stroke engine, so that it is hardly surprising that there is no discussion of the special problems relating to two-stroke exhaust!

Under the heading 'Resonance', Mr. Smith says "At least one designer in the past has attributed a useful torque increase to the theory that the pipe was pulsating in its own period and in time with the exhaust valve" - Really?

The chapter on racing exhaust systems DOES make brief and (in my opinion) misleading references to motorcycles and megaphones. Not a hint of the use of reverse cones, however. The pages devoted to

inlet systems are if possible, feebler still; the only thing which I learned from the whole book was that the first practical use of exhaust pressure-waves to aid scavenge was by the patented Crossley Gas-engine of 1892. This engine, of 7" x 15" bore and stroke, used overlap valve tunings and had an exhaust pipe 65 feet long. Interesting - but not worth 35/-

Discussing the subject of exhaust systems with a Diesel engine designers who is a member of the Club and a successful motorcycle tuner and racing rider, we came to the conclusion that NOBODY understands, or has analysed satisfactorily, the actual mechanics of the tapered pipe, This bears out a remark of Herman Meier's made to me a while ago "So although it is possible to calculate a highly successful exhaust system on paper - DON'T make the mistake of thinking that your assumptions and factors are RIGHT! They may work, but that is another matter" And finally, I may say that you will NOT calculate a successful racing two-stroke system from data in the book under review.

DR. FRIEDEGG

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## **GOLDEN JUBILEE**

Villiers Engineering Company, the world famous manufacturers of two stroke engines, celebrate next year their 50 years in business, and we hope, will be remembered by their introduction of a pukka 50cc Racing Engine, are to be congratulated on their latest creation, their best yet in the form of a special two carburettors single cylinder 250cc two stroke, abundant with many of the 'latest trends' of two stroke development, with square bore and stroke dimensions and 12:1 compression ratio.

The Villiers is a really 'tight' design low crankcase with the flywheels almost level with the top edge and with the transfer ports fully formed in the cylinder barrel only, with the outlets at some 90° to the axis of the cylinder, and at the risk of repeating myself, in keeping with modern tendencies. Needle roller bearings are used for the big end and if Villiers should decide to make a '50' I hope will also be used for the gudgeon pin bearing, and with gearing to replace the primary chain drive.

The engine looks absolutely right and with 22.5 BHP claimed between 5500 and 7000 with a peak of 25 BHP approx midway at 6500 gives positive indication that Villiers need working on by all 50cc Racing enthusiasts because I feel certain they can produce an all British two stroke 50cc racing engine which could give a shot in the arm to the 50cc movement, similar to the impetus given to the 125 class by Bultaco, who came in and gave the Double Knocker Boys something to think about.

I do very sincerely hope Mr. Villiers can be persuaded to make a 50cc racing unit which if only a scaled down 'Starmaker' would produce in my opinion 6BHP at 9750 which after all is better than anything readily available today to the major proportion of 50cc Racers.

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## **F.I.M. Brussels The Annual Congress of the Federation Internationals Motorcyclists.**

**Exhaust pipes** maximum length to a vertical tangent to the rear of the back tyre - this means pipes can be longer, the previous regulation being to the wheel rim. (Good news for the rear facing exhaust port brigade).

## **Yellow Flag**

New definition now - held still, it will mean proceed with caution; waved, it will mean Prepare to STOP.

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## ME AND MY SHADOW

MIKE LEARY

Members might possibly be interested in an experience I had at that 'orrible little Kentish circuit' during practice for the June International meeting. We had suffered carburetion difficulties with the 50 Endura, which resulted in a hole in the piston and a long walk back from Stirling Bend. As practice was soon coming to a conclusion, it was suggested I should calm down a bit by taking out the 125 for a few laps. The Ducati was taken to the starting line only to be turned back as it was decided then to give the sidecars a run. They circulated for an interminable period, and the Ducati got colder and colder and I got hotter and hotter until finally the signal was given and I rode off. The bike fired ok but knowing the old man was watching I had to go steady to give the oil a chance to circulate. As I came up to Druids another bike came up to challenge and as I felt that I couldn't be seen, opened up a bit to keep him off, and having drawn away by about 20 lengths on the first lap and knowing I was being watched, kept to that speed, after about 4 or 5 laps I started to get a 'go steady' signal from my mechanic which I couldn't quite understand and this I did all the way round the 'short circuit' where I could be seen, but this bloke kept creeping up so I pushed on a bitt after going under the bridge to keep him at bay. So it went on for about 10 or 12 laps I kept getting that signal and it seemed as if it was required for my pursuer to pass me but as I didn't quite see the point in this as I am not keen on following blokes, I decided to stop as I was, Practice came to a conclusion the Chequered flag was held out and as I circulated slowly up Druids to come in, I let my pursuer past to see who he was, and it was Degner on the 50cc Suzuki, I had been circulating in 2 minutes 18 secs and using a speed maximum of about 85 to 90mph, His gearing I know was one engine tooth down from his TT, gears because I had seen him changing it in the Paddock.

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## FIFTIES AT THE SHOW

by Brian Woolley.

I found the show rather a dull affair personally. I am not interested in anything but racers and there were few of those, and only Honda showed a 50cc Racer price £400. Now you know this is not expensive; we are so used to a 50 costing only £120 or so that we forget that our brothers in the 250 and 500cc classes cheerfully queue up to give far more than this for models which stand not an earthly chance of doing any good in international racing. If the Dome Honda is half the machine it appears; it is GOOD VALUE at £400. But to my mind the only truly fantastic value is the HONDA push Rod 50cc at £110.00. Fully equipped the fastest; model is capable of a definite 60-65mph, as demonstrated so convincingly at the remarkable Goodwood test.

So, geared up for racing, a racing induction system, exhaust system, raised compression and racing cams and fitted with a fairing, isn't it feasible that the pushrod model will do a competitive 75-80mph. Two-stroke fan though I must admit that the HONDA sends a nasty shiver down my spine.

After this the other 50s on show were a poor lot. I hear that Suzuki intend to offer an over the counter racer eventually but their present production moped is a very bread and butter affair and doesn't look to have any very good features.

ITOMs were not exhibited but news from the factory suggests that they are still 'just 'mucking about', and, that if they don't pull out a finger they will be badly hit, over in Europe as well as here, the moment someone DOES offer an up to date racing 50.

The Ducati 48cc "Sports" model was just that no pretensions to being a racer and although the motor would appear, at a glance, more tuneable than many, it has Only 3 speeds which JUST ARE NOT ENOUGH.

The PRETTIEST 50 at the show was undoubtedly the Garelli - which does have four gears, controlled by a neat rocking pedal on the right. But 'handsome is as handsome does! and I couldn't help wondering that the Garelli FRAME would do around Brands. The NSU Quick 50 has a fine engine, 4 speed gear unit but again, the frame is probably not very suitable for racing. (Wish I could get a unit into a Simmonds frames) The only other power unit worthy of attention was that fitted to the Ariel Pixie. For this, read the frame as for the Honda, but of course the Pixie cycle parts are absolutely NBG for racing.

To break in; many of the Continental two stroke engines are susceptible of a lot of improvement and development however, almost one and all they are fitted into frames which are often none too clever when the motor is standard! With a top speed 20-25mph (and sometimes more) better than standard, the handling becomes plain lethal. Even the Itom definitely 'runs out of steering' when as in about 3 cases, its top speed approaches 80mph. A truly scientific frame, swing arm and forks is at present as much a necessity as a motor in the 150BHP/LITRE category.

So- we came away rather disappointed. No 50cc Norton, No 50cc BSA, AJS or Royal Enfield. The Ariel, superb as it is, is definitely not a racer. Not a single inexpensive Continental two stroke racer, not even an EXPENSIVE one, at that. It does seem to me that there is a market still for something between the (sorry to say) outdated ITOM at £120.00 and the truly GP standard of the HONDA at £400.00 How about it Senior Bulto?

## HONDA CAR

The highlight of the Tokyo Motor Show was the introduction of the Honda Sports Car, one model of 360cc and the other of 500cc. The engines are twin overhead camshaft mainly in light alloy with four carburettors and aluminium exhaust manifolds, the 500 produces over 40 BHP at 8000 rpm with a five speed gearbox built on. The car looks extremely sporting and very small, not much bigger than a Berkeley, although the price is not yet announced. I should say 40 BHP in a slim line two seater such as the HONDA will give speeds approaching 100 mph, and could offer really serious challenges to small capacity sports car classes in European markets.

## THE 1963 50cc 'CLASSICS'

|                |   |                  |                  |
|----------------|---|------------------|------------------|
| MAY 5th        | : | SPANISH G.P.     | MONTJUICH        |
| MAY 19th       | : | WEST GERMAN G.P. | HOCKENHEIM *     |
| JUNE 2nd       | : | FRENCH G.P.      | CLERMONT-FERRAND |
| JUNE 14th      | : | T.T,             | ISLE OF MAN      |
| JULY 7th       | : | BELGIAN G. P.    | SPA              |
| AUGUST 18th    | : | EAST GERMAN G.P. | SACHSENRING      |
| SEPTEMBER 1st  | : | FINNISH G.P.     | HELSINKI         |
| SEPTEMBER 7th  | : | ULSTER G.P.      | IRELAND          |
| SEPTEMBER 15th | : | ITALIAN G.P.     | MONZA            |
| OCTOBER 13th   | : | ARGENTINE G.P.   | ARGENTINE        |
| NOVEMBER 10th  | : | JAPANESE G.P.    | TOKYO **         |

\* or 26th MAY

\*\* PROVISIONAL DATE

## "CLIP ONS"

As there is a movement afoot for the possible abandonment of our old friends the clip-on type of handlebars, it being considered that steering could become dangerous should the clips not be properly secured, any members building new machines during the winter or carrying out extensive modifications to existing ones, should consider this matter rather carefully and that allowances be made to accommodate 'one piece' bars in the event of future enforcements.

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Did you hear about the Bloke who had a Honda Dream?  
And woke up to find,  
He only had a Rolls Royce

## SPRINTING

In the hopes that readers will not consider the following too much out of place in a 50cc Racing Newsheet, I have been asked for more details of the George Brown/ Sidney Allard contests, and accordingly provide the following interesting facts. Allards 'Slingshot' covered the S.S. Kilo in 20.86 secs (a new four wheeled record in this country) and crossed the finishing line at 145.77mph, against George Browns 21.69 and 148.84mph. This is rather surprising and shows the car must gain considerably at the 'bottom end to be so much quicker over the distance with a 3mph less maximum, However as I have said before the 'Slingshot' is possibly more suited to the shorter 1/4 mile s/s which he has covered in 11.54 sees. (In the USA the record is under 9secs)

## LADY COMPETITORS

With women now definitely barred from competing in International solo races, it would appear that Mrs. Beryl Swain is now in the unique position of being the one and only girl to have ever competed in a solo T.T. race, although I have no doubt that Beryl and other ladies as well will not take too kindly to this decision.

## A "MILESTONE" AT MALLORY PARK - Oct. 21st 1962.

An entry of well over 160, a 'New' circuit, a fine day, plenty of marshals the hearty co-operation of the management. These factors plus a most extended practice period augured well, and the reality lived up to the promise. Racing was razor keen in every race for every class, and not just for the first two or three places The standards of preparation were distinctly higher, and there were very few of the drearily slow 'fifties' which have marred some events this year, and which some of us feel are capable of doing harm to the "image" of 50cc racing. There WERE a few slow coaches but let's be charitable, say they were having an off day and talk about the FAST ones. The first 50cc Scratch race was absolutely terrific from the start to finish. On laps one and two, Brian Brader was out front on the Kreidler, then dropped it spectacularly on Gerard's bend, so that for the next ten minutes or so it was an absolute ding dong between Charlie Mates and Dave Simmonds - with neither able to get a decisive lead in fact Dave did it, Charlie was second, Phil Horsham third, Behind them were Mike Sampson - ITOM, 4th, Paul Latham, ITOM, 5th - Bill Ivy, (6 speed) ITOM, 6th - Ian Johnson, Levis ITOM, 7th - Mike Simmonds, ITOM-Tohatsu, 8th.

The first Bantam race was a Fred Launchbury victory - Roy Bacon second, going like a bomb, followed by Herring, Blundell, Smart, Price, Kirby and Hurst. Then the "British 250" heats - what a fantastic variety - and excellent racing too!

Heat one - Goddard (Tom Thorp Special), Ward (Triumph), Potter (Enfield),  
Heat two - Inchley (Arrow), Ward (Norvel) and McGregor (Augain),  
In the truly thrilling final the order was Inchley, Goddard, Ward, McGregor, Albert Motile (Ariel), D. Jones (D. Jones Special) and Curry (Cotton Twin). Cor! what a race, and I'm looking forward to the next one! Then the fifties again!

In this second scratch race, Thomas Woolley virtually led from start to finish - although Geoff Votier (sharing Brian Woolley's old Levis ITOM with Ian Johnson) headed him briefly at one stage! The real challenge to "This" came, though, from the beautifully prepared ITOMs of the Lawley Brothers who finished second and third. 4th was Brian Goldthorpe (ITOM), 5th Votier (Levis ITOM), 6th Thomas (ITOM), and 7th Bob McGregor (BITS).

Now came the vintage race. Hot favourite, Roger Cramp, with his fantastic 1927 Velocette drew a bad position on the grid, but even so, never got within staring distance of the fantastic flying Scott of Chris Williams. (Still - 650cc against 350cc?) Ivan Rhodes was a creditable 3rd on his very nice Velocette. Then came John (built for speed) Griffith with his historic Rudge, then the Nortons of Rayner and Boyerm and then Evan's Sunbeam. The 'Invitation 50cc race saw a truly ALL STAR line up. All that was missing was the Pope Special! Everyone else - you name them - they were there, and Dad they were 'at It' from the drop of the flag.

Brian Brader - true enthusiast - had fitted spare forks to the Kreidler, Maybe he was feeling his way this time, because after leading on lap one, he fell 'back to third and then to fourth place. In front it was again Mates and Simmonds fighting it out - Phil Horsham hung on to 3rd but never challenged them for lap honours - Thomas Woolley fell right back - (a sick motor forecasting his first lap retirement in the 50 miles) and Geoff Votier who was truly on form this day, also falling back with plug trouble. So final order was - Simmonds, Mates, Horsham, Brader, Sampson, Latham, Ivy, Woolley.

A rather dull Bantam event followed - again a Launchbury/Bacon duel. Then the 'race of the day'. The 50 mile Championship race, another star-studded line up, and when the flag fell, Mates, Simmonds and Brader engaged immediately in a fierce set-to. (no fastest lap times were taken, to my knowledge those three were lapping at one stage at around 1min 14sec, approx 66mph). Alas, Braders early domination was followed by the Kreidlers usual retirement!

For some reason, Paul and Ian Johnson both seemed to go a lot faster all of a sudden and at one stage both were catching Charlie Mates - Paul indeed leading him briefly Bill Ivy, (pulling top gear of 16-24) was slowing slightly. Then Ian fell out at 30 odd laps with a broken ignition connection.

So the race went to the 38 laps with never a dull moment, Final order was, Mates, Latham, then Dave Simmonds with 37 laps, Brian Goldthorpe, 37 laps. Ivy 35 laps, Smith 35 laps, Bacon 34 laps, SurrIDGE 34 laps. The programme was now fully run-off, but to 'oblige', we put on a 'consolation' 5 lap race for the 250 owners who, for one reason or another had not got a ride, (or wanted another one!) This was won by C .Ward (Triumph), with Wood second and Curry third. So ended a day of most enjoyable racing. An excellent atmosphere - few delays, high standards in all directions.

Some peoples luck was definitely 'out' - but how much better to blow up at the last meeting of the season than at the FIRST. Since the meeting we have had quite a few 'Thank You' letter; how very nice, and what a change from the early part of the season! Hope YOU enjoyed the meeting and from organisers Brian and Audrey Brader and Brian Woolley, a big thank you to everyone concerned and best wishes for 1963.

## TECHNICAL NOTES

by Jack Leary.

Dr, Joe Ehrlich, world famous chief of the EMC Racing Organisation, kept a promise made earlier in the year that an invitation would be sent to visit his works to discuss boost port two strokes, as soon as the racing season was concluded. In consequence his invitation was accepted with alacrity and the nose of my 'Et Type Jaguar soon pointed in the direction of the Leavesden Branch of Bristol Siddeley Engines Limited, and I was soon ushered into Dr. Ehrlich's office to stand awed at the sight of the many magnificent trophies won by ENC during, the 1962 seasons racing.

Dr. Ehrlich arrived punctually at the appointed time and having handed round the cigars, seated himself, with the invitation to fire away. I started by asking for better elucidation of the boost port principles and this led to a vast amount of technical reasoning which he endeavoured to clarify by the use of oscillagrams and diagrams showing pressure waves in the boost ports under working condition, and further illustrated by allowing examination of cylinder heads and pistons taken from test engines which showed the definite gas flow streams ensuing from the boost ports the total capacity for a 500c engine being approx. 2 (100c)

A very interesting point was not only the extreme downward flow angle of the boost ports but the manner in which the actual transfer ports in the cylinder casting had been shaped to supplement this feature, and it was explained that the extreme gas contact was felt to be of paramount importance for the correct working of the engine. Dr. Ehrlich stated that he was sorry that his invention had been named boost ports because he felt that such naming did not, in his opinion, sufficiently describe the action, and gave as an example the fact that an engine devoid of this feature refused to run at all against an exhaust back pressure of as much as 45 water inches whereas with the addition of the ports the engine was capable of starting under full load, and whilst it was accepted that this rather specialised type of treatment might be held to be irrelevant to 50cc racing requirements, it nevertheless certainly gave one food for thought.

Dr. Ehrlich further endorsed later with a most convincing practical demonstration in the Test House, when an engine run up to full speed and power was then 'pulled' down to a mere 1000rpm by what sounded murderous application of the Heenan and Proude water brake, and then to pile on the agony, cutting the ignition switch, which literally shook the ground as the motor slumped to a dead stop.

Warming to his work and with a glint in his eye, Dr. Joe switched on the ignition and let in the starter clutch, and low and behold the motor fired in at some 500rpm and pulled back again to 1000rpm with a few seconds, Needless to say this was achieved without the slightest hesitation, misfire, or any sound normally associated with a two stroke at these kind of revs, and for all the world sounded more like a four stroke as it took the bit between its teeth, and one could not help feeling that the engineers of the De Havilland and Bristol Siddeley companies must have been similarly impressed when Dr. Ehrlich first sold the idea to them.

The demonstrations in the Test House were further enlivened with the unveiling and running of his latest creation, a 250cc version of the 125 Racing Engine and I was most disappointed to learn that this engine is not to be raced next season, which is a great pity to all two stroke enthusiasts and a great loss to the 250cc class.

The afternoon concluded by being shown various scooters and lightweight road machines all in their experimental stage and a very special disguised 150cc two stroke motor cycle in particular really looked the part and must have been the cause of many surprises in the district and local by pass as Dr. Joe told us it was almost as fast as the 125 Racer, and capable of more than 100mph! So my visit came to a close with the hopes of all Club members expressed that Dr. Ehrlich would find time at

some future date to turn his thoughts to a 50cc power unit.

If experiments which DKW are working on prove successful this winter, there is a possibility that this famous marque will once again be represented in international racing, and I understand that the 50cc two stroke engine which they have been working on for some considerable time is producing on the brake sufficient H.P. for them to feel quite jubilant of the speed of their machines in competition with other makes.

They have employed a single cylinder piston controlled induction engine in which the full effect of tuned resonance and ram has been fully exploited in a way which seems to indicate that the results of even the rotary disc valve may be sublimated. The timing will possibly be entirely different to the accepted rule with possibly some kind of gadgetry to enable the motor to be started, and I visualise an induction and exhaust period of some 180 each and a transfer of some 90 , or short in comparison as my experiments have shown that such a design once started 'flys out of Control' and usually smashes all the usual bits and pieces whilst one is trying to joggle the brake and wind on the telescopic exhaust system all of which after the smoke has cleared gives one food for thought. I feel that it could be along these lines that the DKW engines could be working and with the resources which they have, to solve big end, small end, piston and ring/port failure which amateurs such as myself find far too time absorbing to fully exploit, there is a possibility that the 'old three port' could yet come out on top.

If this should prove the case, it could be the elimination of the disc valve crankcase induction system which will then give the designer a much greater freedom of choice which in turn will obviously mean that a twin could very easily become a possibility and even a four is not beyond the realms of consideration. This could mean with increased piston area and shortened stroke, operated range of twice the present day accepted standard and I feel with gas paths shortened as they would be in such small engines, that this resonance theory could be even more fully exploited and the BHP of a 50cc engine of such design could in turn be double the best obtained today. It all depends on the DKW experiments and in particular on how you can conceal what you have done from your competitors - my sixpence is still stuck up the end of Degner's 50cc Suzuki exhaust pipe which was on show at Earls Court.

## Hi Fli

I understand new problems now present themselves to Honda engineers in that when the new 50cc twin is run up to maximum revs, the sound pitch it produces goes out of the audible range and the normal riders tend to 'get off' in the belief the engine has stopped running. This is a very serious problem to have to overcome, but with typical East Asian thoroughness I understand that Bats are being trained and permission sought from the F.I.M. to use these instead of rev counters for next season.

### NEW TECHNICAL BOOKS REVIEW.

|                                |    |   |
|--------------------------------|----|---|
| "The Resonant Chamber"         | by | P.Long (a most absorbing work)                            |
| "Squish Head Shapes"           | by | Turner Spigot (with drawings by D.Tonate)                 |
| "Weak Mixture"                 | by | Ivor Hole (remembered for his best seller 'Piston Broke') |
| "Work on the Transfer Passage" | by | Flo Smoothley (with Foreword by Bluebell Polish)          |
| "Raising your Compression"     | by | Fin Gasget. (Ten to one you have read it)                 |
| "Padding your Crankcase"       | by | Phil McCaverty (Phil knows every trick)                   |
| "Oiltight Joints"              | by | Harold Ite (a book you won't put down)                    |

**HAVE YOU GOT YOUR TICKETS**  
FOR THE DINNER? DON'T DELAY SEND IGH TAWAY  
THE CLUB WILL HOLD ITS ANNUAL DINNER ON SATURDAY 19th JANUARY 1963.

at  
"THE TALBOT"  
64 LONDON WALL, LONDON, B. C · 2.  
(quite close to Liverpool St. Station)

Tickets 21/- each (Post dated cheque taken)  
S.A.E. Please  
JIM PINK  
21 St. Martins Street  
WALLINGPORD, BERKS.  
ENTRIES CLOSE DEC. 31st 1962

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Do you ever sit and ponda  
If you'll ever have a Honda  
Or does it give you grief and pain  
To know you've only got the chain.

**SOBERING THOUGHT FOR 1963**

by Brian Woolley

Using 2.25 x 18 tyres and 16-28 gearing on an ITOM  
12000 RPM = 69.5mph - 13000 RPM = 72.25mph  
On the same gearing - 15000 RPM only gives 83.4mph

To attain 90mph at 12500 RPM you must use a 16T drive and 24T rear, sprocket  
Do you think your motor will stay in one piece at 15000 RPM?  
Can you pull a gear of 16-24? (i.e. 10-1) No?

Well - the Suzuki does both these things! It has eight gears. It handles well.  
Why don't we all pack up and stick to collecting stamps!

### **50cc RACING**

With serious competition now well under way, the names of the Skingaley Bros, made news together with a popular Parisian in G.M. Suzor, who made yearly pilgrimage to the famous international regattas soon made himself felt and his performance became almost legendary, In this country he pitted the speed of his multi-carburettor two stroke motor against the fantastic engines produced by the Scot Mr. A.D. Rankine, whose split single super-charged two strokes brought worthy Northern representation to the competition.

In the south a four stroke engine having parallel valves in the cylinder head owned by Mr, P. Marshall and tuned by the Innocent Bros was making record breaking runs, each better than before mainly it seemed contributed by its extremely light weight, its construction being almost entirely of magnesium alloy, and in no small measure could be the absolutely fantastic performance of the very specially made hull by Mr, G. Roe with special emphasis on light weight and I would say that this Golden Wonder known as Old Bean IV was perhaps the very first example seen of surface propulsion, running as it did with only the propeller in the water.

In the 1930's the Innocent Bros however, inspired by the success they had achieved with 'Old Bean's motor, set out to produce, and here I am proud to say with some slight assistance from yours truly, an up to date OHV design with such advanced features as alloy head with inserted valve seats, 90 degree valves and tubular push rods modelled more or less on the best existing type of racing motor cycle engine. It was with this engine mounted in 'Betty' that an almost unbroken sequence of fastest runs in both this country and on the Continent set the seal on the design of the International Metre racing class and like 'Old Bean' before her, succeeded in taking almost every record in the book, including a 1 mile run at a speed greater than the previous worlds best for sprint distance.

In conclusion if ever a smaller class than 50cc motor cycle racing should become popular, and I believe 25cc races have been run in Ireland, then it will be to the old boat racing classes we might have to delve for ideas to get us started. I hope to have the pleasure, by the courtesy of the Innocent Bros. of bringing along to the Clubs Annual Dinner on 19th January, the actual .30cc worlds record engine taken from 'Betty', the hull of which I understand suffered fatal damage from enemy action during the last war, whilst berthed in a garden shed.

### ANNUAL SUBSCRIPTIONS

It is hoped our 151 members will continue to give the Club their support in the New Year and whilst not wishing to resort to overworked expressions would never the less with respect, draw member's attention to the fact that 1963 subscriptions will become due on 1st January and it will greatly appreciated if members send in as early as they conveniently can, to eliminate the costly process to their Club of sending out reminders. Your cooperation in this manner would be greatly appreciated.

Thanking you in anticipation.

Roy Nicholson (Subscription secretary)

Full members 30/-

32 Eastgate, Banstead, Surrey.

Associate members 15/-

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BUZZ. BUZZZ. BUZZZZ-Z-Z-Z

Where do the flys go in the winter ???

Well we know where the FLY-Weights go,

To JIM PINK (WALLINGFORD) for an annual overhaul or exchange for a New 1963 Model

ITOM — BENELLI — HONDA

We shall be pleased to supply you.

Also in stock

Alloy Rims : Racing Boots and Gloves : Frames : Hubs : Fairings : Clip Ons  
Fibreglass Tanks and Racing Seats : Itom and Benelli Spares etc.

JIM PINK (WALLINGFORD)  
St. Martins Street,  
Wallingford,  
Berks.

Phone : Wallingford 2017

## "VOICE FROM THE PAST" - Reprinted from the magazine of the 'Half Hundred Club' (1955)

I feel your readers might be interested in my Cyclemotor conversion and adaptations, and the reasons for these changes. I bought a Cucciolo, Ducati fitted to a ladies Norman cycle i.e. with the two oblique cross tubes in the frame. When I first bought this machine, I soon found that this wonderful engine needed stronger cycle driving and braking mechanism. The standard rubber brakes (front and rear) were scrapped and internal expanding types fitted.

### **Transmission**

The 18 tooth free wheel sprocket fixed to the rear hub was replaced by a 60 tooth fixed sprocket, specially made, which screwed on to the hub and further strengthened by four bolts. A larger diameter and improved free wheel engine sprocket was also fitted, and a aluminium chain guard.

The original "sit up and beg" handlebars were exchanged for a lower and straight type motor cycle pattern. I found control and steering far better with this type. One can develop a light pressure technique of the hands without thrusting the body weight forward on the bars coupled with not too hard a front tyre pressure and I find this compensates for absence of front fork springs.

### **Seating**

A dual seat was made out of a piece of 1/2" thick plywood shaped and bolted to rear of the existing saddle, A Sorbo sponge rubber slab cut out to fit and then glued to the board. A thinner layer of rubber and finally leather was glued over, covering the whole seat. Using this seat enables one to place the body weight further back when necessary and to alter ones body position on a long journey to reduce fatigue or stiffness. A long bolt and nut passes through the horizontal tube to fix and support the wooden extension of the seat. The rear number plate and lamp is screwed to the wooden end of the dual seat by two wood screws. Dual tool bags are fixed on either side under the seat; the whole ensemble may be removed by loosening the nut on the saddle frame.

### **Extra Lubrication**

A small oil tank made from an old brass pressure gun was fitted to the vertical tube under the saddle. This has a narrow copper tube leading to the O.H.V. mechanism. A tap fitted to it is controlled from a Bowden type lever on the handlebars A spring returns the tap to the shut position. The small tank is filled with a couple of squirts from a Redex pump and improves the running at high revs. The machine looks very business-like and always attracts attention when parked at the kerbside!! The machine is quite fast and capable of over 40mph on the levels The two speeds are controlled by clutch and pedals as are the original models. This I prefer for a quicker change without taking the hands off the bars.

### **The Petrol Tank.**

The small  $\frac{1}{2}$  gallon tank was replaced for a  $1\frac{1}{4}$  competition tank by Claude Rye with larger filler cap. Connected to the petrol outlet of the tank is a Wipac filter and tap. A speedometer fits neatly into the forward recess of the two flanges of the tank. A shielded light fixed to a fibre collar round the rim of the speedo was made from an old rear lamp. Two twist grips for petrol and exhaust lifter, and an electric horn working from the coil are also new accessories which have improved the machine.

I feel that this is the sort of material that readers may be glad of, and this machine has been tried out with its accessories. J. B .Ray. 5th Nov. 1955. (Editor: Mr Ray was in at the beginning of the 50cc racing movement and built his racers from small mopeds to compete with the ITOM, DEMM, and Maserati. You can see him on the articles of interest page under "How It All Began"

## For Sale

Dolphin fairing with fittings £2. ITOM petrol tank with tap and knee pads £110.0d. Box of Hazet socket spanners, 18 piece with ratchet, brace extensions - as new £3. New ITOM Deflector type piston with rings £1. 10.0d.

R. Williams, Pavis Cottage, Packwood, Hockly Heath, Solihull, Nr. Birmingham.

FOR SALE Brian Woolley's "LEVIS ITOM, Works model with many mods. Chrome Bore, reconditioned. Mechanically perfect all plating and paint as new. As well as many previous successes, raced this year to 2nd at BRC Snetterton, 5<sup>th</sup> Castle Combe, Mallory 7<sup>th</sup>, 5<sup>th</sup>- (raced only at these events) Definitely one of the fastest machines in the country. Many spares and extras. £90.00 only.

Brian Woolley.

120 Charnwood Road,  
Shepshed,  
Nr. Loughborough,  
Leics.

## HAPPY MEMMORIES

by Bob Latham

It really started at Brands, right before the T.T. The ITOM crept back into the pits making peculiar noises and inspection revealed that a piece of the chrome liner had broken away across the exhaust port bridge (Yes it is there) The following day I spent hours (and pounds) on the telephone trying to beg, borrow or buy a new barrel. J. Leary offered me a new one but the inlet port was only 16m, and I could find no one to open it up. Finally I found someone who could and would re-chrome the whole job.

I then realised I had no transport except a cooking ITOM. I thrashed it into Birmingham and almost frightened the man away from doing it, such was my concern to get the job done properly. He promised to let me have it back on the following Monday - four days before we were due to go to the Island! During that week I bought an old Ford van for transport. The sump gasket leaked horribly. Have you removed the sump from a Ford without a pit or a jack? and without removing the front wishbone? It can be done!!!!

I got the barrel back on Wednesday, fitted it to the cooking Itom and ran it for possibly 40 miles with its own new piston. The piston appeared OK; very few high spots needed attention. So, in company with Brian Woolley, we set off with hearts gay and hopes high.

At Liverpool we met Mike Simmonds, Brian Brader. and Audrey, Dave Baulch, and other brave souls, the bravest being Mike Simmonds with out doubt - he had seen works machines (I didn't believe him). Our arrival in the Island was not exactly funny, (to us). That morning would make another story. What about it Audrey, blue paint as well? The first practice session arrived after what seemed an age. For a while I thought I was back in the Far East, except that the Japs were not prisoners of war!

I shall never forget my astonishment when the first 'works' arrived back at the pit, everything that Mike had told me was true only more so. I forget how long Paul took to go around, it doesn't matter now. The machine appeared to be going reasonably well, but rather noisily, mechanically. Paul reported that something happened at Union Mills. The motor cut, locked the back wheel but then turned over again, gurgled a little, picked up and went on again, gradually improving. Yes it had seized, and then for its trouble, been flogged for a further 33 miles.

The piston was a shocking sight but some hours of work decided me, that this would be a better proposition than a new one, it knew its way up and down that barrel under very strong weather. Second practice session I fitted a new plug after long consultation with the plug Rep. After 3 changes en route, Paul completed two laps. The plugs were whiskered. I had not seen this in an ITOM before. Further talks to plug people, who, I may say, gave the completely wrong answers.

Came Saturday morning practice and foul dirty weather. Visibility they said was only 50 yards on the mountain. Away they went once more, and once more the endless wait started. Not for long this morning, Mist or not, the works were around very smartly, and as was Paul, but wait, he came into the pit. His face was very raw, obviously it was not comfortable. I quickly checked the plug and pushed him off to do another lap, which he didn't want to do, he thought the bike was OK, leave it that way.

In a happier frame of mind I went off to the Dunlop tent for tea. On returning, there it was, in letters which looked to me a mile high on the blackboard, "45 stopped at Kirk Michael", no reason given. My first thought was, where could he come off at Michael at speeds enough to hurt himself?. No, that wasn't the answer. I rushed to the office and by then they had "Rider OK - engine trouble".

My heart sank. I dashed off on the 'Hack' Itom by a roundabout route to the Quarter Bridge to await the 'roads open' command. I flogged the ITOM out to Michael and there was 'my lord sunbathing with one

of the Lawley Bros (to this day, I don't know which one). The engine was solid. Shortly along came the Pantehnicon, bless them. We continued the lap in the most degrading manner - in the back of the van.

It took little time to find a broken con rod. Then the work really started. I had a con rod, a rod and crankpin, but only used rollers. I dashed off to Tom Arter's stable where I would find Syd Mizon, a native, and very good friend. I required a lathe etc. to set up the wheels. Yes, he knew such a man, but alas he was out. Early in Sunday morning we found him and to my delight I found his workshop was an old haunt of Bob Giesons. I still don't know his name but he was a brick and helped all he could until we were both satisfied that the wheels were in line. By Sunday evening the machine was running, but oh so gently. I pinched the Reg No's etc from the Hack, begged an expansion chamber from Brian Brader and set off to run in. All seemed well and carefully did one lap in reverse direction (God knows why in reverse). Monday, I travelled it out to see the racing, as far as Ballaugh. Still O.K. Poor Bob Mas gave us the F.T.D. over the Bridge and the most spectacular.

On Tuesday we spent the day in the sunshine at Jurby airfield in company with the Chisholm Bros, Bill Ivy and a few Honda 4's. The engine was going fine but the clutch was slipping. Inspection revealed the rear of the clutch drum worn right away. Back to my unknown friend and after some lengthy perusal of the problem, we produced a bronze distance piece and faced off the worn drum. This not only worked, but still does and shows no sign of wear, so to Wednesday racing, viewed at Windy, and on to scrutineering and handing in on Thursday.

Everyone is extremely friendly and very obviously nervous. It takes a common adversity to draw people together in comradeship. I experienced this quite a lot during the war, and never again until the 50cc T.T. The few private entries of that first T.T. will always be firm friends, of that I am sure. We were very much backs to the wall. On Friday morning I achieved a lifelong ambition, through Paul, to push a machine onto that grid on Glencrutchery Road.

I can only tell you that Paul's machine started well, I did not notice the others. Those of us who were left, 'Pop' Simmonds, Audrey Brader, Mrs. Juler, Bill Ivy's Ann, Mrs. Mates, just waited, to try and describe it would be impossible. It didn't seem long before they went through changing into 5th gear

or 6th or 8th etc. It seemed years before the first ITOM came groaning along from Governors with the revs gradually coming up. Paul went by, the motor sounded right, but oh how slow it looked.

Quickly checking, I was delighted to find that we were in 15th position or 3rd private or the fastest ITOM. Once more eyes fastened onto those indicators, - it moves, - one breathes again, Balamaine past, wait, wait, wait, watch the clock, should be at Kirk Michael, tension mounts, seconds fly by, the pointer moves, one sighs and waits again. The minutes tick on, the tension builds up, glance at the clocks the pointer, the clock., the pointer - should be at Ramsey, but no, that pointer will not move, the Boy Scout has forgotten to move it? No, that could not happen.

The longest ten minutes of my life passed. I stripped that machine in every detail but could not nail what had gone wrong. I travelled every mile of that road from Michael to Ramsey, here were a few places one could be in trouble even on a 50. Suddenly the pointer moved, he was still going immediately I knew, plug trouble, and I was right. Two changes between Quarry Bends and Ramsey, A first lap of 38.38 and a second of 47.25 had cost us only 3 places, but we finished.

We finished, because even when I saw the position as hopeless, Paul's quiet acceptance of my decision shattered me into action again. We finished because of the great help rendered by Brian Woolley in so many ways, so inconspicuously. We finished because so many people helped us in so many ways. We have little to show for it, a small plaque, but the memories will live a long time, the first 50 TT and the few privateers who made it possible.

Hmmm - The cost was tremendous, I still dare not think of it, the effect will pass, but not the memories.

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