“Gordon Bennett!”

Its summer already and time for the online Scott Newsletter!

Disclaimer and Ling

Paul Dobbs R.I.P.

3 Sisters and a VFR

Scott Owners Club visit to Ted

Book review.

Scottland

For sale and wanted.

Spares suppliers List

Disclaimer.

Lei Ling on "Mr Bones!"

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Paul Dobbs

For those who do not already know, we are very sorry to announce that our good friend Paul Dobbs died from injuries received whilst competing in the Isle of Man TT "Supersport" races on 10-06-2010.
Paul lived for his racing and as his wife Bridget quoted. "We prepare for the TT for 50 weeks of the year"
Paul, a native of New Zealand, always loved motorbikes and the extra thrill of riding and racing a fast bike that has attracted so many of us over the years. Paul raced in Australia with some success and then moved to the UK, as it seemed to represent more opportunity for racing.

As I understand, he worked for some time for the magazine "Performance Bikes" where he provided information for technical articles on setting up bikes for optimum handling and performance.
He had met and married Bridget in the South of England, when Bridget was working on engine design at the famous Ricardo concern.

Paul in my Workshop with the Scott engine and some of the trophies

They subsequently moved to the Midlands and had a house at Earl Shilton, from where Bridget gained employment with Triumph Motorcycles, Hinkley plant involved in engine design.

Up to this point, we had not met, but here fate was to lend a hand.

I made the mistake of losing concentration briefly on the last race of the second day of a 2003 British Historic Racing meeting at Anglesey.. I crashed and sustained some damage, which ruled out racing for a while.

As my Scott racer is the only representative of the Scott marque still used regularly on British mainland circuits, I consider I have a responsibility to try and keep the Scott name in the public eye as far as possible.

I asked my old racing friend and proprietor of the BT-H magneto concern, Tony Harris, if he knew of a rider who might be interested to ride the Scott.

Tony said that he had met a likeable New Zealander who was working as a tester for Triumph, named Paul Dobbs, who loved to race. Tony mentioned that the expenses of racing were difficult for a man who by now had two young daughters. I remember Tony relating how Paul and Bridget had recently taken part in a 7 hour endurance race for mopeds. I was impressed at such dedication and contact was made.

Paul visited and looked over the Scott. Such a primitive looking and basic machine would normally have been a little daunting for an experienced race rider of modern machinery, especially for someone not familiar with rigid / girder bikes. We must remember, however, that here was a man who would race a moped in 7 hour races to assuage his competitive passion, so a Mallory meeting was scheduled.

I had spent a little time trying to explain the methods of racing a rigid bike.

Imagine it is a horse Paul and ride in the stirrups. Your legs act as the damper / spring units and you allow the bike to dance about below you.
My bike does not like bumps and will go into a tank slapper / speed wobble if provoked.
In such case, hold the bars between third finger and thumb lightly, back off the throttle a little and do not fight it. If you were still in control when you got to "Hallowed be his name", you could continue.

Paul went out in his first race and came in either third or forth white faced,

"I came out of "Gerards", he recounted, hit a bump and it went into a tank slapper all the way down to "Edwina'a Chicane" where it tried to put me over the top.

I expected him to tell me "Thanks, but no thanks". Paul, however, was not such a man. You need to change the tyres, he said, I replied that I had tried all that, but he was not to be dissuaded, so tyres were changed, without improvement. After a few days thought, he pronounced that he thought that there was not enough weight on the front.

This was quite possible, as I had long used an aluminium barrel and lightweight frame and one of it's more hectic moments was going uphill through the slightly bumpy left hand bend at Cadwell called "Coppice".
With the bike inclined uphill, any lack of weight on the front wheel would have been exacerbated. Yes this was a logical possible explanation. The seat was raised and moved forward over the rear of the long tank and the next meeting saw Paul well satisfied with the handling. In fact, he said that he had never ridden a bike with such feedback. I suppose that the rigid format allows transmission of track / tyre interaction that is partially damped by the suspension of modern bikes.

I had in the past been privileged to ride the Clive Waye Scott which was perhaps the best handling bike ever and vastly better in this aspect to mine even now.
In this guise, Paul rode with glorious spirit and determination. The engine at that time was producing 35bhp and with this modest power he achieved great results and entertained the onlookers with his wheelies over Cadwell mountain. That never to be repeated photo by another ex racer friend and executive at Mortons Nigel Clark was well worth having to replace the brinelled Timken head bearings.

The magazines loved it and gave it considerable exposure which raised Paul's profile considerably within the Classic racing fraternity. Paul now was offered rides on more established and better funded machines, which eventually led to offers of bikes for the TT races.
Of course, his ability and determination would have steadily been recognised, but I well remember my dear old mum relating that "If the world does not know you exist, you might as well be dead"

Paul's well publicised and documented exploits on the Scott racer gave considerable publicity to the marque and to the evolution of the bike by the Moss family. Everybody benefited from the publicity which clearly contradicted the fable that Scotts were intrinsically frail and unreliable. Yes, of course we know about the limited life of the original cranks, but we demonstrated that the basic design was sound and capable of considerable upgrading with modern metals and by the lessons learned over the years.
Paul became more committed with his NW200 , TT and other Classic rides but tried to squeeze in the odd Scott ride during his annual pilgrimage to the UK.

Following the moving of the weight, the bike looked untidy, so I had the tank shortened so the seat could be lowered into a position better for me. Unfortunately this necessitated extensive reshaping of the exhaust with a hammer and a reduction of power to an estimated 33 bhp. This was not fair to Paul and I needed to do better, so a new exhaust was made by Allan Middleton and the alloy barrel was rechromed for regrinding. Something went wrong in this process and the bores could only be finished to a size bigger than the lightweight Silk pistons, so new oversize pistons had to be created from castings.

Now another problem emerged, that of water leaking into the crankcase and corroding the big end bearings.
In a somewhat desperate attempt to stem the leak without making another barrel, some slow set epoxy was poured into the water jacket adjacent to the exhaust ports. The bike was put on Dave Holmes Heenan and Froude water brake dyno and it gave 41.9 bhp, a great improvement. Unfortunately (That terrible word again) with the increase in output came an increase in heat and the epoxy that had restricted cooling round the exhaust ports, led to seizures. Finally it became obvious that the barrel had to be scrapped, which is not something to decide lightly when you have a queue of customers who have been waiting longer than they had hoped.

I had slowly been getting together the components for my Silk Scott and hoping I would get this on the road before I was too old to care. I "Borrowed" the barrel and Silk pistons and put these on a rebuilt bottom end that finally had a crankshaft from the same 300M steel I use for the interchangeable Scott high strength cranks. The head clearance is not set up to race standards and the block is basically a roadster block, but it gets me on the track till I have time to finish the job. It gives about 38bhp and is reliable and has good performance for a bike that weighs only 100kg.

Paul loves to race the Scott and contacted me from the TT on ninth of June to enquire if I could make the bike available to race at Lydden after the TT. He said that the TT was going well. Of course I replied that it would be a pleasure to see him out on it again, to which he replied that he would change this return flights back to New Zealand so he could join us.
I take it as a privilege that such an outstanding race rider should want to ride a Scott when he has so many exalted machines on offer. The fact that he was such a good friend made the prospect a greater pleasure. Paul lived for his racing and firmly believed in living this gift of life as though each day was his last.
It was his destiny that he met his end the day after we had arranged that he should race the Scott at Lydden. Our world was made brighter by knowing you Paul. Although you have left us at an unduly young age of 39, you packed infinitely more into those 39 years than men twice that age.

Nobody truly dies while we hold tight their bright memory in our hearts.Thanks Paul. A truly noble two wheeled warrior and dear friend.

Roger Moss

Paul the Racer

Fun at 3 Sisters!

I recently had a whim (*as the elderly sometimes do!)* and decided that the time had come to by myself a 150 MPH Honda VFR. A bike I had admired many years ago.

A suitable victim was found and a extremly resonable amount of cash flew to a friend and I became the 6th owner. A couple of weeks "Macceling" saw the bike up to my satisfaction and as Roger Moss was racing the scott at the 3 Sisters track near Wigan thiught that a 900 miles run would do nicely thank you.

Now apart from initially riding it like an old man. (*which of course I am*) I soon got to grips with the beast and realised that a light touch on the bars and cuddling it like an oversized Teddy Bear seemed to give the best results.

The trip down was horrendous! Gale force side gusts had me poodling along in the slow lane at 55mph for 80 miles on the M74 from Glasgow to Preston. However things gradually improved and I made 3 Sisters in 8 hours.

A great pleasure to see the Roger and the VMCC racing crowd again. In fact I was pleasently surprised as Roger had **cleaned** the bike*! Only kidding Roger!*

It goes without saying that we had a great weekend with excellent racing, great "crack" and superb weather.

Sunday dawned and the thought of the return trip loomed. By now the wind had dropped so I took a look at the weather and decided to head home.

It was a breeze *(pun!)* The bike flew home, I left Wigan at 1210pm and arrived 414 miles later at Hopeman at 1804. Nice ride! Nice people and great fun.

Now! Where did I get to with preparing the Scott racers!

Ted Parkin

A Visit from the SOC.

Enclosed pics of the bikes during a most welcome visit from members of the Scott Owners Club during their succesfull Scottish Rally. Jon Hodges, Gill Swann, Paul Rickards and Richard Tann. Thanks Guys and Gals!

Jon and Gills' bike. Ultra reliable and a bit special.

Paul Rickards bike. TT Replica

Technical Bit!

Collapsing main bearing support

There are procedures that used to be carried out by the Scott factory that have been largely forgotten with the passage of the years. It is only by careful measurement and interpretation that we can rediscover what was done in past years.
When the Scott engine was first designed and developed, the quality and characterristics of the Aluminium used for the crankcase was considerably inferior to what is used in automotive applications in more recent years.
It is an unfortunate fact that Scotts never re evaluated the use of better grades of aluminium as the years passed, perhaps due to the cost implications.
I think it might be better if I just spell out the problem simply at the start so that those who are not interested in details, can move on. I will go though the details for those interested later.

FACT. Many Scotts are running around with main bearing cups loose in the crankcase due to the soft metal of the crankcase having collapsed like dough with the constant expansion and contraction of the metal and the vibration of the engine. Higher vibration and excessive oil leakage to the inside of the case where the flywheel runs is the result.

If you want to know more, read on.

The main bearings are in the form of a steel cup that is hardened for about the first 1/32" of its depth and ground when held firmly in position in the crankcase.
The crankcase is made of aluminium to keep overall weight within reason.
Aluminium, especially the simple type used on Scott crankcases, expands considerably with heat. If the outside diameter of the hard steel cup was made of the same size as the hole made for it in the crankcase, then at running temperature, the hole in the crankcase would be approximately 0.005" (Five Thou) bigger than the steel cup and the cup and all the bearings, cranks, flywheel assembly would rattle

Scotts then decided to make the steel cups five thou bigger than the hole in the case.
Because the case expands with heat so readily, it was only necessary to heat up the case moderately in order to drop in the main bearing cup.
When the case cools down, the aluminium contracts and the cup bearing is held securely.
This would be fine for the “Static Exhibit” but unfortunately, the engine gets hot when used.
It is, after all, a heat engine!
When the engine is run moderately hard and the case becomes hot, then the cup again becomes loose in the case.
What to do?
I imagine that in early experiments, it was decided to make the cup, say ten thou bigger than the hole in the case. It is certainly possible to put a bit more heat into the case to get the hole big enough to drop in a cup that is ten thou bigger.
So far so good
We drop in the cup and wait for the case to cool down to the sort of temperature it will get used to sitting in your shed waiting to be used.
As it cools down we hear a “CRACK” Oh Damn! This poor quality aluminium will
not tolerate the sort of bursting forces now imposed on it.
Back to the drawing board and lots of head scratching.
We need to arrange a method where we can impose a grip on the cup that does not rely on trying to have such a degree of radial bursting load imposed on the crankcase casting.
Alfred, for I am sure it was he, came up with such a simple and logical method.
It was arranged to produce a groove in the inside face of the crankcase to leave about ¼” of aluminium as a rim all the way around the hole (bore) for the main bearing cup.
He then arranged to have a steel ring made that was NINE THOU! Smaller than the inside diameter of this groove. This ring is the equivalent of the old metal band tyre that was heated and dropped over the rim of a wooden cart wheel and was a procedure still well known and appreciated in those early times.

The groove was arranged to have radiused corners on the inside and the steel ring had matching radiuses.
The steel “Shrink Ring” is heated to a mid red heat and dropped into the groove after the cup has already been fitted with a five thou “Interference”
The inner ¼” section that the steel ring had “Shrunk” on to, acted to strangle the inner end of the cup by imposing this force round it’s neck.
It worked tolerably well, up to a point.
You see, whereas the cup was held securely round it’s neck on the inner side of the bore in the crankcase, there was no shrink ring at the rear where the oil supply hole is very near the flywheel edge of the bore.
The result was and is, that when the case gets hot, there is often a small gap between the cup and the bore and a proportion of the oil seeps out.
This gets more like industrial archaeology by the minute!
So what did they do?
If you have a spare case about, look at the aluminium around the flywheel side of the cup and in almost all cases except some Birmingham types, you can see a vee shaped groove surrounding the cup.
They used a tool called a “Spinner” to indent and deform the metal and try and force it more firmly against the steel cup.
All in vain actually, as the aluminium will still grow at the same rate regardless.
The best plan nowadays is an application of silicone sealant.
Of course if you prefer it to be just as produced, then perhaps you like the oil seepage.
But then, nothing stays the same in life, does it? And that includes Scott crankcases!
If you have an old case you wish to reuse, I suggest the following test.
First inspect the relationship between the heads of the three screws that surround the head of the cup and the face of the cup. They are generally ground together and should be flush.
As an aside here, the fact that Scotts saw fit to put timing screws to ensure the cup did not rotate in the bore in the crankcase and so cut off the oil supply, should ring alarm bells in the mind of any thinking person!
Next you heat up the case to at least the temperature you would expect it to reach on a reasonably hot day when working reasonably hard. We will not be extreme, just objective and fair.

Now get a bar of metal of about 5/8" or ¾" diameter and pass it through one cup centre hole so you can tap the bar on the rear of the opposite cup.
Give it a few reasonable taps and then repeat the process on the opposite side.
Now check if you can see if any movement has taken place.
If so, a re evaluation is necessary.
Here I will admit that because in my early experience, I made my own crankcases from a metal a little superior to that from melted down Dinky toys, I had no experience or suspicion of metal collapse.
If the cups seemed secure at room temperature, I passed them as fit for purpose, so it might be that in good faith I have accepted what I should not have accepted.
One difficulty is this. That in order to be absolutely sure of the fit of the cup, it is necessary to drill a hole in the shrink ring to cup its grip and then heat the case to remove the cups.
This costs money and the rebuilder is on trust not to do unnecessary work and incur unwarranted costs. Hence the hot tap test.
When the cup moves in this test and so you remove the shrink ring and cup, you find that the bore in the case that was originally 2.625" dia, is now almost 2.630" diameter, or the same size as the cup. The metal has compacted. We no longer have a secure fit.
Now inspect the groove where the shrink ring is located after removal.
With your finger nail you can feel where the ring has compacted into the groove metal.
You no longer have a secure fit in either case.
So what did Scotts do? What indeed!
They knew all about this problem, but then, they had produced a consumer durable for about a 12 year life within a price that was never expected to last forever.
Scotts made oversize cups for engines where the metal had compacted.
When the factory was functioning, then most engines that were in need of rebuilding were returned to the factory, as they had all the special machinery and equipment to carry out what is clearly an engineering job in a proper way.
They would start off by making absolutely sure that the cups were secure.
They are after all, the very heart of the engine.

Any doubt and oversize cups would be fitted. I have the works drawings of these.
After this, the cups would be ground in situ as this is the only way to ensure accuracy of this critical component. If you doubt this, then consider that Alfred himself designed the special grinding machine that he had made to do this job (I have a photo of it from 1916)
I have had a few of such engines recently and sincerely regret the expense it incurs.
I hope you will understand that I will not knowingly send out an engine that I would not be happy to receive myself, so will ask the owner to find another rebuilder if my cost is unacceptable.
My preferred method is to rebore the case and shrink ring groove and fit a high tensile steel cup with a shrink ring.
The cup is jig bored in situ from the block mounting face to accommodate modern ball bearings as replacement main bearings and replaceable synthetic oil seals.
I am sorry that this has ended up a bit of an epic, but it is a very little appreciated and important factor.
Like the little girl. When a Scott engine is good, it is very very good
And when it is bad it is horrid!
But then, what man has done before, man can do again and with the benefit of modern materials and the lessons of many years learned and responded to with appropriate remedies,-

Then the very very good machine, can be even better A real gem!

Now! lets talk about Pilgrim Pumps!

Pilgrim pumps were made by “The Pilgrims Way Engineering Company of Canterbury UK until about 1960 when the company finished.

Getting Pilgrim Pumps reconditioned has been a problem in recent years.

I remember Jawa and ESO speedway engines using a copy of the Pilgrim Pump until about 1980

There never were any agents as such for Pilgrim.

I am advised that there is one man in Switzerland who will recondition Pilgrim pumps

Karl Rutz in Mollishaus. CH-9225 St. Pelagiberg, tel.: (071) 433 11 12 (private) and

(071) 430 05 10 (work) - fax: (071) 433 17 30, produces and supplies parts for Motosacoche and has all necessary parts for Pilgrim pumps, both double and single. He also overhauls old pumps. I asked him whether he would overhaul Pilgrim pumps for Scotts and he said yes.

The quality of the parts seen by my friend seemed to be excellent and up to Swiss watchmaker standards.

Kind Regards

Roger

Further Scott racing adventures --- persistence rewarded.

(and a nice bit about Paul Dobbs' input)

I read my son Richard's account of the August Beezumph and VMCC events at Cadwell Park with a poignant mixture of emotions. First and foremost was the pride I felt in reading his so evocative account of our trials and battles to overcome obstacles. In my minds eye, I saw him refusing to be defeated and working resolutely towards success.
As parents, we are always a little concerned for the future well-being of our children, but after this display, I can die with a calm heart, but perhaps, not yet awhile!
The second emotion, was sadness that we had such problems and these were so publicly aired.
I remember the quotation that "Whatever does not kill me, makes me stronger"!
I know that through problems that highlight weaknesses, comes the opportunity to overcome those weaknesses, but who amongst us enjoys demonstrating our flawed humanity to our peers?
I thought it might be interesting to give some background to Richards account of the Cadwell meetings and to give a brief account of the following meeting at Three Sisters near Wigan.
After my crash in 2003, I had looked for a rider to keep the Scott name visible at historic racing events. In hindsight, I was very lucky to be introduced to Paul Dobbs. Paul is a full time development and test rider for Triumph Motorcycles.
His recent projects included the 2.3 litre new "Rocket Three". His wife Bridget is a designer with Triumph and like Paul, loves to race. Paul was unhappy with the Scott's handling and after trials with various tyre combinations, he concluded that there was not

enough weight on the front wheel. He asked that the seat be taken forward about three inches and my idiosyncratic "Brooklands" type bars replaced with Vincent Straight type. As I have a long tank, it was necessary to raise the seat above the rear of the tank, in order to move it forwards. It is not a beautiful solution, but ok for a trial. Paul pronounced the change a success and I pondered over how many years I had endured the handling problem that had been solved so easily. I reflected that I rarely ride a bike, but that Paul rode every day and experienced so much variety. Paul has raced modern two strokes for several years and recommended that we use modern synthetic two stroke oil at much leaner proportions in the Scott. I had no evidence against this, so we changed as suggested.

I had not raced the bike since my crash and as it is not registered for the road, I could not test it their either.

During early 2004, I was perplexed when Paul told me that the leading rider in the class, Ian Bain, had a significant power and speed advantage. We had not changed anything, so perhaps Ian had found some more GO!

We come to the Beezumph event, where I was to ride on the Friday and Saturday of that event, then Paul would ride at the VMCC races on the Sunday. I went out on the Friday and was horrified! I admit that the new riding position was uncomfortable and strange to me, but of more importance, it would not GO and it would not STOP. It was Lacklustre! How had Paul Dobbs managed to get wins on it in this condition?

I was puzzled, for if one thing had characterised the bike it was that it always performed the same and you put it in the shed after a meeting and when you dragged it out for the next meeting, it went exactly the same!

We had changed the mag, which had a retard curve on, and the oil. We jetted down significantly and altered the timing.

The bike started to perform better. The brakes had been relined so needed to bed in. I was mortified when an internal screw holding a high flow transfer port cover came loose and caused damage. I suppose that it is far better that it happens on my engine and not to a customer. In my own defence I have since implemented a belt and braces modification to make it entirely secure. During our hectic timing and rejetting exercises, I had had a slight nip up, but although unwelcome, it should not have caused problems. The aluminium, chrome lined barrel is durable and has only one thou wear in 27 years racing. Considering the final race on Sunday was with a piece of the LH piston missing, it went well.

After we returned home, I stripped it completely. I was astonished to find that instead of the internals all being nicely oily from the Castrol R 40 I used for years, the internals looked as dry as if they had been washed in a solvent.

The bore where I had had a nip up, did not so much show evidence of a scuff, but it looked like it had been metal sprayed with a thin coating of aluminium. It looked like there was an almost total absence of lubrication.

If this is modern synthetic lubricants, then they do not suit a Scott engine!

I rebuilt the engine with new pistons and reverted to the Castrol R 40 and the same settings for ignition timing and carburation I had used since 1986. The only

modification was to fit a 60mm long ram tube to the carb intake, as this had given an increase in both power and spread of mid range torque on dyno tests. Other than this it just had a good general fettle.
Paul Dobbs had recently returned from the Manx GP, where he took his standard framed 500 Gold Star with new 50 bhp Dutch engine, round at a touch over 95mph. Paul had not ridden at Three Sisters before and so decided that Saturday was to be a learning day on the Scott and Gold Star, and Sunday would be the day for serious racing.
He had good placings for the first three rides on the Scott, but just prior to his last outing, it started raining heavily and several riders fell on the slippery circuit. As though to dispel any thoughts of "taking it easy", Paul drew a front line grid position. The narrow 21" "Speedmaster" front tyre seemingly found grip denied to others and Paul won handsomely!
On Sunday, Paul had four starts on the Scott and won all four races. Where there was another class with later big twins racing together, Paul headed them home also, with the leading riders in his class, half a lap adrift.
Paul recorded almost identical best times on the Scott as on the 500 Gold Star on what admittedly was a circuit that favoured the nimble handling of the Scott, although, of course, the bumpy sections favoured the spring frame Gold Star.
The Scott not only performed handsomely, but was entirely trouble free.
Paul Dobbs is returning home to New Zealand this Christmas, but was so happy with the Scott at Three Sisters, that he is planning to return next year to have a real go at the VMCC championship. I am only sorry that I had not ridden the bike earlier to identify the changes.
The word round the paddock is that Roger's Scott is now full of Yamaha TZ internals! In your dreams! Alfred did it first!
I have decided to look out for a Silk Scott into which I can put one of my engines as both a test bed and a nice light bike to ride. I wonder if one would be eligible for any classes of historic racing?

(First published in the SOC magazine "Yowl" and used with permission)

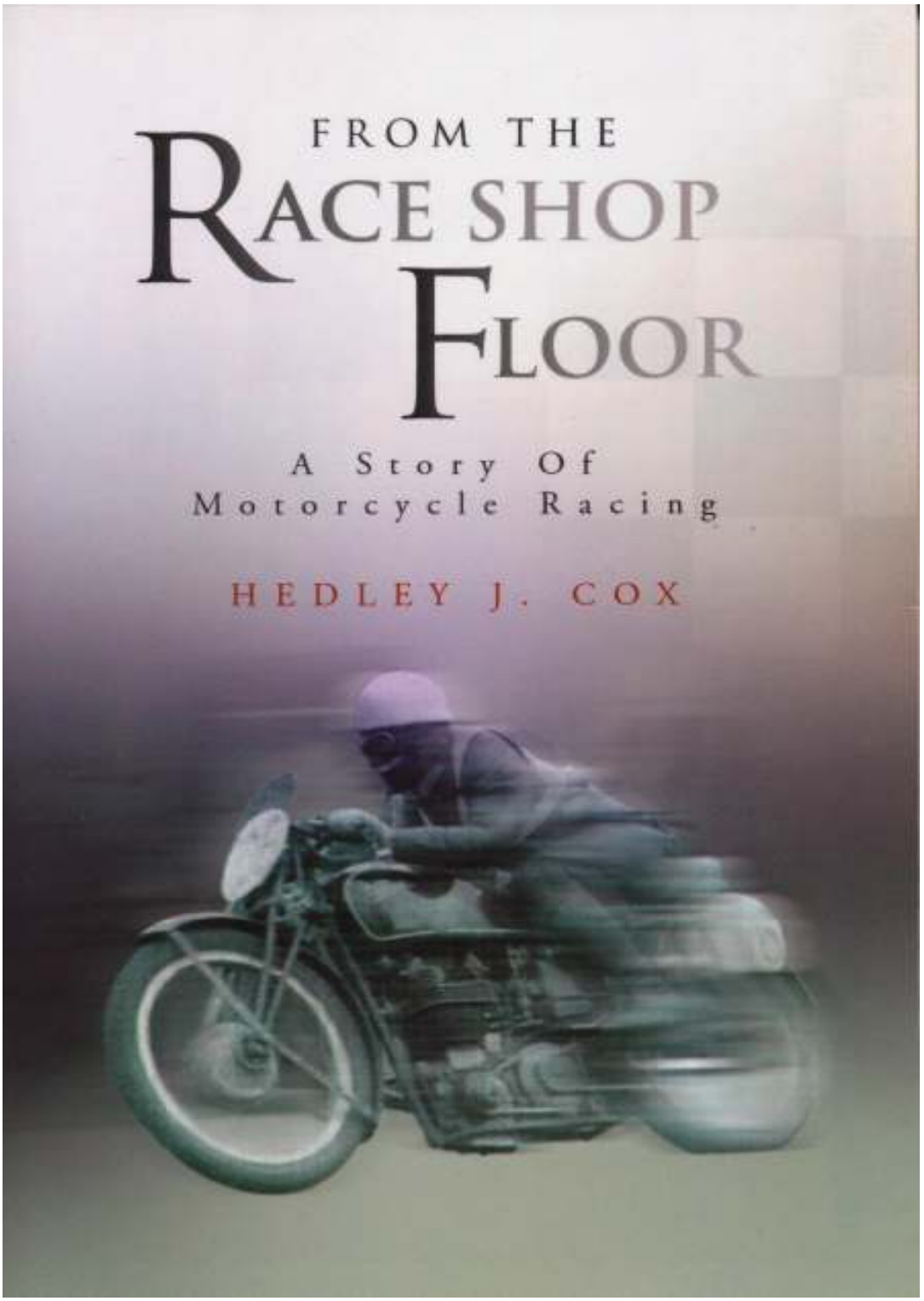
Roger Moss

Book Review

"From the race shop floor" A story of motorcycle racing by Hedley J Cox
ISBN 978-1-4415-6723-9

It might be good if I quote the description on the cover and then give my opinion of this book.
" This is the inside story of how a motorcycle race team of the forties worked. How a division in the company's outlook drove it to bankruptcy. The story of how a member of the racing team saw it all. How he participated in racing, and devised a new machine, but was swept aside. How he emigrated and tried to get a factory to embrace a new world view but was frustrated again. Lessons that Detroit might heed. How he moved into an academic programme and aided the US Air Force in it's search for lower costs."
This book was loaned to me by Rob Collett, to whom, you might recall, I am giving modest assistance in bringing to fruition his latest invention, "The Phased Transfer Engine" Rob was an engine designer by profession and after retirement has continued to create wondrous strange engines. He currently rides round on a bike that is as scruffy as it is bristling with innovation and powered by a 500cc sleeve valve uniflow two stroke engine of his own design and creation. Rob knows Hedley Cox from years back, hence the book.
This book is another milestone in the story of the self destruction of our industry in general and the motorcycle industry in particular by the classic human vices of pride and ignorance. It tells, what we must accept is a one sided account, of how a young man bursting with ideas and enthusiasm, joined the Velocette Company. What follows reminds me of the schoolboy, who in answering a question in class, starts his reply with "Please Sir, I Think-----" to which the teacher responds with "Don't think boy, LEARN" We experience the feudal hierarchy and the total failure to engage the untapped talents of the workforce. There are parts that are just difficult to believe, when it is recounted how the valve settings on one engine were accidentally set differently to the settings dictated by a family director. How the engine gave significantly more power on test, but when the "mistake" was discovered, the workers were instructed to reset to normal settings.
How Hedley Cox realised that the output of the single cylinder engine of a given size would always be at a disadvantage to a multi cylinder machine, made his own twin cylinder Velocette based machine, the Coval. The book is pervaded by a sense of frustration bordering on quiet rage at times, but if even 50% were true, you would come

to the conclusion that the demise of Velocette was richly deserved. However warming to the spirit it may be to read stories of golden glory, the reality is that our motorcycle industry, like most of our industry generally, was the architect of it's own misfortune. I



recommend this book as not only being a view from an unusually motivated and articulate working man, but a valuable bit of social history.

If you are interested in specialist books, I suggest you check out the website of my favourite book seller in the USA http://www.powells.com/

You might notice that writing about this book raised my passion a few notches. I have decided to tell you a true story that resonates with this afore mentioned book. It is not about Scott's, but some might find it of interest and if not, just move along till something more interesting catches your eye.
Of course, if you do not want to read so much of my ramblings, you could always contribute something yourself. Oh, I do hate begging!

This story finds me walking round a machine tool exhibition in Tokyo in the early 1980's.
I stop, in the gangway to look at a multi head changing production machine.
This was one of the more productive designs that we offered to our customers (Mostly named Ludd) without success. Only Rolls Royce and the Russians would buy today's answers to today's problems.
The fact that such a machine was on show demonstrated that Japanese customers were open to more advanced and profitable machining concepts. I envied them.
A young man came from the stand and asked me if I was interested in this machine. I told him that our company was involved in the same industry in the UK so I was not a prospective customer, but wished them success in their business. You must meet our Dr Yamamako, he said, but I replied that I did not want to waste their time. Wait here please, he asked, and ran back on to the stand. Almost immediately he returned to say that Dr Yamamako would like to meet me. I followed him on to the stand and met a modest looking man in pin striped suit about 50 years of age. Sit down, have a cup of coffee Etc. Then he asked a question and I admit to my shame that I answered the question I expected to hear, not the question he asked. The question I thought I had heard was "Tell me about your company". After a few moments, he put up his hand and said "That is not the question I asked"
OK, I had lost face, but humans are not perfect, so I asked him to repeat his question.
His question was "How and where did you acquire the knowledge and experience necessary to enable you to carry out your duties effectively and efficiently" Oh dear! Certainly not the sort of question I had expected, nor was it the sort of question I really felt comfortable to answer.
I explained that I was a very poor student at school as I found the greatest difficulty in remembering disparate facts. I could remember principles which I could use like tools, but I had no "Hook" in my head on which to hang facts. I was pronounced a failure and left alone whilst the truly talented were tended. My greatest happiness however was to go to my father's little factory at weekends and was working a big Ward capstan lathe at the age of nine. (It beats going up chimneys)
I went every weekend and school holiday, so that by 14, I could work most of the machines in the factory that were available to me. How I served an apprenticeship in another company, returned to my father's company and in some time became works

manager and introduced more effective and profitable machinery and working practices. Dr Yamamako replied that he thought this was highly unusual for the UK but explained that in Japan, everybody must also start at the bottom so that they learn the basics of the industry they are in. Nobody must ever be put in a situation where they must make a decision where they do not know the basic facts. If you have talent, there is a "Fast Track" but Always you start at the bottom. I started at the bottom, he said and then quoted the various companies of which he was head. The machine tool companies will mean nothing to you, but many of you will recognise the company Yanmar. Dr Yamomako was a true captain of industry and went on to tell me a most uncomfortable tale, that was the more poignant by being obvious.

He explained that competition, whether it be military, commercial or industrial shared the same requirement. That is that you should know the strengths and especially the weaknesses of your opponents. A group of major Japanese companies, such as Nippon Steel, Sumitomo, and a whole group of big players had set up a study group to rate the opposition main industrialised countries.

One study was to identify the number of potentially profitable patents lodged by each country in relation to the size of it's population. The UK came out as the leading country in this regard. They then studied the financial benefit that these countries had derived from these inventions. When they checked the record of the UK, it was minimal. The group could not explain these findings, so the sponsors decided to send a research team to the UK to find out the reasons.

After 18 months, they returned and reported that the British were still a class ridden society where young persons born to families higher than the "Working Class" were given a reasonable education and then went direct from university into middle management without "Starting at the bottom"

Because of this, the decisions they could make were not underpinned by personal experience.

The conclusion was that the British had a good workforce if treated fairly, but the worst management in the world. The team returned having learned the old saying "Lions led by Donkeys"

We realised that the Brits would never be a challenge, but we could work there if we wished. We could use the same workforce, but just put in a management of our culture.

To sit on an exhibition stand in Tokyo and be told this by a truly successful business leader made me want to bow my head in shame, especially as I knew it to be true.

I will finish with an interesting anecdote. At one point in my career, I left the engineering activities of our family company in order to convert an existing industrial building to a new machine tool manufacturing plant. It was necessary to live with several existing features. One feature dictated that my office was on a slightly higher level than the general work floor that it overlooked through a wall of windows. When we were visited by managers from British plants, many would sit and observe "I notice your office is elevated and has windows round on all sides, so you can see "The Bastards are Working". Dr Yamamako visited and sat in the same chair and said "I see

you have windows round your office so everybody can see that You are Working" I shook his hand.

Roger Moss

"Scottland" Vol 2

Chapter3.
Disaster!

Calm reigns as we make our way back along the single track roads, rain threatening in the west. Potholes abound and Pams utilises her well developed radar system for the bad ones which involves hoisting herself off the saddle and onto the footrests as they approach. We just have to slow down as the roads get worse and worse. Tourist buses don't help much and enjoyment takes a bit of a nose dive.

Still the motor is singing well as we climb away from the coast. The bad side is that it starts to rain but not enough to warrant a stop for the wet weather trousers. I can see the summit and accelerate to the low 60's as with a shriek the bike skids to the left and I whip the clutch in, "Seizure?" I think but it makes no difference and the bike clanks and slithers to a standstill. I look behind and see the rear chain guard twisted and the chain off the sprocket and jammed hard against the frame.

The considerate motorists don't like being held up with a bike stuck in the middle of the track and try to hurry things along with a prolonged burst of loud horn pressing. This has never bothered me and we cannot push the bike out of the way so lift it a little at a time to the relative safety of the grass verge. Our motorist friends pass by with an angry glare in our direction. At times like this I always smile and wave as they accelerate away! It's more annoying to them like that!

(Who said hooligan! Quite at the back there!)

I have a quick looksee and had assumed that the rear chain had broken but cannot find an end. First job drag the bike into the next passing place and get the bike onto the rear stand. Easier said than done and we are warm in the extreme by the time we manage this. I undo the bolts from the chain guard, swing it up out of the way to find that the chain is in one piece, had jumped the sprockets and twisted itself through 360 degrees without breaking, jamming the wheel in the process.

Tool inventory:
1 Screwdriver.
1 Adjustable spanner.
1 Pair of pliers.
And that's the lot!

And to put the finishing touch to a really smashing day a cloud of the most voracious midges decide it is time to disobey St Columba and start the feast!

Pam whips out the midge cream in quick time but trying to get the cream to stick on hot wet faces is impossible. We wipe what we can of the sweat and rain and try again .
All this time the midges are feasting rapidly. I try a swear and shout but only succeed in inhaling the lot! Back to putting up with them I suppose. All these shenanigans bring us no further to solving the chain problem so I have rest. Have a think and chip away at the problem. Trying to think clearly while being eaten and rained upon isn't easy you know and not made any easier by the motorists who want to use this passing place to pass.

Not unreasonably I suppose but we have tried to make ourselves as small as possible and have shuffled the bike as near to the edge but they are still not satisfied and the horns blare and the windows get wound down and abuse gets hurled in our direction. I take all this in my stride after the sixth scream of abuse cause' I know that they will not get out of their cars' its the womb syndrome you know and I'm dead sure that they aint going to get out and face the midges plus the sleeting rain so I resolve to ignore the lot of them and just get on with the job.

This works! The abuse stops when they can see we are working on the bike and I don't mind the odd Volvo and Range Rover driver carrying on. Funny that! It seems that the more well heeled the motorists are the more arrogant they get.

There's agood thesis to be written here you budding sociologists!

I get the chain guard off and start to unwind the chain. "Bloody hell! this thing is tight" I try to rock it back and forth. Nothing doing. I manage to lever the chin up about an inch and move it backwards. Forward again and another quarter is gained.

A blue Escort pulls to a stop and backs off the road in front. Out hops a young chap from Glasgow. Looks at the problem and opens the boot of the car wherein lives a full toolbox, "I've got a Triumph Bonnie Mate. So I know what its like!"

Angel Eh!

So now with a full set of tools it was mearly a matter of graunching everything back to some sort of order. The midges loved it of course! Less so my saviour and myself! Still, Pam could have a chat to his girlfriend safely ensconced inside the car while we set to and bought order to the carnage. Only a matter of minutes before we were mobile again. Bikers! Salt of the Earth Eh!

We wiped our hands, stood back to admire our handiwork and congratulated ourselves on our ingenuity. Wiped the tools and shook hands. He tootled off with my good and thankful wishes.

"We are up, up and away Kimmo Sabe!" *(Lone Ranger talk!)*

Ted Parkin

Pam and Ted at the Klausenrennen 2002

(Photo by Armin Fischer)

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