

# **I know it's late but herewith the latest on-line Scott Newsletter**

**In This issue;**

**Disclaimer**

**Last plea from the Editors for copy**

**Scotland 2**

**Racing from Roger Moss**

**The Genesis of the 4 speed Scott gearbox.**

**Alfred A Scott.**

# Disclaimer



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## Short words from the Editor.

Sorry for the tardyness of the latest newsletter but both Roger and I have been flat out working and preparing bikes to race. However, herewith our latest offering , which may well be our swansong if we don't get any articles to put in it as both Roger and I are rapidly running out of personal copy to fill the spaces!.

So, dear readers, it's up to you.

Regards EJP



## From the Moss camp

The BHR race meeting at Three Sisters near Wigan 8/9 May went very well and the bike certainly handled much better with a tyre that was a near equivalent of a 325 x 19 on the back.

The difference in handling when using a more narrow section than the 350 x 19 "Avon Grand Prix" tyre used previously was quite profound. I believe Avon do make a 325 x 19 back tyre, but I was using a 90 x 90 x 19 "Roadrider" front tyre in soft racing compound on the back with direction reversed.

After this I went on holiday with Marina and called in on Gulio Caimi near Milan, for whom I had rebuilt, or rather, resurrected an engine in a dire state. Later we visited the magnificent Audi museum in Ingolstadt to see their treasures from DKW etc. Of particular interest was a water cooled twin cylinder two stroke that they had introduced in 1929 to overcome cooling problems they were experiencing in their previous air



cooled version. To my recollection, it gave less power than the equivalent Scott engine. The next outing was the "Beezumph" which is a track event run by the Triumph Trident and BSA Rocket Three Owners Club. This year the event was staged at the Anglesey circuit, a good but very exposed coastal venue. The evening and night before the event, there was wind and rain of truly biblical proportions which first blew away the large marquee that had been erected for the Saturday evening BBQ and band. Next we saw tents flying into the Irish sea and drenched folks who had come on bikes intending to camp with all clothes that had not disappeared after their tent, totally soaked. A disconsolate trail of wet riders headed home early the next morning muttering about

“The circuit from hell!” To my surprise, the weather cleared and we had a good thrash round on both days of the event. With my “Sticky” tyres, I was riding round other riders on corners in great style and was not disgraced on the straights either. At the end of the event, all the bikes were lined up for judging and I was asked to put the Scott in the section for Competition machines. I looked at the line of genuine “Works” triple racers, including the one owned by Garry Nixon that had been air freighted from the USA with Garry for the event. The prize for “Best Competition Machine” was awarded to my Scott and presented to me by Garry Nixon. I mentioned to a friend that I felt a bit uncomfortable, as it was their club's event and they had genuine “Works” racers. My friend commented that mine was a “Works” racer and far more rare, as there was only one like it.

Next was Lydden near Dover on 31 July / Aug 1st. A nice little circuit and as son Richard's Scott was awaiting a new crankcase (Another case of metal collapse), it was arranged that I ride on Saturday and Richard on Sunday. The front runner in the Vintage class is Ian Cramp on a very highly developed KTT Velo on dope. Ian had been unhappy in the past when Paul Dobbs had beaten him and Ian had urged his dad Roger to extract more power from the Velo to keep ahead. It had broken at this meeting the previous year and repeated it's trick in style this year, with a sheared Oldham coupling which led to significant destruction. We both enjoyed our rides, although the rear tyre was too soft and the bike was sliding on to the exhaust pipe, which was exciting! To my quiet satisfaction, Father's best time was slightly faster than Son's and it is good to know that at nearly 70, I have not lost the spirit. Many of you will remember Scott main dealer Ken Swallow of Golcar. Ken's son Bill assembled his dad's first Scott from Matt Holder and still has his Dad's bike.

Ken Swallow and Arthur Fogg had bought Scotts post war from Shipley and as they were well known at the Panther works, they arranged to have both machines converted by Panther to have tele forks and swinging arm rear suspension. It was on this machine that Ken competed in the “All Scott Race” at one of the first Cadwell meetings after the war. Bill told me he will look out the programme so I can scan it. Bill Swallow's elder son Chris, had asked previously for a ride on my bike and had won on his first outing. Now Dad Bill asked if he could also try racing a Scott in earnest. In view of his family connections with Scotts, I agreed that he could take my rides at Cadwell 25 / 26 Sept. Bill will bring his dad's Panther modified Scott and Ted Parkin is travelling down from the Moray Firth to bring other Scotts for display. If you are free any time that weekend, we would welcome extra Scotts and would try and get some good photographs to submit to the press.

I am trying to finish the new crankcase and rebuild the engine for Richard's Scott, so that we can have at least two Scotts on track.

As regards the work side, I have been fortunate to receive some money from a will and as “investing” this in my pension fund does not seem to bring much return after inflation, I have decided to look carefully at what components I could make to offer owners.

The following is part of the list of what is currently available and scheduled for early production

- Crankcases. Scott type reconditioned with new cups to Scott design
    - Scott type reconditioned with ball race main bearings and synthetic seals
    - New Moss big inlet type with ball bearing main bearings in LM25TF
  - Barrels
    - New DPY type in iron with pistons
    - New blind head RZ / RY type with pistons
    - New Moss aluminium DPY blocks with chrome bore 500cc only with
  - Scott case
    - New Moss aluminium RZ / RY type with chrome bore 500cc only with
  - Scott case
    - Cylinder boring service
  - Heads
    - New Moss high efficiency DPY heads in LM25TF
  - Water Jackets for blind head barrels
  - Carbs
    - TT style Carbs 34 / 36 / 38mm bore with Scott flange
  - Flywheels
    - reconditioned with new centre hubs and weight rings
  - Cranks
    - New Moss high strength cranks Short Stroke, Long Stroke and Long stroke with
      - balancing slugs in Tungsten
  - Rods
    - Full reconditioning to original factory accuracy or exchange items
    - Big end caged roller sets
  - Oiling
    - Non Return valves for oil lines
    - Brush oilers for primary chain
  - Pistons
    - Currently investigating piston manufacture
  - “Super” Steering head stems in S155 / 300M high strength quality items (only 4 available)
  - Spark plug / water jacket retaining ferrules and ring nuts for 14mm plugs phosphated
  - Pistons reground to Scott taper including new Silks ground to 75.60mm
- The 1934 Scott four speed gearbox as I have successfully raced for 35 years has been completely redrawn by Ted Hills and as we have all patterns for casings, these could now be supplied. The design, however, in true “William Cull” tradition, is elegant but would be expensive to produce.
- Moss free newsletter by email available on request from [roger@mossengineering.co.uk](mailto:roger@mossengineering.co.uk)
- Kindest Regards to all Roger

## **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

From: Barry Holland [mailto:BSHOLL@bigpond.com]

Sent: 27 August 2010 11:20

To: roger@mossengineering.co.uk

Subject: pilgrim pumps

Roger.

I googled pilgrim oil pumps and on page four there is a site:-

Oil pump catalogs - brough superior, [www.brough-superior.com](http://www.brough-superior.com)

there are good views of the internals etc of these pumps. The centre column, fourth row down shows the internals of the style that my bikes have. This is the best I have found on the Net so far, will look into that site further tomorrow.

Cheers Barry.

## **The Genesis of SGB4 (the four speed revolution!)**

It came about in the following way.

In trying to make my Scott racer more than usually competitive, I kept breaking cranks. I decided to develop the engine to breathe better and enhance the crank

assembly to withstand higher revs. This progression brought the dilemma that if I

wanted more power, I could achieve this by a narrowing of the power band and pushing up peak output. This solution brought the problem that the spacing in the

three speed box would be too wide for the more narrow power band.

I had heard of the Scott four speed box, but had never seen one. Enter Fate!

A friend phoned and told me that the Scott GP machine with two four speed gearboxes, owned for many years by that gentleman Scott expert Nick Sloan,

was in his care. He told me that Nick had sold the bike and it had passed into the

ownership of a gentleman who was having it rebuilt and that it was intended that the best components from the two gearboxes would be used to make one serviceable unit. I was asked, if I wished to have a brief loan the rejected set of gearbox components, for the purpose of making drawings of them. This would make it possible to make a faithful copy at a future date, rather than the easier but non-standard route of modifying a three speed box. The latter option being in

contravention of the eligibility regulations for Vintage Racing.

My friend said that several of the gears were marked 30TT and that this would be

evidence that this design was produced in pre production form at that date. This was important as the cut off date for the "Vintage" class in racing was, at that time, Dec 31st 1930. If the box was produced after that date, then the bike would

be put into the next age class "Post Vintage". I like riding and rode the Scott in the Vintage events and a 39 T100 Triumph in the Post Vintage class. This enabled me to get four rides per meeting instead of just two.

I have a most talented friend named Tony Pacey of Melton Mowbray, who in his early years had been an engineer's pattern maker. Although, at his place of work,

he had progressed to technical management, he still enjoyed the challenge and fulfilment that came from producing an interesting pattern privately. I visited Tony

and discussed the project. He assured me that he would be able to make patterns that would produce an exact replica of the Scott gearbox castings even down to the location of casting split lines. While Tony made each pattern, the original castings were measured and full engineering drawings produced. On completion, the patterns were sent to the Leicester foundry of R C Harrison Ltd, who were acknowledged experts, for the castings to be produced in heat treated

LM 14, which is the old "Y" alloy piston alloy.

When correctly processed, this grade, machines very well and results in a tough casting with strong threads, without resorting to none standard "Helicoil" thread inserts. The drawings having been produced for both castings and rotating parts,

the next step was to review the design. It was evident that as the normal Scott gearbox was short in body to accommodate the inside primary chain line, so it had been a challenge to incorporate a further ratio into this limited space.

The gearchange mechanism had been located above the gears and was a most elaborate design. It used a face cam to push either forward or reverse plungers which were each equipped with a swing out pawl, rather like a small version of a

kick starter pawl. This pawl engaged a small ratchet wheel secured to the top face of a plate cam, which in turn moved the selector forks. I looked for the positive stop features in the design, and found nothing effective. True, the operating plungers had their stroke limited, but once the plate cam was spinning,

there were only small spring-loaded balls in the selector forks to engage in small

grooves in the guide rods to arrest the momentum. This design fully earned the reputation of the box with four gears and sixteen neutrals! It was found that the face cam profile could be altered slightly to solve this problem. The modification meant that whilst one plunger / pawl assembly was being pushed to rotate the plate cam in one direction, then near the end of its travel, the second plunger would be advanced a little, so as to block the plate cam from continuing to spin past its target. A detent plunger was also incorporated to work on the periphery of the plate cam, instead of the spring-loaded balls in the selector forks. The Scott casing had extra metal to allow for this feature, but it had not been used. The finished gearbox is a trifle slow to shift but is otherwise a great success. The

only problem has been one particular gear that has shed teeth, due to the side face having dog pockets machined into it leaving too little metal under the teeth for good support. It must be accepted that at about 37BHP now, the loading is perhaps a little higher than originally envisaged.

I have sought the advice of Messers Hewland, the long established maker of gearboxes for racing cars, as regards the best metal spec. currently available and am at April 2001 engaged in the manufacture of replacement gears to a modified design.

Nick Sloan was kind enough to send me a copy of an arrangement drawing for the original Scott design. To my infinite mortification, my Airedale dog Rex ate the packet before I got to it. I did not have the heart to ask for another at the time,

but if you read this Nick, you know what I want for next Christmas!

To be fair to Scott, it was not so easy to get the extra ratio's into the same space

as that of a three speed box and the design thus ran to complexity and expense.

I am convinced that they could have solved the selection problems but the extra production cost of the four speed box over that of the three speed unit, would have been more than the market would stand.

The production of a facsimile Scott four speed gearbox with minimal internal refinements, is perhaps the single most extreme commitment of an overall project to develop the Vintage Scott, whilst staying true to it's overall design parameters. I have had a lifelong love affair with engineering for its honesty and

purity in a world of deceit and dishonesty. The development of this bike has been my tribute to Alfred Angus Scott for his inspired concept of simplicity and clarity.

## Scotland 2

### Chapter 3

#### The Man who Pushed His Scott

It takes a lot these days to motivate me.

I have had it with patriotism, standards and pleading. There aren't many things now that can raise my hackles.

So, when the phone rings at 10pm in the evening I'm not best pleased. Even less so when a pleading voice asks if I can drop everything and get to Kyle of Lochalsh by 8 AM the next morning to sail with a well known organisation to sort out a crew from hell. I'm not enthralled and even less interested.

However, with this short notice and instant availability we have got to be talking major bucks here, TT Replica bucks.

For as it happens, Roger Moss had just put his 29 TT Rep up for sale in the Scott Owners Club Journal. I rang and asked if he would be interested in offers but naturally he was not, so **this** call was a chance to obtain a dream. I hesitated a couple of seconds during which the daily rate shot up another couple of points on the salary scale. I was hired.

So what do I do to warrant such desperation?

I teach Offshore Sailing. Mainly working with young people. 14-17 year olds, both sexes, and am known as 'That Bastard Bosun' Young people and I having a rather '**special**' understanding based on a subtle blend of psychology and extreme physical violence!

The contract was for a month and I was outrageous! (*a repressed showman I think!*)  
Over the top. A caricature of a sailing psychotic.

But results!

No problem.

Order and sense reined supreme after three days. All the assholes and bullies met their match. All the 'nasty boys' *and girls* met their Waterloo. Their worst nightmares became a living hell and do you know the real neat thing? They were paying me for the privilege! And paying lots! I'm like Claudia Schiffer. I don't get out of bed for less than \$5000 per day. (*pro rata of course!*)

I came back full of jokes and stories of youngsters who had learnt what real responsibility was when their mates lives were in their hands. The students bulged with self confidence and my bank account bulged with cash which, together with the sale of a 1920 BSA vee twin, was enough to buy a dream.

And what a bike!

**EU 7373.**

Fastest known road going Scott in the UK, if not the world. Tested by Titch Allen in the Second Vintage Roadtest Journal pages 44 to 47.

A legend!

So I popped down to see Roger and thought his lifestyle quite normal and not too far removed from my own. We got on, had a great meal cooked on the old AGA, found we had mutual friends in the vintage racing world and he accepted my hard earned money with regret on the parting of an old friend.

Back to Scotland after a quick family visit around Newark.

I had to help deliver an 80 foot yacht from the Clyde to Skye to top up the old finances but a couple of weeks later saw me readying UE for its MOT. A friend dropped in to have a look at this bike I had been raving on about for the last week and asked for a ride. No road tax, no MOT, so I told him to "*Just run it down the road*"

Missing for twenty minutes.

I've got to stop doing this!

It's doing my heart rate no good at all, but I just love sharing these experiences with others. The wiggling I get about Scotts from my mates (*all of whom have never ridden one of course*) is too much of a red rag to a bull and I have to give them the opportunity of mending their ways and at least letting them criticise from experience.

Geoff came back amazed. He had done 10 miles. Was thrilled at the speed, handling and lack of vibration of the TT Rep. He actually said that he thought, "*What a heap of S\*\*t!*" when he first saw it but had to admit it was the fastest, best handling bike he had ever ridden. No! he wouldn't be buying one as his credibility in the Four Stroke Lovers Club would be called into question and he might be blackballed if word got out.

MOT time.

Pam decides to go for a bike ride and do a bit of bird watching while I am away. Can't start the bike so while Pam peddles off shaking her head I head for the local hill, fortuitously placed nearby, to help the push start. We crackles into life with the minimum of effort and its, "**High Ho UE, Awaaaaaaaaaay**" (*Lone Ranger talk!*)

Through the local environs of Hopeman I keep it down, although with her tuned engine she doesn't like it and is straining at the leash to be let out to play. Out of the village and I give it a gob full. "*Just hang onto the bars Ted*" she says, "*Let me do the work!*" and I do. We flick around the first left hander in second (60 mph) cranked over and steady as a rock. That sublime left hand flick into top and the racing throttle is opened. A slight lag as she gather her breath and we are off.

**YYYYYYYOOOOOOWWWWWWL LLLLLL!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!**  
**YYYYYYYOOOOOOWWWWWWL LLLLLL!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!**  
**YYYYYYYOOOOOOWWWWWWL LLLLLL!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!**

I've ridden nothing so sublime!

Smooth, powerful, exhilarating.

We reach the crossroads and hang a right blipping the throttle, flicking it into second. Crank over for the bend on the overrun and open the taps as we straighten up. Let her run up the rev range, turbine acceleration rocketing us forward as a slight left hand kink sweeps towards us. Crank to the left and "*Flick*" into top. The straps on my helmet are too loose and try to beat some sense into my chin and neck. I shut my mouth to stop my cheeks from inflating and ride the bumps over a right hand kink dropping now at high speed towards a sharp left-hander. The brakes (AM4 linings) pin us to the road and I flick her into second gear.

Three farm workers taking a break from the ploughing look up and are transfixed at the sight and sounds. Bike leaning way over to the left. Boot kissing the tarmac and I rev it

past the men to let them enjoy the sound and smell (*it runs on Castrol R 40! Bliss!*) as we hit top gear. Over the brow of the hill 3 miles from home and revving well, the back of the bike slew's hard to the left. Feels like oil on the back wheel but no matter. I'm stopping real fast, the bike straightening, when I snap the throttle shut. *Thoroughbred Scott handling you know*. Engine sounds good so nothing wrong there and we come to a safe halt by Duffus graveyard. *Ironic eh!*

Completely flat tyre.

No MOT today and a three mile push home. Ah well! I need the exercise!

At least it gives me chance to talk to the farmers and tell them about the bike. They don't know about Castrol R and I give them the definitive history of lubrication while resting after the first half mile.

Just what they needed to know!

It's a beautiful day and the bike isn't too heavy. I've pushed worse bikes for far longer distances anyway and reckon that with all the cholesterol you burn off doing this sort of thing it can only let you live longer and ride further.

An hour saw us home and a good cup or two of tea saw me back on top form ready to set to on the rear wheel.

Pam rides through the open gate, "*Did it pass?*"

I explain and pour her a cup. She gives me a hand with the repair. The tyre is in good condition as is the tube apart from having no valve attached. *See what I mean about power!* Must E mail Roger for some gen about tyre pressures!

Back together. Ready for the morrow. I'm ready for some more tea!

MOT at 10.30, a beautiful sunny morning and I wheel the bike out in good time. Tool up and get the riding gear on. Flood the carb and nothing happens!

This is getting monotonous! Worse than that is playing to the stereotype of hard starting Scotts. I take it to my nearby hill where I am collecting a growing band of regular spectators to my starting rituals.

Mind you the jokes are getting better and have changed from laughing derision to, "*Didn't Scotts fit an engine then Ted!*" and "*What a quiet engine you have there mister! Want to swap for my mountain bike!*" The TT Rep eventually starts and their derision is drowned out by the noise of the engine. But I must see what I can do about this.

Still! A brill ride into Elgin and the MOT is really a formality. I regale the tester with stirring stories of the history of the bike and he is really impressed with all this.

Unfortunately I can't start the bike and push off to find a local hill.

The 330lbs is making itself felt as is the sunny day with sweat breaking out in the vicinity of an increasingly furrowed brow. Back to the testing station and I buy a couple of new sparking plugs. Nothing doing and eventually the tester is not bothered about waiting around to hear this engine any more.

I am mortified after all the build up!

And slink away to find a bigger hill, not too far away!

I spy something which might do within sight of a local housing estate, unfortunately to get to the top you have to push it up.

We are joined halfway by a 9 year old on a push bike, "**Who makes that then Mister!**" he asks, "*Scotts*" I say between lungfulls of Scotland's finest. "**No they don't!**" he shouts, "*Who does then*" I answer, "**Honda**" I look at him and decide, after counting the increasing heart rate, that it is just not worth the hassle and a rest might be a good idea.

"*Scotts made them*" I pant, "**Naw, mister. All these bikes are made by Honda. It's a Honda with Scott written on it. They make Harley Davidsons as well!**"

I suppose it's our own fault. We don't teach British Industrial History anymore.

I push on with him cycling slowly by the side, "**You ought'a buy a Honda engine to put in it!**" he says. I sigh and don't spare the breath to put him right.

Top of the hill.

Turn, rest, catch my breath and off we go with chappie cycling alongside.

Nothing doing except a higher heart rate.

"**Told ya so!**" says my friend who cycles off.

Turn around pushing back to the top of the hill, I concentrated on breathing evenly and filling my lungs to their maximum, almost there.

"Ere Mate!" shouts a voice and my pal is back with two of his friends,

**"We 're going to help you push the Honda Mister!"**

I don't argue and me, three lads and the Honda prepare for lift off!

First bump and she fires, smoke everywhere, lads covered in Honda oil and holding their ears!

Home time!

Where I strip off the cylinders to find gummed up piston rings, the perils of R40. Clean it off. Engine inspected, a work of art. Polished, machined, tweaks and ideas galore!

Engine back together and it starts first kick. I am therefore, at last.

**"The Rider Formally Known As The Man Who Pushes His Scott!"**  
**(TRFKATMWPHS)**

But it is still difficult to start. I still have to run it down the local hill so, technically, I am still TRFKATMWPHS.

I have a good look in the engine. Everything looks fine. I check the timing, fine. Check that none of the new gaskets are restricting the gas flow. All fine. Still TRFKATMWPHS

I go for a long ride.

Acceleration is fabulous but it seems to sit at the top end around 65 mph.

I e mail Roger who responds quickly. I have checked all his suggestions already so back to the thinking board.

Another run still TRFKATMWPHS.

This seems as if the engine is being restricted by its fuel flow. I drain the tank. Nothing there but loads of filters which I am pleased to see. But I'm no further forward. Off with the float chamber and jet holder. Full of water and bits of crap! I'm not surprised. I washed the bike after the rebuild and the crap is from its time standing.

All clean. Back together.

Starts on the kickstarter!

Full acceleration. Top speed unobtainable!

No longer TRFKATMWPHS

**Street credibility restored! Happy time!**

So off I'm go to my local test track. All is brilliant! Flicking to the left and right and speed only limited by my nerve. I decide to visit a friend in a local school but as I approach it the bike coughs and stops. It starts again easily enough but stops again within a few seconds.

I have a very silly thought, open the tank and confirm that there is no petrol!!!!!!!!!!!!!!  
Still TRFKATMWPHS

Pam rescues me and I learn that speed has a price. The price is petrol!

Well I can handle that and embark on the usual "Getting to know you and sort out" phase.

Off to the A96.

Speed is awe inspiring and I am only limited by the handling and the knowledge that my Life Insurance isn't a lot!

I fill the bike to the brim checking that the oil tank is brim full with R30. Got to have that smell! Another filler up at the station knows of Scotts and knows that the TT Rep is some machine. It turns out that he is the owner of a roadgoing Manx Norton. I fill him in on the history of the bike and scream away to impress him.

I settle into the bike. Let it warm up and give it a gobfull. A slight slide to the right confirms the power and the traffic thins enabling the bike to come into its own. A cold feeling in my nether regions tell me all is not well. Off with the throttle and a glance down. Petrol is seeping fast from the left filler. Slow down time and I use the handling for a while as i flick left and right through the traffic. Vibration is acceptable and I soon wind it up into the mid 80's. It feels like 180 mph with the wind whipping the pudding basin helmet up my forehead and the wind filling my cheeks.

"Damn and blast!"

Forgot about the petrol leak and treat the old block and tackle to another soaking of Mr Texaco's finest.

A friend of mine who survived a fire on his bike once enthralled my family with a graphic description of what it was like to be on fire.

He had just crashed his Triton on a country road in Kiddeminster. The fibreglass tank had split and the petrol had ignited throwing him away from the bike. All he could hear was a slight crackling which he could not place so walked into the road. Cars had stopped and what he could not understand was the way the occupants were shrinking away from him as he walked towards them. He saw a shimmering in front of his eyes as a lorry driver ran towards him with a seat blanket.

The crackling was his body burning and the shimmering the flames dancing above his head!

### **I took petrol leaks seriously after that!**

So I slow down real fast and tootle back to Hopeman.

It's fixed quick and I have a good think about what to do with this bike.

This machine is special in the extreme. It's history and development is known and documented from 1943. Do I tour it round Scotland and put up with the noise and thrills ( gets on your nerves after a time) or save it for special occasions?

Pam and I have a Glenmorrangie in the garden and think about it. It takes a while and another drink before I decide to keep it for special occasions and to let my mates have a go if they are deemed worthy.

In fact I've just had a brain wave!

Here's the deal

It is difficult for anyone to get to ride on a genuine TT Replica these days so what I suggest dear readers is this.

If you want a ride ion UE 7373 that's alright but here's the rules:

1. You must arrive on a Scott!
2. You bend it you mend it!

**Deal?**

**Ted Parkin**

# **Alfred Angus Scott.**

## **An engineering explorer.**

Having now travelled a good few miles along life's way and witnessed some of the variety of human motivation, I recently fell into a whimsical contemplation of the character and life of A A Scott.

The inspired concept of the original Scott and the rapid early development of the designs fascinate me. We then see such bold and innovative advancement virtually cease, to be replaced by a regime of sound but bland updates of details.

I speculated the following. Alfred Angus decided to design a motorcycle, but his unusually valiant and questing spirit had no time for the conventional approach of copying the accepted norms and adding a few peripheral features to give some identity.

He defined his design objectives, then constructed his solution from first principles. Where there was a perfectly good solution already existing, he did not let false pride fetter him from applying it.

Having arrived at his first complete design, it needed to be manufactured. This needed the extensive and expensive facilities of a manufactory with skilled craftsmen, so the Jowett brothers were commissioned to manufacture the first machines. The machines must have functioned successfully so the next logical step was to arrange for quantity production.

The outlay to underwrite the premises, plant, tools, equipment, work in progress, start up funding and day to day cashflow was well beyond the means of Alfred and his immediate family. In order to achieve production, outside venture capital was needed. Enter the businessmen!

The bikes were demonstrated and compared with other machines of the day. It was clearly seen that there was a market opportunity for this innovative commodity and that the paramount objective of the prospective investors, being that of employing capital to create greater wealth, showed every likelihood of being achievable. The capital was invested

We now have the situation where, although the name over the door says “SCOTT” the reality is that Alfred was a minority shareholder and his freedom of action was subject to the approval of the main shareholders.

The setting up and starting of manufacture of the first production design, must have been heady and challenging times. The bikes roll off the production lines, but Alfred already has ideas for advancement and improvement of the design. The ideas are eagerly explained, but the motivation of the investors is very different to that of Alfred. They point out that the factory is operating at near capacity and they are selling all they can make.

Why should they then invest further capital into new tools and equipment in order to produce the proposed new design unless there was a prospect of making more profit? Was the new design cheaper to produce, so that if the current selling price was maintained, there would be a bigger profit margin? no, well then there is no financial logic and Alfred’s desire to just make a more advanced product was thwarted.

What Alfred would be allowed to do, now that the factory was ticking along nicely, was to occupy himself with the design, production and development of machines for racing. This would keep him occupied and hopefully gain publicity that would offset the costs, without disrupting the established production of the factory “Cash Cow”. Expensive retooling would be strictly controlled and implemented only when problems effected sales, or changes were necessary to maintain market share. Given Alfred’s fertile creative mind, then these constraints must have been frustrating. The innovation he demonstrated in the early racer design was not paralleled in the development of the contemporary production models.

When Alfred could bear the bondage no more, he left and soon produced the Sociable, with an engine showing considerable technical advance over the production Scott.

If one considers the reasons for one’s allegiance to the marque, it soon becomes evident that there are great contradictions in the history of the Scott. Are you inspired by the innovative designs of Alfred, or do you hold in respect those who continued to produce a design that was practically in suspended animation for a further half century. Surely Alfred would have turned in his grave if he had realised what would be done in his name! My own respect is unconditionally reserved for Alfred as a questing engineering explorer of the highest calibre. I understand the needs of financiers to make a profit and can understand that the meeting of the two philosophies must have made a very dysfunctional marriage.

Perhaps divorce was inevitable and best for all concerned. One must accept, however, that even given the restrictions that would have been imposed on Alfred's burning ambitions to constantly improve and develop the machine that bore his name, then after his departure from the company, the only thing that was not diminished was the name.

We can only mourn the loss of what might have been.

My objective in designing and implementing improvements on my machine was to retain the original design parameters and to try and release the full latent potential within the limitations of a deflector piston design, in a way that could readily have been produced with the available manufacturing technology of the late 1920's. (Titanium rods excepted)

It has been done as my humble tribute to an outstanding engineer, to whom the exhilaration and fulfilment of designing "a better mousetrap" was his greatest motivation in life. With far less effort, I could have put a Scott wrapper round a Yamaha and achieved immeasurably greater results, but it would hardly have been decent!

I have been told many times, that my bike is not a Scott and that there is a body of opinion that would prefer that I did not bring the machine to rallies lest it causes offence. I strongly uphold the rights of every person to their opinion and have mostly refrained from taking the machine to other than race meetings, unless I am sure that it will be acceptable.

I had a most enjoyable time recently when I took the bike to the "Beezumph Rally" which is a track day on Cadwell long circuit, primarily for the owners of Triumph and BSA triples of the 1970's but all British bikes are welcome.

My trusty steed and I had a great time prevailing over these machines and ended by having a hilarious romp with a new 135bhp Daytona 595. I was clocked at over 105 mph along the slightly uphill straight but had an advantage through the corners. The onlookers were so enthusiastic at the spectacle of this very unequal "David and Goliath" battle, that we were awarded "Best Competition" and "Man of the meeting". I received our awards from Doug Hele and said a silent thanks to Alfred for the splendid day we had enjoyed and the most friendly reception I had received from those whose resplendent and powerful modern machines had been vanquished by the machine bearing Alfred's name.

**Roger Moss**

# Supplier List

## Carburettors

**If you want good expert information and parts about carburettors contact**

**Don Payne**

**Hitchcocks M/cs**

**Amal Specialists**

**Rosmary Cott, Oldham Lane West**

**Chadwick End, Solihull**

**W Mids B93 0DL**

**UK**

**Tel 01564 783 192**

**Fax 01564 783313**

**[info@hitchcocksmotorcycles.com](mailto:info@hitchcocksmotorcycles.com)**

**[www.hitchcocksmotorcycles.com](http://www.hitchcocksmotorcycles.com)**

**If you have problems that the special Scott carburettor body is worn, Jon Hodges could**

**make a new body - [jon@myddfai.com](mailto:jon@myddfai.com)**

**If you want a more modern replacement, then Moss Engineering can supply an adaptor to fit the Scott crankcase and a Mark 1 Amal concentric carburettor.**

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## **Petrol / Oil Tanks and Tool Boxes**

**Down to the last few traditional Biscuit Tin Petrol tanks, also Traditional separate oil**

**tanks and Tool boxes.  
Colin Morris  
The Conifers, Noke Lane,  
St Albans  
Herts AL2 3NX  
UK Tel 01923 671 441  
Sorry no email connection**

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**Fork Repairs  
Elk Engineering.  
Contact Jake Robbins.  
Tel 01424 445460.  
Mobile 07986 254144.  
[elkforks@aol.com](mailto:elkforks@aol.com)**

**I've had two pairs of Webb forks repaired/restored by Jake and  
he does a great job. He  
will straighten or retube (even taper tubes) and supply spindles,  
bushes and most other  
parts.**

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**Magnetos / Ignition Systems  
New Self generating electronic Magnetos. Vintage appearance  
BT-H Magnetos Ltd Leicestershire UK  
[www.bt-h.biz/index2.htm](http://www.bt-h.biz/index2.htm)**

**BTH and Lucas Magnetos rebuilt for over 40 years  
Fred Cooper  
Tel UK (0) 1732 822030  
Special ignition systems  
Rex Caunt Racing  
[www.rexcauntracing.com/](http://www.rexcauntracing.com/)  
Spark Plugs**

**NGK Co We use NGK spark plugs in our racer with complete confidence. Check out this website for info:**

**[www.ngksparkplugs.com/techinfo/spark\\_plugs/techtips.asp?nav=31000&country=US](http://www.ngksparkplugs.com/techinfo/spark_plugs/techtips.asp?nav=31000&country=US)**

**And this one for the UK  
[www.ngkntk.co.uk/](http://www.ngkntk.co.uk/)**

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### **Instruments**

**Rev Counters Electronic. "Scitsu" Pick up from HT lead.  
Vintage in appearance, works  
with mags.**

**Dawson Harmsworth Ltd.**

**PO Box 3606**

**Sheffield S6 2YZ**

**Tel UK 0114 233 7460**

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### **Engine and Transmission Parts, Rebuilds, Services**

**Scott big end roller plates**

**Laurie Erwood (SOC member)**

**[laurieandval@erwood208.fsnet.co.uk](mailto:laurieandval@erwood208.fsnet.co.uk)**

**Piston Rings Made to order**

**Phil Daintree**

**22 Hawkstone Road**

**Whitefield, Manchester N45 7PJ - UK**

**Tel UK 0161 766 4487**

**Oil seals and O rings**

**Rhondama Ltd**

**5-6 Windmill Rd. Ind Est.**

**Loughborough**

**Leics LE11 1RA - UK**

[enquiries@rhondama.co.uk](mailto:enquiries@rhondama.co.uk)

**Engraving - degree graduations on flywheels, Crank screws, etc**

**Robinson Engraving**

**15 Ruskin Avenue, Syston,**

**Leics, LE7 2BY – UK**

**Tel UK 0116 260 5998**

**Hard Chrome plating including bores**

**Michrome Electro Plating Coventry UK**

[www.michrome.co.uk](http://www.michrome.co.uk)

**Scott Engine and transmission rebuilding Specialist in 2 speed  
gears**

**Ken Lack**

**5 Norton Lees Square**

**Sheffield S8 8SP - UK**

**Tel UK 0114 281 1250**

**Scott Engine and Transmission rebuilding**

**Tim Sharp**

**14 Hazel Beck,**

**Cottingley Bridge,**

**Bingley,**

**Yorks. BD16 1LZ - UK**

**Tel UK 01274 567 528**

**Scott Engine and Transmission rebuilding**

**Sam Pearce Motorcycles**

**Unit 5, Stanley Lane Ind Est,**

**Stanley Lane,**

**Bridgenorth**

**WV16 4FS**

**01746 762743**

**Scott Engine and Transmission rebuilding, New sports engines  
etc. Any challenging**

**engineering project. Scott technical information on website**

**Moss Engineering**

[www.mossengineering.co.uk](http://www.mossengineering.co.uk)

**33 Kings Lane,  
South Croxton,  
Leics., LE7 3RE  
UK**

**Tel (0) 1664 840215**

**Fax (0) 1664 840215**

**Silk Spares (clutches)**

**Clive Worrall**

**"Foxtwood", Foxt Road**

**Froghall Wharf**

**Staffordshire Moorlands**

**ST10 2HT**

**T 01538 266160**

**[clive@foxtwood.fsnet.co.uk](mailto:clive@foxtwood.fsnet.co.uk)**

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### **Castings**

**Engineering Patterns for quality replacement castings. Melton  
Mowbray UK**

**Tony Pacey ( Tony has made my patterns for 35 years – says it  
all!)**

**[james.pacey1@ntlworld.com](mailto:james.pacey1@ntlworld.com)**

**Aluminium Castings. Top quality floor moulding in high  
strength aluminium. Heads,  
barrels, cases etc.**

**Accrite Aluminium Ltd.**

**Unit 10, South Leicester Ind Est**

**Beverage Lane, Ellistown,**

**Leicester LE67 1EU**

**Tel UK 01530 263 038**

**Iron Castings including Malleable iron brake drums etc**

**[www.castmetalsfederation.com/home.asp](http://www.castmetalsfederation.com/home.asp)**

**Metalcast (Bilston) Ltd  
93 Wolverhampton Street  
Bilston WV14 0LU –UK**

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**Brake and Clutch Linings  
Brake Linings, Clutch linings, British bike spares.  
Supreme Motorcycles Earl Shilton UK**

**[www.suprememotorcycles.co.uk](http://www.suprememotorcycles.co.uk)**

**Clutch plates  
Sam Pearce Motorcycles  
Unit 5, Stanley Lane Ind Est,  
Stanley Lane,  
Bridgenorth  
WV16 4FS  
01746 762743**

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**Cycle Parts  
Tyres, oil, all types of accessories  
Ken Inwood. Hersham Racing Service  
173 Hersham Road,  
Hersham Nr Walton on Thames  
Surrey**

**Tel UK 01932 229 547**

**Control Cables  
T Johnson (Cables) G.B.  
[ableman@btinternet.com](mailto:ableman@btinternet.com)**

**Rubber saddles  
John Budgen Motorcycles  
Toddington UK  
PH/FAX: 011 44 1242 621495**

**Rubber / Dunlop Drilastic type saddles**

**Terry Doyle**

**Kick start springs-\$20, Stainless dog bone dampers engraved-\$80 set, Ribbed brake**

**drums ala TT Rep or plain \$300, Sprockets dished \$300.**

**Looking for 1920 Motor can**

**swap other bits let me know your needs. Terry Doyle,**

**Melbourne,**

**Australia**

**[tdoyle@alphalink.com.au](mailto:tdoyle@alphalink.com.au)**

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**General Spares**

**Scott Owners Club Spares Scheme (Please note the SOC Spares Scheme can only**

**sell to SOC members)**

**[www.scottownersclub.org/spares/](http://www.scottownersclub.org/spares/)**

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**Services**

**Dynomometer setting up and tuning.**

**Operating a dyno is not enough. For good setting up you need a water brake dyno and**

**a really skilled engine specialist who can interpret the readings.**

**Absolutely the best**

**way to set up any engine.**

**Dave Holmes**

**Coventry**

**UK**

**[dholmes@250mov.freemove.co.uk](mailto:dholmes@250mov.freemove.co.uk)**

**Authentication of Scott Motorcycles by SOC Registrar. Send details and photo by post with SAE or by email to:**

**Ian Parsons  
Musterpit House  
Winwick  
Northampton  
NN6 6NZ**

**ihparsons@tiscali.co.uk**

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**Literature**

**Technicalities – Bill Jamieson’s compilation of technical articles**  
**[www.scotttechnicalities.com.au](http://www.scotttechnicalities.com.au)**

**High quality black and white photocopy sets of manufacturer's  
original literature**

**[www.brucemain-smith.com](http://www.brucemain-smith.com)**

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**Garage Equipment**

**Hydraulic bike lifts in all sizes**

**Amy Holder**

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**[http://www.freewebs.com/amoir\\_1/](http://www.freewebs.com/amoir_1/)**

**Meridan**

**Coventry**

**UK**

**Tel UK (0)7714 273247**

**[amydholder@hotmail.com](mailto:amydholder@hotmail.com)**

**Please note that Amy is the granddaughter of Matt Holder who  
rescued the Scott name**

**and produced the Birmingham Scott's.**

**Your Scott should be cared for on a lift from those who help us**

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