



In The next "Yowl"
1921 Standard Restoration
Cliff Kingdoms Scotts

SILK 700S

The Silk is one of those enigmatic machines which captured my imagination as a young novice motor cyclist back in the 1970s. Anything which was a little different and out of the ordinary appealed — and I would do whatever I could to amass information concerning them.

Along with the Silk ranked the Quasar, the Münch, the Healey 1000/4 and anything with a Wankel rotary engine. I long dreamt of owning such machines, but had to wait close on 25 years before this was to be realised; for while enthusiasm was plentiful, money was not!

Fast forward to 1999. I had just become a father for the first time at 43 (Prof. Robert Winston finally pulling the rabbit out of the hat). Life was feeling pretty good, and I was given the green light to start a search for a Silk.

So a '*Silk Wanted*' ad. appeared in *Yowl* and two would-be vendors made contact. There was one Silk up on Merseyside — the owner of which inexplicably lost interest in selling to me — stating that he'd thought he'd sell it to his son instead! (*Why bother to reply to the advert then?*), and another in Nottinghamshire — of which I eventually became the owner. This owner produced papers from the V.M.C.C. giving their estimate of the machine's value as £6,500 — but he eventually settled for a sum around half that! (Given that the *value* of anything is what someone else is prepared to pay, has anyone ever paid anything like that for a Silk?).

The machine was in a very good cosmetic condition and appeared to have been well looked after — but then it showed only 14k on the odometer, so perhaps that's not surprising. What a waste of a good bike — each day that passes is a day nearer death for us all — a day that could have been spent riding a motor cycle you enjoy; and to hell with its 'value', this was a bike that was going to get ridden.

Anyone who owns (and uses!) a Silk 700S should (will?) eventually get to know Clive Worrall. Clive is an absolute fount of knowledge concerning these machines, having worked with George Silk building them for close on 20 years. He still holds several spares for the 700S and can overhaul the engines. I wish I had got to know Clive a little earlier, for he might have saved me some troubles — but hindsight is a very handy thing. Nevertheless....

Much like with women I suppose, once you start to live with something small faults which go unnoticed at the time you first meet become apparent — and so it was with my 700S.

This particular Silk must have been first purchased by someone with an eye on the finances; thus it had just the one front brake disc; spoked wheels rather than cast, and no tachometer. It had a Smiths speedometer (most Silks I had seen up until then were later models with Veglia clocks) and I noticed the trip odometer was stuck and not recording. In fact the trip could not be reset either — because the little reset knob was missing.

I noticed the rubber radiator mounts were dry and perished — and one had actually split in half, so only two of the three were holding it in

place. Clive to the rescue! On his advice I used exhaust mounts from a Mini car (Rover part number GEX7251). These proved to be exactly the same as the Silk radiator mounts and so I fitted three new ones. (They also appear to be what are used as the mounts for the Silk fuel tank.)

But with the radiator off, I now noticed signs of coolant leaking from the hose at the rear of the cylinder head (up to the header tank). While visual inspection (and receipts supplied with the bike) confirmed that the four hoses connecting the engine to the radiator had been recently replaced, the fifth, being out of sight, had obviously been left untouched and was probably still the original. I found that a Quinten Hazell hose, part number QH 556, will fit the Silk at all five applications — and although they do appear to ‘crimp’ a little at the radiator/header tank location, there is still plenty of flow through them. I flushed through the radiator and engine with a hose while it was apart, but only a small amount of sediment came out. It was refilled with a 40% mix of Bluecol and water from the house de-humidifier. This water is pure as I do not want the Silk’s engine to end up like the inside of my domestic kettle! This would not affect anyone living in a soft water area.

The handlebars were a dropped sort of racing type (a.k.a Jota bars?). I had no idea if they were an original fitment or not — all other Silks seem to have had flat ‘touring’ type bars. They would not have been so bad had the switchgear not been placed next to the actual handlebar mounts, necessitating one hand being lifted from the bars to operate the indicators etc. I moved the switch to a position next to the clutch lever and things were much better. But then the nearside handlebar grip became loose.

This was obviously a problem the previous owner had encountered as an (alas futile) attempt at twisting lock wire around the grip had been made. This spoilt the joy of riding the machine as half the rider’s effort was put into ensuring the grip did not come off the bars — and trying to push it back on when it did! A bike with two *twist* grips is not confidence inspiring.

When I pulled the grip off the end of the bars I found that whatever ‘glue’ had at one time been used, had changed consistency to resemble something more akin to a thick Vaseline — which now acted more as a lubricant than adhesive! Its residue was removed using nail polish remover and a different pair of grips was sourced. A local BMW dealer came up with a pair of second-hand Tomaselli rubber grips from a F650 for £5. He told me that so many Funduro owners opt for heated grips from new that they have a good stock of nearly new unused grips removed from these machines. Using hair spray to ease them on, I now have a more comfortable firm set of grips fitted which go a long way to improving the handling.

A friend and fellow two-wheel enthusiast was visiting one day and expressed an interest in a ride of the Silk; I agreed and off he set — but nearly an hour later I was becoming concerned when he failed to return. Eventually, sweating profusely, he appeared over the horizon pushing it home. It had, he said, without warning suddenly increased in engine speed and he could not stop it — finally resorting to turning off the ignition switch. And that was the last the bike ran. Furious kicking failed to bring it back to life — but occasionally, on turning the ignition switch on or off, it would pop or backfire. Out with the spark plugs; there were no sparks, save when the ignition switch was activated.

AO Services is a Norfolk-based one-man company run by Alan

Osborne. Of all the electrical problem solving companies I contacted, Alan was the only one who said he'd be prepared to have a look and see what he could do; no one else was interested. So with the Silk on the trailer I headed up to Norfolk. It soon became apparent what was wrong as Alan delved into the ignition system. One of the advance/retard weights had shattered — and the resulting shrapnel had smashed the Lumenition optical trigger. Alan connected up a different Lumenition trigger — and breaking the beam gave reliable sparks — so this was definitely the cause. The problem (or rather, one of the problems) was that *this* trigger would not fit the Silk — and the original Lumenition part was long obsolete.

I spoke with Clive Worrall again. Clive told me that he knew of other Silks which had suffered similar problems. Apparently these bronze weights have become brittle with use and/or age and are beginning to shatter without warning. He said that as far as he knew, at least a couple of Silks were now running with Boyer Bransden electronic ignition systems fitted. "Why not go the same route?" he suggested.

I called Boyer; they had not heard that one of their systems would fit a Silk, but imagined that one (probably the BSA/Triumph twins system) might do. This did not really fill me with much confidence, especially given the total lack of interest shown by several other firms advertising in the classic bike press as electrical problem solvers.

Alan Osborne was not so easily deterred. Offering no promises other than he would do his best, I left the bike with Alan and returned home. Over the next few weeks I had several phone calls from him bringing me up to date with what he was trying and how successful it was — or wasn't.

Clive Worrall again proved to be a great help to Alan — as did a couple of other Silk owners (to whom Alan was referred by Clive) who had previously gone down the Boyer route. The recess where the trigger was to be located in the Silk engine was too small for the Boyer system — so some machining had to be done. This was really outside Alan's remit of an electrical problem solver, so he had a local engineering firm do it — and then managed to fit the Boyer system (which does away with the advance/retard weights completely) — and then got the bike to run! Alan has kept all his drawings and calculations, which means that any future Silk conversion of the same sort would be very much easier and straightforward.

I would urge anyone with a Silk (who intends to use it) to go the same route. Otherwise it will always be at the back of your mind — wondering if the weights are about to break and leave you stranded. To hell with 'originality'! Performance, starting and fuel consumption are certainly no worse than before, and if anything a little better. At least they have been for the 700-odd miles I have covered since Alan did his bit.

I was on my way home late one night having finished a late shift when the handling became very odd: a rear wheel puncture. Into an all-night BP station a 20p poorer I filled up the back tyre with as much air as I could — with eight miles to home. It was flat again after two, so the remaining six miles were ridden at a fast walking pace and a wobbling rear end! Ah, the joys of changing a wheel on a bike without a main stand. I have now invested in one of those nifty little paddock stands designed for today's superbikes — which lifts the Silk well clear of the ground.

I had not been impressed with the front brake. It had very little stopping power and a great deal of lever pressure was needed to give anything like decent retardation — and then the brake started to bind....

A strip down of the caliper showed that while the machine had certainly been polished well, such tasks as greasing the brake's pivots had been overlooked. They were cleaned and treated with copper grease — and using knee pressure, the piston was pushed all the way back in. This I repeated several times, and finally had a front brake which would free off once the lever was released.

I was perhaps naive in thinking that nothing else could go wrong — but when the front brake lever began to creep back to the bars I knew my optimum had been premature. I noticed that, on initial application, the Lockheed master cylinder appeared to offer good back pressure — if held 'on' for any length of time (such as at traffic lights or slowing from high speeds), the lever would gradually come back to the twist grip — and any braking effect finally vanish! Releasing the lever and immediately re-applying would give instant back pressure and more braking — until the symptom reappeared — usually after a second or two. This was not the same as the sponginess one gets when a hydraulic system requires bleeding (I had already changed the brake fluid); it seemed that a seal inside the master cylinder had failed.

Luckily I had a brand new Yamaha master cylinder lying in the garage, bought some years earlier for a Norton Commander. While designed for a bike with twin discs, I could see no reason why this should not work on the Silk. (The reverse though, I could understand, where a single disc master cylinder might not shift enough fluid to work a twin disc set up). It was fitted and works fine. The o.e. brake hose is now well over 20 years of age, so this was replaced with a stainless steel braided line made by Goodridge. The Silk hose was sent to them to use as a pattern and the new one was returned within a week. AP Lockheed do still have master cylinder repair kits for those used on the Silk (part no. CP2215-20RK) which set me back £9.05 inc. p&p from a local dealer. (Note, the repair kit for Silk *twin disc* Lockheed master cylinders is said to be different. It is CP2410-1RK.)

When I bought the Silk, I was given a list of parts which were said to fit the bike, but the suggested front brake pads just brought blank stares when I asked for some Mintex LBD19/GKN 2002 please....

The front pads used in the Spondon caliper are, it seems, the same as used in Meriden Triumphs (Bonneville, Tiger etc.) of around the same time. I have found the following part numbers which might be of use to someone: Ferodo FDB342; Lockheed LMP123; Dunlop DP500; Brembo BB LK01 and EBC FA16.

The machine continued to delight and frustrate. It began to run on just one cylinder from cold. The second pot would usually chime shortly after starting, but this one time it refused. A new set of NGK B8HS plugs was fitted and the problem was cured, or so I thought. The next time the bike was started, the same thing happened; pulling off alternate plug leads showed that it was the right hand cylinder that was not firing. The plugs were removed, cleaned and dried and replaced — but within a mile or so, the problem had returned. I swapped plugs from cylinder to cylinder — and now the problem was with the left hand pot. Aha! A duff plug.

But this is most unusual in my experience. Another new set of B8HSs and we are on the move again. Setting off on the 27-mile

return journey from work that afternoon, the problem recurred. I didn't have a spare set of plugs on me (a mistake on a two-stroke, I know) — so I had to limp along on one cylinder to the nearest car spares shop. The nearest plug he had to fit was a B5HS. Very much hotter than the B8HS, but hopefully more resistant to fouling. This saw me back on two cylinders, so I gingerly continued the run home.

I then changed up to a pair of B7HSs. Only slightly hotter than the B8s, they seem to have done the trick — but then the engine began to make disturbing rattles. Could I have done damage while riding it on one cylinder? How robust is the Silk power unit? Or is it my imagination and do they all sound like this?

Maybe I shouldn't have tried to ride it at all in this state, but the A13 in Newham, East London, is not the sort of place you leave any sort of bike and expect to see it again, especially one with no sort of lock fitted.

The Silk was last used at the end of that September to attend a local vintage rally at Battlesbridge. There were at least two other Scotts present, S.O.C. members presumably. The bike was a pig to start at home, and I had to go through the pug changing ritual again *en route* (this time NGK B8HVX ... VERY expensive!). Coming home again it did not want to start. Always the way when you have an audience. Resorting to push starting it down a hill, it fired and away I went.

However, on the way home the mechanical noise from the engine was getting worse and I knew something was definitely amiss. Another call was made to Clive Worrall. In a borrowed van, the Silk was now heading north up the M1 to Staffordshire.

It transpired that there was much amiss with the engine. I don't have a full written list of everything that was wrong — but new bearings, big and small ends and pistons were certainly on the list. Basically, it had a full overhaul.

Clive said he was surprised to discover that the crankshaft was not silver plated. He tells me that it was found that this plating aided oil retention and prevented the bearings 'picking-up' on the crank. Once Silks had identified this as a cure for bearing/crank problems, at the first service, an exchange of cranks was done as a matter of course. This led him to suspect that either the bike's original owner had missed the first service — or the crank had been worked on since by another company, who might not have been aware of the practice of silvering.

Clive found the guard (fitted by the previous owner) protecting the radiator could cause overheating. It was more of a colander than a mesh and was removed. I shall look for a finer mesh to stop stones. There is no temperature gauge — and to be honest I don't know if it ever overheated or not.

I was astounded when Clive found the bike had mismatched brake pads! One of them was an EBC — the other a Ferodo. It seems the previous owner had changed the pads singly! I am no great mechanic, but even I know that's a definite no-no!

The Jota bars were indeed non-original. This was confirmed by Clive, so he exchanged them for a straight set. Much more comfortable and, it must be said, more in tune with my riding style and, er, physique.

Clive said that he wished I had contacted him earlier — and I would urge any would-be Silk owner to do this before parting with any cash. Clive is quite prepared to come and have a look at any Silk

you are thinking of buying — and will be able to advise of any faults/non-standard modifications/things to watch out for etc. I imagine he may well, quite rightly, ask for some travelling expenses if it's a long way from his home base near Stoke; but this could well prevent a lot of expense and heartache later. He may well have a record of the actual machine — and might even have undertaken work on it himself.

So what next? I would very much like a rev. counter to match the speedometer. Apparently Smiths never made an electronic tacho to match the Silk speedo, so I might have to accept a non-matching Veglia part. Failing that, I might go for an electronic one that I see advertised from time to time aimed at road racers. The alternative Silk parts list suggest a Citroën 2CV tacho will fit the 700S. Does anyone know for sure?

The primary chain is (I'm told) very rare and expensive. It's the same size as used by Triumph in the last of their T160 Tridents — and no other bike! Apparently, Renolds sold their last stock of this chain to Norman Hyde some years ago — who then cut it into T160 lengths. A pity because he also sells belt drive conversions for these Triumphs and, according to Clive, the 700S uses the T160 length — plus two links! Thus to get a whole new 700S primary chain, one would need to buy two T160 items (at over £100 each) — and then cannibalise one! Given the modest power output from the Silk, I imagine primary chain life is fairly good — and besides, Clive tells me it would not be impossible to convert to a single row chain (rather than duplex) which will cope OK with the Silk's modest power.

Other advice I picked up concerns the cooling system. Make sure you use a good quality antifreeze, compatible with aluminium engines — and it's a good idea if the bike is to be left unused for any length of time, e.g. garaged over Winter, to drain off the coolant when stored. Clive tells me he never really trusts the seals to keep the water in — and a crank suffering rust damage is an expensive item to replace — much more than the small hassle of draining. Don't forget to replace it before you ride off in the Spring!

Changing the gearbox oil regularly is advised. Silk 700S gearboxes run very cool and take a long time to reach operating temperature. Thus, the oil is prone to emulsifying.

I am using a fully-synthetic two-stroke oil in the engine. Hopefully this offers greater engine protection than a run of the mill mineral oil — but there is still amazing smoking when starting from cold. Other tests of the 700S have mentioned this, so maybe it's just something I must learn to live with. Or maybe the pump was set extra rich for the running-in period? Further investigation is required.

The front fork gaiters have both perished and are now a series of black rubber 'rings'. A new pair of BSA gaiters, sourced from Draganfly Motorcycles in Norfolk is waiting to be fitted.

The kickstart lever was cracked around its splined mount. These were the same as used on Triumph Trophy machines of the same era. There were two versions of the Trophy, road and off-road. In the case of the latter, the kickstart lever is canted away from the bike to clear the upswept exhaust. Both Triumph types will fit the Silk, but the off-road one does make its presence felt rather, when using the rear brake lever.

And now, dear reader, you are up to date with my trials and tribulations of Silk 700S ownership. I am now waiting for the next part to fail to see what adventures that will bring!

Clive Worrall is now kept very busy running his holiday cottage letting business, and does not have masses of free time. Someone, sometime, needs to sit down with him and record his stories. I found him fascinating — listening to his memories of working with George Silk (with whom he is still in contact) and looking at the masses of photographs.

And once his memories have been recorded, a book about George Silk and his 700S needs to be written. Any offers?

David Cameron.

Useful Contacts:

AO Services (Electronic ignition systems), 35 Griston Road, Watton, Norfolk IP25 6DN. Tel. 01953 884681.

P.J. Speedos (Smiths speedo repairs), 287 Worplesdon Road, Guildford, Surrey GU2 6XN. Tel. 01483 232006. e-mail: pjspeedos@hotmail.com

Clive Worrall (Silk help and advice), Foxtwood, Froghall Wharf, North Staffordshire ST10 2HJ. Tel. 01538 266160. e-mail: clive@foxtwood.fsnet.co.uk

AP Racing (Master cylinder repair kits), Wheler Road, Coventry CV3 4LB. Tel 01203 639595. www.apgroup.co.uk

Goodridge (UK) Ltd. (Stainless braided brake hoses), Exeter Airport, Exeter EX5 2UP. Tel. 01392 369090. www.goodridge-uk.com. e-mail: goodridge@goodridge-uk.com

SCOTT MOTORCYCLES AT BROOKLANDS

Scott motor cycles were entered by amateurs into many club events from 1920 run by the British Motorcycle Racing Club and The Motorcycling Club Ltd.

The earliest recorded entry at Brooklands was:

5th November 1921, C.P. Wood, 3 lap Handicap, 1st, 74.57 m.p.h.

Other entries of note.

14th May 1927, G. Schuckburgh Wright, supercharged special with sidecar.

22nd October 1927 P.A.E. Vare who later rode in 1929 and 1930 TT.

27th September 1928 London Ladies Motor Club 8.5 mile rac. Miss B.E. Tippett and Miss G.E. New, winners' speed 77.81 m.p.h.

19th March 1932 L.C. Williams who later achieved 100 m.p.h. at Boreham in 1951.

30th September 1933 Noel Christmas, 3 lap Junior Allcomers, winner's speed 69.97 m.p.h. Rode Grand Prix Scott in 1933/34 TT.

28th July 1934 A.L. Howitt 50 mile GP Scratch Trial. Rode Grand Prix Scott in 1933/34/35 TT.

During 1936 about 40 Scott riders took part in Brooklands events.

25th April 1936 The British Two Stroke Club entered a Scott team in the 3 lap Mountain Inter Club Relay race. Riders E.A. Beckham, R.W. McLaren and Noel Mavrogordato who raced many times in the Manx Grand Prix. He also won the first vintage race at Silverstone in 1950.

17th April 1937 W.R.E. Best at the Clubmans Meeting covered the flying kilometre in 30.2 seconds, a speed of 74.04 m.p.h. The certificate is on page 108.

10th September 1938 At the Motor Cycling Club Ltd meeting the London Scott Club team entered 1 hour trial. Riders F. Hill, F.I. Green and W.R.E. Best.

Cliff Bowman.