



► TRIUMPH TWIN REBUILD ► BONHAMS AT BICESTER

30TH ANNUAL VINTAGE & ANTIQUE MOTORCYCLE AUCTION



APRIL 28-MAY 1 · 1,750 MOTORCYCLES

LAS VEGAS CONVENTION CENTER . LAS VEGAS, NV



CONSIGN OR REGISTER TO BID

THE WORLD'S LARGEST SELLER OF ANTIQUE MOTORCYCLES



THE EXPERIENCE BEGINS AT MECUM.COM



VERRAILS

A SELECTION OF MACHINES ARE ALWAYS AVAILABLE IN OUR SHOWROOMS



1911 350cc Douglas



1924 150cc Excelsion



1924 980cc Brough Superior



1928 350cc AJS K5



1929 500cc BSA Combination



1936 550cc Triumph 5/1



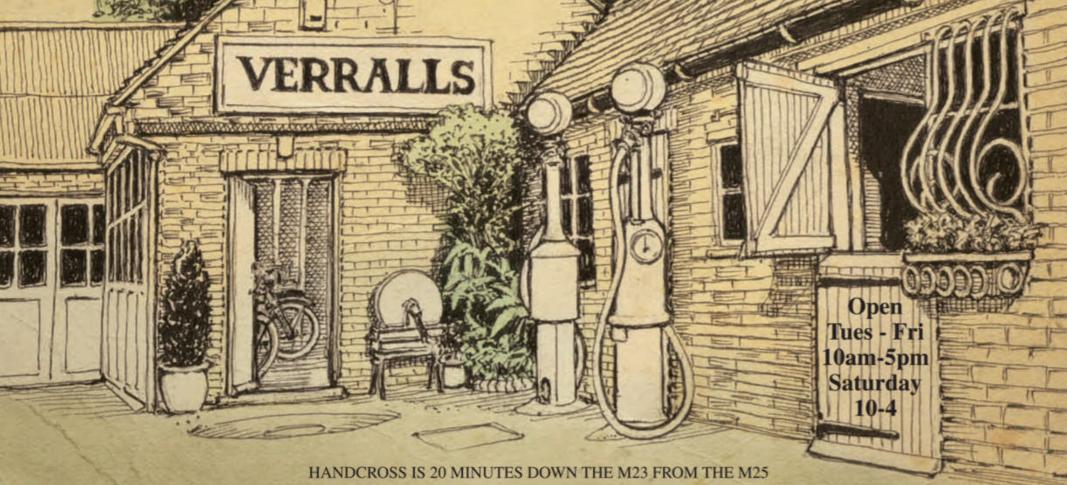
1954 750cc Triton



1974 350cc Ducati Street Scrambler



2001 250cc Greeves Anglian



THE OLD FORGE, QUICKS YARD, HIGH STREET, HANDCROSS, W. SUSSEX RH17 6BJ Phone 01444 400678 • 07880 966903 Visit our website www.verralls.com

Editor's welcome

As we teeter between tiers and fret over lockdowns before beginning – hopefully – the long ride to returned normality, it was an absolute joy to be able to have a day out and visit the Bonhams sale, at the Bicester Heritage centre. A huge old aircraft hangar, it was flipping cold, but there was plenty of space everywhere, and it felt such a pleasure to be able to do something sort of normal.

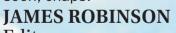
Added to looking at a load of old motorbikes, there was of course the added plus of seeing several people too, though all conducted at safe distances and with initial introductions a little bit odd (elbow bumps will never seem right), and after that trying to work out who it actually was behind the mask. But we all managed.

My heart's desire was the 1928 Model 90 Sunbeam, pictured below, featured in this magazine's January 2018 issue, though there was zero chance of me acquiring it, although at least one person has asked me if I bought it. Sadly, no. I hope who did, though, enjoys it plenty; it's a cracking bike.

As soon as anything like that sells for a huge price – it was £41,400 – there's always a collective gnashing of teeth and some negative comments on the internet message boards of various clubs about how 'prices have gone mad' and similar such sentiment. Often by the same people who prophesies the doom of the old motorcycle movement and enthusiasm, which seems quite ironic really, as on the one hand they're saying things are too expensive, then on the other saying no one will want them. To me, surely if a huge price is achieved, it means enthusiasm is alive, well and strong?

And though of course it does mean people are priced out, there's generally something to suit a more modest pocket, with at the same sale, prices ranging from a few hundred pounds for a Villiers-powered project to a couple of grand for a prewar Triumph single. And heck, there were even two 1920s, 500cc flat-tank Sunbeams in the higher, four digit bracket. In these times when negativity and misery have been the prevailing motions, I prefer to look at positives.

In that vein — so a negative, but look to a positive — of our regular contributors, both Alan Turner and Tim Britton have been to hospital this last month. Alan's stay (with an ongoing heart issue) being more serious and rather longer than Tim's, who put his finger where he shouldn't have. Both are, thankfully, on the mend though. Get well soon, chaps.











Regular contributors

Tim Britton, Rachael Clegg, Jonathan Hill, Roy Poynting, Richard Rosenthal, Martin Squires, Jerry Thurston, Andy Westlake.

Contributors this issue

Chris Cooling, Ian Kerr, Greg Pullen.

THE CLASSIC MOTOR CYCLE (USPS:710-470) is published monthly by Mortons Media Group Ltd., PO Box 99, Horncastle, Lincolnshire LN9 6LZ UK . USA subscriptions are \$63 per year from Motorsport Publications LLC, 7164 Cty Rd N #441, Bancroft WI 54921. Periodical Postage is paid at Bancroft, WI and additional entries. Postmaster: Send address changes to THE CLASSIC MOTOR CYCLE, c/o Motorsport Publications LLC, 7164 Cty Rd N #441, Bancroft WI 54921. 715-572-4595 chris@classicbikebooks.com



CONTENTS

ISSUE | FEBRUARY 2021

Archive photograph	G
News	8
Subscribe and save	12
Bonhams' Bicester sale	14
Letters	18
NSU Max	22
Norton Commando	30
Velocette MAC	36
BSA Bantam	42
Mont Ventoux hill climb	48
Lockdown Velocette	52
Charles Falco part two	57
Closer look - Villiers late engines	62
Men Who Mattered - Charlie Dodson	68
Paul Goff interview	70
Triumph unit twin rebuild	72
Roy Poynting column	7 6
Jerry Thurston column	78
Sketchbook travels	80
You Were Asking	86
Classic components – JAP part 14	97
Classic camera	98
Next month	99



POST: The Classic MotorCycle, PO Box 99,

Horncastle, Lincolnshire LN9 6LZ **EMAIL:** jrobinson@mortons.co.uk



- » Every issue will be sent hot off the press and delivered straight to your house
- » You'll never miss an action-packed issue or supplement again



Want to publicise your dance? Well, of course you need motorised sandwich boards then.

Image: MORTONS ARCHIVE

he members of Cheltenham Motor Cycle Club doing their bit to promote their annual dance, taking to the streets on their array of machines, literally taking the weight of promoting the club's annual dinner dance on their own shoulders/backs.

The picture was published in the March 3, 1921, edition of *The Motor Cycle*, and one wonders how many of these men had endured the horrors of the First World War. You'd have to say probably not the youth nearest the camera, on Triumph registration number NB1687, as he barely looks old enough to be riding a motorcycle in 1921, let alone to have served in a war which had ended nearly two-and-a-half years before.

Though the young man's motorcycle may have done, as it's a Model H Triumph, as supplied to the war effort in vast numbers (30,000 or so) with many later finding their way onto the public market. This example has been fitted with a rakish set of handlebars, and a gas headlight, while the hand change lever for the three-speed Sturmey-Archer gearbox looks to have been turned downwards, providing an early footchange. Though it was some years before the positive-stop arrangement of footchange came into popularity, such a modification as demonstrated on 'NB' (a Manchester-issued mark) was to find favour with many sporting men in the 1920s.

Next along, the somewhat older fellow - though it's all relative, not one of the motorcyclists in the picture is probably older than about 25 - is aboard seemingly a Royal Enfield two-stroke, registration FH1371, a number issued from nearby Gloucester. Enfield's 225cc machine (the Model 200) had first appeared at the Olympia show in November 1914, complete with a two-speed gear, and was instantly popular. It rejoined the postwar range,

again finding favour, its low weight - a claimed 147lb - and economy a winning combination. What's also of interest is that in 1929 a new Model 200 cost £73-10s; before the war it was £39-18s, exampling just how prices had risen, owing to the clamour for motorised transport. By 1925, the boom over, the equivalent Enfield was just £35. Looking at the 1930 range, the base model two-stroke was £32-10s, while the list price of the 1920 two-stroke was over £10 more than any model in the line; a Model K, 976cc V-twin, was £62-10s.

OH641 is third from the left, which is most

likely a Sunbeam judging by the leaf-spring front forks, though many of the machine is obscured. Again, the handlebars are tilted down. It'll be a side-valve model for sure (as an overhead valve was a few years away) and an expensive one at that. Though relatively new to powered two-wheelers, with a first motorcycle announced in 1912, Sunbeam went straight to the top of the class, earning an instant reputation for the build quality of its machines (initially designed by Harry Stevens, of Stevens brothers, makers of AJS, fame) and backing that up with Alec Bennett's TT win in the





1920 Senior race, the first post hostilities Isle

The silver tank of FH1881 (so Gloucester again) identifies a Norton - again a sidevalve as an OHV job was a bit in the future - with the local registration FH1857 on the next unidentifiable machine.

Then we have two more Triumphs, with possibly an Indian V-twin the next machine, while sticking out a bit further along - and with what looks like electric lights - probably a Royal Enfield (or maybe AJS?) V-twin.

Final two wheeler in the picture is the

cycle on the left of shot, with the young lad stood behind it. Following the fashion of gentleman riding tall motorcycles, this one comes up to just below the little fellow's armpit.

Location of The Motorists' Dance was Cheltenham Town Hall - which would appear to be the building in the background. Built around 1902/3 (so not even 20 years old at the time of our picture) the hall boasted - so says the website www. cheltenhamtownhall.org.uk - 'marbled Corinthian style columns, intricately decorated coved ceiling dance-friendly

sprung floor, beautiful balconies, internal decoration and fixtures and fittings' and the cost was put at £45,000; over £5.5 million in current terms.

Checking on the DVLA's database, none of the registration marks that it's possible to identify are still in use, which is a shame, though the town hall is still there, albeit quiet for much of 2020, one is sure. Let's hope that the 1921 dance was a success and that the sandwich men's work was a contributory factor, while, hopefully, in 2021 the town hall will be able to return to doing what it was designed for, too.

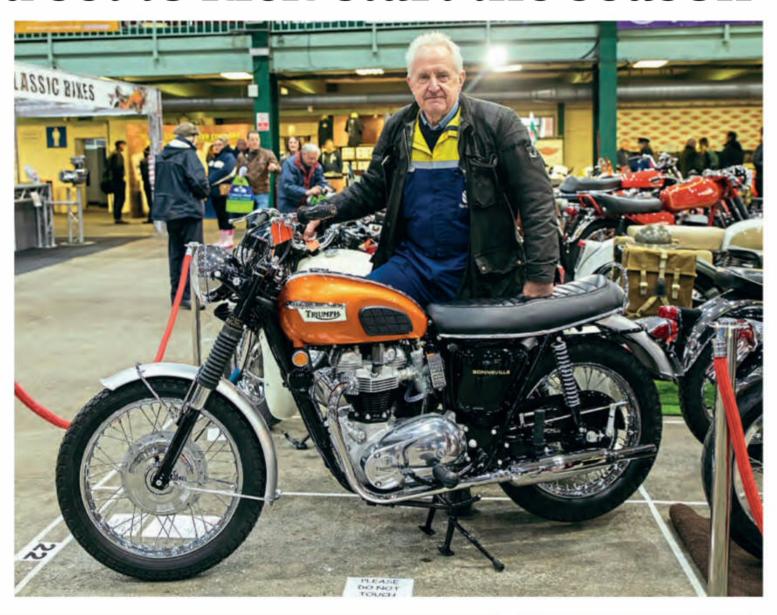


Stafford set to kick-start the season

There's hope and expectation in the air - and plans afoot for The International Classic MotorCycle Show, set to be held on April 24/25, 2021. Coronavirus regulations permitting, it is hoped all the usual highlights will be present and correct, with Bonhams returning to the Stafford site with their Europe-leading auction too.

It's also the 40th anniversary of The Classic *MotorCycle*, which we'll be celebrating at the show. Look forward to seeing you all there!

Right: Graham Bowen has been a regular at Stafford for many years, and his **Triumphs have graced** several covers of The Classic MotorCycle too. Let's hope Graham – and everyone - is back at the showground post-haste.



Design, art, desire – Australian exhibition



In collaboration with our feature and interview with Charles Falco (see page 57) the exhibition The Motorcycle: Design, Art, Desire opened on November 28, 2020, and runs

right through until April 26,

The exhibition – at the Queensland Gallery of Modern Art, in Brisbane - is an inperson experience, which

also offers digital interactives as well as a companion website that you can access when onsite.

More from www.qagoma.qld.gov.au

NEWS IN BRIEF

PETER WILLIAMS

Just as we went to Press, word has reached us that legendary designer and racer Peter Williams has died. A hugely talented road racer, Peter is perhaps best known for his revoltionary design and engineering work with the John Player Norton race team in the early 1970s. there'll be a tribute next month.

KOP HILL DATE ADJUSTMENT FOR 2021 The 2021 Kop Hill Climb will now be on September 25/26, not 18/19 as originally planned.

■ ROYAL ENFIELD **METEOR RELEASED**

There's a new 350cc model from Royal Enfield, called the Meteor. A simple 350cc fourstroke single, prices will start at just £3749.

Switch to the AA for a different kind of breakdown service

- ✓ Unlimited call-outs mean we're there when you need us
- ✓ Tap & track app lets you follow our Patrol to your side
- ✓ We'll usually fix you within 30 minutes of arrival
- ✓ Upgrade to Smart Breakdown to track engine faults in real time
- ✓ Join many other Members in saving over £55 a year with discounts at Greene King, Farmhouse Inns, IMO and lots more.

Buy breakdown cover from

£6 a month



Buy online at theaa.com/advert1 or call 0800 294 5661

AA

Breakdown cover from £6: price is for monthly UK Roadside Vehicle Membership. Other levels of cover are also available. Offer is not available for existing Members or at renewal. Your membership will renew on a monthly basis. You can cancel your cover at any time giving 30 days' notice. You'll receive a renewal invitation beforehand so you'll have plenty of time to change or cancel your cover. Unlimited call outs: repeat call outs for the same fault within 28 days will not be covered.

30 minutes attendance: based on an average of all AA attended breakdowns September 2019 – August 2020. Smart Breakdown and Tap and Track App: subject to network coverage. Member Benefits saving value calculated based on the top 10% of Members by Member benefit redemptions between 01/03/2019 and 29/02/2020. For further information visit: theaa.com/member-benefits. All information correct at time of print December 2020.



Alan Holmes

Manxman Alan Holmes, who became the first Island-born man to record a Manx GP double with his pair of wins in the 1957 Junior and Senior races, on Reg Dearden Nortons, has died.

Holmes made his Manx debut in 1953 - following a fine third in the Clubman's TT Senior race - and recorded a strong seventh. Following his Manx double, he graduated to the TT proper, but was out of luck in 1958, when his career was ended by an accident at Oulton Park.

After living on the mainland, he returned to the IoM and was a resident of Castletown.



Robert's recognition

Annually since 2000, the BMW company offers, worldwide, the International Knochlein Award, for 'outstanding contribution to preserving BMW tradition.' This has normally been presented in circles, around the world, though the latest recipient is Britain's Robert Freeman, the first time someone from these isles has been thus honoured.

Born into a BMW-owning household, Robert bought his R50S new in 1963, keeping it until 2012, though he still has an R25 single, while he was due to ride the R5 he owned for 20 years during a rally in America in 2020.

Over the years, Robert has tirelessly worked on providing club members with history for their machine, having access to the AFN Limited (originally importers of BMWs into the UK)



Award winner Robert Freeman with the BMW R25 he first bought in 1966.

records held by the Frazer Nash Club, among other resources, to call on. Find details of the club at www.thebmwclub.org.uk

Mecum sale highlights

There are 1750 machines on offer at Mecum's 2021 Las Vegas sale, to be held at South Point Hotel and casino on January 26-31.

The array is vast, with among their number a 1928 680 Brough Superior, as well as big numbers of glorious

Harley-Davidson, Indian, Triumphs, early Hondas... There's two sublime Crocker ohv converted Indians, too, while a Vincent Black Lightning is perhaps the star attraction.

Details from mecum.com

Book Review

"Classic Superbikes" Inside stories of the world's greatest classic and retro bikes

Author: Frank Melling

Editor and photography: Carol Melling

Archive images: Jane Skayman

Published by: Mortons Media Group Ltd, Media Centre, Morton Way, Horncastle, Lincolnshire LN9 6JR Tel: 01507 529529 www.classicmagazines.co.uk Signed copies are available from the author at www.frankmelling.co.uk

Softback, 210 x 295mm (portrait); 130 pages with over 140 photographs and illustrations.

ISBN: 978-1-911639-20-6, £7.99



Then there is the historical background to put these bikes in context. As a journalist, Frank Melling is unusual in the fact that he has also been a regular competitor and "a fairly useful road racer" in the classic classes and a long-time centre standard scrambler "of no great merit." He has also been fortunate to be in the right place at the right time.

The aim of the book is to entertain and inform too, but primarily to share the wonderful, privileged position that he has been in having had access to these bikes.

The first of his dreambreaking rides was on the replica 1957 500cc fourcylinder Gilera, generously loaned by the Sammy Miller Museum. Not surprisingly, an amazing machine on all counts. A great sigh of relief was felt by all concerned when the £200,000 machine was returned undamaged!

Read about the 1938 Triumph Speed Twin, the superb 500cc parallel twin that became the benchmark for the whole industry; Fritz

Egli's exclusive hand-built 1250cc Yamaha XJR-engined Egli Fritz at £42,000 "handles superbly but is poorly finished and vastly overpriced;" Ducati 900SS Hailwood Replica "the machine dreams are made of;" Triumph Street Twin: "Triumph's best-selling retro bike;" the Triton "the ultimate bespoke special;" the last works BSA scrambler ever produced - the fabulous handbuilt B50 and ridden by Melling - "...the worst factory rider ever supported by BSA;" Hesketh Venom: The gentleman's motorcycling carriage "as sold, it was vastly overpriced, overweight and underpowered;" Honda CB1100R: The ex-Ron Haslam machine - big, powerful and very successful; "Slippery Sam," the most famous production racer of all time; Norton Commando 750 Mk.1: "The best of all the Commandos;" Moto Guzzi V7 II: "A superb refined tourer;" Honda Rune: "Not for the shy - the ultimate overweight, impractical, poseur's machine."

Along with fascinating background info there's the author's personal recollection of the 1978 Formula One TT and Mike Hailwood's againstall-odds win and Melling's ride in the Retro Moto St Cergue hillclimb in Switzerland.

A fascinating read of some of the most exotic bikes available, helped by some superb photography by Carol Melling.

Reviewed by Jonathan Hill.

THE WAY WE WERE IN

February

.....1921

Although now regarded as a national club, the Auto Cycle Union (ACU) was considered by many pre First World War enthusiasts as a London body.

The Motor Cycle encouraged the ACU to hold its regular committee meetings rotationally in the provinces and in 1920, the Union began formalising the division of England (including the Isle of Man) and Wales into 14 centres. These were: Northern, North-Eastern, North-Western (including IoM), Yorkshire, Midland, East Midland, North Wales, South Wales, Western, South Midland, Eastern, South-Western, Southern and South-Eastern.

As well as organising events

nationally or within centres (exampled by the then soon-tobe-held Western Centre twoday trial, scheduled for April 8/9) the ACU was to continue to monitor, and where possible advise, on proposed Government legislation applicable to motorcyclists. Existent initiatives such as the 'get-you-home-scheme' (which helped almost 1100 riders and machines who'd broken down or been involved in an accident) was to continue and be expanded.

To cover costs of the ACU's growing roles in motorcycling, the annual membership fee had doubled from 10 shillings (50p) to £1, with all members receiving a free ACU badge.

.....1946

Fact and rumour from BSA. It was now possible to confirm more details of the competition version of the single cylinder 348cc ohv B31, announced in January. Priced at £100 and coded the B32, its specification included extra chrome plate including to mudguards, wide ratio gearbox, high ground clearance frame and upswept exhaust system.

Rumours emanating from the huge BSA concern

suggested work was well advanced on the design and development of an all new model with in-line overhead camshaft engine, shaft drive and fully sprung frame. Intended as a touring machine, sources eagerly confirmed the design employs the best practices from both the motorcycle and car world. All were excitedly looking forward to official announcements of this new machine.

.....1971.....

On February 3, 1971, Veloce Ltd of Hall Green Works, York Road, Hall Green, Birmingham 28, stopped production. In a financially precarious situation for some time and with no buyers, including E & HP Smith Ltd, willing to complete a takeover deal, an official liquidator was appointed and issued

the following statement on February 4:

"With effect from Friday, February 5, 1971, the main gates of the works will be locked, and all employees should enter and leave via the office entrance. No vehicles will be allowed past the gate and the car park should be used."

·····1996 ······

As well as unveiling his museum's latest restoration, the 538cc V-twin two-stroke Stanger, Sammy Miller had just confirmed his museum would move from New Milton to its new home at nearby Bashley Manor in June.

Richard Rosenthal.

Lansdowne Classic Series 2021... Hopefully!



We all know what happened to the 2020 calendar of racing events, although some clubs managed to get a few meetings run, none of the Lansdowne dates materialised. They nearly got to Pembrey in October, then with a week to go the Welsh Government said 'no'.

There are seven Lansdowne meetings planned for 2021 at seven different circuits, with

April 17/18 Castle Combe
May 7/8 Oulton Park
June 13 Mallory Park
June 26/27 Anglesey
July 16-18 Cadwell Park
July 31/Aug 1 Donington Park
October 2/3 Croft

The Lansdowne Classic Series aims to re-create the halcyon days of the late 1950s, when unfaired Manx Nortons ruled the roost, challenged by Matchless G50s, AJS 7Rs and the odd plucky BSA Gold Star. Add in the five different clubs, and, for some, the Goodwood Revival meeting, which the Lansdowne helps to organise and run the motorcycle race, in 2021 over September 17-19.

There are no changes in the rules and regulations for 2021, Avon Tyres are still the control tyre supplier and the four classes will remain the same. Dates are:

CRMC
BMCRC
CMMC (Classic Car Meeting)
Wirral 100
NG Racing
CRMC
CRMC

occasional Rudge, Velocette and Vincent, and you have a fantastic, vintage spectacle.

Check on the website lansdowneclassic.co.uk for any changes to these dates and for full details of the series.





Pay just £3.50 per edition

That's a 22% saving when paying by direct debit



Great reasons to subscribe

- >> Free UK delivery to your door or instant download to your digital device
 - >> Save money on shop prices >> Never miss an issue
 - >> Receive your issue before it goes on sale in the shops

FIVE GREAT OPTIONS TO CHOOSE FROM...

PRINT ONLY

1 year direct debit for £42

1 year credit/debit card for £44

2 years credit/debit card for £85

DIGITAL ONLY

6 issues credit/debit card for £15.99

12 issues credit/debit card for £28.99





classicmagazines.co.uk/TCMDPS



01507 529529 and quote **TCMDPS**

Lines are open from 8.30am-5pm weekdays









Words: JAMES ROBINSON Photographs: MATT HULL

n these strange and uncertain times, Bonhams' winter sale reiterated something we actually all knew already – that there'll always be a market for top class, well-presented machinery, no matter what else is going on in the rest of the world, including pandemics and ongoing trade negotiations.

With the sale split into two days, Friday, December 11, 2020, hosted the automobilia, as well as the motorcycles from the National Motorcycle Museum. The immense hangar taken over by Bonhams at Bicester Heritage as also hosting Bonhams' MPH sale o Friday too, meaning that the motorcycles shared space with a vast and mixed array of cars, which provided something else of interest to look at.

Operated under Covid guidelines - though it seemed to a selfish few that wearing a face covering didn't apply to them, despite polite instruction and signage - there was a huge amount of room and viewing visitors, meaning that nobody had reason to feel uncomfortable. All attendees had to report to reception too, with slots to view being pre-booked and details recorded. Nice and orderly.

The sale started at 10am, with lots of interest in the effects of two of the great, albeit wildly contrasting, characters of British motorcycle racing, cockney

charmer Barry Sheene and latter-day sheep farmer Percy Tait. A leather holdall belonging to Bazza made £3187, another similar £2020, a watch £7650 (estimate £300-500), while Perc's red and white leathers fetched a heady £5737 (estimate 3600-£1000) and his maroon and white pudding basin £4462. The sale went slowly mainly owing to the huge number of bids being lodged!

The steady pace meant it was almost an hour after the expected 11am when the NMM machines started to come through. Pre-filmed videos of each machine ar, no motorcycles moved. Despite a sluggish start, when a couple of AMC machines didn't make reserve, gradually the temperature warmed up, with a cammy Square Four fetching £25,300 and then an immense £40,250 being paid for a low mileage 1990 Norton F1. A fee of £17,250 for a 1951 Thunderbird was strong, strong money, then the first of the Bullnose Sunbeam Model 90s went through at £24,150; enough for a machine with a confused history (and confusing as the details in the sales catalogue were incorrect, attributing a history to this machine of another, though a saleroom notice acknowledge and corrected it) and featuring crankcases from a 'cooking' Model 9.

Main: The old aircraft hangar offered plenty of room for all. The Morgan nearest the camera was one of four 'cars' from the National Motorcycle Museum.

1: Star of the show. The 1928 Bullnose Model 90 Sunbeam. as featured in our January 2018 issue.

2: Another star performer. The 1927 TT Triumph.



















1: Basically, it's the shed/storage facility we all dream of having...

2: This purposeful was fair value at £5520, being as it consisted of a mismatched engine and frame, the frame number restamped. B44

3: Every auction seems to have a Silver Jubilee **Bonnie in it, often** unregistered and with no miles. This sale was no exception. It fetched £9890. Commando behind only had 841 believed genuine miles on the clock. It was £12,075.

4: Attractive 'Italianised' ex-Army Triumph 3HW; £4600 bought it.

5: Understated SS80 Brough **Superior and 'petrol** tube' sidecar was £51.750.

6: Top price of the day was for this 1936 Brough Superior SS100. It sold for £276,000. Or 6.666 OX 5193s. You decide...

7: Other interesting tempters were this pair. The Cotton on the left fetched almost £15k, the AJS (with its special forks) £23k.

8: From the museum, this sprung hub Thunderbird was a strong £17,250.

9: Sectioned C15 – possibly done by BSA - was £3825. It was displayed at the 1960 motorcycle show.

Next came OX 5193, the second Bullnose 90 and the machine featured in our January 2018 issue, which I was lucky enough to have the use of for much of 2017. Still sporting the petrol tap I fitted, I was pleased to see it and knew it was going to go way, way beyond what I could afford to pay for it, eventually selling for £41,400, more than double its lower estimate and surely a record for a Model 90, quite possibly a Sunbeam. I hope its new owner enjoys it as much as I did; it's an exceptional motorcycle.

Things calmed down for a few lots, then the 1936 Brough Superior SS100 came under starter's orders, eventually selling for £276,000. After that, there were some high prices for good machines, though a few 'non sales' too, mainly for narrow interest machines carrying high reserves. Overall, sales rate was high and with the NMM motorcycles processed, the auction moved over

Saturday, December 12, was the general sale day. Much like the previous day, quality, well presented machines did well, though some which in the catalogue or online looked good, but under close inspection were not that well presented at all, struggled. Quelle surprise.

The sheer number of Vincents - there were 14 in total, including the NMM machines – always meant buyers could be picky, and some sold for what must be the lowest prices for Vincent V-twins at auction recently; the lowest being £17,250 for a V-twin project.

Again, though, there was a real clamour for some things, providing they were good quality. For example, £25,300 was paid for a 1914 Sunbeam outfit, £34,500 for a 'believed ex-works' 1927 TT Triumph and formerly

rebuilt - where it gained its copper exhaust pipes - by Colonel 'Mad' Jack Churchill, the Second World War officer famous for going into battle with longbow and bagpipes and the motto: "Any officer who goes into action without his sword is improperly dressed," while the intriguing 'Tommy Spann special' AJS fetched £23,000.

The Spann bitsa featured what may have been an ex-works frame, but it definitely featured a set of special front forks, as used by the works racers in 1928 and never put into production. The scruffy machine, which was found abandoned in an outbuilding and was only loosely assembled, was estimated at £7000-£10,000 and so comfortably exceeded that.

The glorious Cotton-JAP, a 1929 500cc twin port restoration project, was always going to exceed its £3000-£5000 though the £14,950 it made was probably more than was anticipated, while it was no surprise that the glut of Square Fours caused those to perhaps not make what sellers would've hoped for.

Overall impression taken and conclusions to be drawn were that good, unusual, pedigree and genuine machines continue to do well, while perhaps buyers have become slightly more discerning, with, say, anachronistic use of silver metallic paint counting against a machine. as an overview, though, there will be some very happy buyers and equally pleased sellers, one would think and hope.

All prices given are including buyers' premium (27.5 per cent on automobilia, 15 per cent on the motorcycles) though excluding taxes (so VAT in the UK) on those premiums.





Readers Letters

YOUR VOICE & YOUR OPINIONS

Survival story

Looking through the January 2021 issue of TCM, I paused to look at the various photos from October's Newark autojumble. Photograph eight caused me to do an astonished double-take - not because a canted engine in a Triton is rather unusual, but because I recognised the actual bike.

The owner and architect of the Triton back in the 1960s was a good friend of mine. His name is Chris Dawson, hailing from Hull in East Yorkshire. Incredibly, the bike at Newark is still easily recognisable from photographs I took of it way back then, over 50 years ago, some of them in Switzerland.

Chris was studying civil engineering at College in Brighton during the 1960s and in 1969, four of us enjoyed a two-week Alpine touring holiday. Chris was on his Triton and another friend, Ron Burgoyne rode his BMW. Another friend of ours, Chris Peet, was travelling in his 850cc Austin Mini, having his first holiday abroad while still recovering from a dreadful motorcycle accident in 1967. He was very lucky to keep his left leg – albeit, considerably shorter.

On this trip I'd left my 1956 Norton Dominator 99 at home so that Chris had the company of a co-driver in the car.

While in northern Switzerland we went to admire the Rhine Falls at Schaffhausen and there had the pleasure of meeting a charming and interesting young Swiss lady, Ingrid Schweizer, who rode a Triumph Bonneville.

Chris's excuse for tipping the



Chris Dawson, on the Triton, and Ron Burgoyne chatting to Ingrid Schweizer, Schaffhausen, Switzerland, September 1969.



Ingrid Schweizer and her Bonnie, with, from left, Ron Burgoyne, **Chris Dawson and Chris Peet.**



Triton MBR 459, in Switzerland, September 1969.

engine forward was that he liked to have something 'different.' I still didn't really understand, since his 'different' was my aesthetically 'peculiar.' Of course, it was this very 'peculiarity' that immediately caught my attention on spotting that picture in *TCM*.

I'm intrigued as to how this bike could have survived for so long yet barely change. Perhaps it was laid up for all those years and just reappeared. I'm hoping Chris kept MBR 459 until he finally decided it was time to pass it on to a new owner. More importantly, I would love to

know if Chris is still alive and well. If he is, it would be wonderful to get back in touch with him.

Sadly, I have to report that Chris Peet and Ron Burgoyne are no longer with us. I've been more fortunate. I'm 80, still fit and still riding.

Anyway, it's nice to foresee the Triton being back on the road again. One thing, though. Whoever decides to rebuild MBR 459 now; please position the motor back as it should be! Oh, and don't forget to see if that bit of feeler gauge is still in there.

> John Edwards, Flintshire, North Wales.

THIS MONTH'S STAR LETTER WINS

The writer of this month's Star Letter wins a Weise Michigan Jacket worth £169.99. Subtle, classy retro design cues mark the Michigan out from the crowd. Quilted shoulder stitching and upper-arm stripes round off a highquality textile outer shell. Find out more at thekeycollection.co.uk













Colourful Kreidler picture

Further to Andy Westlake's feature on the ex-TT Itom, in the January 2021 issue, I thought you'd like to see this postcard picture of the start of the 1963 IoM 50cc TT.

The rider cocking his leg over his bike near the Lucas banner is Horace 'Crasher' Crowder, on Brian Woolley's 50cc Kreidler. Crasher was a DNF this year - he quite probably lived up to his name... This postcard was sold during 1964 IoM TT week and was, bizarrely, printed in the USA.

At least one other bike survives from the 1962 IoM TT - that same Woolley Kreidler, on the postcard. It underwent a number of updates so only about half of what raced in the 1962 50cc TT, when it finished 14th at 59.96mph,



Postcard depicting the start of the 1963 50cc TT.

exists. That year, it was entered by Two-Stroke Improvements (aka Brian Woolley) and in effect this is the bike Crasher is pictured on in the postcard.

Perhaps of interest to readers,

author Roy Bacon finished 25th and last at 41.23mph on his own creation named 'Bits,' built using some Itom parts, in the 1962 50cc TT.

George Nelson, via email.

Another Triumphant Hancox tale

I've just read Jonathan Hill's review of Tales of Triumph Motorcycles and the Meridan Factory (TCM, January 2021). I obtained a copy of this book a couple of years ago and, like Jonathan, found it to be a fascinating read.

Another book I can recommend is Triumph Production Testers' Tales - from the Meridan Factory. This is also by Hughie Hancox and is another example of a book with lots of information about what life was like at the Meridan Factory, including many amusing tales.

Chris Rayment, via email.

An 'I was there moment!'

The article on Benellis by Rachael Clegg in the December 2020 issue was really enjoyable, especially the first paragraphs, because in 1964 I was staying at one of the guest houses on Church Road Marina; it could have been the Pitcairn, if not, certainly next door, with three friends.

Early one morning, we heard the unmistakable sound of a four-cylinder engine being warmed up. We rushed out towards the sound. Just around the corner, as Raymond mentions, there was Florian Camathias and the Gilera outfit, outside a wooden shed on Finch Road. A small crowd of us gathered there, and it is extraordinary to think Raymond would have been there at the same time as me.

To stand so close to the great Swiss who had won the 1963 TT with a BMW Rennsport powered outfit and to see his machine up close and in detail was an incredible experience which I remember clearly.

Camathias was a short man, and we all knew he wore glasses with thick lenses, but to see how thick they really were was



was he one of these boys? But, alas, he wasn't.

a surprise - one of my friends mentioned jam jar bottoms!

After a short while he and his passenger got on the outfit and headed off for morning practice. Like Raymond, I too was a huge Camathias fan, I always thought he had the most wonderful name. It was a sad day when he was killed at Clearways, Brands Hatch, on October 10, 1965.

I was 20 in 1964, and rode to the Island on my 350cc Royal Enfield Bullet. Walking back to the guesthouse, a young boy of about 10 took an interest in my bike and I sat him on it and took his photograph (above). I wonder if Raymond was that young boy?

> Les Curtis, via email.

Don't rely on a Seagull

Loved Jerry Thurston's column about 'Seagull' (Villiers based) outboard motors, TCM January 2021.

Back in the 1960s, I had a little experience in hardto-start Villiers engines, including in lawnmowers and chainsaws. I have to say, that when my friend built a 16ft 'trailer sailor' sailboat I was unsurprised when he told me that the build instructions for the boat specified as an emergency auxiliary a variety of small outboard motors - but explicitly "not British Seagull."

Lawrie Bradly, Victoria, Australia.

Blast from the past

At last, a café racer as they used to be! I refer to the Beezer in the December 2020 issue with the clip-ons and standard tank. Back in the day, I only ever saw one bike with an alloy tank, so it was a real pleasure to see a bike as they used to be.

Please keep up the good work. It's always a delight to get my latest copy of the magazine.

Ian Bork, Scotland.





If you are looking for affordable Custom Bike insurance you can trust Bikesure to find you a competitive insurance quote that won't compromise on quality.

We offer specialist policies, which we tailor to your own riding history and personal requirements.

POLICY BENEFITS AVAILABLE CAN INCLUDE:

- · Modifications Cover
- · Free Legal Expenses
- · Laid-up Cover
- · Agreed Values

CALL US ON FREEPHONE 0808 1001 275 bikesure.co.uk

Authorised and regulated by the Financial Conduct Authority

Richard Edmonds **Entries Invited for our February 27th Auction**

0% seller's commission for selling your bike, you receive 100% of the hammer price.



Already consigned: 1938 Ariel Square Four Combination, Vincent 500cc Comet, 1937 Scott 600cc Combination, Triumph Bonneville, Triumph Tiger 100, Rickman Matisse & others.

All enquiries to 01249 444544 or info@richardedmondsauctions.co.uk

Worth the Morth the Morth

Captivated by sight of one as a small boy, finally our man has the chance to try an NSU Max. And a 'Spezial' one at that...

Words: ANDY WESTLAKE
Photographs: GARY CHAPMAN

ith the NSU's shiny blue paintwork gleaming in the autumn sunshine, my thoughts wandered back to a cold February Saturday, six decades ago. I was aged six and a driving licence was 10 years away, but, as my big brother Rod had already taken to two wheels aboard a rorty Triumph Tiger Cub my interest was piqued; it was not surprising that sometime in the future I, too, would become a motorcyclist.

Accompanying my mother on our weekly shopping trip meant going past our local motorcycle dealers and while mum went into Cayford's Butchers to purchase a joint of meat for our Sunday lunch, I decided to spend the time looking at the line-up of bikes in the Difazio motorcycle garage workshop next door.

Most of the showroom floor space was taken up by a range of British singles and twins, but, on that particular day, my eyes were drawn to an unusual looking machine with the letters 'NSU' on its petrol tank. I had never heard the name before but its sparkling blue paintwork, its unusual front forks and an oil-tight engine, it looked – even to my child's untrained eye – obviously a top quality machine. For the rest of our shopping trip, I had a mental picture of me kicking the 250cc single into action and heading off to some far flung place...

Despite my daydreams, I had to wait until 2020 before I finally got to ride a similar machine, belonging to West Country enthusiast Jim Thompson. Jim's bike – a Max 'Spezial' – was manufactured in 1955 and is one









••I had a mental picture of me kicking the 250cc single into action and heading off to some far flung place...*

of the 298,583 units which were turned out that year by the 6000 workforce at NSU's huge Neckarsulm factory. That production figure made NSU one of the biggest motorcycle manufacturers in the world and their range of fast and reliable bikes were exported to a staggering 102 countries around the globe. Plenty of these came to the UK and in a road test the period journalist waxed lyrically over the overhead camshaft quarter litre single, which, on the road, recorded a highly respectable top speed of 75mph, a performance figure which was only surpassed by two postwar 350s.

Humble start

The Max had been launched in 1952, but the first bike to carry the name of NSU on its petrol tank had appeared 50 years earlier. This was powered by a Swiss made ZL (clip on) engine mounted at an incline in the centre of the frame, a sturdy machine producing 1.25bhp, which - if period reports are to be believed - under favourable conditions would produce a top speed of 24mph on the flat.

When production of this two-wheeler started in 1901, the little NSU became Germany's first motorcycle to be marketed commercially, although the origins of the company can be traced back to 1873 when Heinrich Stoll and Christian Schmidt set up a modest workshop in Riedlingen. This, a small town built on an island in the channel of the river Danube, was the home of their fledgling business which concentrated on the manufacture and repair of Strickmanschinen (knitting machines). From its humble start, the business really took off and in the following year (1874) they moved to bigger premises in Reutlingen.

For the next six years the business steadily expanded, but then the partnership divided, with Schmidt moving

north to set up another factory in Neckarsulm near Heilbronn, where the company called Neckarsulm Strickmaschinen Union (NSU) was born. Sadly, at the age of just 39, the German entrepreneur died, and the now well-established business was taken over by his brotherin-law Gottlob Banzhaf.

Banzhaf was both inventive and energetic and by 1892 the boom for knitting machines had passed and the company concentrated its output on its first pedal crank bicycles. He was quick to see that with a few proprietary fittings the bicycles could easily be adapted to the newly announced internal combustion engines and in 1900 the first pre-production 'motorcycle' appeared.

This rather crude machine made its British debut at the Stanley Show held at the Crystal Palace in London and by the following year it had become a 'real' motorcycle with the Zedel engine (now giving 1.75bhp) mounted vertically in separate engine plates within the redesigned frame. The same year, Banzhaf was joined by Karl Schmidt - the son of the late founder - as technical director and in 1903 the first motorcycle totally built by NSU - a single cylinder of 329cc turning out 2.5bhp and with a top speed of 41mph - appeared in the showrooms; it immediately proved a good seller and between 1903 and 1905 2228 machines rolled off the Neckarsulm production lines.

NSU was quick to recognise the importance of export markets and as early as 1905 the company was registered in the UK, with offices in London. It didn't take long for the British enthusiasts to recognise that the NSU was a top quality machine and by 1906 almost a quarter of Germany's total motorcycle exports came to the UK.

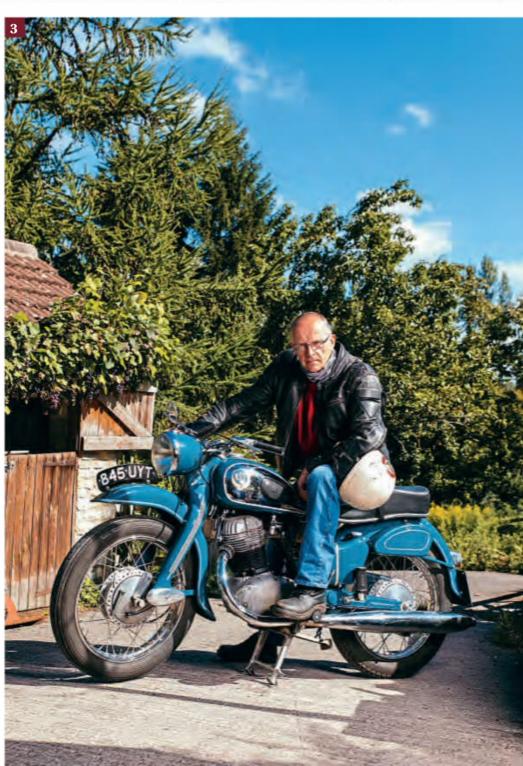
The export market collapsed during the First World War as NSU concentrated its output on munitions, but after 🗘

- 1: Designed by Albert Roder, the engine proved both durable and sprightly.
- 2: NSU's world championship successes are celebrated on the fuel cap inscription.
- 3: Kick-start and gear change are on the left-hand side.
- 4: The rear suspension, with hidden springs inside the pressed steel frame.
- 5: Years 60 in fact Andy Westlake has waited for this opportunity.











- 1: There's no surprise the striking **NSU Max created an** impression on sixyear-old Westlake.
- 2: On the road, it performs admirably, as Jim Thompson demonstrates.
- 3: Jim Thompson has ridden the NSU far and wide. excelling in its touring abilities.
- 4: Speedo drive is taken from the front wheel.
- 5: Plush Denfeld dual seat looks stylish and modern.





"Nobody has yet produced the perfect touring motorcycle but the NSU Max comes very close to it."

FINER DETAILS

1955 **NSU** Max Spezial

ENGINE

OHC single cylinder four-stroke

> **CAPACITY** 247cc

BORE X STROKE 69x66mm

POWER OUTPUT

18.6@6750rpm **CARBURETTOR**

Bing with air filter **TRANSMISSION**

Four-speed

foot change

FRAME

Pressed steel

SUSPENSION Front Swinging link controlled by coil springs; rear hydraulically damped rear shocks

ELECTRICS

inside steel frame

Bosch six-volt engine speed dynamo

LUBRICATION

Dry sump with double gear type oil pump

ELECTRICAL

Six-volt Bosch with coil ignition

> **FUEL TANK** Three gallon

TOP SPEED 75mph

PRICE NEW

£235-6s-1d including purchase tax

the armistice was signed, the company rapidly returned to the business it understood, that of making motorcycles, and by 1922 there were over 3000 people working at the Neckarsulm factory.

After surviving the Wall Street crash in October 1929 – thanks to an agreement with the Italian giant Fiat - the 1930s saw NSU's recovery and the peak of post-First World War's output came in 1938 when 62,619 motorcycles were produced. With the declaration of the Second World War in 1939, NSU were directed to build motorcycles for the military and while BMW and Zundapp were left to construct heavyweight sidecar outfits during the six long years of hostilities, the Neckarsulm factory turned out 28,000 lightweights, comprising 18,000 ohv 250s and 10,000 two-stroke 125s. In addition, NSU also made the unusual chain tracked 'motorcycles' in the form of the Kettenkrad and were heavily involved in the production of aero engine starters.

When the surrender was signed on Luneburg Heath in 1945, it was agreed by the Allies that the German heavy industry should be dismantled, but, for some reason, NSU was exempt from this and before the end of that year some 98 Quick motorcycles, 75 'civilianised' Kettenkrads, plus 8822 bicycles were produced. In addition, a small number of 250cc OHV 'war office' models were assembled from existing parts and by the mid-1950s NSU were the leaders in German motorcycle production.

Much of this success can be attributed to the company's chief designer Albert Roder, who by 1948 had made the first of many changes to their line-up of production machines, new bikes which led to the launch of the top of the range - and rather unorthodox-250cc Max at the Cologne show in 1952. In both frame and fork design it owed much to the earlier Fox and Lux models, but the overhead camshaft engine was all new and featured a type of valve gear unique among motorcycle power units. Patented under its designer Albert Roder, it was called the Ultramax system and featured drive to the overhead valve gear by long connecting rods or levers housed in a tunnel cast integrally on the left side of the cylinder barrel.

At their ends, these rods carried an eye encircling counterbalanced eccentric discs connected to the half time pinion and the overhead camshaft, and, as the engine revolved, the eccentrics imparted a reciprocating motion which was transferred to the valve gear. When this system had been tried by car producers in the 1930s, they encountered problems with that of differential expansion of the materials used which could throw the timing out. However, Roder overcame this problem with his novel 'floating' camshaft arrangement, which was rigidly held in position by a tie-rod between the half-time pinion and the camshaft housing. With its oil-tight, high performance engine, top class brakes, enclosed drive chain and extremely comfortable 'Denfeld' dual seat, the Max was far superior to most of the period opposition and there was no shortage of eager enthusiasts queueing up to purchase the German quarter litre tourer.

Complimentary press

The British weeklies (*The Motor Cycle* and *Motor Cycling*) were equally complimentary about the new machine and following a 1600 mile road test the Motor Cycling summed up their exhaustive test by writing: "Nobody has yet produced the perfect touring motorcycle but the NSU Max comes very close to it."

In the UK, imports were handled by Vincent in Stevenage, but with its closure in August 1955, all spares and distribution of machines passed to NSU Distributors (Great Britain) of Ealing, London, W3.

Jim's bike, wearing the registration number of 845 UYT, was one of 228,135 made by the Neckarsulm factory in 1955, the year which saw the powered two-wheeler output hit its production peak. The 'Spezial' was only available for one year but it was very much a case of the factory amalgamating both new and old stock as it only differed from the old model with its with its new fullwidth brakes and a slightly larger petrol tank.

As Jim recalled, the Max is a very different bike to the one that at the age of 13 ignited his lifetime on two wheels, or the 250cc single which was his first machine in the early 1970s. He takes up the story:

"No one in my family had any interest in motorcycles but I was hooked when I saw the movie 'Easy Rider' and on reaching 16 bought myself a Royal Enfield Crusader Sport. To say it was a 'bit of a heap' was, to say the least, O





an understatement, then the first time I took it out on the road I hit the kerb and fell off.

"At that time our family were living in Chiswick and I decided to go the huge distance of 12 miles to Kingston. I got there okay but the Enfield then decided to stop and it took me all night to push it home. The following year (1974) I took my driving test on a Honda 90 and out of sight of the examiner I fell off again; however, there was no damage done so I continued and at the end he told me I had passed. From there I soon progressed to a Triumph Tiger 100 and got a job as a dispatch rider with the BBC [later on he progressed to a film camera man with the Beeb] which took me all over the city and surrounding counties covering thousands of miles in the process.

"On the 40th anniversary of D-day I was sent to France to collect some film of the celebrations and this was the start of my touring career."

Riding tales

From that first trip to France in 1984, Jim has ridden in five continents and also raced a B50 BSA in classic racing, tales of which could fill several articles on their own, but, for now, we will concentrate on the NSU Max, which joined his eclectic collection in 2010.

"For many years, I'd loved the clean, uncluttered lines of the Max and when I saw this one advertised by NSU guru Howard Nuttall, I decided that, although it was pretty rough, it was complete and too good an opportunity to $% \left\{ x_{i}^{2},x_{i}^{2},...,x_{i}^{N}\right\}$ miss. Following restoration – this was done professionally - a further seven years had passed before it was on the road again and its first long outing was to the Colombres Rally in Northern Spain. All went well until I was forced to stop when a couple of engine mounting bolts came adrift; fortunately I discovered they were the same size as those holding an Armco barrier in place and with these 'borrowed' and relocated, I was soon on my way again.

"The rest of my trip around Northern Spain went extremely well but on my return to the UK - and shortly after having the bike serviced - the cam seized, the reason for this was - and still is - unknown, but with this sorted, the engine has run faultlessly."

Above: You want different? That's the Max all round.

Above right: John Surtees hardcharging on his Sportsmax, the super successful production racing version of the **NSU** single.

Left: Just the thing for a ride in the countryside.



For more great content, and to check out the website and app from the UK's leading classic motorcycle magazines, visit: www. classicbikehub.co.uk

It was now time to put my long-time dream of riding the stunning German bike into action and with ignition on it required just one kick to bring the OHC single to life. In its original road test in 1955, the period journalist commented: "With its enormous silencer, the NSU makes little more noise than a car, and once on the move the effect is uncanny, no noise at all being audible above 30mph save the rush of the wind." I can vouch that this is still prevalent today as it's certainly one of the quietest machines I've ever ridden and more than on a par with a modern machine.

The clutch was both purposeful but feather light and all four gears selected easily, although in top it was a little bit 'flat' and I felt that it would be hard pushed to reach the 75mph recorded back in 1955. That said, both the handling and the braking were top class and it was easy to throw the NSU through corners like a lightweight, the 342lb single (heavy for a 250) holding its chosen line like a racer with its footrests just skimming the tarmac.

My ride through the lanes of North Somerset was soon at an end and it was time to return the bike to Jim and reflect on my long awaited ride on the stunning German 250cc single. The 1955 road test said it all; it's certainly a very remarkable machine and the best quarter litre touring machine of its period I have ever ridden. My 60-year wait was well worth it.



Cassandra the Canadian Commando

After landing a new job and with time on his hands, a young man in Vancouver decided to restore a British motorcycle considerably older than him.

Words and photographs: CHRIS COOLING

n 2009, I decided to find a classic British motorcycle to restore. I had spent the last four years flying airplanes in Northern Canada and was just given the opportunity to move back to my home city of Vancouver at the age of 24. I suddenly had a lot of time on my hands and no hobbies to occupy myself. My dad had restored a 1960 Austin Healey my whole childhood and I thought that maybe he'd be interested in restoring a motorcycle with me as a nice father and son thing. He'd had a Triumph Bonneville and a BSA Lightning in the late 1960s so it was obvious that this would be a British bike. I liked the Bonnevilles and BSAs, but nothing was sexier to me than a Norton Commando... So where would I find one?

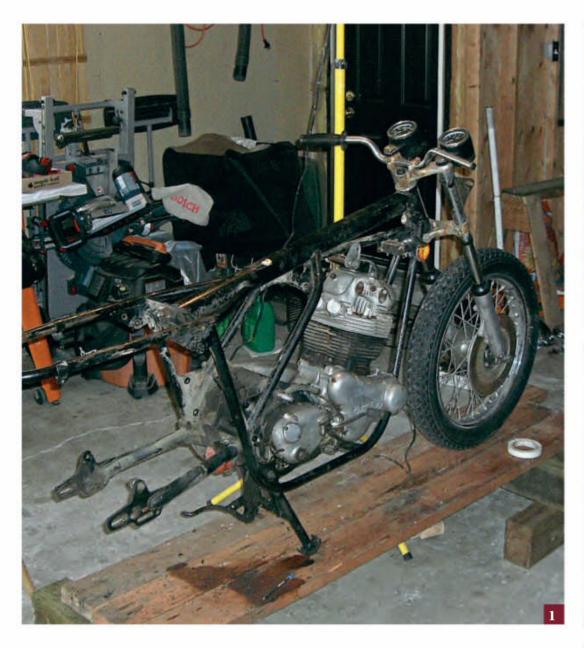
I joined a British Motorcycle Owners' Club (BMOC) to help navigate this community. My dad came with me which was good, because I stood out as the youngest person by 40 years. Before my first meeting even started I found the club president had a love for Nortons and he even joked about selling me one. I hounded him again after the meeting and he agreed to sell it to me

Above: Chris **Cooling with his Norton Commando.**

for \$2500. Everything was going according to plan!

This 1974 Norton Commando 850 had 11,000 miles on it and had been inert since 1979 where it suffered an accident; the frame was bent and it didn't have the original tank. It came with a picture of two Nortons in the Rocky Mountains – the story goes that two friends bought them new and rode from Toronto to Vancouver with all of their belongings. This was a romantic story indeed. I was so overwhelmed when I brought my Commando home that I could only sit and stare at it, imagining what it would have been like to ride this bike in the 1970s, and what had happened to the original owner who had crashed it 30 years ago.

I decided to name the bike Cassandra - a reference to female actor Tia Carrere's character from the film Wayne's World, who was beyond beautiful. I had her on one of my flights years later and the flight attendant told her that one of the pilots named his motorcycle after her. I had to go back and explain myself, she was very nice and told me that rapper Snoop Dogg calls his Porsche Tia!







I was so excited to get started on the restoration that I neglected the mundane task of properly documenting everything and I slowly filled the garage floor with oilcovered Norton parts. This was all against my father's wishes and my future self wasn't too impressed either.

I spent hours in the parts cleaner and hours more derusting everything with a wire wheel. I measured every nut and bolt and finally did do my best to document them (I was starting to get the hang of this) before putting them all in a bucket and taking them to get cadmium plated. This was an industrial shop, so it was nerve-racking giving them all of these irreplaceable parts (I'm convinced they lost some).

While all this was going on, the frame was being straightened and I was getting the parts cleaned up that had to be powder coated (including the head and barrel).

This was an all-consuming hobby I had stumbled upon and it wasn't a cheap one either. I was committed to do as much on my own as I could, so when I was able to get my hands on a wheel jig, I thought it would be fun to spoke them myself. I spent over 20 hours on this task doing my best not to rip a spoke through the hub. When I 'finished' I took them to the club to have someone look at the job I had done. They were much too loose and not up to standards - they had to be redone. Something like this was more of a trade I guess. But I gave it my best shot.

"This was an allconsuming hobby I had stumbled upon and it wasn't a cheap one either."

- 1: The strip down begins!
- 2: 'A nice father and son thing' was Chris's idea, as he enlisted the help of his dad.
- 3: Dad at work on the petrol tank.
- 4: Lovely clean engine in the reassembly stage.
- 5: Ordered, tidy and ready for reassembly.













I ended up putting a racing camshaft in the bottom end and the aluminium push rods were worn down from rubbing on the head gasket so we replaced those, but besides that, I kept all the other internals of the engine. The transmission bearings I did decide to change, which were pressure fitted. Pounding the old ones out wasn't an issue but putting the new ones in would have to be a more delicate task. It was recommended to put the transmission casings in the oven (to expand them) and put the new bearings in the freezer (to contract them). The day we decided to do this we had just got the head back from the powder coater. I remember my mom coming home and my dad and I had the transmission cases in the oven and the engine head in the dishwasher... She was not impressed.

When I was over to work on the bike that's all I did and when we were having an issue we were both very quiet at mealtime in our own heads trying to solve it. My mom was incredibly supportive and patient, but she was used to this type of behaviour. My dad had spent most of the 1980s and 90s restoring the Healey after all. This was a fun time and we got along quite well in the mentor/protégé role. There was nothing worse than having a couple of days off to get as much done as possible and then hitting a snag where I was forced to sit and wait for parts; patience is not my virtue.

One of my lone tasks was to get all the aluminium to shine again. This took about three hours per piece to sand with three different grits and then polish on the bench grinder. I couldn't believe the results. Each piece was shinier than it had come out of the factory! One of the comments I get about the bike that annoys me the most is: "Nice chrome.

"I spent over 100 hours polishing aluminium, it's not chrome!"

When it was all 'done' the restoration had taken twoand-a-half years, but there were still some issues that we were running into. The transmission would get stuck in gear and after taking it fully apart (more than once) we found we had not installed a circlip that held one of the shafts in place. The existence of this was an oversight in the rebuild manual but the parts book showed it and I had never taken note when I had removed it years earlier. Our next big issue came with the engine shutting off while riding it for a short while - this problem was remedied after much research that directed us to remove the handlebar cluster that contained the kill switch, and saw there was a rusty connection.

And what happened next?

In 2011 I got my dream job flying for Canada's International Airline out of Toronto and wasn't able to get the Norton to me as I had no place to store it (and no tools of my own). I would ride it a bit when I got home to Vancouver but it wasn't fulfilling the dream I had intended it to. And it became more finicky as the years went on. We had put an all-weather cover on it in the garage and it was keeping the moisture in (Vancouver has very 'English' weather) so we were getting sporadic electrical issues. I was also neglecting to drain the carbs occasionally. So there it sat until I bought a house in 2017 and got it sent out. The Norton was back where its journey began in 1974. They even still had it on file when I registered it with the Province.

I rebuilt the carburettors again and it wasn't running too badly; one problem now was the clutch was very 'sticky' and was stressful to ride in traffic because when it stalled I found there wasn't much sympathy on the road. Not fun trying to kick over a motorcycle while cars are whizzing by you. I took it apart and found half the plates 🏻 🗘

6: Chris filling the garage floor with oilstained Norton parts, as he himself put it.

7: From this...

8: To this. Lots of polishing reaped reward.

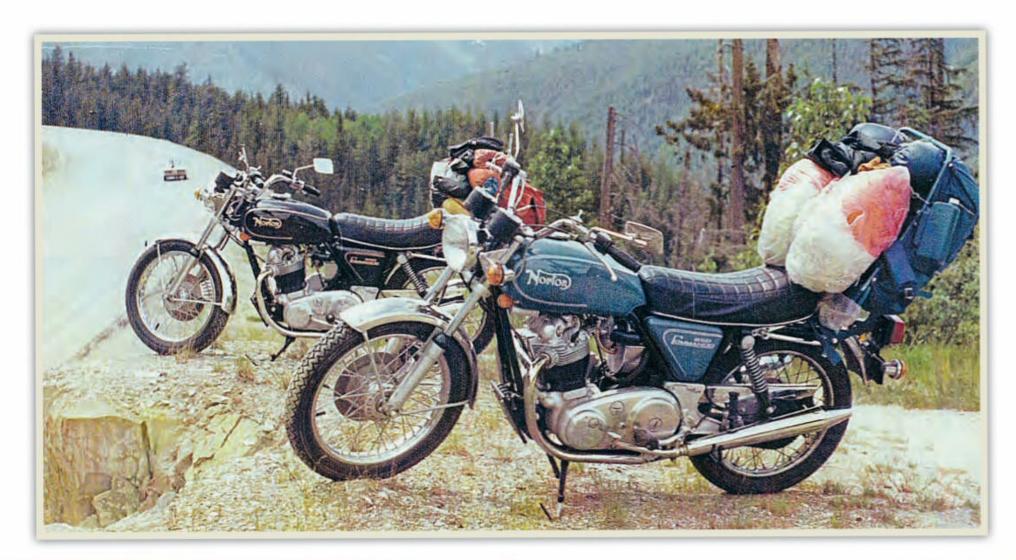
Top right: Chris's Commando was one of two bought new to ride from Toronto to Vancouver. This picture is in the **Rocky Mountains.**

9: Bolts, fasteners, washers, brackets.

10: The wheel building exercise. It certainly looks the part.

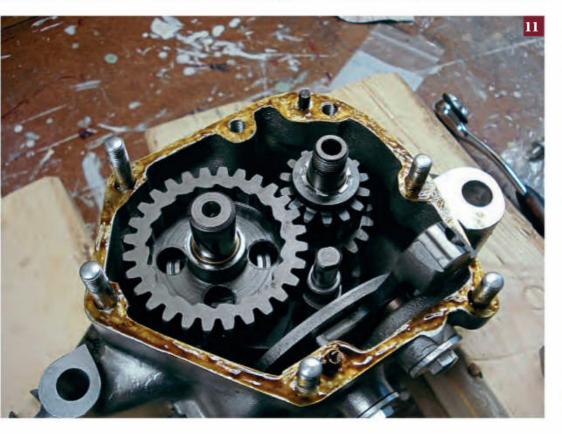
11: Nicely refreshed gearbox.

> 12: Engine balancing...













were stuck together, from lack of use presumably. Oh, and sometimes at idle with the turn signal on the engine would shut off. So I didn't venture too far from home.

The next winter I replaced the clutch with something more modern and started it up in the spring. I was very excited to test it out and when I took it around the block the first time I flicked the turn signal on, and the engine started to buck and then died. This was followed by a heavy electrical burning smell and I pushed her home gritting my teeth the whole way as bystanders told me that they smelled burning. The next month I had a child and that summer came and went. I would get anxiety just thinking about my bike and how unlucky I had been, although it wasn't totally her fault.

I was determined to fix her up good as new in 2020 and with the global pandemic I wasn't working much. The wiring for the right turn signal was charred all the way to the transformer rectifier unit and the battery. I realised I had installed an American 35 amp fuse instead of a British one (yes, there is a difference... apparently). I had to change some wiring, the battery, the TRU and get a new handlebar cluster that houses the turn signal, kill switch and horn. I also went all in and got new carburettors. The slides and needles were worn and when I tried to order new parts over the phone the guy said: "You're just putting new wine in an old bottle." This sounded very sophisticated with an English accent and I was sold. It took a couple of weeks for them to show up but I found that there's nothing like the new Amal Carburetter (sic) smell, they were all put together and ready to go!

I pronounce 2020 to be the year of the Norton! She started right up, the new clutch was beautiful and it gave me no issues. I took it around town going farther and farther from my home until I finally had full confidence in her. I got it up to 80mph on the highway until I realised the tyres are 10 years old, I quickly took the next exit.

It was something that gave me a pang to think about for many years and now I can't stop thinking about it. It is the most beautiful thing on the road and I promise to never let it rust away or be neglected again. The sound and feel as it accelerates down the road is something that I cannot explain.

I must make it a priority to find a BMOC in my hometown to share this experience with, and this time I shall only be the youngest by 30 years. I just put Cassandra to bed for the winter and I can't wait for next spring. My first task will be to get new tyres.

Above and top right: How it arrived and, inset, the photograph recreated.

13: All painted and looking splendid.

14: 'Peace Baby' etching is hidden by the footrest. Chris's dad's Austin Healey has the same etching carved in the steering wheel behind the horn.

15: One wheel in, with forks and such attached. Looking good.



















Green WITH ENVY

Life aboard a 1950s 350cc British single is perhaps as good and as uncomplicated as it can get.

> **Words: JAMES ROBINSON Photographs:** GARY CHAPMAN

here are a couple of owners' stories that always stay with me regarding Velocette's post-Second World War, swinging arm 'cooking' 350cc offering, the MAC. One comes from a chap I've got to know in Ireland, who has had his same Velocette MAC since the early 1960s and he's never felt the need to change or upgrade it; he's always been delighted with the performance of his 35occ single. Until recently, when the regulations on one of his favourite events 'barred' the trusty MAC, it was, so far as I'm aware, his only machine.

The other comes from Velocette enthusiast and collector Neil Redley. When visiting him some years ago, Neil confessed that in many ways his favourite and probably most used – of his Velos was his 'humble' swinging arm RS MAC (so 'RS' in Velo speak, for Rear Springing), eschewing his stable of exotic cammies, café racers and rarities (as well as the first Venom, among others) in favour of the pushrod 'ride to work' machine.

The other evening, while rearranging my magazine collection (these winter lockdown nights just fly by...) I happened upon Roy Poynting's article on that actual machine, featured in our March 2008 issue. In which, Roy made some salient points, including that although in 1954 the MAC was Velocette's offering to compete with likes of AMC's 35occ singles and Royal Enfield's similar sized Bullet, not to mention BSA's unburstable B31, the Velocette was a cut above, reflected in its price; it cost £6 more than a Matchless G3L/AJS Model 16, £11 over the Bullet and a whopping £30 premium over a B31, which at that point was offered with plunger (not swinging arm, like the others) rear suspension. But, still, 30 quid was a lot of cash; the average weekly wage was £9.25. The MAC cost £197.

I do remember too, that Roy rode a green MAC, like the one photographed here, in our December 2010 issue. The green machine which Roy rode was a sparkler - while the one we're focussed on isn't, but it's lovely patina and demeanour is what attracted its current owner to it. Bought at the October 2015 Bonhams Stafford auction, it was described thus:





"This Velocette MAC was acquired for the collection from previous owner A J Keitch of Reading in February 1983 and comes with the purchase receipt. Nicely presented, it displays at total of 25,358 miles to the odometer and should only require minimal restoration. The machine is offered with a V5C registration document, expired MoT certificate (1996) and a 2002 tax disc."

Green machine

What made Velocette offer its MAC in green? It's a bit of a strange choice, when one thinks about it, while I can't really think of another machine (save the D1 Bantam) with an all-over one-shade green finish, including for the frame. In fact, any all-over coloured paint finish was a break from the usual 'any colour you like, so long as it's black' mentality which prevailed in post-Second World war Britain.

Though by the launch of the swinging-arm MAC for 1953 (where it initially ran alongside the rigid offering; in fact, it only dropped out of the range for 1956, the year when the Viper and Venom were added) a few companies had branched out and were offering all-over paint schemes, perhaps signalling a move away from the austerity of the immediate postwar period and a move to more colour. But not many of them chose green.

The official colour, no.5, willow green, which I've read was offered only for 1955/56 on MACs, was the option for the earliest Vipers (with Venoms as dove grey aka beige) while I've seen at least two Venoms in green as well, one of which is 100 per cent genuine, being as the Norfolk chap who still owns it, bought it brandnew circa 1960. So reports vary. There was a green and chrome Venom Clubman which I long lusted over on the show circuit too, though I've not seen that for a few years. So green Velos are out there, even if they're not

66The **96mm** stroke used for the MAC is long for a 350.22

1: Headlamp cowl was a 'must have' styling feature in the 1950s, it seemed.

2: We're pretty sure that's a pattern seat.

Right: It's just an all-round, nice motorcycle. And, in green, a bit different. exactly thick on the ground. But they were, of course, made at Hall 'Green'...

In fact, it was all about the colour why it was purchased. "The main reason for buying it was that it green rather than black," offers owner Peter Rosenthal, who proved camera shy on the day of our visit (or otherwise known as 'busy' and just let us get on with it!). Since acquiring the MAC, Peter hasn't done much work on it at all. "All I did was put on some new tyres and checked the spokes and wheel bearings. It didn't have a spark when I got it home, but we just cleaned up the points, then stripped and cleaned the carb, and away it went, after about two kicks. That's about it!"

Actually, Peter hadn't really meant to buy it at the sale - although he had checked it was originally supplied green - so hadn't made provision for taking it home, a friend taking it back to his place, from where it was duly collected. Then a good clean and a little TLC, and that was that. "I'm pretty sure the mileage is genuine," grins Peter.

Velocette and 350s

Regarded primarily as makers of excellent two-strokes (though they had made four-strokes in the veteran era, both a 3½hp side-valve and a 2½hp inlet-over-exhaust) when Velocette decided to go four-stroke, they pitched straight in with a 350cc model - an overhead camshaft 350cc model in fact, the story of which is oft told, most recently in our November 2020 issue.

By the time Velocette announced its MAC in late 1933, the Hall Green maker and quality 350s went together like cheese and pickle, Morecambe and Wise or death and taxes - they were complementary, inextricably linked and a certainty. The reputation was fostered on the overhead camshaft models, the quality roadsters and the all-conquering racers, though these all shared parentage and linear. The new overhead valve model's engine didn't; it was an all-new entity on its 1933 launch, in 250cc MOV form (with OV for 'overhead valve'), which itself had followed the disappointing performance of a 35occ side-valve, made only in prototype form.

The story of the MOV's conception is detailed in Ivan Rhodes' book Velocette: Passion of a lifetime; "The idea of drafting a motorcycle-for-everyman was carried on [from the disappointment of the side-valve model] by a young engineering apprentice, Charles Udall, while the rest of the staff were at the TT!" This, one can deduce, was the 1932 TT races; as the best Velocette performance in the year's races was a disappointing sixth in the Junior, by Les Archer (behind Stanley Woods' cammy Norton then four pushrod competitors, interestingly), it was inarguably Udall's time that was best served.

For Udall's design was to form the basis of Velocette for the next 40 years, basically. Rhodes speculates on Udall's inspirations: "Bearing in mind that the Veloce company had been involved in the production of Rolls-Royce engines during the First World War, and that I believe Harold Willis was running a Riley car, which had a pushrod engine with camshafts high up in the block, hemispherical combustion chambers and a good performance to boot, it is no wonder that the engine to replace the side-valve should turn out to be the M, Overhead Valve of 68 x 68.25mm bore and stroke dimensions - the bore size was probably determined from experience gained from the pre-First World War inlet-over-exhaust two-speeder. This machine O











66Charles **Udall's** design was to prove the basis of Velocette's range for about 40 years."





remained simply the M model until the 350cc MAC version arrived, when it became the MOV."

Birth of the MAC

There's nothing particularly scientific or legend-worthy about the germination of the 35occ version of the new 250cc, though Rhodes interestingly suggests that the stroke may have come from the successful dimension used by Bradshaw for its 1920s oil-cooled engines, which were legendary for their torque. Among the firms that used said engines was Montgomery - the factory whose wares Willis rode before his immersion into the Hall Green enclave. That, though, is simply conjecture.

What is fact is the 96mm stroke employed for the MAC is long for a 350 - compare it to, for example, the 81mm favoured for other 35occ Velocettes from 1924 Model K to 1948 KSS, as well as all the KTTs through the ages. Even Velocette's still born 350cc side-valve had an 81mm stroke; apparently its lack of torque was one of its major failings... Was that the reason for the long-stroke for the newcomer?

Or was the reason simple one of economy - keeping the MOV's bore meant that the piston and cylinder head from the 250cc could be used. It made financial sense.

In the same spirit of financial sense, the flywheels, conrod, little end and big end were shared with the KSS; the only difference is the location of the crankpin hole.

Success

Hardly surprisingly, the newcomer was a success what's not to like about effectively a 250 in weight and size, but with the extra go of a 350? During the 1930s the MAC enjoyed popularity, joined by the 495cc MSS (which shared the MAC's 96mm stroke) which also quickly found favour. After years of its overhead camshaft models being the company's 'flag bearers' by the mid to late 1930s, the pushrod models were enjoying a solid reputation and (KTT aside) were probably more sporty than the cammies.

Riding a MAC

Vice free. That's what I always think, when aboard the MAC. Okay, it's not perfect - what 60-year-old vehicle is going to be - but it does all can reasonably be expected of it, with the minimum of fuss and protestation. And with no particular nasty habits.

For those unfamiliar with it, sitting on a swinging-arm Velocette single can leave one feeling slightly 'perched' on top of it (I've often wondered why we don't see more retro fitted with a single saddle, surely the frame shape

1: Over 5700 swinging arm MACs were made. the last sold in February 1961.

- 2: Everything works as it should. There's nothing exceptional of course, but all does as one would hope it would.
- 3: Deeply valanced rear mudguard was a MAC - and MSS – staple.
- 4: For one year, MACs had a tubular silencer. It didn't last and the Fishtail was restored to where it belongs.
- 5: Only handlebar top lever is the air control.
- **6:** Velocette's novel, adjustable rear suspension.

lends itself perfectly, a la Royal Enfield Bullet) and this is exacerbated by pattern seats - as I believe fitted here - while the footrests are quite far forward too. It's not uncomfortable at all, just takes a little getting used to. In fact, I think the pattern seats have more padding in them for comfort, thus making them higher.

Starting was another non-issue with this machine. Petrol on, good flood, air lever shut, then I followed the Velo starting drill (find compression, valve lifter in, kick-start right to bottom, release valve lifter and allow kick-start lever to return to top, then kick) and was rewarded with first-kick starting. With a compression ratio of 6.75:1, there was minimal effort required. Igniton is controlled by the auto-advance unit, so that takes care of itself. Air open immediately on starting, and soon the MAC settled into a steady tickover. Lovely.

Within minutes – nay seconds – I felt totally at home, and enjoyed a familiarity ride, to just try out the brakes, up and down the gearbox, and so on. I buzzed up to an indicated 60, though 10mph short of that was a nice, relaxing speed to be at, with somewhere in the middle no bother either. Then I turned round – easy, feet up, in the road - and rode back and forth past photographer Gary. It was all satisfyingly easy.

Thinking later about the swinging-arm MAC, on my journey home, a line came back to mind, which was passed on to me, made by the late über vintage enthusiast David Earnshaw, who reckoned that if he had to choose one motorcycle to ride to the ends of the world, it'd be a Model H Triumph. Now, I don't have enough experience of Model Hs to offer such judgement, but, from what I do know, if I was to choose one bike to ride to the ends of earth, to keep me safe and battle the elements, I'd most likely go for a sturdy MAC.



Hybrid chicken

BSA Bantams come in many forms, and the ability to interchange parts between different models permits an almost endless number of variants.

Words: MARTIN KIRK Photographs: HELEN KIRK

ne of the endearing features of the BSA Bantam, is that any engine from D1 to D14 will fit into any frame, giving almost endless possibilities for the creation of 'hybrids' with different engines and frame types. The D7/D10 'hybrid' Bantam featured was purchased from Saddleworth Classic Motorcycles in December 2003. Following a clean up and the usual bolt tightening exercise, the combination of the classic looks of the 1964 D7 chassis, and extra power from the 1967 D10 engine, has proved to be the perfect combination.

Motorcyclists buy classic bikes for different reasons, often to restore and show, and sometimes even just to take along to meetings in vans for a chat and a cuppa with other enthusiasts, but personally I like my bikes to be able to run and be ridden as they were originally intended. I've read in the classic bike press that Bantams, on account of their low power, are more suited to showing than riding on modern day roads. However, where I live in Aberdeenshire, north east Scotland, we're lucky that there's an extensive network of B and C class almost traffic-free roads, ideally suited to Bantam riding.

Above: The fetching hybrid Bantam, using a D10 engine in a D7 chassis.

Operator error

The engine on this bike is number D10 260, which, according to Owen Wright's book on the BSA Bantam, started life for the GPO (General Post Office) in 1967. It's therefore likely it was ridden everywhere at full throttle in its early days, but doesn't seem to have suffered any lasting ill-effects. During the last 17 years, I've covered around 6000 miles and during that time the engine has in the main run reliably, with the only replacement parts being spark plugs, tyres and new clutch plates, when the clutch started slipping following being laid up one winter.

The bike has also had a rebore after seizing, but this was more due to my tinkering about with the mixture than genuine wear. The mixture on a Bantam appears to be fairly critical, and, from my experience, the needle position shouldn't be altered from the standard setting based on plug colour. The plug on my bike was a shade dark and the running on part throttle a bit rough, so I decided to drop the needle a notch which initially appeared to improve both issues, but also had the unfortunate result that the bike seized (several times) when held at 45mph or more for more than a few miles.



A remarkable feature of a Bantam, though, is its resilience to this kind of 'operator error'. Despite several seizures - which would have finished a more modern chrome bore two-stroke - BNF 62B could always be restarted after a couple of minutes cooling down time and able to carry on its way. After a rebore and new piston, fitted to make sure no ill-effects remained from the seizures, cleaned and gapped points, the bike now runs like a dream. With the carb needle position back on the standard setting (notch three), and the slow running adjusted to maximise engine speed at constant throttle, the bike just purrs along (or on a Bantam, should that be clucks?) at slow speed or 45mph plus. The extra power of the D10 engine is only 2.5bhp more than a D7, but, in percentage terms, is an extra 25%, which makes the bike much more lively and fun down the back roads.

As with any classic, niggles can develop out on a ride without warning at any time, but on this Bantam there has never been anything to stop the bike in its tracks and leave me stranded or needing recovery back home. One of the stranger things which happened a couple of years ago involved the speedo needle starting to spin around the dial through 360 degrees, before coming to rest terminally. The cable was fine but the clock needed a repair, which fortunately could be made, because Bantam speedos with black face and white numbers are now very difficult to source, even second-hand.

The riding experience

The D10 engine has a three-speed gearbox and gives more of a classic style ride than the later four-speed Bantams, due to the widely spaced ratios between the



Black-faced speedos with white numbers are difficult to source.

gears, especially first to second. However, with a bit of forwards planning it is possible to keep the motor spinning nicely and pulling well on back road rides, helped by the reasonable amount of torque available from the 175cc engine. The handling, although a bit bouncy and limited by the short travel period suspension, is still good enough to have some fun riding the twisty bits. Comfort wise, the bend of the handlebars gives a good upright riding position and the seat although thinner at the rider's end, even with new foam from RK Leighton, is easily bearable for 40-50 miles at a time.

Most of my riding has been on shortish local rides, although I have used the Bantam a couple of times for the annual Grampian Classic Motorcycle Club Cairn O'Mount run (www.gmcc.co.uk for information) of about 90-100 miles, including one year when there was a large contingent of Dutch DKW riders. I hadn't ridden with so many two-strokes for years, and the sight and smell as about 15-20 two-strokes all throttled up together on the climb over the 1500ft high Cairn O'Mount hill, made it look like blue-tinted low cloud had descended.

0



Loaded with camping gear and about to tackle the Bealach Na Ba, NC500.

Adventure riding on Bantam

Reading any current mainstream modern bike magazine, you could be forgiven for thinking that to have any kind of adventure trip on a motorcycle, you need the latest £20k electronically tricked BMW GS or similar adventure bike. Not so, however, back in 1952, when an article in *Motor Cycling* reported on a trip by the Bantam Club covering 2000 miles in two weeks over the Austrian Alps.

In the early 1950s, there were also other Bantam adventure trips. In 1951 Mr and Mrs Agne from the USA rode a 125cc Bantam over 5000 miles around France, Germany and Italy with no more problems than a burst tyre. In 1952, an Englishman, Cliff Hall, took his wife on a 14-day tour of Germany covering 2142 miles on just 14 gallons of petrol! I don't know what speed he rode at, but that works out at 153mpg - on the NC500, my 175 only managed 50-55mpg solo loaded with

> John O'Groats, NC500, the **Bantam takes** a breather.

camping gear! Another epic Bantam adventure trip was made in 1954 when Brenda Collins, a 25-year-old English journalist, bought a D1 Bantam and rode from her home in Montreal across Canada to Vancouver, south down the Pacific Coast (Highway 1) to San Diego, east along the Mexican border and southern states to Jacksonsville, Florida, then north via New York to finish in Boston, covering 10,000 miles in just 90 days.

The most famous Bantam adventure trips however, were made by 25-year-old Peggy Iris Thomas from Epsom, Surrey, who bought a rigid-framed 125cc D1 Bantam in 1950 and made a 4500 mile camping trip of Scandinavia with her Australian friend Prudence Beggs. That trip must have set the adventure bug itching, because over the following 18 months during 1951/52, Peggy and Prudence made a 14,000 mile tour of North America on their D1 Bantams carrying camping and cooking gear and her 60lb Airedale puppy Matelot in a tin box secured to the Bantam's parcel rack. At the start of the trip, they only had \$60 in funds and so had to work at various jobs along the way, sometimes night and day, to pay for the trip. You can read about this epic Bantam adventure trip in Peggy's book published in 1953 titled 'A Ride In The Sun' and still available online. No sat navs, traction just nothing but pure adventure!

FINER DETAILS 1964/67 BSA BANTAM D7/

D10 'HYBRID' **ENGINE:**

174cc, two-stroke single

BORE AND STROKE: 61.5x58mm

COMPRESSION

RATIO: 8.65:1

MAXIMUM POWER:

10bhp @ 6000rpm

ELECTRICS:

6v Wipac 60-watt alternator

CARBURETTOR:

Amal Monobloc 375

LUBRICATION:

Oil/Fuel Mix **CLUTCH:**

Wet multiplate

GEARBOX:

Three-speed **FINAL DRIVE:**

Chain

FRAME:

Tubular steel cradle **SUSPENSION:**

Front: Telescopic forks. Rear: Swinging arm with twin hydraulic

> shock absorbers **TYRES:**

Front: 3.00 x 18 Rear: 3.00 x 18

BRAKES:

5.5 x 1in drums front and rear

LENGTH:

79 3/8 in/2016mm

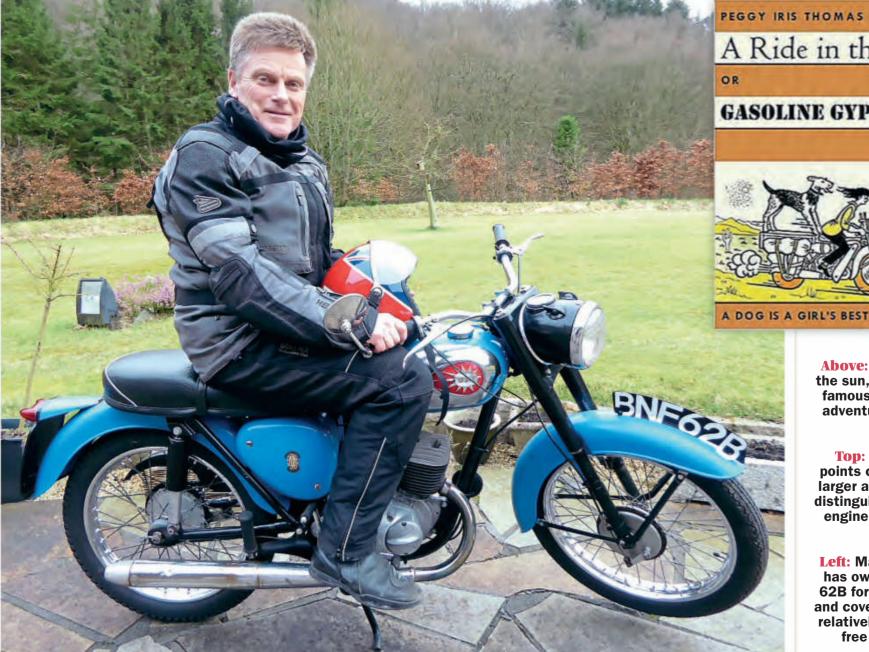
WIDTH:

27¾in/603mm

HEIGHT: 36in/914mm







A Ride in the Sun

GASOLINE GYPSY



A DOG IS A GIRL'S BEST FRIEND

Above: A ride in the sun, the most tamous Bantam adventure story.

Top: Finned points cover and larger air cleaner distinguishes D10 engine from D7.

Left: Martin Kirk has owned BNF 62B for 17 years and covered 6000 relatively troublefree miles.

The NC500 by Bantam

The NC500 around the north coast of Scotland has become the UK route to ride, and so seemed the perfect choice for a UK Bantam adventure. Riding to and from home in Aberdeenshire to the start/finish point at Inverness Castle added 212 miles, and made the total trip 771 miles. Anyone who's ridden the NC500 on a motorcycle, and even more so on a bicycle, will know that the route is far from flat, and takes in just about every possible variation of road type, ranging from main A roads to single track roads with grass growing up the middle.

Nevertheless, the Bantam performed admirably and completed the testing route over four days in weather ranging from torrential rain to warm sunshine. I cannot deny that there were some mechanical issues and rider misjudgements, but in true Bantam spirit the bike made it to the end to be parked up in the same spot outside Inverness Castle, where it had stood at the start four days previously. By the finish, the lights had stopped working, but the rider knew the switch was dodgy before the start and so the bike cannot be blamed. The fuel pipe also started leaking close to the end of the trip, but was replaced with two new clips, and a free coffee, for £3 by BRC Motorcycles at Muir of Ord.

Some of the hills on the NC500 in the far north-west are steep, and first gear was called for at times, but as soon as the summits were passed, 45-50mph cruising was resumed. It's worth mentioning that fuel stations in the far Northern Highlands can be well spaced, and sometimes temporarily dry of fuel. With a maximum tank range of 88 miles, I was caught out when the pump at Durness was closed, but friendly locals came to the rescue with three litres of 'lawnmower' petrol, and a long push onto Tongue and the next fuel stop was avoided.

Touring by Bantam is an adventure, never dull, and the bike undeniably attracts a lot of interest and friendly banter. Whatever the type of Bantam, after a good check over there's nothing better than to get out there and ride it, preferably with a good bit of throttle on like it would have been ridden years ago, for some great fun in the slow lane!



Above: A welcome fuel stop at Tongue, north west Highlands – handwritten notice on the pump explains the procedure...

Right: Evocative badging.

Below right: Chrome tank view.





Below: BRC
Motorcycles, Muir of
Ord, NC500 – there
are worse places
to break down!





ROBIN JAMES ENGINEERING SERVICES

The award-winning British restorer of Classic Motorcycles, established 1979

QUALITY MOTORCYCLE **RESTORATION &** RECOMMISSIONING

From just one component to a complete rebuild

In-house services include:-Engine & Gearbox Rebuilds Fork Reconditioning • Wheel Rebuilds One-off Parts Fabrication Tinwork Fabrication • Machining • Welding Classic Electrical Wiring Paintwork a Speciality

Whatever your needs, call Nick Cronin, K.O.B.I.

Clinton Road, Leominster, Herefordshire HR6 0RJ Tel +44 (0)1568 612800

Email: robinjamesengineeringservices@gmail.com







SPECIALIST IN ENGLISH SPARE PARTS www.vintage-motorcycle.com

We only sell what is in stock. Every part you see on our website is available NOW You pay today - we ship today

> The specialist for BROUGH SUPERIOR VINCENT VELOCETTE Huge stocks of TRIUMPH | BSA | NORTON spares

Also spares for AJS | MATCHLESS | ARIEL | AMAL | LUCAS | CHAMPION | BOYER 400 different nuts | 500 different bolts | 250 different screws | 2000 used spares

LOW COST POSTAGE

British Only Austria Puehret 1 A-4643 Pettenbach

Dealers welcome - terms available

Tel. +43 7586 744610 E-Mail: office@vintage-motorcycle.com



Owner Mark Upham





All personnel English speaking





With so few events to report from, it's time to look back over a spectacular French event and look forward to its hopeful resumption.

Words: IAN KERR Photographs: IAN KERR (unless stated)

ncreasingly popular in the UK, pedal cycles now are ever-more in evidence on the roads every weekend, with individuals enjoying the great outdoors and keeping fit, as the UK catches up with the rest of Europe, where the sport of cycling has dominated roads every day for years.

National sporting events such as the Giro d'Italia (won incidentally by a Brit, Tao Geoghegan Hart, in 2020, for only the second time ever) and the Tour de France, attract tens of thousands of spectators each year to name just two. In the Tour de France event several particular mountain climbs have become legendary, one being Mont (Mount) Ventoux in Provence, in the South of France.

Often known as the 'Bald Mountain' or the 'Giant of Provence,' Mont Ventoux is well known in pedal cycle circles as one of the most challenging climbs in the annual Tour de France. Geologically, the mountain is part of the Alps, although it stands alone with its limestone peak looking as if it is covered in snow all year round.

Above: One suspects things like this Saroléa competed in period.

Below: Plaque commemorating cyclist Tom Simpson. (Magnus Manske).

Ventoux actually means windy, somewhat apt as the famous 'mistral' wind often manages 200mph on its peak standing just short of 2000 metres (6218ft) high and the wind speed is above 56mph for 240 days of the year. At the summit is a meteorological station built in 1882, which created the need for an access road on the mountain.

Just short of this is a memorial to the British cyclist Tommy Simpson who died there in 1967, from heat exhaustion and dehydration, but even now there is still some speculation as to the exact cause of his death; amphetamines were found in his bloodstream and his race jersey.

It happened while Simpson was making the ascent in a race and he fell off after weaving across the road for no apparent reason. Although delirious, he

persuaded spectators to put him back on the bike, which he then managed to ride within a half mile of the summit, before dropping down dead, still clipped into his pedals. All of which is quite well known, but what is not so well known is that the mountain has an impressive motorsport

LA MEMOIRE DU REGRETTÉ CHAMPION CYCLISTE TOM SIMPSON SOUS L'EGIDE DE LA MUTUELLE DE LA PRESSE SPORTIVE MARSEILLAISE UN GROUPE DE SPORTIES FRANÇAIS



- 1: Max Deubel and **Emil Horner, with** the BMW outfit, excelled on the hill. (Mortons Archive).
- 2: French maker **Alcyon would** have been a common name in 1920s events.
- 3: Lightly hotrodded Vincent, with Lightning pipes and brakes, well turned out.





history that includes quite a few British riders of note, including inaugural world sidecar champions Eric Oliver and Denis 'Jenks' Jenkinson.

The motorsport history starts in 1902, just two years after the twisty road that zigzags up the mountain from Bédoin and down again to Malaucène was opened. The road has approximately 120 bends including several hairpins, with an average gradient of 1 in 11 with a maximum of 1 in 7½. The road initially had a 45 degree banked hairpin on the way up to help vehicles maintain speed. Even today at road legal speeds it is a challenging climb on a modern motorcycle, let alone a pedal bike, despite the road surface being in good fettle compared

At the turn of the last century, hill climbing was a popular sport on the continent and Ventoux provided yet another challenge of racing up one side and then surviving the drop the other side, with primitive brakes barely slowing the rate of descent.

So on Tuesday, September 16, 1902, a number of competitors gathered to meet the new challenge, split into three classes, although the event was just a run up to the observatory (1908 metres) at the summit from Bédoin and did not have the drop included. However, it was a significant enough event for Michelin to sponsor it and a large crowd gathered.

Overall, it was won by a Frenchman named

Chauchard driving a 13.7 litre Panhard Lavasior, his average speed being 47.501kph.

In what is described as the 'motorcyclette class,' a rider called Derny riding a Clement averaged 30.960kph - not too bad in comparison, given the difference in engine size. The record book shows the second place machine, a 21/4 hp Werner, was nearly an hour behind him.

Despite the success of the event which was primarily for cars (as it was for the duration) it was not run again until 1904, when a Vitesse (speed) class was introduced for the solos. Spasmodically run for bikes from then on with the number of motorcycle classes changing each year, the entrants were mainly French, as were the machines.

In 1912 a Rudge-Whitworth came second in the 500cc class, but British bikes were never to dominate, or for that matter feature that highly in the results on a regular basis. In 1913, three classes of sidecars based on machine engine capacity were introduced for the first time, but the First World War interrupted play and any more revisions to the programme.

It was in fact not until 1921 that the motorcycle event was run again and Harley-Davidson dominated the sidecar class and a year later won the solo class. Their main rivals in the USA, Indian, cleaned up in the main sidecar event. But while there was now more variation in the list of manufacturers, it was still predominantly 🗘

66At the turn of the last century, hill climbing was a popular sport on the continent."







a home event in all respects. Certainly home manufacturer Terrot used their four solo class wins there in 1927 to dominate their advertising campaign of that year, although BSA and AJS powered the two sidecar class winners. More British bikes were starting to appear, no doubt as local concessionaires convinced the locals to move away from the home products for 'something better...'

To give you some idea of how the event was viewed in the car world over the years, many prominent manufacturers added their names to the winners roll call, such luminaries as Bugatti, Mercedes-Benz, Porsche, Ferrari and latterly BRM and Cooper-Climax taking their turn on the top step when it moved more to single seat racing cars.

Top drivers from the car world also took part – like Rudi Caracciola driving a supercharged Mercedes SSK in 1931 – such was the lure and challenge. Three years later another German, Hans Stuck, took a rear-engined, supercharged V16 Auto-Union Grand Prix Silver Arrow up the road leading to the top of the 'Giant of Provence' setting a new record, as one might expect.

Motorcycle classes finished running long before the start of the Second World War, but started again 1947, when a Vincent outfit won the three-wheeled class, with a Norton taking the solo class a year later. As before, all the winning riders were still French, despite there now being more competitors from all over Europe taking part in all manner of competitive motorsport events.

In 1949 though, the British pairing of Oliver and Jenks were to - albeit briefly - stop the home dominance, and get their names added to the roll of honour, despite the

1: Harley-Davidson and Indian enjoyed early success at the event – but not many like this WLA would've tackled the climb way back when.

2: Eric Oliver and **Denis Jenkinson** enjoyed a 'nice little earner' in 1949 though they worked hard for their money. (Mortons Archive).

3: Manx Norton, stylishly ridden. **Nortons were the** last British winners, in 1964 and 1965.

well-known French racers like Behra, Houl and Collet being part of the large entry.

At that time the organisers, the Automobile Club Vauclusien, like many others, were paying start money and the Oliver and Jenks team, along with others, entered in between championship commitments to earn some 'wages' to continue financing their racing on the continent. The irrepressible duo managed to win both the sidecar classes by not stopping at the top in the under 600cc event, instead riding through the finish and down the other side of the mountain to reach the bottom of the valley, before blasting back to the start to do it all again in the over 600cc class. It should be borne in mind that the return route to the start was 22 miles of similar going!

Not content with that, they repeated the exercise and then rode in the solo classes on a Velocette KTT for more money, with Oliver actually managing a third despite the gruelling schedule. Jenks later said that the event '... was a real-earner and we dined on steak that night.'

It was the best year ever for Brits, as apart from the above, another four riders from the Continental Circus made the 350cc results and two featured in the 500cc class as well, with many records being broken. Phil Heath actually gives a detailed account in the 1950 version of the 'The Racing Year' edited by Geoff Davison. According to the overall motorcycle event results, it is also the only year the Brits ever won.

Norton did well as a manufacturer for the next few years, but 1952 was the last motorcycle event until 1963, despite the car classes continuing to run. A Matchless









took the solo win on the return, with Norton managing to take the top podium step for the next two years, but it was to be the last time a British make featured in the top placings.

After that, Ducati took the honours for the next two years and then the Japanese brands dominated, as they did at the end for the sidecar class, until it all stopped with a Kawasaki taking the title as the fastest solo. However, from 1963 until 1972, BMW ruled the threewheeled class and world champion Max Duebel won in 1964, averaging 92.969 kph.

In 1976, the last competitive hill climb event was run on the course which had seen many changes over the years, including the introduction of banking on more corners to allow speeds to be maintained. But the course was now shorter and costs of running the event had risen well beyond the organisers' pockets. No doubt the heavy costs of the high number of Gendarmes (allegedly 480 were required) needed to control the increasing crowds and ensure their safety, contributed as this had to be paid for by the club.

Add in the fire and rescue services on standby, along with other things like insurance and safety aids, these were just the final straw for the historic climb that had once featured in the European Hillclimb championships. Well, the end, at least as far as cars were concerned.

So, apart from the inclusion in cycle racing, and a few rally stages, in the main the 'Giant' had been left to sleep without having an engine on full chat disturbing the slumber. But in 2008, the Asso-MC2A motorcycle club started a classic event from the Malaucène end

4: Built in Lyon, Follis used a range of proprietary engines; this one is an Ilo-powered.

> 5: Purposeful**looking Gilera** Saturno.

6: Smart monoshock lightweight, with a Sachs engine, has Gauthier on the one-piece tank and seat unit.

7: Racy Koehler-**Escoffier has either** lost a pipe, or been converted to single port.

of the road. Not a full blooded competitive event, but a demonstration style run, split into 14 classes up a 2.3k section of closed road to celebrate the history of motorcycles on the mountain. Despite quickly establishing itself and attracting a large entry, it too now has become a victim of the current economic climate, not helped of course by the current pandemic.

Last time I was there a few years ago, a look down the programme and around the paddock showed many bikes that may well have taken part in the original event. A 1927 Alcyon, a 1934 New Map – a brand that won in 1928, a Terrot and Magnat-Debon from the home teams, to mention just a few of the immaculate bikes in the paddock. As you would expect, many British machines like Manx Nortons and Velocettes also featured strongly in the entry, many having a weekend off from the racetrack as they would have in the past.

There was fair sprinkling of modern classics – many manufactured after the hill closed in 1976 - like the French Godier Genoud Kawasakis that dominated endurance racing in the 1980s. In fact, the whole event was just a wonderful celebration of classic bikes in a classic setting re-creating at least in part, what must have been a truly impressive event in its heyday.

Hopefully this taste of the past may get another lease of life; if it does I strongly recommend a visit to see some machines not often seen at events in the UK. As well as taking in the event, the weather in Provence in mid-April is generally better (at least at the bottom of Ventoux...) than here in the UK, the wine is still cheaper and the challenging ride to the top gives access to a panorama you won't forget.





hat this feature is entitled 'Store cupboard special' is becoming increasingly ironic, as, basically, we seem to keep finding bits that are required, and so adding to the expenditure. That there perhaps wasn't quite as much in the cupboard as first thought seems to be the lesson being learned.

The initial idea was a make do and mend approach, which is what the overall mentality is and has been, but when bits are missing, then there's no option – either stop, or acquire them. And if the project stops, then all momentum is lost and all we have is an uncompleted motorcycle ('unfinished project' – we've all seen the adverts) – which means the pressure is on to keep progress in a forward going manner. That means buying bits.

At the end of last month's instalment, I'd talked about the list of things which we needed to order and, finally, I had to get it done and ordered – my reticence owing to an increasingly expensive house move taking up funds, and the prospect of Christmas looming (although one could hardly consider it a surprise, it's the same time every year...) meaning spending a load of cash wasn't really particularly helpful. But it needed to be done.

We (dad and I) logged onto Grove Classic's website (www.groveclassicmotorcycles. co.uk) and started going through all the bits and pieces we needed, from the cheapest ('chaincase felt ring (special soft version) £4.60') – although actually the 60p alloy washers for the oil banjo bolts were cheaper at 60p – to the most expensive, the £82 engine sprocket. The chains and sprockets on the bike were all badly worn, so it was decided to replenish, and that was duly accomplished. A few pence short of £500 was the total bill.

A couple of days later and Bahzad from DPD was knocking on the back door – Bahzad, having been to us many times now, knows that dad will most likely be in the garage and that's where our 'presents' are generally headed, so he too comes round the back of the house – and we had a big box of shiny, new bits to undo. Exciting!

But to backtrack slightly. At the end of last month's exciting episode, we were able to have the oil tank in place, but it wasn't fixed. After several layers of top coat, it was secured in place and plumbed in; the old oil pipes had gone hard and brittle, so they'd been dumped, and dad made up some new ones



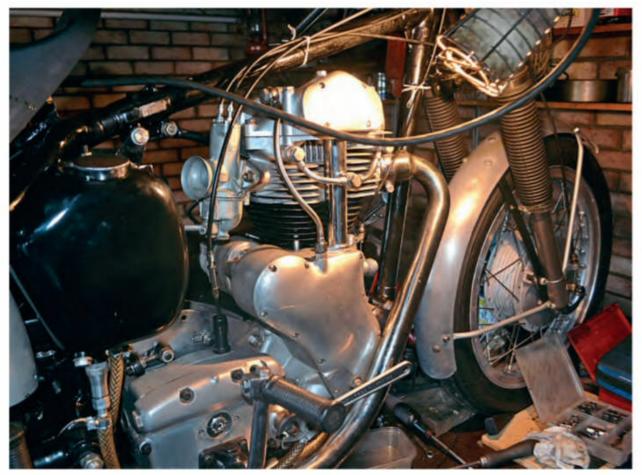
Exciting times! Big box of goodies arrives.



Inside the big box, was lots of little presents.



Unwrapping produced lots of shiny new bits.



It wasn't long before purchases were being bolted on. This is the oil feed to the rockers fitted.



There's been plenty of jiggling with the gear lever/exhaust pipe.



New engine and gearbox sprockets were soon in place.

from the appropriate reinforced tubing. We had most of the necessary pipes, although were missing the oil feed up to the rockers that was to come in the big box from Grove.

The back of the primary chaincase was cleaned, rubbed down, painted (and repainted) then fitted. After unpacking the box, we now had the engine and gearbox sprockets, which were duly fitted, allowing the new primary chain to go on – except it wouldn't. For some reason, the gearbox wouldn't go as far forward as it needed to be, but, eventually, and after much fiddling, it did move to where it needed to be put and allowed the primary chain (dimensions 1/2 x 5/16in and consisting of 67 links) to be fitted. On a Viper, the rear chain is of the same dimensions - a Venom runs a bigger rear chain - and that has been fitted too.

With the chains fitted, it was then possible to fit the repainted final drive chainguard (again, rubbed down, undercoated and then given an aerosol top coat), though the primary one was a bit more awkward mainly as the crews just pushed straight through the holes. So new screws required. We'll come to them in due course.

The swept back exhaust we had, while

not immaculate, isn't too bad at all, and was fitted without drama. Likewise the Fishtail silencer. Though we did find we were lacking the clamp for the cylinder head end of the exhaust. Which was another to come in the Grove order.

Once the exhaust was fitted, it all seemed very close to the gear change – in fact, it touched. The model is fitted with a reversed lever - which will mean a 'down for first' pattern, though that's fine; dad's KSS and our Mk.I KTT are both like that – but the issue here was the collision between the two; so the lever/pedal hitting the pipe. It (the change pedal) didn't have a rubber fitted to it previously, and so this was now making everything 'come together.' A little bit of gentle persuasion and it all fitted.

We'll have to see how it all operates though - there does seem to be quite a lot of sloppiness in it, and it's very long travel anyway. Internally, it seems there were two at least – forms of connecting/linking rod; the early system has neat joints and elbows, whereas the later one, just relies on a bit of bent metal. We've gone for the early bits, but, actually, it could be that there's wear in the joints, and that was the reason the firm

swapped the manufacturing process, not just from economy, as we'd imagined.

There was another issue of things colliding with the exhaust pipe, when it came to the kick-start. The external spring was fouling the exhaust (dad describes everything in this area as 'rather snug') so dad modified it, replacing the external spring with a ball and plunger type arrangement. No more collisions.

In the same area, close inspection of various pictures - and of the diagrams of the factory rear set footrests – revealed a strengthening brace, between the back of the plate that the rider's footrests are mounted to, and a lug a little further back. This support is missing on our bike, on both sides. Now, the right hand side won't cause much of an issue, as there's space to make up and put something in place, but the left side, is all a bit tighter. We've a fold up footrest on both sides, though isn't actually necessary on the left (it is on the right to allow the kick start to be operated) - was just what we had. There's an added factor in that on the left hand side, the rear brake is pivoted from the same bolt as the footrest hangs on, suggesting it would be the one in need of the extra strength;



In the light of day. Looks like a motorcycle now.



Chains, both primary and final drive, are new too.

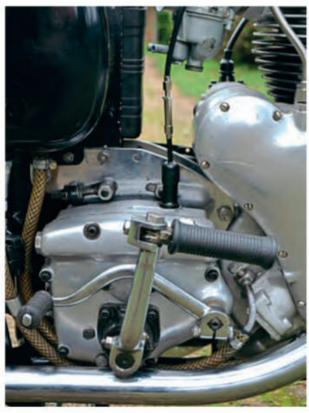
ironically, the one on the right (where there's plenty of room) has nothing but the footrest supported on the plate, as the gear lever is simply reversed.

Lots of the more fiddly bits have been done – such as the oil pipes – while the new levers are all in situ too, with new cable made up for all of them, except the throttle, as the carburettor had that one attached to it. The throttle (twistgrip) fitted isn't particularly nice, so we'll maybe look at getting a better replacement for that, too. On the subject of the handlebar area - we have upside down standard items on at the moment, as supplied on a Clubman, but it might be that we'll mount them the other (ie correct way) in the end. I've found, from having ridden a few, that rearsets and standard bars make for quite a nice riding position on a Velocette of this ilk.

Otherwise, hopefully, the amount of parts needed to buy is now getting towards its end - though I know we'll need a pair of rear shock absorbers, a headlight, a dynamo, a rear mudguard, a speedo, and that's just off the top of my head - so perhaps not near the end at all. The petrol tank needs painting and the seat covering as well. Oh well, onwards and upwards!



Clutch lever. It works!



The correct relationship has been established...



Bit too racy? Bars might end up the other way. Cables are mainly freshly made.

WHAT A DIFFERENCE A DAY MAKES



INSTALLED IN 1 DAY

"What a difference a day makes as the saying goes, and yes, that's all it took to install."

Mr & Mrs Barber, Wells

WARMER IN WINTER

"There is no doubt that the conservatory is much warmer than previously, and no, the room is not darker either!"

David Birch, Chichester

USABLE ALL YEAR ROUND

"The conservatory is now used throughout all seasons of the year and is far more comfortable to sit in whatever the weather outside."

Mr & Mrs Gibson, Portishead

MOULD & CONDENSATION

"This is the best thing we have done in this house. Used to run with condensation and now zero."

Karen Thomas, Chippenham

COOLER IN SUMMER

"You could have fried an egg on the table in there in the summer, I now look upon the conservatory as a new room. It is quiet, restful and cosy."

Carol Doyle, Surrey

REDUCES ENERGY BILLS

"I've already turned the underfloor heating down. Lovely job guys, thank you!"

Anne Bird, Bristol

QUIETER IN BAD WEATHER

"For the first time in 10 years we do not have to close the door to the conservatory when it rains, as the noise is minimal and before I found it difficult to hear the TV over the loudness of the rain on the old roof."

Mr & Mrs Bailey-Webb, Warsash

CONTACT-FREE

We can offer contact-free installations, and perform these in less than a day!



Checkatrade.com





www.greenspaceconservatories.co.uk









Get a price for your conservatory roof



The Motorcycle

DESIGN, ART AND DESIRE

The concluding part of a two-part feature, in which the history of motorcycle evolution is examined and a new book's author interviewed.

Words: RACHAEL CLEGG Photographs: MORTONS MEDIA/RACHAEL CLEGG

alf way across the world, a queue is snaking outside the Queensland Gallery of Modern Art, Australia. The long line is comprised of avid motorcycle fans, eager to gawp at the dozens of machines on display which together illustrate the fascinating evolution of motorcycle design.

The exhibition – entitled The Motorcycle: Design, Art, Desire - bears all the hallmarks of a contemporary art display: artworks (in this case motorcycles) are generously spaced-out and mounted on slick white plinths and accompanied by perspex-cased text panels. We are thus reminded that our beloved two-wheelers are not only technologically impressive but also beautiful works of art in their own right. It's no wonder that the exhibition has received rave reviews.

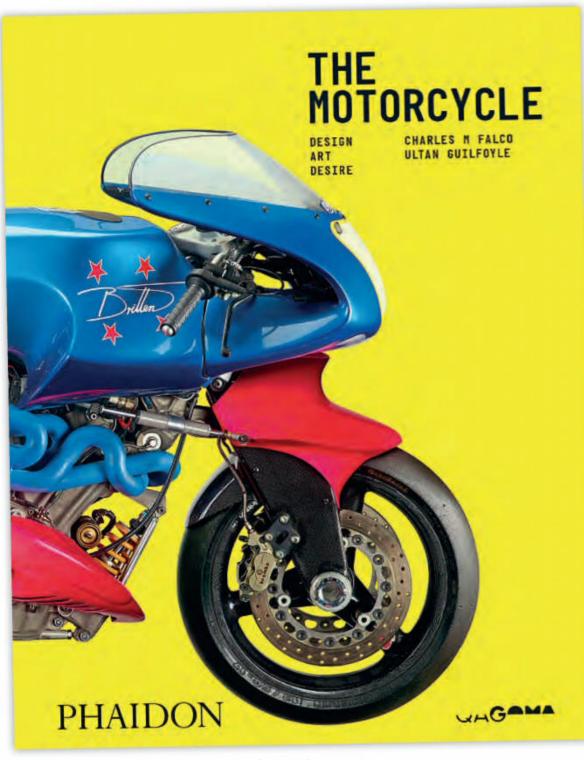
And fortunately, we don't have to travel 9526 miles to experience The Motorcycle: Design, Art, Desire either: art publisher Phaidon have saved us that job by producing an accompanying book of the same name. Its authors - Charles Falco and Ultan Guilfoyle - are also the show's curators and, as such, the book itself is a sort of exhibition, albeit a paginated one.

In last month's TCM we embarked on the first part of a 'tour' of The Motorcycle with its author and TCM reader Charles Falco and now, it's time for part two....

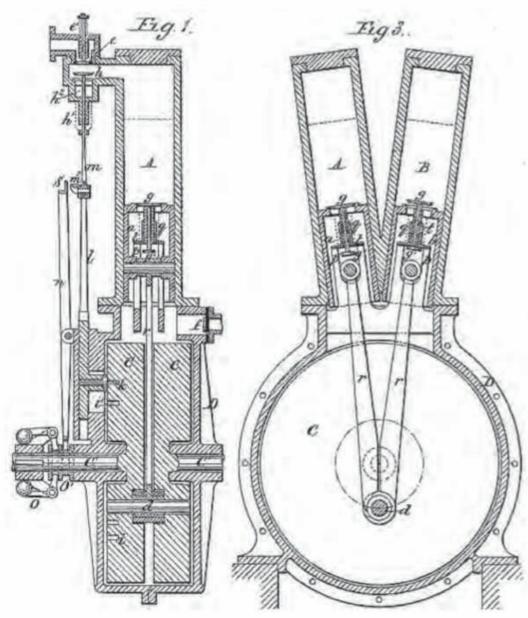
Design comes in many forms. In the last issue of *TCM*, Charles Falco described some of the influences that have determined the development of motorcycle technology, such as the magneto. But as for the way a motorcycle looks, that's a whole other story...

The world's first motorcycle is considered to be the French-built Perreaux steam velocipede, produced between 1867 and 1871. Put simply, the velocipede





Cover of the book.



The first V-twin was from Daimler.



The Princeps V-twin, made in Northampton.

was a Louis-Guillaume Perraux steam engine bolted to a Pierre Michael iron-framed bicycle. It is a crude creation but it served the purpose of the velocipede: to propel a pedal powered device. It ticked its literal boxes too: 'velocipede' is from the Latin 'velox' (swift) and pes (foot) hence, Perreaux's machine absolutely did what it said on the tin. Its fundamental design was echoed in subsequent motorcycles for years to come.

Ultan Guilfoyle writes in The Motorcycle: "The lines of Pierre Michaux's velocipedes were pleasing and the very centre of the frame seemed like a good place to stick an engine, even a steam engine."

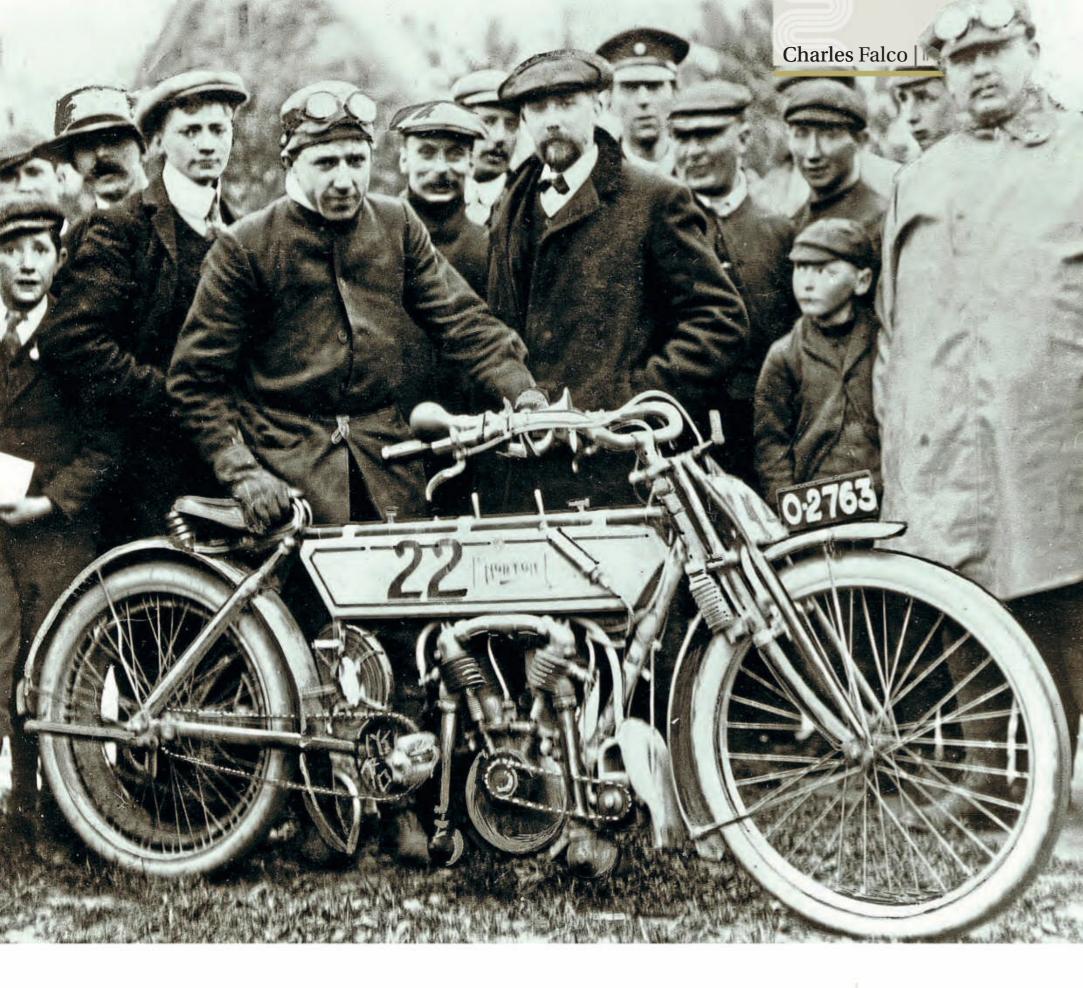
Falco argues that it's this basic bicycle frame that likewise gave rise to the V-twin, which became a design staple. "When you look at a bicycle frame you can see it's a V-shape and this perfects a natural space for a cylinder and a crankcase and furthermore, to double the power, you simply add another cylinder. That's why the twins ended up the way they did."

But what's interesting is that this basic V-design emerged across the world, from America to Australia and without any known collaboration between manufacturers. The first V-twin was arguably the Gottlieb Daimler in 1889, with other versions emerging from around 1900. Indeed: Princeps AutoCar Co in Northampton produced a V-twin in 1903-1905, there was the Curtiss V-twin in 1905 and by 1907 Peugeot had produced its 1907 TT-winning twin cylinder engine.

"These designs were being produced independently of one another," says Falco. "And the internet wasn't so fast back then...," he laughs. "It's not like manufacturers were copying what other people were doing, it is more the case then they were drawing from other industries and taking ideas from outside." For the early era motorcycles, those industries were that of the bicycle and the automobile.

But while early motorcycles featured the same basic ingredients, individual 'recipes' soon emerged. The crude bicycle-frame-with-bolted-on-engine design soon allowed for aesthetic tweaks which often reflected a national style, as Guilfoyle explains in The Motorcycle: "Cars and motorcycles were, at first, just built. In other words, they were constructed in workshops and garages by talented mechanical and engineering innovators. With interest in these new, exciting machines at a frenzy, cars and motorcycles started to be designed, that is, drawn on paper, before being handed to the mechanics and engineers." Good design enhanced a motorcycle's appeal to prospective customers and enthusiasts.

"Of course, an American wanted an American-style design, while someone in France wanted something



that looked, well, French," writes Guilfoyle. "The early world of motorcycle design had national characteristics that we can celebrate today."

Interestingly, the predominant factor in influencing motorcycle design was the manner in which a nation used horsepower. "The Brits designed slightly dull, workmanlike motorcycles, with names that flourish still: Triumph, Royal Enfield, Norton," writes Guilfoyle. "They were solid, upright designs, with the rider in an upright position, as if riding a horse English-style, with a straight line running from north to south through the rider's shoulders, bottom and ankles. The young engineers who worked in those factories may not have arrived at their workshops on horseback, but they probably arrived

in a horse and cart, and the style of horse riding was as familiar to them as the taste of roast beef and Yorkshire pudding. Very English."

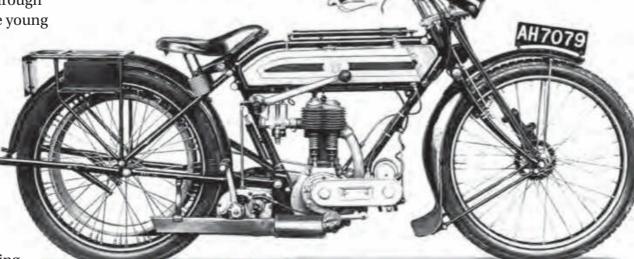
America, on the other hand, wanted something different: "George M Hendee and Oscar Hedstrom, in Springfield, Massachusetts, and Messrs Harley and Davidson, in Milwaukee, Wisconsin, all arriving

to work on horseback, rode in a different, 'cowboy' style: laid-back, feet-forward, neck-reining. That American style of riding a horse has come to define the American style of motorcycle design."

As Falco says: "In America, if you were in Minneapolis, Minnesota and you asked me how to get to Sturgis, I would tell you 'go right and ride for 400 miles directly west on one highway.' In the USA, you only have to drive back and forth but to travel the same distance

Above: There was a **Peugeot V-twin power** unit for Norton's 1907 TT winner, ridden by Rem Fowler.

Below: Upright engines and upright riding positions were the norm for the first 25 years of **British motorcycle** manufacturing.





Above: Indian was one of the US big two – its machines, naturally, were 'typically American.'

in Europe – for example from Prague to Amsterdam – you can't go 50 feet without having to turn. This requires much more manoeuvrability and this difference in travelling style is reflected in the seating style of American and European motorcycles."

The Motorcycle: Design, Art, Desire hones in on the fascinating and dynamic nature of the early years of motorcycle design-not just twins either. There are singles aplenty, including a 1906 Australian-built Spencer, a 1903 Minerva and the 1908 Indian D'Ora.

Later, other influences start to have an effect on national styles, such as emerging aviation technology and expertise. Guilfoyle cites BMW's R32 as one such example: "Bayerische Motoren Werke (Bavarian Motor Works, or BMW) was an aircraft engine manufacturer of renown. BMW, however, was on the wrong side of the First World War, and it struggled to gain a foothold as a manufacturer of engines and automobiles in the early 1920s. Aircraft engineer Max Friz, when asked to look at motorcycles as a way forward in those difficult years, created the R32, using a horizontally opposed aircooled twin, the so-called boxer engine, that has been the hallmark of BMW motorcycles ever since. It was not just the engine that set the BMW apart, it was the way Friz integrated the engine into the rest of the design, how he married the engine seamlessly to its parts: the triangular frame, the tank, the pinstriped symmetrical mudguards, the low seat, the wide handlebars, and the headlight, perched high and leading the way forward, almost like a flag."

BMW's boxer engine format became a mainstay of the marque's subsequent designs, designs which would eventually become absorbed into licensed spin-offs across the globe. The Russian-built M-72s are based on the BMW R-71 and the Chinese-built Yangtze River 750 is based on the M-72. "That's what licensing does for you," says Falco. "It's like Covid: it spreads across the world."



An early example of Germany's BMW, with the boxer engine.



Russian BMW copy, the M-72.

It's this cross-pollination that also led to the huge expansion of the Japanese motorcycle industry, according to Falco. "It's easier to improve something and edit it than to write the first draft. The Japanese didn't have to invent a motorcycle, they just made the existing ones better."

Eventually, Falco argues, the variations in design started to stabilise in the 1970s, giving way to what he defines as an 'international' style. A quick glance at both the Norton Commando and a Honda 400/4 confirms this theory: both share the same basic aesthetic.

This could be owing to the expectations of the typical motorcycle customer. "Motorcyclists are intrinsically conservative," says Falco. "There's this phrase a famous French-American designer Raymond Loewy invented: 'most advanced, yet acceptable' (MAYA) which describes the constraints faced when designing motorcycles for the mass market.

"Some motorcycle designs are just too out-there," says Falco. "One example is the Ner-a-Car: that was just a bit too extreme so it never really took off." But the Ner-a-Car wasn't too 'out there' for the exhibition: indeed an example is featured in the book.

Falco says: "The book and exhibition are not really about the usual suspects though there are some of the usual suspects, such as a Vincent Black Lightning. The book operates at a deeper level than one would normally look at a motorcycle and to enable people to understand them as products of design."

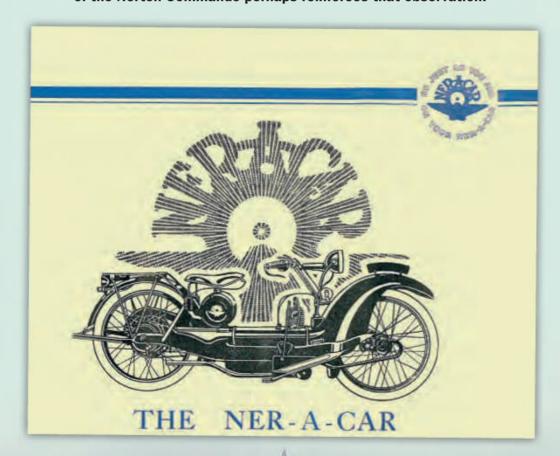
Despite Falco's ability to explain the complex influences of motorcycle design history, the academic is at a loss when it comes to choosing his favourite machine in the book. 'That's like asking a mother to choose her favourite child," he laughs.

But after some probing, he settles on a single machine: "Okay, if I really, really have to choose one motorcycle, it would be the 1928 Georges Roy Majestic. That was something quite different. And it's just a beautiful example of a motorcycle that many motorcyclists don't like because it doesn't look like a motorcycle."

Georges Roy's Majestic had very little impact on the motorcycle world. It was, in Falco's words, too 'out there' to have any influence on subsequent design. And of all the reasons to choose this machine as his favourite, Falco says: 'It's quite simple: I just look at that machine and smile."



"Motorcyclists are intrinsically conservative." The enduring popularity of the Norton Commando perhaps reinforces that observation.



Above: Despite its many advantages, the Ner-a-car never really took off.





Highs and lows

The demise of Villiers motorcycle engine production was sad and messy but there were highlights in the final decade, including the many successes of Thundersley, Essex-based Greeves trials and scrambles machines.

Words: RICHARD ROSENTHAL Images: ROSENTHAL FAMILY ARCHIVE

The birth of Villiers

Born 1836 in Ludlow, Shropshire, John Marston moved to Wolverhampton in 1851, starting a seven year apprenticeship at the Jeddo Works of tinsmiths and japanners Richard Perry Son & Co. Training completed, he bought the like business of Daniel Smith-Lester of Bilston. Marriage followed and his first son Charles (who was to play major roles later) was born 1867. Four years later, Marston bought Richard Perry Son & Co., Marston, and soon moved his existing business into the Wolverhampton site. John Marston was a successful businessman and his factory performed well, leading to expansion plans by 1877.

These expanded businesses fabricated large quantities of household and other items from sheet steel, and earned a reputation for the high quality of their enamel finishes. Son Charles (the first of nine children born to Ellen and John Marston) joined his father's business in 1885 and soon showed the same dedicated work ethos as his father, studying business and science at Mason College (later Birmingham University) while working in the business's dispatch department either end of his college days.

For health reasons and pleasure, John Marston enjoyed cycling and, in c1888, he, the works and William Newill designed and built their first cycle with a low frame, to suit Marston's short stature. Folklore enters history here, suggesting the sight of the sun's gleaming reflection on the cycle's lustrous black enamel picked out with gold leaf prompted Ellen Marston to suggest the name 'Sunbeam' for future production models. The name was registered and soon the works became known as 'Sunbeamland.'

Charles shared his father's enthusiasm for the world's growing pursuit of cycling (although junior preferred tricycles) and a cycle section was established at the Paul Street site in 1888. Such was their rapid progress, by February 1889 they were able to display bicycles, tricycles and a safety cycle at shows. Significant - and even more so for our story - Sunbeam designed an eccentric pedal crank lug/bracket which facilitated chain adjustment. It was patented and more patented designs followed into production.

Such was the success of Sunbeamland products, they outgrew their premises, leading to the purchase of the Edward Bullivant (tinsmith and japanner) works of Villiers Street, Wolverhampton. In 1898, the Villiers Cycle Components Company was established by John Marston, with Charles in charge. Initially, the business had two roles - first, to design/manufacture cycle components for Sunbeam cycle manufacture at Sunbeamland, and, second, to design/ manufacture components for sale to other makers. Conveniently, the establishment of 'Villiers' offered a brand name for their proprietary offerings which didn't impinge on the brand Sunbeam and their cycles.

Among the many products Villiers offered were robust chainwheels and freewheels for pioneer motorcycles.

Brief Villiers engine history

Freewheels and chainwheels apart, Villiers first attempted to enter the motorcycle market during February 1911, launching their design proprietary motorcycle hub clutch. In 1912, Charles bought Villiers from his father

for a reputed £6000 and it became a private limited company. Significantly Frank Farrer, who'd sold his own business in 1902 to join Villiers, was one of the shareholders, while Charles initially continued as managing director. Then in 1919, Charles became chairman (1919-45) and Frank Farrer MD (1919-45, then chairman 1945-57). Leslie Farrer, Frank's son, was works director 1937-57 and chairman 1957-65.

Villiers announced their first proprietary engine in 1912; though intended for motorcycles, they soon were found in other applications. The four-stroke inlet over side exhaust valve 349cc single cylinder engine was given a mixed reception by press and trade alike.

Still eyeing a lucrative motorcycle market, Villiers floated ideas in the office, including a flat four-cylinder two-stroke engine. Frank Farrer knew this was too complicated and so designed a simple 269cc single cylinder twostroke engine, which his colleagues dismissed instantly. However, Charles Marston was persuaded by Farrer it was a good idea, a prototype was built, slotted into a crude



O

locally made frame which Frank immediately rode on a round trip to Bridgnorth in Shropshire. Happy with its performance, he asserted and guaranteed Villiers would sell thousands of them. His only error was he grossly underestimated demand.

Not wanting to put all their eggs in one basket, Villiers displayed both the 269cc two-stroke and 349cc four-stroke engines at the 1913 Olympia Show. The new twostroke engine - later, in hindsight, coded the Mk.I - was offered as a complete package with double barrel exhaust, carburettor and magneto, or just as a loose engine. At the show, the 269cc unit was also installed in an Ixion and the larger engine to a Sun.

After the Mk.I to Mk.V 269cc engines, Villiers expanded their range for 1922 to comprise 147cc VIC, 247cc VIA and 343cc VIB - later, these units were updated and issued with revised prefix codes. The first 172cc engines appeared for the 1924 season, leading to the sporting Brooklands engine a year later and the Super Sports engine in 1926 (both developed in association with Brooklands habitué Tommy Meeten) when they also launched their smallest engine to date, the 122cc 11/4 hp. The 122cc capacity was soon dropped, until the 1938 launch of the 122cc VIIID.

Many remember the 197cc (59x72mm bore x stroke) Villiers 5E to 9E engines powering trials machines from Dot, Greeves, Francis-Barnet, James and others. The E preface series started in 1928 with the twin exhaust port 196cc (61x67mm) IE, joined by the single exhaust port II (two) E for the 1930 season and the first 197cc III (three) E appeared just before the Second World War.



The initial 247cc A prefix series continued until 1940 with updates, while alongside the longer stroke 249cc (63 x 80mm) XIVA to XVIIIA series ran 1933-1940. The 250cc single cylinder engines reappeared for the 1958 season as the 246cc (66x72mm) 31A which ran through to the 37A, the revisions weren't necessarily upgrades but denoted engines of differing specifications for differing roles.

Often The Villiers Engineering Company Ltd cautioned against tuning their engines... But many did just that, including Tommy Meeten with factory blessing. Post Second World War, Greeves offered gear ratio options to suit varying roles, and appeared to cooperate with the likes of Dot (who as well as off-road machines won the Manufacturer's Team Prize in the 1951 Ultra-Lightweight 125cc TT), Greeves, Cotton, DMW et al. In autumn 1962, Villiers launched the Bernard Hooper designed 246cc Star-maker, which

soon became the Starmaker. Standard engines developed 25bhp@6500rpm, and factory race prepared engines produced 32bhp@8000rpm. It wasn't long before two-stroke tuners wrung even more bhp from them.

The factory launched their first twin cylinder two-stroke engine in 1927, the 344cc inline engine fitted briefly to the Francis-Barnett Pullman. Then came a 500cc transverse parallel twin, of which a few prototype engines were offered to makers including SOS, Monet Goyon and Brough Superior before it was shelved.

Villiers next offered a twin in its 1956 range, launching the 249cc 2T, then came the 324cc 3T, initially intended for light car fitment options of self-starter and reverse gear for both were available. Then for 1963 the higher performance 249cc 4T was introduced, a replacement for the 2T, except at least one trade customer still ordered 2Ts!





During their engine manufacturing life, Villiers built over three million engines, including many for stationary/industrial roles. Behind the scenes, Villiers bought other businesses, including steel pressing operations, and, in 1957, merged with JAP, for the latter's stationary engine business and designs.

Many rightly claim the 1950s were the boom years for Villiers, but they actually did pretty well from the launch of their first two-stroke engine in late 1913 through to the early 1960s, a 50-year period. As well as motorcycle and light car power units, their stationary engines suited for many customers. Behind the scenes, there had been much other engineering type work undertaken for many years. During the 1960s, Manganese Bronze began acquiring Villiers shares, then, in 1965 when holding the most shares, bought the rest to take over.

With the collapse of AMC in 1966, Villiers was all but sunk. From the ashes, Norton Villiers was created to focus on the Norton marque and develop the Commando. Suddenly, the remaining motorcycle factory customers were without engines. DMW took over the rights to build A and E series units, but in practice built selected A series units (mostly 32A and 37A) for a couple of years, plus, luckily, Greeves had developed their

own Challenger engines. Later the Villiers brand name moved to India.

While rivals Dot, Cotton, James, Francis-Barnett and others produced trials winning machines, two models, the Greeves Scottish and the Greeves Anglian, dominated for the best part of a decade, giving Villiers an Indian summer, as the rest of their world collapsed.

Greeves Scottish

The world first heard of the Greeves through a feature in *The Motor Cycle*, published on May 19, 1951, in which two prototypes were mentioned - a roadster and a scrambler. Motor Cycling soon carried a test feature then all went quiet, although Invacar prototype competition models competed in East Anglia. In autumn 1953, Greeves announced a three model range, with Greeves developed rubber in-torsion suspension and Villiers 197cc 8E power. These machines (20R - standard roadster, 20D - de-luxe roadster and 20S scrambler) were soon joined by the 25D Fleetwing roadster (242cc twin cylinder twostroke British Anzani) and the 20T trials, also with 8E engine.

Forgetting roadsters and most scramblers for this feature, the trials models were developed, gaining Armstrong rear shock absorbers and later the 197cc Villiers 9E engine. Scramblers were fitted with



An early, probably 1959-ish Scottish outside the Thundersley, Essex factory. Note Derry Preston-Cobb's conveyance in the background.

Armstrongs a year earlier. Sales were initially slow, but factory boss Bert Greeves had enough faith to support a few riders who enjoyed limited local success. A steady start, which suddenly changed overnight.

О



Somehow, in January 1957 Bert Greeves enticed ex-Matchless works rider Brian 'Strawberry' Stonebridge (1928-59) from his then employers BSA to develop a Greeves comp shop and their off-road machines, in an old chicken shed on the Thundersley, Essex site, with Stonebridge assisted by young mechanic Bob Mills, conscripted from the Invacar production line.

For the scrambler, Stonebridge – who'd learned his two-stroke development skills at BSA from the German expert Herman Meier quickly boosted Villiers 9E power output from nine to 16bhp, and, like all good fairytales, he was soon beating up the big boys, including



From 1966, Anglian Villiers engine with Challenger barrel and head.

rival works bikes from BSA. Stonebridge then took a chance in signing Suffolk teenager Dave Bickers (1938-2014) - Bickers was to win four British 250cc titles (in 1963 he raced both Greeves and Husqvarna) and two European Championships (1960 and 1961) for Greeves.

Enjoying trials riding for relaxation and with the scrambler singing, Stonebridge turned his attention to the 20T trials model. Many attribute the 20TA Scottish to Strawberry, but it was, actually, first conceived by Bert Greeves from the existing 20T, while Stonebridge developed the scrambler. Then Brian worked his magic on the new trials project which became the Scottish launched for 1958 as the 197cc 20TA. Alongside, a 249cc 2T-powered 25TA appeared, though was soon dropped.

Luck entered the equation as local Bishop Stortford and Chelmsford dealer Derek Cornell collared the first 20TA off the production line for his rising star DR 'Don' Smith (1937-2004), later to become a Greeves works rider.

In 1959 the 246cc Villiers 31A Scottish, coded the 24TAS, appeared. But devastating tragedy struck – aged just 31, Brian Stonebridge was killed in a car accident in October 1959. Suddenly Greeves competition glory years and its future rested on the shoulders of two youngsters; Bickers for scrambling and trials rider Smith, to whom Bert Greeves entrusted 'Scottish' development.

DR not only won national trials regularly (thanks in part to his dedicated practice regime) but evolved the Scottish into a world-



The 'banana' front fork fitted to all Anglians (1966-8) as standard, though teles were available for another £20.

beating trials machine. In its final form, the 'E' series the 246cc TES Mk.II was considered the best Scottish of all. And in the ultimate act of backing his work at international level, Don Smith won the Belgian, French and German rounds of the 1964 Challenge Henry Groutars (European Trials Championship), securing the title with further places.

The 197cc Scottish machines were coded 20TAS (1959) and 20TCS (1960), both with Villiers 9E engines. The 250cc Scottish range was 24TAS (1959, Villiers 31A), 24TCS (1960, 32A), 24TDS (1961, 32A), 24TES (1962-4, 32A – some (later models) fitted with Greeves Challenger barrel and others retro fitted) and TFS (1965, 32A with Greeves Challenger barrel).

Greeves Anglian

Realising a new trials machine was needed to keep ahead of the pack, Don Smith and Invacar factory staff developed a new model for 1966, the 24TGS powered by the Villiers 37A engine, topped off with the Greeves Challenger square barrel, head and compression plate to give an 8.86:1 compression ratio.

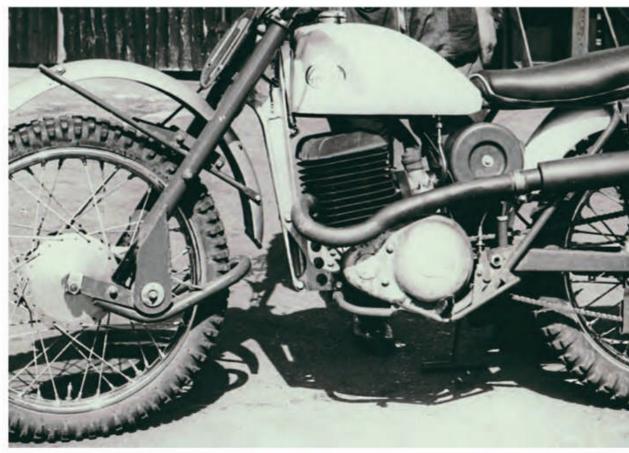
Initially, Greeves used a few 32A engines with their barrel conversion for the first Anglians, then switched to 37A units for most production models and works machines. Although retaining the familiar Greeves cast aluminium alloy downbeam, the rest of the frame was redesigned from that of the Scottish and a so called 'banana' front fork replaced the Metalastik component. Gone also were the glass fibre mudguards fitted to later Scottish models, with Greeves reverting to alloy items, then the Anglian was topped off with a new design glass fibre fuel tank, which shocked purists. Not for its design or shape, but its colour, as the familiar Moorland blue was replaced by bright red.

DR scored wins and awards straight from the box with 'his' works models. Don, a friend for many years, reminded me more than once he had 'at least' two trials machines per season, and occasionally three, which were run under the same registration mark - sounds exactly the same as other famous competition factories. At 228lb, the new Anglian was the lightest 250cc Greeves trials machine yet, but it was set to lose more weight as the updated 24THS (1967) and 24TJS (1968) scaled in at 215lb.

Eyeing some American sales, Greeves took the Anglian rolling chassis and fitted dual seat, lights, motocross tyres, a Villiers 34A engine with Challenger barrel and sundries to ready it for the Stateside market. Coded the 24CS (aka Ranger) it was launched for the 1967 season. Finally having dropped their 'cheaper' trials range (the 24TE) after the 1965 season, Greeves returned to this market by using some Anglian components powered by a standard Villiers 37A engine to offer the Wessex (24TJ) for the 1968 season.

Eventually, the growing success of the Spanish Bultaco Sherpa range (initially developed by Sammy Miller) and later the emerging Montesa Cota (largely overseen by the self-same Don Smith) knocked Greeves from its perch as one of the very best trials lightweights of the period. Although listed as ending production in 1968 due to the Spanish invasion and engine supply problems, Greeves actually built the last few Anglians and Wessexes in 1969. True, they were all but out of the game but they and Villiers went out on a high - in fact, two highs.

DR, riding his works Anglian/s, won the Belgian, French, German and Swiss rounds of the 1967 European Championship to which he added points from other outings to



A Challenger motor (fitted to a scrambler) from which the barrel and head was nicked for later Scottish and all Anglians and Rangers, but not the Wessex, which had a standard Villiers iron barrel and alloy head.



The last hurrah – Bill Wilkinson wins the 1969 Scottish Six Days, on his Anglian.

secure the title again. And on the home front, Sherpa, then joined in a cooperation with Yorkshireman Billy Wilkinson not only scored well in many nationals (including winning the Allan Jefferies Trophy Trial) but capped off his and Greeves's successes by winning the 1969 Scottish Six Days Trial aboard his Anglian.

Realising the Anglian was about to lose out to the Bultaco Sherpa series, Smithy wanted to design an all-new Greeves trials machine with brand-new frame for the 1968 season. After dithering, the Greeves board decided against, so DR left to ride a privateer Bultaco

Montesa to develop a new trials machine which became the Cota. Don proved his and Montesa's worth when he won the European Trials Championship for a third time, on his works Cota.

One can only wonder how different history may have been if Greeves had backed their man one more time, because at heart DR was patriotic and he'd have put his all into the new Greeves trials machine he wanted to scheme, to keep the Brits on top and repel the advancing Spanish armada.

CHARLIE DODSON

⁶⁶By 1929, CJP Dodson was a bona fide top level road racer, pretty much unbeatable on the sand, too."

he diminutive Charlie Dodson was the last man to win a TT, the 1928 Senior, on a 'flat-tank' machine, then the next year became the first (and only) winner of a TT on a saddle tank Sunbeam, as well as recording the last ever success in the Island for the Marston maker.

Charles Joseph Pearson (though 'Pownall' has also been suggested) Dodson was born December 6, 1901, youngest of four boys, in Didsbury, near Manchester, son of a successful barrister, who died when Charlie was just five years old.

Schooled until the age of 17, he was then apprenticed to Royal Ruby at Altrincham - he'd cycle the seven miles there and same back, daily. Always an advocate of personal training and fitness, some attributed his determination to succeed to his height; it's reckoned he was but 4ft 11in (though other sources have him at 5ft 3in) and a couple of pounds under nine stone.

Dodson started competing on a specially-built – largely by himself - Royal Ruby, finding some success in local sprints, before his employer folded and Charlie swapped to a 350cc Sunbeam - but not just any old Sunbeam, but one which had previously been campaigned by experienced old hand Pa Cowley, while Charlie's mother also bought the young racer (who was starting to show real promise) a brand-new 492cc Longstroke Sunbeam.

Dodson's Isle of Man debut came in 1924; he finished ninth in the Amateur race, on the ex-Cowley model. Charlie's performance was more impressive when it's learned his carburettor fell off nine times, after which he had to stop and reattach it. In 1925 he graduated to the TT proper and came eighth on the same ex-Cowley machine and retired a works 175cc DOT-Blackburne in the Ultra-Lightweight too.

For 1926, he was invited into the works Sunbeam fold, but his races ended in retirement, though he was back with the firm in 1927; he rewarded them with eighth in the Senior race. For Dodson, 1928, again Sunbeam-mounted, was arguably his annus mirabilis; he won the German and Belgian GPs, narrowly lost out after an epic scrap in the Ulster GP, then came the TT.

Though Dodson later claimed it a 'fluke' the old adage 'to finish first, first you have to finish' proved true, as in terrible wet and foggy conditions, and despite several crashes which he thought had ruled him out of contention, he inherited the lead near the end. His speed was the slowest since 1924, his win the last by a flat-tanker. But win he did.

CJP Dodson was now a bona fide, top level road racer, pretty much unbeatable on the sand, too. In 1929, he was fourth in

the Junior TT on his Model 80 Sunbeam, then won the Senior, beating his team-mate Alec Bennett - arguably the decade's top rider - into second, on identical machinery (although Dodson's lighter weight, perhaps crucially, allowed him to pull a higher gear). Dodson followed it up with a win in the French GP shortly after.

For 1930, Dodson was presented with a Sunbeam Gold Medal at a special January dinner in Wolverhampton and starred on the cover of Sunbeam's sales brochure; but as a racing force, the old models were done. He struggled to fourth in the Senior TT but then departed Sunbeam.

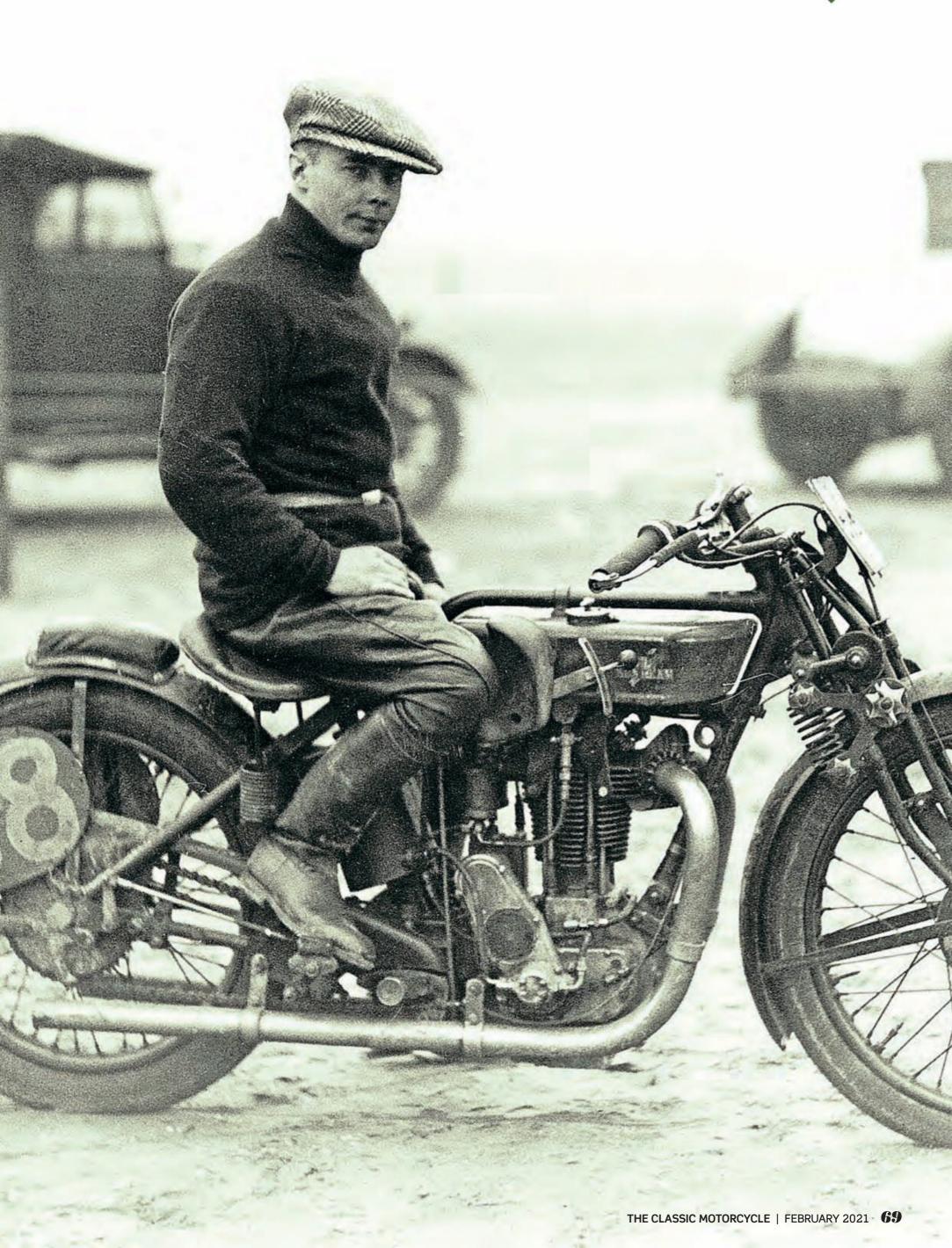
Though Charlie Dodson raced on, he never scaled such heights again, though there were flashes of the old vim, including a fastest lap (albeit immediately eclipsed) in the 1931 Senior on an Excelsior and finishing second on a New Imp in 1933's Lightweight TT, winning the 250cc Ulster race the same year.

But car racing was where he was headed. A talented driver, he raced at Le Mans, and in 1934 (MG Magnette) and 1936 had car TT wins in Northern Ireland, the latter year partnering Freddie Dixon (Riley) in a race overshadowed by catastrophe, with eight dead and 15 seriously injured.

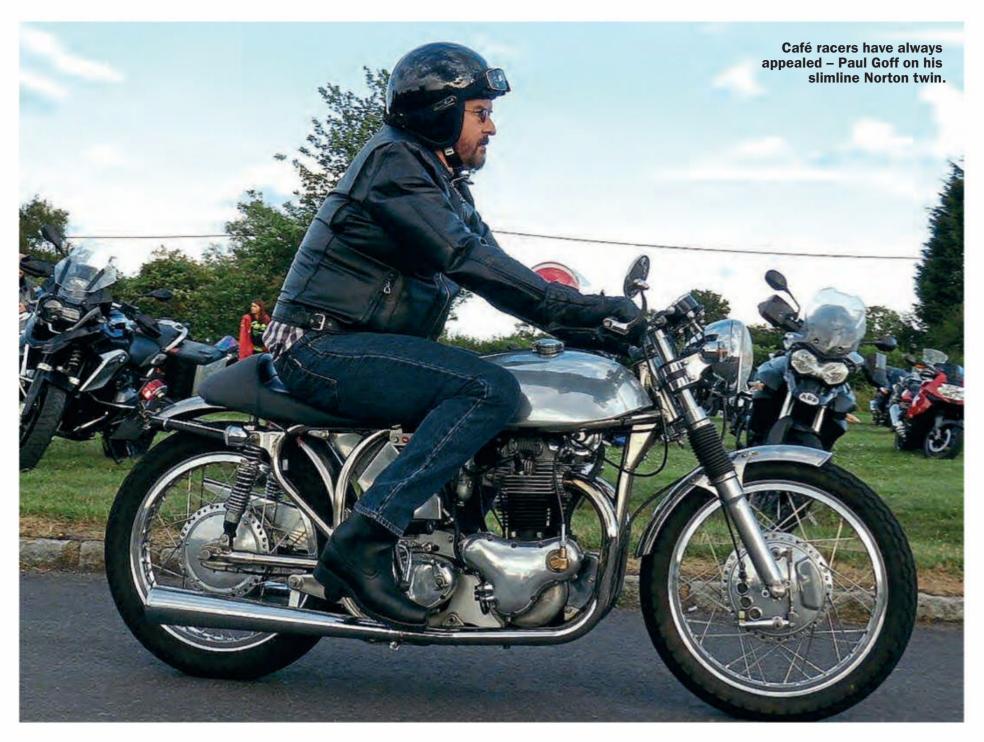
Dodson won the 1938 British Empire Trophy Race, in an Austin, while he also drove for John Cobb; indeed, the Alfa 8C he campaigned is on the cover of the December 2020 edition of The Automobile magazine, while Dodson was also part of Cobb's team at Bonneville, chasing records with the Napier-Railton.

During the Second World War, Dodson served as a commissioned officer in the Royal Navy Volunteer Reserve; while he was away, his Manx-born first wife left him, leading him to forever be reluctant to discuss anything to do with the Isle of Man, including his racing days. It's reckoned he had one last race after the cessation of hostilities, a production race at Silverstone in a Jaguar. He finished second. To Stirling Moss.

At the 1983 Festival of 1000 Bikes, Charlie Dodson, who'd had very little to do with motorsport for decades (he'd worked with agricultural machinery), was reunited with what was reportedly his 1928 Senior TT winner. On a horrible wet and windy day, Dodson was determined to ride. Offered a set of leathers and a full-face crash helmet, he instead preferred his leather jacket and old pudding basin. He completed his scheduled one lap safely, but, reportedly ignoring marshals' signals, he started a second circuit. CJP Dodson, winner of the 1928 and 1929 Senior TTs, crashed at the bottom of Paddock Hill bend; he never regained consciousness and died in hospital, aged 81.







A brief chat with... Paul Goff

Interviewing for these 'chat' features has revealed a regular theme the subject has become involved in fettling old motorcycles because of a personal experience.

Words: TIM BRITTON Photographs: PAUL GOFF

uch is the case with Paul Goff, riding to his local bike club one dark evening he realised there was a queue of cars tailing behind him as he peered into the gloom ahead. "Normally it was me stuck behind the cars," he says, "but the weather was terrible and my headlight not exactly brilliant, something had to be done." Paul remembered seeing an advert for quartz halogen bulbs to fit British headlamps but couldn't find the advertiser. "I did find an Indian company who would happily make me the bulbs in 6V or 12V with a range of Watts too... as long as I ordered a 1000 of each. I continued riding slowly and carefully at night..."

The idea of being able to see at night or in poor weather didn't go away though and as is often the case, fate took a hand.

At the time Paul was working for a small engineering company making equipment for the food industry, the worker/management relationship became less than ideal and ended up with Paul being invited to explore opportunities outwith the company - made redundant in other words.

"I'd been involved in autojumbling for a few years as a way to keep my own bikes running and realised there would more than me who would benefit from better lights, so I invested the redundancy in a few thousand quartz halogen light bulbs, took adverts in Old Bike

Mart and attended as many autojumbles as I could find." The breakthrough jumble was Netley Marsh when Paul realised there could well be a living to be made from ensuring users of British motorcycles could see where they were going at night.

Paul embraced the autojumble scene. "My record for attending them [autojumbles] was 53 in one year. Once we realised which ones were our best to be at, we trimmed them down to 20 or so by 2019 and we'd had plans to do the same in 2020 until this pandemic halted things, though for 2021 we will be at April Stafford." As with most businesses these days, Paul also has an online presence, but points out unlike internet giants, he doesn't

Paul Goff

For details of what Paul does, as well as finding lots of British bikey stuff too, visit his web page www.norbsa02.freeuk.com

It is possible to ring Paul on 01494 868218 during the day. Or visit his stand at autojumbles.

"We're going to be at the April 2021 Classic MotorCycle show at Stafford, so see you there."

Easy one first Paul, what's your full name and how old are you?

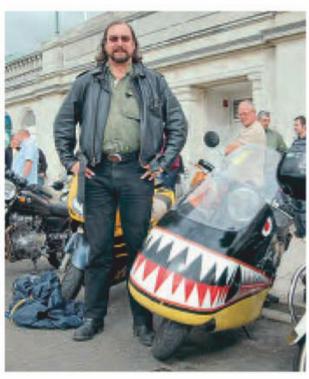
Full out I'm Paul Richard Goff and I'm 64.

You're based in Buckinghamshire but is that where you're from?

Well, I've been in Buckinghamshire since my teens when the family moved there from Surrey. Before moving south we lived in Warwickshire, where my dad was from.

Do you hail from a motorcycling family or are you the black sheep so to speak?

My dad had motorcycles before I was born, an ES2 Norton and a Vincent Comet spring to mind, he did a bit of touring with them too. An uncle on dad's side was a Honda dealer.



Down at Brighton, with the 'adorned' A10.

have a team of pickers working 24/7. "It is true the internet has changed the way businesses work both for supply and sourcing - these days, most of my LEDs are made in China as opposed to the bulbs, which were Indian. The potential for misinterpretation of my requests is quite high when dealing with telesales teams who have excellent non-technical English but need arrows and diagrams to explain such concepts as negative earth..." Paul finished with: "I have a drawer full of the errors..."



Anyone who can be named as responsible for encouraging or influencing your motorcycle aspirations?

Not anyone as such, I gravitated to motorcycles as they were better than cycling for me at the time.

What were your early motorcycling experiences?

My early experiences were curtailed slightly when the Government introduced the 'sixteener' law and I had a licence revoked. I finally got mobile with a Phillips Panda Mk.III then came Cubs and C15s and such things.

What's your working background?

I've mostly been involved in electrical things all my working life. First with a company making record players, then building voltmeters - exacting work with eyeglass and tweezers - and there was 10 years with Non Destructive Testing equipment and that sort of thing. Along the way I gained a City and Guilds in electrical work.

How has the old bike scene altered in the time you've been involved with it?

It's changed dramatically. In the early days, it was people wanting to ensure their old bike started in the morning so they could get to work on time. These days it's about the restoration, with a bit of riding.

Do people still do high mileage on old bikes?

There are still those who do but there aren't as many as there were.

Is there an 'available-from-Paul-Goffonly' range of things you do?

Most of my LED lighting stock is made specifically for me. The off-the-shelf stuff isn't really suitable for old motorcycles so there

Bucks British and Classic Motorcycle Club

Once this COVID thing has passed and some normality returns to life it is likely the Shiny Bike Night at The Plough, Cadsden, near Princes Risborough, will happen again. It is normally on the Wednesday nearest to the longest day, so does fluctuate a little. Check their website www.bbcmcc.freeuk.com for up to date details.

are places in the world where you can have control over what you want.

The supply chain has altered radically since the British Industry ceased, has this altered your experiences of dealing with manufacturers?

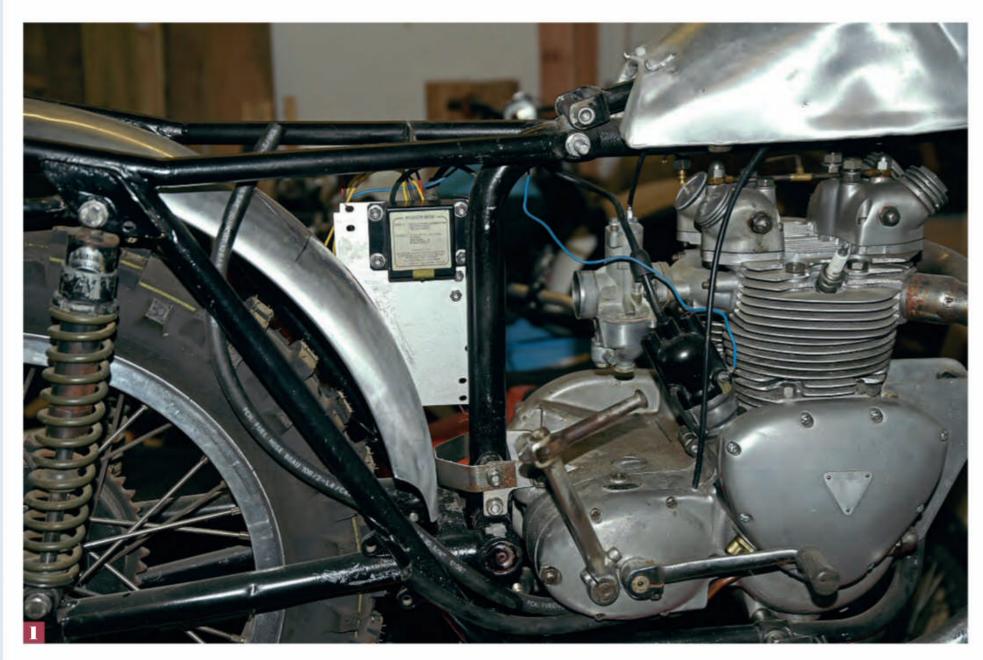
Oh, yes, the Indian manufacturers were by and large easy to deal with. The majority of the people I dealt with spoke English and problems were easily solved. The Chinese however, aren't so easy, as the English speaker is generally not an engineer.

I know you attend the odd rally or two as I've seen you there myself. Are you involved in any such things as

There was the annual Classic Bike and Rock 'n' Roll Day I was part of a while ago, until the venue changed hands, but these days the only thing I'm part of organising is my own club's - Bucks British and Classic MCC annual Shiny Bike Night.

And finally, what is your favourite motorcycle of all time?

Has to be my BSA A10 which I've had since 1977. Other bikes have come and gone, but it's still there.



Bucks, formers, dollies and slappers

Every skill has its own range of technical terms which are particular to the job - panel beating is no different.

Words and photographs: TIM BRITTON



o those not involved directly with a particular trade or occupation, the jargon used by those who are can sometimes seem unintelligible, mystifying and puzzling.

Often though, the terms become obvious when explained in context, with such things as a 'buck' for instance, this being the pattern for something like the oil tank being produced for this project. This buck can then be used to form pieces of aluminium to make the tank and gives the maker something to work to.

I did visit this subject and began a tank quite a while ago but it became one of those jobs which fell to the wayside while other bits were done. One of the biggest issues I have with this sort of thing is indecision, will the tank look like this, or perhaps look better a different way, then all of a sudden







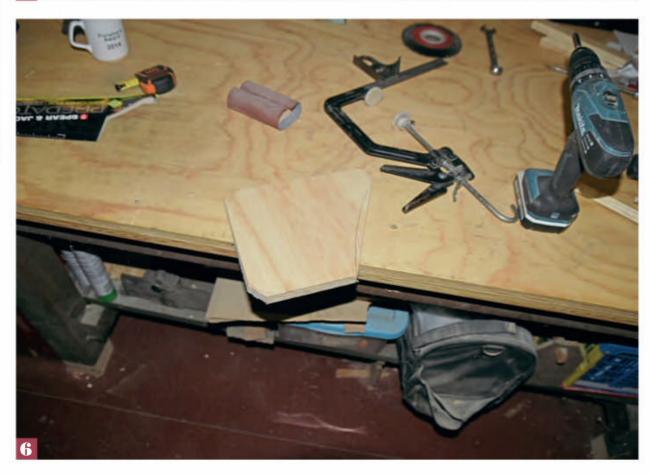
- 1: The reverse of the electrics plate. It only looks like it's resting on the guard because of the curve.
- 2: This space will be filled with the oil tank, a pleasing shaped one, I hope.
 - 3: Stage one of the pleasing shape.
 - 4: The feed filter liberated from the 650cc tank.
- 5: Stage two of the build up. Cutting the big bit off gives the hobby bandsaw an easier time of it.
 - 6: The pencil lines will be left on and allow for final tweaking on the disc sander I have.

there's a picture which pops up on the internet which appeals even more.

There are many factors which affect the design of just such an item - the actual frame, has it been modified, that sort of thing. The easiest solution would have been to use a standard 3TA/5TA oil tank and in the very early days of this project this was to be the option. To this end, an oil tank was acquired at an autojumble by picking up a vaguely Triumph-looking bit on a stall and asking: "Is this for a 3TA?"

The reply of: "Yer, fink so..." was enough to part me from a £5 note. Said tank turned out to be for a 650cc Triumph. These days, I'd be much more canny at these stalls, or, more like, I would actually find a picture of what I was looking for and have it with me. However, once the frame had been altered, there was no chance at all of a standard tank





fitting in place.

In the days when Triumph fielded a trials team with Messrs Peplow and Giles on twins, they fitted a modified sub-frame and used Triumph Cub oil tanks as they are quite a bit smaller than any of the twins' versions. They are also valuable classic parts these days and unlikely to come along at a cost within this project's ideals. So something more DIY was deemed the way forward and a slim aluminium box was envisaged.

The 650 tank was complete though and the oil filter feed in these tanks are now about £16 so, according to the logic we use when justifying our purchases to anyone who may need them justifying, I'm £11 ahead of the game. This filter thing is common to lots of after-market tanks, or at least it looks similar and will do the job required of it.

Where the oil tank goes is pretty much a

forgone conclusion with this type of bike, though there was a fashion a few years ago to use a large diameter steel tube as both tank and frame strut and I did half-heatedly look for one, but to my knowledge this sort of oil tank wouldn't have been used in the 1960s when the inspiration for my project

Alloy oil tanks though would have been around in the period and this was the way I went. First one I tried was rushed, and not a particularly great thing - nor did it take into account the position of the carburettor. My inspiration for the first one was on my B40... a single with an off-set carburettor. This was to go on a twin with a central carburettor and a large diameter air filter which pushed the tank buck way too far over. Fitting on the electrical equipment also altered the space available and the tank was pushed to the





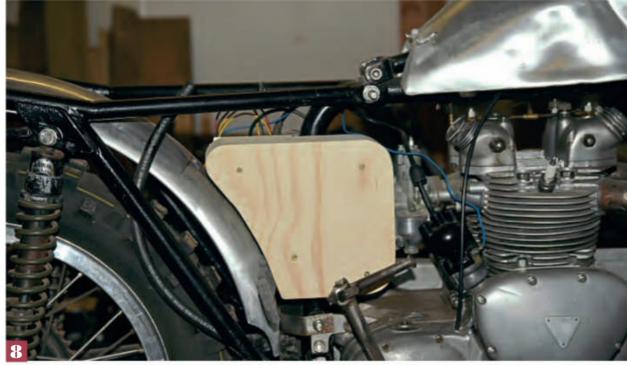
back of the work bench for 'the time being.' Then a period of frustration was entered as things were offered in place, tie-wrapped, wired and, well, common sense was ignored.

Eventually common sense did happen and I pulled everything to do with the electrics and oil tank off the bike, to leave the sub-frame free and clear.

I left well alone for a few days and instead did some cyber digging for information and determined something I knew I had would be a better solution to the spark issue. All I had to do was find it... Okay, it took a while but the Boyer Bransden Powerbox turned up and removes the need for all sorts of things such as a rectifier and capacitor, so with less bits to tuck away the option of a flat alloy plate in between the seat tube and mudguard was viable.

I had such an alloy plate - the numberplate for a TY250 monoshock trials bike, removed because it was a massive thing - there were some bits of steel strip which bent up easily to make a couple of brackets to bolt to the ones on the frame. This meant there was now a flat surface to bolt the plate on, it was a bit fiddly to scribe the curve of the mudguard on the plate as I had to hold the plate in place - none of my joinery clamps are small enough to hold it. I do have a metal cutting blade for my bandsaw though and this made cutting the curve easy. I put the Powerbox on the reverse of the plate and the coil on the front which is much neater, even if I do say

The space at the other side for the oil tank



was now determined. In order to give some clearance between the tank and the frame, I

used some scraps of floor mat, those neoprene workshop mats, just enough to pull the tank away. The material to make the buck was obviously going to be one more familiar to my skills and also one with lots of bits lying round. Again, scribing the curve was a bit tricky, but done and simply wedged into place with more cuttings of the mat, I could stand back and look at it to see if it looked right. It did, so more layers of ply were added, three to be exact, which I felt would give a big enough tank for enough oil to do what I needed it to do.

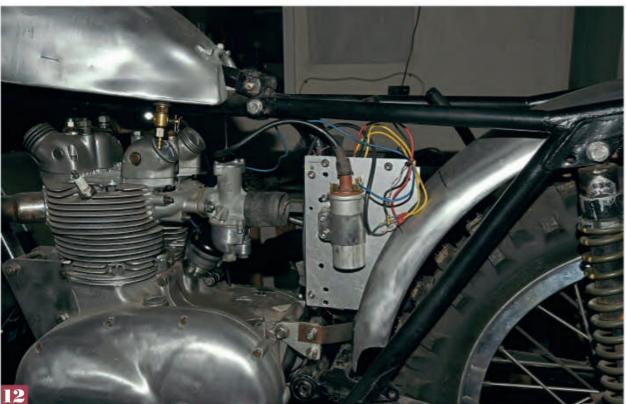
> Once this bike runs it's not going to be covering hundreds of miles between oil changes, so as

long as there is a reservoir of oil, it will be enough. Holding the result up on the frame showed it to be too bulky with three layers of ply and two layers looked better. I compromised by adding a bit on the back which had room to go behind the seat tube, so added half a layer in effect.





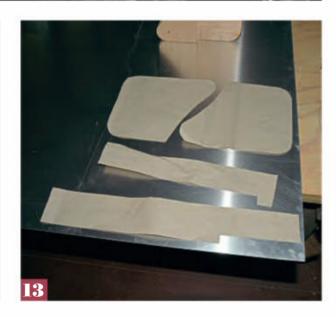




- 7: The final shape is quite in keeping with the project.
- 8: There's room on top for all of the things such as froth tower and filler cap.
- 9: Some light reading on light fabrication.
- 10: I'll probably arrange for the fittings to go close to these points.
 - 11: Paper patterns safely cut.
 - 12: The front of the electrics plate.
- 13: Once full digit use is returned, the patterns will be marked on the alloy.
 - 14: The final cut-out will be made with a Dremel.

Feeling relatively pleased with myself, I thought about mounting a bracket to fit the tank in place and this is where things went badly wrong for me. Suffice to say, there was a finger/disc sander interface and technical work will have to be on hold for a week or so, until the dressing is much smaller. The annoying thing about this incident, and woodworkers will probably be wincing as they will know exactly what I did, is that in the days when I was responsible for training apprentices, if any of them had done what I did, I'd have yelled at them for being so stupid.

Still, there are things which can be done



while 'resting' the finger – paper patterns to transfer the shape of the tank to the aluminium only required a pencil and small scissors to do the job and I'm sure my other half was genuinely concerned for me when she asked if I'd be okay with the scissors... The patterns are effectively the inside of the tank as the outside will be the thickness of the alloy sheet bigger all round, this will be allowed for when cutting the sheet.

I did have a go with the cutting disc on my Dremel to see if the bandage would prevent me using it... it did. Nor was I going to attempt to turn aluminium bosses for the oil feed, filler cap, froth tower, return feed

Read all about it

There are some excellent books on making things with sheet metal. I have a number of them on my bookshelf and one day I will progress further than just reading them. If you like the idea of trying sheet metalwork, then perhaps these three books will be interesting reading:

- Ultimate Sheet Fabrication by Timothy
- Advanced Sheet Metal Fabrication by **Timothy Remus** Both of these are Wolfgang Publications.

Then there is a Motorbooks Workshop series called:

■ Practical Fabrication and Assembly **Techniques by Wayne Scraba**

In all cases, an internet search will bring up all the book titles. Lots of useful information for basic work and more advanced stuff too.



and drain plug while I have a bandage on, so these will wait until slightly later.

Also for later - but because of the pandemic rather than it being my fault - will be the new front spindle and tank welding, neither of which I can do, the former because my lathe won't do it and the latter because me and welding... just no.

Meanwhile, the enforced light duties means I have to actually think about things rather than dive straight in. Unfortunately, what I'm mainly thinking is: "Why didn't I buy this, or those, or the other bits when they were a few quid rather than what they go for now...?"





Stop-start motorcycling

Of course, everyone has been affected by 2020's pandemic, though motorcyclists might have felt the restrictions much harder than others.

hen the Covid pandemic first started raging, I admit that apart from feeling extreme sympathy for victims of the disease and their relatives, the chief reaction of myself, friends and family was frustration. Luckily, we live in a low-incidence area, and none of us were personally affected, but the fact remains that nobody remained totally untouched, and that especially included those like active motorcyclists whose pleasures are found outdoors.

As you'll doubtless remember, the first lockdown coincided with the best spell of weather seen in April (and most other months) in living memory, and what did we have to do? Stay in touching distance of home, not travel unnecessarily, not meet up with friends and not frequent pubs or cafes! In essence, everything which makes for a successful club run, or even an impromptu trip out with mates, suddenly became literally off limits.

How did you cope? Some of you may have responded by simply locking your bike away for the duration, and then getting it out when restrictions were eased. I know several enthusiasts for whom such behaviour would seem quite normal; they are the chaps who only wheel out their motorbike (they usually have just the one) when they feel like it, when the weather is fine, and when a club run which they fancy is due. In other words, they often go weeks without riding in normal times, so I doubt if they felt too constrained by the Covid-19 situation.

Others, for whom ownership is key, probably weren't unduly concerned either. Many of them may have bought their bikes ready-restored, or unrestored with a patina they are happy to leave undisturbed. These folk may well have been quite content to simply polish, dust or just admire their investment without even wondering if it still worked. As a result they didn't even have to worry whether the batteries (if any were fitted) had run flat, or whether the ethanol in its petrol (if they'd ever put any in the tank) had done its well-documented, and sometimes exaggerated, mischief to plastic and metal surfaces.

But then there is the sizeable proportion of us who like to both restore (or at least maintain) and ride our bikes. And for us the lockdown was frustrating to say



Roy Poynting has been a regular contributor to The Classic MotorCycle since 1995 when he entered and won a writing competition. A veteran of many restorations, he continues to be an enthusiastic rider.

the least. Admittedly I was fortunate in having recently started a restoration project, so I had something to keep me occupied in the garage. But it was surprisingly difficult to keep motivated on garage work when I couldn't have the occasional outing on one of my other bikes, to show me how enjoyable the end result would hopefully be. And I was torn between getting on with the job and not wishing to rush it to the point where I would be held up by outside factors.

Thinking of hurrying restorations reminds me of the time I reported on a Triumph twin in these pages, and probably offended its owner by noting his restorative work had lasted longer than the period the bike had been in use before he'd stripped it down. He wouldn't have worried about losing a couple of months, would he? At the other extreme, a friend who is an avid restorer and rider was less lucky; he'd just completed everything except the painting and plating on his latest project, at the very moment when the relevant specialists either closed down or became impossible to access. He passed the time polishing his other bikes (which were already at concours-standard) and gardening, so he was not a particularly happy bunny!

As I've already noted, there are all shades of enthusiasts, and none of us were totally unaffected by the pandemic. Even armchair motorcyclists, who are long past their active riding and restoring days, noticed the difference with no live motorcycling to watch on the TV (not even highlights of the TT!) and no recent static or riding events to read about in the magazines.

It makes you wonder what it must have been like for those deprived of motorcycling for six long years during the Second World War. It's rather amazing that enthusiasm survived, but survive it did, and no sooner had peace returned than motorcycles were again in action, both on the road and the track. Hopefully Covid-19 will be brought under control much quicker than that, and when it is, I'm sure the resumption of activity will be equally positive. If nothing else, an enforced layoff will remove any excuse for fit but less dynamic motorcyclists to say they can't come on a run because they haven't had time to prepare or clean their bikes!

"In essence, everything which makes for a successful club run, or even an impromptu trip out with mates, suddenly became literally off limits.

Diary

YOUR EVENT SHOULD BE HERE

The Classic MotorCycle is anxious to learn all about your motorcyclerelated events. Contact us at *The Classic MotorCycle*, Mortons Media Ltd, Diary Listings, PO Box 99, Horncastle, Lincs LN9 6LZ or email obmwallplanner@mortons.co.uk

'n normal times, the diary pages are a regular, popular go-to section of *The Classic MotorCycle...* But these are far from normal times. The team at TCM has received much correspondence regarding

date changes and so on, but the situation is ever-changing. However, please keep sending us all the information you can and we'll keep our systems updated. Normal service all-round will resume as soon as possible.

GIANT AUTO & BIKE JUMBL

SCORTON - North Yorkshire Events Centre DL10 6EJ 5 mins off A1 at Catterick, B1263 Catterick to Teeside road - 1 mile east of Scorton - Starts 7am **UNDERCOVER & OUTSIDE**

16th January & 20th February 2021

EVERY THIRD SATURDAY OF EVERY MONTH

ADMISSION £3.00 • PITCHES FROM £12 A MASSIVE 10 ACRE SITE OF AUTO AND BIKE JUMBLE INSIDE AND OUT AMPLE PARKING - EXCELLENT REFRESHMENTS

CALL BERT ON 07909 904705

2021 Motorcycle-Only Events in the South East!

South of England Classic Bike 'Jumble

Ardingly New Date:

Oam Entry: £7 adults, 7:30am Earlybird £10. Kids free. Pay on the Gate by cash or Card

Five indoor halls of all-motorcycle traders & autojumble Visit Showcased Dealers in our Heated Indoor Hall Observe Social Distancing & PPE measures at all times Book your ticket online and beat the queues

Visit www.elk-promotions.co.uk

South of England Showground, Ardingly, W Sussex, RH17 6TL Ashford Classic Show & Jumble Easter Monday 5 April

At Ashford Market, Ashford, Kent, TN24 0HB Romney Marsh Classic Events @ Hamstreet, Nr Ashford, KENT TN26 2JD

Classic Bikejumble with Ride-In Show Sunday 23 May Now 2-Day! Saturday 26 & Sunday 27 June

Ardingly Summer Classic Show & Bikejumble: Sunday 25 July Romney Marsh Jumble with Ride-In Show Sunday 12 Sept South of England Classic Show & 'jumble Sunday 31 October At The South of England Showground, Ardingly, West Sussex, RH17 6TL

Details: ELK Promotions PO Box 85, New Romney KENT TN28 9BE 01797 344277

www.elk-promotions.co.uk

Selling your Bike? Free BikeMart at working to re-introduce attractions

Check www.elk-promotions.co.uk BEFORE travelling!



Saturday 24th April 2021

CHEFFINS

FURTHER CONSIGNMENTS INVITED

For advice on buying or selling please call 01353 777767 or email vintage@cheffins.co.uk Catalogues available at www.cheffins.co.uk in due course

Sales and valuations undertaken nationwide.





Oldies but goodies

Being an 'artful dodger' with a sound knowledge of mechanical make do and mends is arguably a prerequisite of running old vehicles.

n my shed are a plethora of odd tools. Probably the oddest is a distributor testing machine, which, although largely an ornament, is occasionally pressed into service, the last time being for a Triumph twin way back. Unused for years at a time, sod's law dictates that every time I think of selling it, something crops up that requires its use.

With several shelves taken up with one-use items, and not being over keen on storing stuff of that nature, I'm trying not to fork out for yet more tat that will potentially sit on a shelf for years between uses. Recently, I've been trying to find and borrow a cylinder bore ridge reamer to cut the step out of a very worn bore in order to remove the pistons; I find that most cover a certain range of sizes and, inevitably, although I have pals that have one, so far they have either been too big or small. And, yes, I do realise that had I stuck to bikes I would not have this problem as most motorcycle pistons come out from the bottom of the barrel.

All this make do and mend has me thinking about the mechanical dodges to wring another few miles out of a worn engine. At one time, you could buy slightly oversized rings to give a second lease of life to a motor without the need for a rebore and new pistons - I remember that they came with a step in the top ring to avoid the bore wear.

In some circumstances, they are effective. I used them when restoring a Clinton two-stroke engine for an early go-kart. Bought with near zero compression, the engine really needed a bore and oversize piston, but these were not available. While researching Clinton engine catalogues online, I spotted that in period they offered slightly oversized new rings to fit the standard pistons to 'pep the motor up.' Incredibly, I did find a set of these new old stock, cheap enough to take a chance on. They worked! When fitted, the compression was once again good and it has run well since.

On the more dubious side, I have heard of putting sawdust in the gearbox to shut a worn one up, many times, but despite many years around the motor trade, I have never been able to find anybody who has ever taken a 'box apart to find this. I'm guessing it's an urban myth, likewise the bananas that I did find reference to



Jerry Thurston bought his first vintage motorcycle when he was 17. For a time he was The Classic **MotorCycle** advertising manager. Now 30 years on from buying his first old bike, Jerry still owns and loves them and is especially fond of fast, noisy flat-tankers.

being crushed and used as grease for a Model T Ford, albeit by the brilliantly but somewhat suspiciously named Aloha Wanderwell, allegedly an adventurer in the 1920s - the jury is out on this!

Commercial oil treatments for low oil pressure? I have used them, pouring what appeared to be a tin of the world's thickest oil into the tank, effectiveness unknown, but it made me feel better! It is still available in various guises today, I have to presume that it has more to it than just being a thickener, but as I'm not an oil-tech chemist, I wouldn't know where to start with how these actually work, or indeed if they do.

I have come across string wound around a shaft between a case and a sprocket as an extra oil seal and I have to say it was quite effective, especially judging by the amount it leaked after I had removed it.

In the clever department, I heard of a tuner in a stock race class attempting to circumnavigate the 'may not remove or add material' rule by instead moving the metal, having his motors heavily shot blasted to roughen the cases and fins, this to get a bit more surface area and hence cooling, clever definitely... Effectiveness, theoretically good, but unproven.

As for 'get you home' fixes, I think we all have heard of mustard or eggs into a radiator to stop a leak, probably only effective with an unpressurised system. I did a bit of research on this and found reference to ground black pepper and even ground ginger as an alternative. For Scott owners, soft soap pressed into the honeycomb to plug a leak is the one for you.

I've done my share of get you home bodges - it's surprising what you can find in the verge when you are desperate; bailer twine, old pop tins, chunks of wood and more.

In attempt to find other ideas I pulled my 1914 'Hints and Tips for Motor Cyclists' from the shelf. I expected to find all sorts of outrageous notions but it all seemed very sensible, with plenty of sage advice.

While most get you home fixes don't last, there is always an exception to the rule. One of my bikes had a metal spray paint can cap on the end of the magneto for years, this after grubbing it out of a ditch to replace the real one that disappeared on a wet run. It was a perfect fit, and worked fine, so why change it?

"All this make do and mend has me thinking about the mechanical dodges to wring another few miles out of a worn engine."









DIARY DATES

MORTONS

WE'RE ON, IN 2021!

Whether it be classic bike or classic cars - we have the perfect event and day out for you... check out our diary dates below!

ð#6	The International Classic MotorCycle Show	24-25 Apr	Stafford County Showground, ST18 0BD
≥	London Classic Bike Show & Autojumble - Kempton	8 May	Kempton Park Racecourse, Middlesex TW16 5AQ
306	Telford Classic Dirt Bke Show	15-16 May	Telford International Centre, Telford, Shropshire TF3 4JH
ça,	The Classic Car Spectacular Show	5-6 Jun	Tatton Park, Knutsford, Cheshire WA16 6QN
(20)	Stars & Stripes Classic American Car Show	3-4 Jul	Tatton Park, Knutsford, Cheshire WA16 6QN
≥	Bristol Classic Bike Show	24-25 Jul	Bath & West Showground, Somerset BA4 6QN
ca	The Passion for Power Classic Car Show	21-22 Aug	Tatton Park, Knutsford, Cheshire WA16 6QN
≥	International Dirt Bike Show	18-19 Sep	Stafford County Showground, ST18 OBD
≥*6	The Classic Motorcycle Mechanics Show	9-10 Oct	Stafford County Showground, ST18 OBD
≥	London Classic Off Road & Racing Show - Kempton	4 Dec	Kempton Park Racecourse, Middlesex TW16 5AQ
300	Winter Classic	TBC for 2022	Newark Showground, Notts NG24 2NY

www.classicbikeshows.com www.theclassiccarshows.com





CLASSIC



The motorcycles of

Lino Tonti

Words Greg Pullen Illustrations Martin Squires



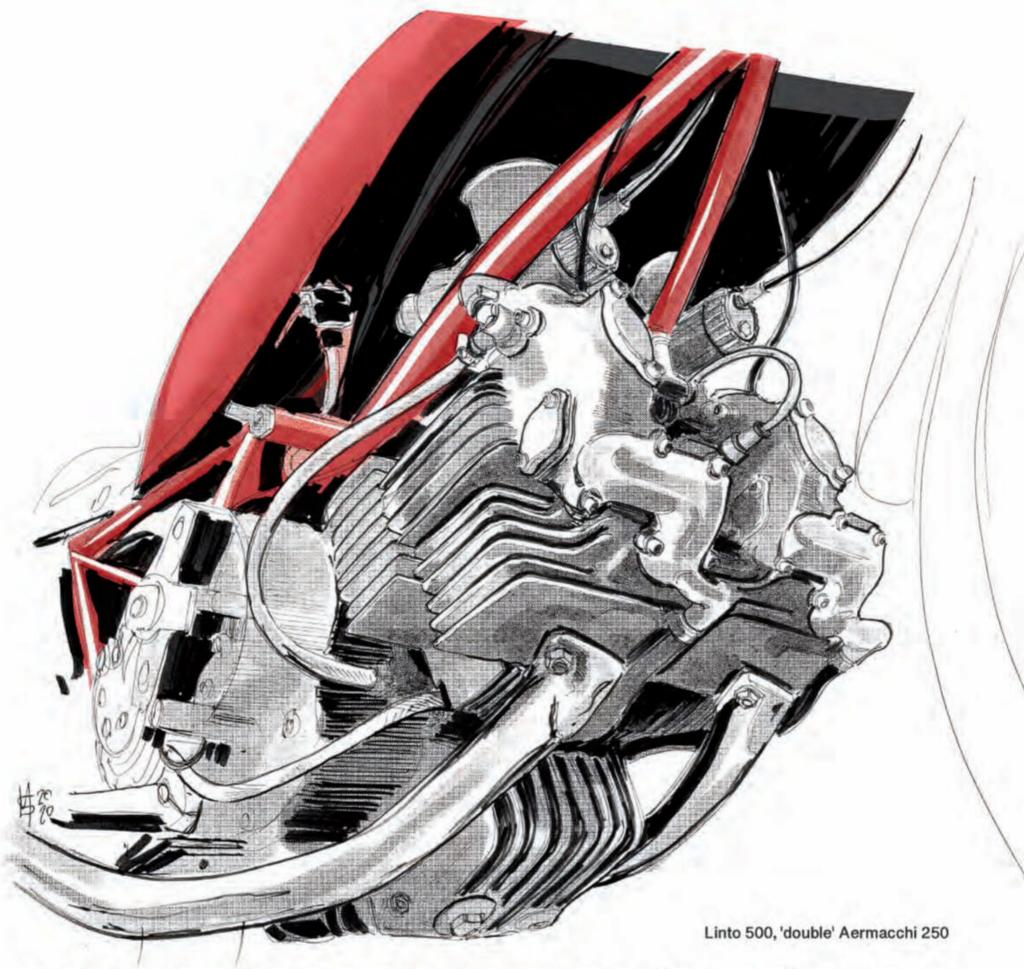
Linto 500

Under the Linto banner, Tonti had continued to offer tuned versions of other manufacturers' motorcycles, especially Aermacchi's works machines. Often the riders wore Linto sweaters - when asked if they were riding a Linto or an Aermacchi, Tonti would simply reply "The answer is both," proof of how close the relationship between Linto and Aermacchi remained.

Despite his success at Mondial, Paton and Bianchi in grand prix racing, Tonti is perhaps best remembered in that area for his Linto 500 – often called a 'double Aermacchi 250' because so many parts from the 250cc Ala

d'Oro production racer were used. Tonti started the project in 1966, initially intending no connection with Aermacchi whatsoever. He wanted to build a twin-cylinder 500cc racer with radial four valve heads. After some initial sketches, he realised the project would not be economically viable, so, instead, he decided to build an engine using existing parts from the Aermacchi Ala d'Oro. But, frustrated with a lack of success in 1967, he joined Moto Guzzi, which slowed Linto 500 development to a crawl. Still, he persevered, thanks to men such as his assistant, Alcide Biotti, and former racer turned car dealer Umberto Premoli, who helped with funding.

The 1969 season was the most successful year for the Linto. Tonti offered a Linto 500 to Australian Jack Findlay who, along with Italian Alberto Pagani and Swiss rider Guyla Marsovszky, made up the trio of riders most associated with the Linto 500. In just the second race of the season, the German Grand Prix at the ultra-fast Hockenheim circuit, Findlay surprised all by finishing third, only beaten by Agostini's MV and German local expert Karl Hoppe on a Metisse. Up until that point the Linto's success was largely attributed to Pagani's expertise, but Findlay showed there was more to the motorcycle than that. Perhaps



a Linto could be a genuine alternative to a works ride, with the potential to be up there with the best, regardless of who was riding it. Marsovszky finished the 1969 season as runner up in the world championship, and Alberto Pagani also won the Italian Grand Prix on Tonti's twin. With 66bhp at 10,000rpm, the Linto delivered more power than the 500cc singles, even if it was not enough to match the 83bhp of the MV.

In fairness, Tonti and Pagani's success in the Italian GP was helped by Count Agusta's fit of pique that Imola had been chosen as the circuit for the race. The Count had insisted that Monza should be used as he owned a

house, literally, a stone's throw from the circuit's tarmac. To make the FIM rethink their ruling, the Count withdrew his MVs, but to no avail. And Findlay's third place? In the 1980s he was asked for his memories of the race. With a smile, he said "Oh yes, do I remember! I was asking myself whether it was worth riding such a dangerously unreliable bike!" He must have meant it as, despite the free use of the Linto, he opted mid-season to ride his G50 Matchless-powered 'McIntyre' framed machine instead.

Linto never again achieved the success of 1969 and in 1970 the Italian GP returned to Monza to be won by Agostini on an MV. The more things change, the more they stay the same. Tonti was free to focus on the Moto Guzzi V7 tourer and police bike.

When Tonti joined Moto Guzzi, he had immediately set to improving the V-twin. As usual, the American market was clamouring for more performance and cylinder capacity so, by late 1968, Tonti had increased bore and valve sizes to create a 60bhp, 757cc engine and, with a raft of other changes, the V7 also lost 15kg (33lbs), allowing it to at least match the top-selling British bikes in straight line acceleration. Named the V7 Special for most markets, the importance of US exports was recognised with



Moto Guzzi Le Mans

models destined for the United States featuring American's preferred left-foot gearshift and tagged Ambassador.

Despite being the looks being called 'Elephantine' (complete with a photograph of the Guzzi behind an elephant) when tested by Cycle magazine, the overall assessment was flattering. The south west Guzzi distributor ZDS Motors built a surprisingly competitive racer from an Ambassador which, while looking nothing like the motorcycle Moto Guzzi had exported, was in fact surprisingly standard. Apart from some bracing, the frame was original, as was the bottom end of the engine. Conventional tuning was aided by Tonti loaning parts from his planned record breaking V7s.

In Europe there were also individuals keen to unlock the V7's inner racer. Dutchman Jan Kampen Senior bought one of the first V7s for his endurance racing team, tired of the poor reliability

of British twins. When his V7 finished second in a 1969 six hour race, he attracted the attention of the Moto Guzzi factory, Kampen becoming friends with Tonti and an integral part of the factory's development programme.

Tonti had also developed a version of the V7 Special for record breaking, dramatically increasing carburettor size and compression ratio, tricks that would reach production with the Le Mans. Similarly, dramatic weight loss allowed the sporting promise of Carcano's V-twin to be realised. With a top speed of over 140mph (225km/h) when fitted with a dolphin fairing, Tonti's record breaker took a clutch of rosettes with high profile riders on board, including MV Agusta star Remo Venturi, Pagani, Brambilla and racing reporter Roberto Patrignani. These records included the 1000cc one- and 12-hour records at averages of 135mph (218km/h) and 111mph (180km/h) respectively. This was despite the engine running at just 757cc, and with capacity slightly reduced three 750cc class records were also established.

Encouraged by this, a few V7 Specials were entered in production races with mixed results, although in standard trim the Special was really too heavy to compete. British twins dominated the market with similar power to the Guzzi V-twin but with far superior roadholding and around 60kg (132lbs) less weight than the Italian machine, the British bike's performance and racing success meant they ruled in the showrooms of Europe, America and Australia.

These were issues that Tonti was keen to address, harbouring racing ambitions for the V-twin and also mindful of the new wave of 'superbikes' on the way. This was a completely new leisure market, creating a fresh breed of rider who enjoyed motorcycling as a sport in itself, rather than something briefly flirted with before cars, marriage and careers.



Moto Guzzi V7 Sport, telaio rosso

Seizing the zeitgeist, Tonti set about designing a completely new chassis to create the V7 Sport. Perhaps 200 (or maybe just 150; accurate figures are unavailable) of the 1971-72 'Telaio Rosso' (red frame) bikes were hand built, with chrome-molybdenum frames and lightweight, 748cc engines, identified by missing gearbox ribbing. These are perhaps the most undervalued Italian exotica, with independent tests finding the bike would easily outperform any other 750, and making the V7 Sport arguably the finest sporting motorcycle of the early 1970s: truly a race-bred production bike. Tonti replaced the beltdriven dynamo between the V7's cylinders with a Bosch alternator on the front end of the crank. This allowed space to run the twin top tubes of his new double cradle frame from headstock to tail, doing away with the V7's loop frame, lowering the overall centre of gravity and improving handling beyond recognition. Front forks were cartridge-style, manufactured in-house,

although innovative, were a little lightweight and arguably the V7 Sport's only handling failing.

The engine was comprehensively redesigned to both reduce weight and increase power. The Sport's capacity fell to 748cc from 757cc, warning competitors that the Sport was intended to race in 750cc class events. Yet when 844cc versions came third and sixth in the 1971 Bol d'Or at Le Mans, the potential for further development was clear.

Mike Hailwood was invited to test the new motorcycle. Quite unprompted, he said this was the best handling road bike he'd ever ridden, and immediate racing success suggested he wasn't just being his usual gentlemanly self. The public's first view of the V7 Sport came when two were entered in the Monza 500km in June 1971, one shared by Vittorio Brambilla and Guido Mandracci, the other by Raimondo Riva and Pierantonio Piazzalunga. The latter pair held second for much

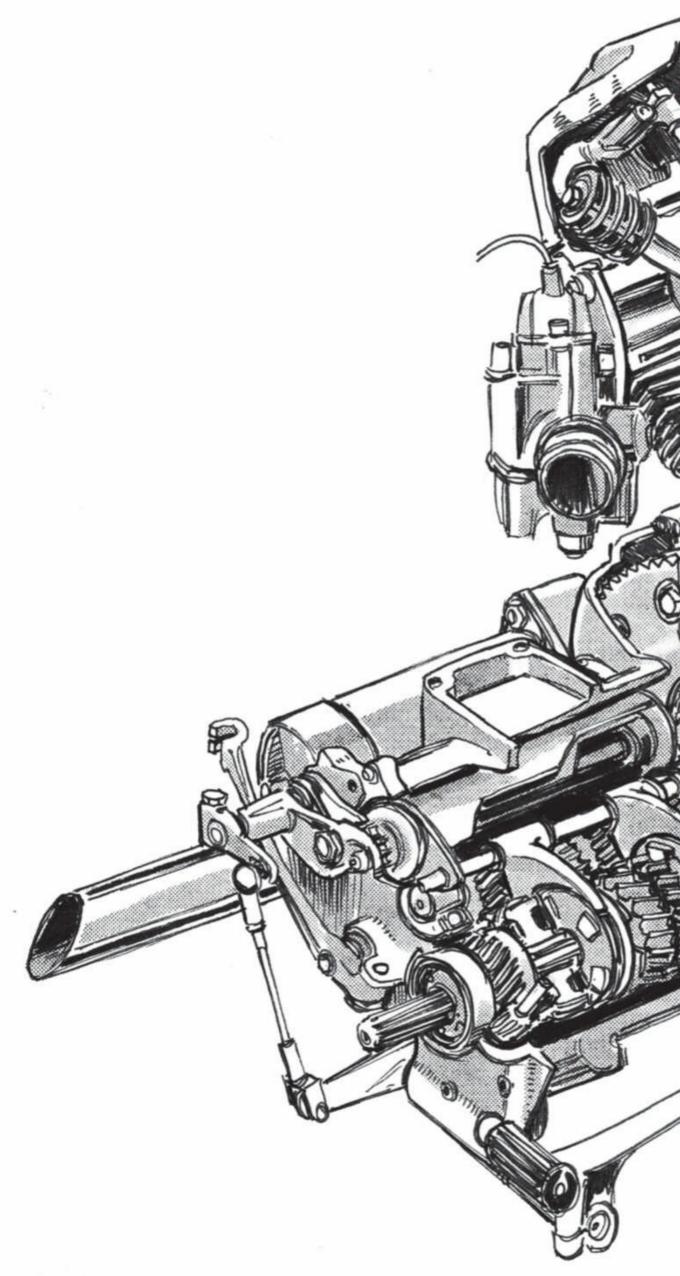
of the race and finished third behind two other superbikes of the day, a Honda CB750 and a Triumph Trident. Later that year, Mandracci and Brambilla took third at the Bol d'Or 24 Hour, despite a breakdown, puncture and crash.

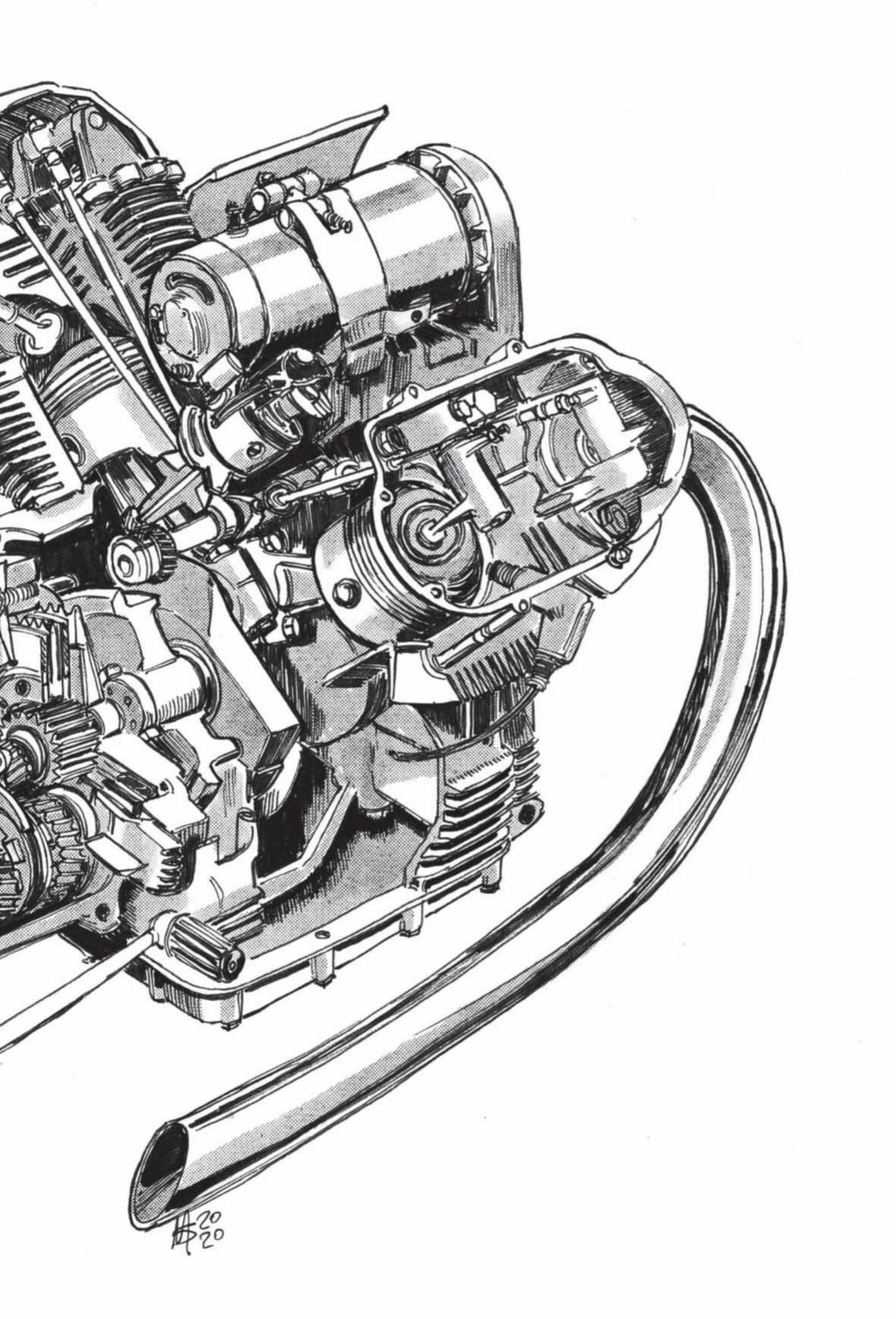
So in 1972, hot on the heels of the 844cc version of the V7 Sports' success at the Le Mans Bol d'Or, a road going replica was announced. Unsurprisingly, this development of the Sport was to be called Le Mans, and was first shown to the public in late 1972. With an engine upgraded to 844cc, visually it was a scarlet V7 Sport with a bikini fairing, 40mm carburettors, humped seat and triple disc brakes. It was the brakes that provided the greatest innovation, being linked so that one front disc operated in harmony with the rear disc, controlled by the foot brake via a hydraulic splitter. When disc brakes first appeared there was concern that the front brake would be too easy to lock, especially by a less experienced rider in tricky conditions. Tonti's inspired solution was to spread the braking force across both tyres.

Tonti's calm and persuasive nature was also needed to get the Le Mans to the market. By now Moto Guzzi was, along with Benelli, owned by Alejandro De Tomaso. There was, in De Tomaso's eyes, no reason to keep developing the Moto Guzzi V-twins, which were expensive to build and looked dated against the motorcycles coming out of Japan. Instead, De Tomaso planned to badge a new range of multi-cylinder motorcycles as Moto Guzzis and Benellis, allegedly walking through the Guzzi factory immediately after he'd bought it and waving a sword while shouting "No more stupid twins." In fact, there were years of developments of the original V7, including Tonti's V-1000 Convert, introduced as the first large-capacity automatic motorcycle with a Sachs torque converter.

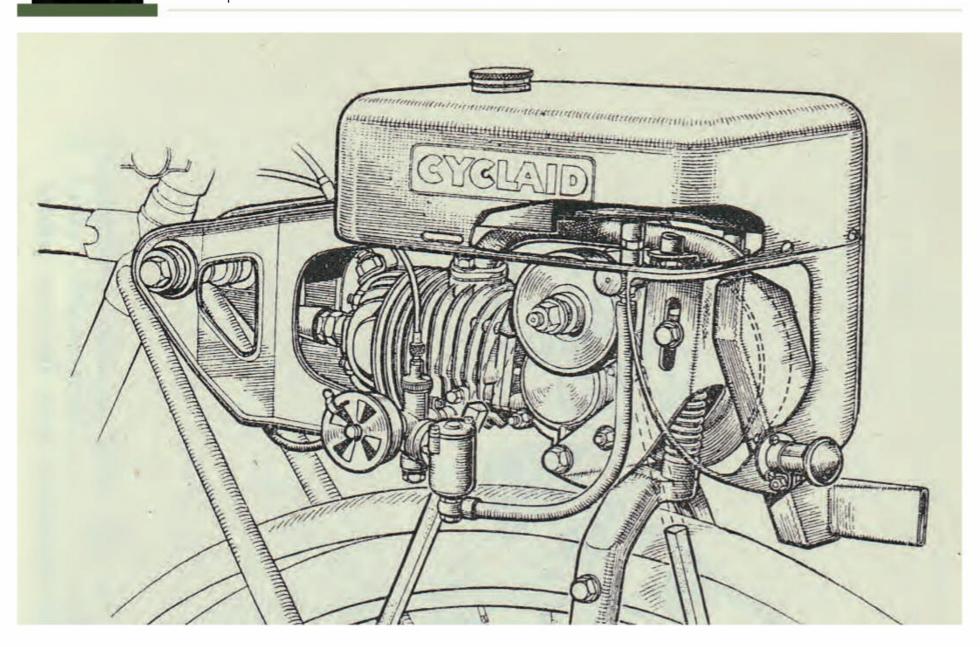
Tonti also completed development of the small block V50 motor, available as tax friendly 350 for the home market, and powered a host of entry-level Guzzi models. Built in De Tomaso's Innocenti car factory with modern production techniques to keep costs down until phased out in 1989, the small block engines are the roots of the current V7.

Lino Tonti retired in 1990 and died on June 8, 2002, aged 81. Although some might consider him a journeyman, his work almost always based on previous designs, he proved remarkably able to see how things could only get better. He just needed a sketchbook – and a drawing board – to become one of motorcycling's greats.





You were asking Your queries resolved with Richard Rosenthal



Cyclaid or Cykelaid?

Not related; the 1950s 31cc Cyclaid, as above, drove the back wheel, the 1920s Cykelaid, right, the front.

About a year ago, I bought a 1953 Cyclaid cyclemotor with DVLA documents as a retirement restoration project for when I finish work, in about three years. Now I discover the firm made a front wheel drive autocycle in the 1920s, though as the spelling of its brand name is different, I wonder if these are from two different makers?

Could you also list the basic specification of both because I only have a moped entitlement on my driving licence (from the days when this was included with the car licence) and am limited to under 50cc and I don't really want to take a motorcycle test now.

Dr Phil Hall, email, Midlands.

These are two different machines from two different makers, and while you will be able to ride

the Cyclaid with your moped licence, the Cykelaid has an over 50cc engine and for this you'd need to gain an appropriate UK driving licence.

The Cykleaid (1919-26) was *manufactured by The Sheppee* Motor Co Ltd, 59 Thomas Street, York. It was powered by *a 133cc (55 x 56mm) deflector* piston, single cylinder twostroke engine, mounted to the sprung girder type front fork of the machine, with fuel tank fitted above the front mudguard. Drive to the front wheel of the single speed machine was by chains and a countershaft. Its launch price was £50 and progressively dropped to under £25 for the basic model before production ended.

Although offered with options of lady's or gent's cycle for the complete machine, the Sheppee Motor Co Ltd also offered the

units fitted to its front fork for those who wanted to build their own motorised cycle, with some using it to power pedaltype tricycles or tandems and a few cruel souls fitted them to the front of light three-wheeled carriages to power their homebuilt cyclecars.

The makers claimed the single speed engine would power cycles, tricycles and tandems on the flat at between three and 20mph, with a fuel consumption of 100-120mpg, though some pleased enthusiasts claimed up to 150mpg.

Your Cyclaid, Phil, was made by British Salmson Aero Engines Ltd. The origins of this business was established by the French car and aero engine maker Moteurs Salmson at Raynes Park, London in 1929 to make/assemble under licence radial aero engines. A year later, a group of British investors took over the UK operation and established their business as British Salmson Aero Engines Ltd.

Sales of their French-designed rotary aero engines were slow, leading the British offshoot to start assembling Moteurs Salmson four-cylinder dohc 1471cc cars with the designation S4C. Using French made engines and chassis, the British company finished them off with a revised gearbox and a number of predominantly coach built body options, ranging from sports cars to saloons. Later, a larger dohc six cylinder car, again with choice of body options, was launched in 1936 and finally a year later the SC4 was revised with larger engine, better brakes and improved suspension. All cars were

THE CYKELAID

fitted to a pedal cycle forms AN IDEAL MOTOR CYCLE FOR A LADY.



59, Thomas Street, YORK.

relatively expensive and, like the aero engines, sales were slow. It is estimated between 300 and 400 cars were built before production ended in 1939.

The company branched out into making printing equipment and at some point moved their works to Glasgow, although they retained a London office at 76 Victoria Street, SW1. In 1950, the business launched the 31cc (35 x 31mm) single cylinder two-stroke

single speed Cyclaid cycle attachment which sold in modest numbers until 1956. The ultra-light (15lb) unit was mounted to a 'U' loop support above a cycle's mudguard, with attachment to the cycle's saddle stem pinch bolt, and drove by belt the back wheel. Silentbloc rubber bushes were used to insulate riders from any engine vibration. And like the 1920s Cykelaid, it offered a top speed of 20mph and up to 150mpg.

Pile aboard and smile

Viv Bracket from the Sammy Miller Museum suggested I contact you in the hope you can help my family research. Recently, I found this great photo of past family members seated on a motorcycle outfit and wondered if anyone can identify the make of motorcycle and perhaps the model.

The image was taken in Guernsey in the 1920s. The lady seated in the sidecar was my grandmother Helen Roberts, the chap behind was her husband John Roberts - they married in 1915 - while the rider/driver was Helen's brother, Samuel Webster. The others were family friends I don't know.

Samuel Webster enrolled in the Navy during the First World War though served as a signalman on secondment to an Army unit - I'm not quite sure how this came about as there is no record of it, though perhaps it's possible he rode a motorcycle in the course of his duties. My grandfather John Roberts also served during the First World War.

Greg Roberts, email, Guernsey, Channel Islands.

This delightful outfit is either a later veteran or early vintage (c1914 to early 1920s) 4¼hp BSA Model H (all chain drive) or Model K (chain primary drive and belt final drive). The final drive is obscured in the photo, preventing one spotting either a final drive chain or belt. Other than final drive and associated details, the models were near identical and powered by BSA's 557cc (85 x 98mm) single cylinder side-valve engine, driving through the factory's own design three-speed counter shaft gearbox with integral multi-plate clutch (20 bronze and 19 steel) and kick-starter.

BSA launched their threespeed Model H and Model K in late summer/early autumn 1913, and although some were made and sold in 1913, many consider them 1914-onwards motorcycles. **Delightful** family photograph, with the well-laden **BSA** either a late veteran or early vintage example.

Bizarrely, history

suggests BSA launched the more modern, all change drive three-speed Model H slightly in advance of the Model K with its belt final drive. Possibly some customers (including potentially the military) wanted none of the 'new-fangled' all chain drive.

BSA launched their own designed and manufactured first commercially produced sidecar in 1913, at about the same time as the three-speed Model H and K. It comprised a well-upholstered coach built body suspended on generous springs rather higher above its chassis than that of many rivals. The result was a more comfortable ride for passengers.

Although BSA primarily intended their 500cc (85 x 88mm) 3½hp models for solo work and the Model H and K as sidecar machines, they could be brought in 1914 for £63 and £59-15s respectively in solo trim. A sidecar added £30 (variable on finish and specification) to the cost. In solo trim, the Model H and K could hit 50mph and cruise at 40-45mph, and, surprisingly, the fitment of a sidecar made little difference to these figures.

Although a tough machine, probably less than 2000 of these 260lb models were supplied to the War Office for use by the Allies. Speculation suggests that BSA's works were dedicated to the manufacture of munitions and associated equipment, leaving little time for motorcycle manufacture. At the war's end, just under 1100 machines remained in service.



LEADERS IN CLASSIC LUBRICATION

Castrol XL30, XXL40, GP50, XL20w/50 Castrol R, M plus all original Gear Oils.
One litre, Gallon, Home Workshop Drum sizes.
Free UK mainland delivery offers.

www.castrol.com/uk/classics Castrol Classic Oils Tel: 01954 231668









AJS 7R production figures

My father-in-law has inherited a 1958 AJS 7R, with a short stroke engine. Most of our bikes are big and from the 1970s and 80s (Kawasaki GPZ900s, Suzuki GS850s etc), so the 7R seems tiny, but we like it.

I know AJS made a long stroke motor, so when was this engine introduced, what power should it develop, how fast, how many were built, who designed it and when was it first made?

DF Abbott, email, UK.

Your email has been sitting in my 'in tray' for a few months while your father-in-law was awaiting probate. Now legal things I wouldn't understand are complete and the 7R is Ray's, we can look into your family's machine in more detail.

The AJS 7R over the counter racer (known by many as the AJS Boy Racer) was launched to the public in February 1948. It comprised a sohc 348cc (74 x 81mm) single cylinder four-stroke engine with magnesium alloy castings coated in gold paint to prevent air contact corrosion, housed in a wide, double cradle frame, with AMC Teledraulic front fork and swinging arm rear suspension, derived from the factory E90 Porcupine chassis. Finished in lustrous black enamel with gold lining and lettering to its tank, gold engine cases, heavily finned barrel and Amal racing carburettor, the 7R looked stunning.

I've lusted after an early example for years, but the sports motorcycle pocket money has been spent on a couple of other tasty models, so my potential 7R will have to remain on the shelf, unless I sell something - and that isn't going the happen!

Many history books credit long-time AMC employee Phil Walker with the 7R design, which is true as far as it goes, and



The AJS 7R, with its gold-finished engine and black paintwork, cut quite a dash. This is a long stroke version.

some authors attribute design features to the prewar 7R which although there are some similarities, this thought is largely erroneous. While Walker was responsible for much of the design, the idea came from AMC's sales director Jock West (second in 1939 IoM Senior TT riding a works BMW) who carried out much testing, usually on the then grass race circuit at Brands Hatch, and he must have advised on development.

While the 7R was never the fastest 350 on the block, it handled superbly, for the period its brakes were sound and the motor was tough. Despite being unveiled in February 1948, it took a little time to get into production, though AMC completed their orders to deliver 23 models to factory and privateer riders for the year's Junior IoM TT. Riding what was by design an over the counter model, Maurice Cann finished fifth behind the fully factory supported works Velocettes of Freddie Frith and Bob Foster, who were trailed by the Nortons of Artie Bell and Johnny Lockett. Ten 7Rs finished within replica qualifying time, a terrific result for a totally untried motorcycle but better was to come.

Later in the 1948 TT week, Geoff Murdoch raced his 348cc 7R to a fourth place finish behind three 500cc Nortons in the Senior

event. Later in the year, well known Continental Circus racer and long time VMCC librarian Phil Heath finished second to Denis Parkinson's Norton in the Junior Manx GP.

The first 7Rs developed a claimed 32bhp@7500rpm, although some sources state 30 or even 28bhp. In 1951, Ike Hatch began developing a three valve version with revised dimensions of 75.5 x 78mm and it is likely AMC development engineer Matt Wright (formerly of New Imperial) was involved until he left Plumstead in 1953 to be replaced by Jack Williams. Only ever available as works machines, the three-valve 7R reached its pinnacle during the 1954 IoM Junior TT when New Zealander Rod Coleman won with a race speed of 91.51mph from Derek Farrant astride an identical works model.

Ike Hatch died in 1954 and AMC withdrew works support for motorcycle racing. However, the 7R continued in production until 1963, after which Colin Seeley, later George Beale and then others built engines or complete machines, with Colin using his own designed Seeley frames.

In 1956, the 'works' 7R3 engine dimensions (75.5 x 78mm) were adopted for production models which remained a two-valve design. By the early 1960s, and thanks to Jack Williams' development, 7Rs were delivering 42bhp@7800rpm which kept the then ageing design competitive at national level and models were clocked at 115-120mph on the flat.

Few factory production figures of the 7R survive, but an educated guesstimate suggests between 500 and 550 complete machines were built 1948-1963 and approximately 1100-1200 engines, which leaves around 600-700 sold as loose engines. One assumes most were bought as reserve engines by owners. Survival rate of the model is good and with revised dimensions the later Matchless G50 (1958-63) engine was developed from the 7R unit. And, again, after AMC stopped production, Colin Seeley et al took over.



Right into the 1960s, the 7R continued to be raced at the top level; this is Mike Hailwood, on Tom Kirby's example, Brands Hatch, 1965.

In the workshop **Boring matters**

Pun apart, bore wear and remedy does matter, but how much wear and damage is acceptable and how much isn't tolerable?

In an ideal world, engine cylinder bores should be precisely bored and true as recommended by the engine or piston maker. But all mechanical things, including engines, wear with use, albeit many modern engines can cover huge mileages with little discernible wear.

Early engines with cast iron cylinder liners were estimated to wear at a rate of approximately 0.001in (1 thou) per 3000 miles, while a nitrided cast iron liner wore at the rate of 0.001in per 10,000 miles. However, we all know of engines which have exceeded these mileages with much less cylinder liner wear, including my Model 30 New Imperial, which has covered just over 15,000 miles since purchase in 1986. Though when bought, it had tram lines in the bore, caused by an ill-fitted gudgeon pin discovered soon after purchase. At the time, spare cash wasn't available for rebore and new piston, so, as the machine ran okay and hardly smoked, I chanced it and rebuilt as was.

Some 'how to' books state an 80-90mm diameter cylinder bore should be rebored when wear at the bore top exceeds 0.015in and 0.003in at bottom of bore. Lesser figures are appropriate for smaller bore figures are extreme and I would bore an example 85mm bore once it is worn by 0.008-0.009in at the top. Some will disagree, stating more wear is permissible, and the following may back their case.

About 40 years ago, a friend's son presented his bought from new and always pasted unrestricted Yamaha FS1E, uttering '...it's rattling when cold and when I go slowly.' It was -

in fact, it clattered. On strip, I found the bore had worn by 23 thou (0.023in) in 31,000 flat out miles and needed to go from standard to a +30 piston to clean up the liner. Add to this worn rings and bad piston grooves, one can only marvel it still ran, but in fact, other than its clatter caused by piston slap, was loud, it started easily and willingly hit 45-48mph.

When I worked in the motor trade 1965-70, experienced mechanics seldom measured bore wear, but rather on removal of the cylinder head eved the discernible lip on the bore above the piston ring travel point, and, by experience, judged whether to rebore or clean off the lip with hone and then hone bore before fitting new rings. Personally, unless wear is minimal, as with the New Imp barrel here, I need to measure.

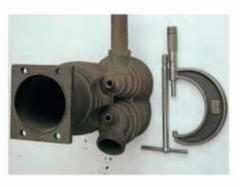
As stated earlier, the most bore wear is at the top of the piston's travel in the bore and tapers to the least at the bottom of the piston skirt's travel. But how to measure? In the home workshop, we may have nothing more than a set of feeler gauges, but don't worry, these will give a good guide for any barrel with detachable cylinder head. Another approach is to fit a compression ring from the engine's piston and keeping it at right angles, slide down bore and measure the ring gap. This won't give a bore wear measurement, but will indicate if wear has occurred, and, from this, one gains a useful impression.

Both above work best with loose cylinder barrels. But what if the engine has a blind head (cast in one with barrel) or one doesn't want to remove the barrel from the engine at this stage? In either case, spring bore gauges are the best approach. They range from the simple set I have to micrometer and digital read out gauges.



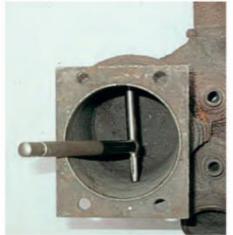


Above: By sliding the piston up and down the bore the gap can be measured with feeler gauges. Most will know that pistons are very mildly barrel shaped - thus there should be a larger gap to the top and above the top piston ring than at the skirt - and aren't truly round either, so pick a point on the piston skirt and use this as the measuring point for all measurements.



Above: Spring bore gauge, micrometer and circa 1922 293cc JAP blind barrel.





Left: The 1934 **New Imperial** Model 30 barrel. **Evidence of ill-fitted gudgeon** pin tram lines and a seizure before I bought the restored machine are visible. Although I admit to bad practice here, on discovering this damage, my then cash-strapped situation dictated no money could be spent on the unit ohv 250cc machine. Although my financial situation is now thankfully vastly different, as the little motorcycle has covered 15,000+ miles like this, other than a light hone and new rings it is going back as is, on the principle of 'if it ain't broke, don't fix it.' Bad

As can be seen, despite its mileage, there is only the merest shadow of a lip above the piston ring travel point. A light hone will be run down the bore before reassembly, but as this lip measures well under 0.001in, some might remove this with fine emery cloth.

practice maybe, but that is what

is going to happen.



Above: Not my favourite approach to gauging bore wear, but by sliding a ring at right angles to the barrel down the bore and observing piston ring gap, variances can give some idea of bore wear.



Above & both left: Insert spring gauge into barrel with telescopic gauge at right angles to bore. On positioning gauge at desired point, lock gauge with screw cap at end of handle shaft, rock slightly to remove from bore and measure locked telescopic gauge with micrometer. Repeat at different heights and at degrees round the barrel, as they often wear more in one plane than another as well as wearing more near top than nearer the base. Of course, one can measure without removing spring gauge with micrometer and digital telescopic spring gauges.

In a perfect world, I planned a table to demonstrate wear on this little JAP side-valve barrel, but annoyingly and unexpectedly the wretch measured identically along its length, so you'll need to take my word for this fact.

MOTOR (YCLE IS THE BEST PLACE TO ADVERTISE YOUR CLASSIC BRITISH BIKES AND SPARES



There is no other medium so effective as The Classic MotorCycle's trading **place** – so why not take advantage of them right now? Simply complete the form below and send it as soon as possible to: The Classic MotorCycle Trading Place, PO Box 99, Horncastle, Lincolnshire LN9 6LZ

It is our policy at The Classic MotorCycle not to accept private adverts from traders. If, whilst looking for a bike in TCM, you experience a trader advertising as a private seller, please call us on 01507 529529 and we will take appropriate action.

Advertisements can be accepted on this form, photocopy or internet.

If you are a trader, give our advertising department a call on 01507 524004 for our latest display ad rates.

The Classic MotorCycle Reader Adverts

For Publishing			Choose a section
Make	Model	Year	Choose a Section
D :			☐ For sale ☐ Miscellaneous
Price			☐ Wanted ☐ Photo enclosed
			Spares
			Name:
			Address:
			Area/County:
			Telephone:
			Email:
		County	Signature:
		County	Date:
Tel	Email		OFFICE USE ONLY MONTH CODE

Terms and conditions for private advertisers the truthfulness of any statements made by a only accept one advert per coupon.

- 1. The advert provided by the customer must be legal, decent, honest and truthful and comply with the code of the Advertising Standards Authority (www.asa.org.uk). Mortons Media Group may amend the advertisement to comply with these requirements.
- customer in the advert copy. Accordingly, the 4. Whilst every effort is made to include your customer will be responsible for any losses, free advert correctly, we are unable to take expenses or other costs incurred by Mortons telephone calls should an error occur. Media Group which are caused by an untrue 5. Please enclose a stamped addressed statement made deliberately.
- 3. Mortons Media Group reserves the right to be returned. 2. Mortons Media Group is not able to verify edit an advert to fit the allotted space and can 6. The publisher reserves the right to place this destroyed.

- envelope if you would like your photograph to

advert free of charge in other Mortons Media related publications.

DATA: Protection of your personal data is important to us. Personal data will be stored securely and will only be used for the purpose of processing the advertisement. Data will be stored for a period of 6 months and then

Vintage & Veteran

The Friendly Motorcycle People





1910 Humber 2hp project	£12995
1923 BSA 550cc	£11500
1929 Sunbeam TT90	£19995
1930 Montgomery Greyhound 500cc s	£34995
1922 Royal Enfield V-Twin outfit	£21995
1929 Rudge Special	£13995
1925 Triumph Model P	£8995
1929 Sunbeam TT90 & sidecar	£19995
1962 Velocette Viper/Venom 500cc	£8500

Please see our website for more photos and more bikes We also supply ball & roller bearings for

older vehicles and classic oil & lubricants

www.vinandvet.com 01283 509562

Jacksons of Knebworth

Sales, Service & Repairs of all classic, vintage & veteran motorcycles







BIKES FOR SALE	
ARIEL ARROW 1960 Fully restored	£3495
ARIEL NH350 1957 Excellent condition	£4995
BSA BANTAM B175 1970 Excellent condition	£2595
BSA BANTAM SPORTS 1967 Rare model in great condition	£2695
CYCLEMASTER WHEEL 32cc restored in a period Elswick gents bicycle SQL.P.	£1295
FRANCIS BARNET LIGHT CRUISER 1959 Good original condition	£1995
FRANCIS BARNET PLOVER 86 1959 Restored	£2395
HUMBER LADIES BICYCLE 1928	£295
MATCHLESS 650 CSR 1959 Very nice sporty twin	£6995
NORMAN B3 ROADSTER 1959 250-2T Well restored	£4250
NORMAN B3 197cc 1959 Good condition	
NORTON DOMINATOR 99 DELUXE 1962 Superb	£6995
RALEIGH LADIES BICYCLE 1935	£450
ROYAL ENFIELD 350 DELUXE 1999 many upgrades excellent condition	
ROYAL ENFIELD XR500 CAFÉ RACER 2006 very rare, one of only two built in black.	£3750
SCOTT FLYING SQUIRREL 1949	
SUNBEAM S8 Project call for details	£4495
TRIUMPH TRIDENT T150V 1973 Immaculate	£8995
TROJAN MINIMOTOR on gents Raleigh bicycle	£1295
VELOCETTE VIPER 1963 Immaculate	£7595
VESPA 125 1962 restored	£3995
WANTED- VELOCETTE GTP Later foot change model in any condition.	
ALL CLASSIC DIVES WANTED COOD OF BAD DESTOREDIODICINAL CONDITION	OP

ALL CLASSIC BIKES WANTED GOOD OR BAD, RESTORED/ORIGINAL CONDITION OR UNFINISHED PROJECTS, WHAT HAVE YOU? UK DELIVERY SERVICE AVAILABLE FIND US ON FACEBOOK - JACKSON'S CLASSIC BIKES







124 London Road, Knebworth, Herts SG3 6EY 01438 812928 • harvey-jackson@btconnect.com

Andy Teman







1931 BSA Sloper 557cc SV£7,500



1934 Francis Barnett 250cc......£3,250



1936 Norton 50 350cc....£9,250



1961 Panther 120 650cc.....£5,850





1937 BSA Empire Star 350cc £9,000



1951 Douglas Mk5 350cc£5,500



1961 Matchless G5 350cc.....£2,850



1947 Norton 18 490cc



1938 Royal Enfield KX 1140cc..£22,500



1950 Vincent Rapide C 1000cc .£47,500

937 AJS 22 250cc nice pre war machine	£5650
957 AJS 16MS 350cc storage since 1993	£3150
922 AJS model D 800cc honest machine	£20,000
937 AJS 2A V-twin 990cc last ownership since 1997 both books	£28.000
960/61 ARIEL LEADER 250cc choice of 2	£3500/£2650
954/58 ARIEL VH 500cc, choice of two	£4750/£5350
952 BSA Bantam D1 125cc lovely tele rigid.	£3650
967 BSA B40 350cc, in full army trim	C3650
927 BSA L27 350cc OHV full potential	20000
937 BSA Empire Star 350cc desirable machine	C0000
929 BSA Sloper 350cc OHV nice early Sloper	£9250
954/55 BSA B31 350cc choice of 2	£4250/£4650
948/54 BSA A7 500cc choice of 2	
927 BSA S27 500cc lovely vintage	£10,000
944 BSA WM20 500cc, fully equipped army bike	£7500
931 BSA Sloper 557cc SV last owner since 1952 931 COVENTRY Eagle 500cc OHV selling on behalf of customer	£7500
931 COVENTRY Eagle 500cc OHV selling on behalf of customer	£13,500
951 DOUGLAS MK5 350cc choice of 2	£5500
924 FHW Motors 680cc selling on behalf of customer	£25,000
964 FRANCIS BARNETT Falcon 87 200cc lovely bike	£2650
964 FRANCIS BARNETT Falcon 87 200cc lovely bike	/C4750/C5250
960 GREEVES SCOTTISH 250cc tidy trials bike	63500
961 GREEVES 325cc twin lovely machine	C4000
932 JAMES V-Twin 500cc unique and desirable.	C15 000
961 MATCHLESS G5 350cc economically priced	
954 MATCHLESS G80S 500cc, pleasant machine	C4450
954 MATCHLESS G805 S00CC, pleasant machine	£4150
914 MOTOSACOCHE model 2C - vii 4hp	£20,000
960 NORTON 50 350cc slim line featherbed.	Σ6000
936 NORTON 50 350cc genuine bike	£9250
947 NORTON 18 490cc gleaming tele rigid	£9850
924 NORTON 16H fitted big 4 engine 633cc comes with the original engine	£16,500
961 PANTHER 120 650cc good used bike	£5850
957 RATIER L7/8 750cc ex French police	£7000
991 Royal Enfield Bullet 350cc low mileage	£2000
928 ROYAL ENFIELD V-Twin 976cc selling on behalf of customer	£24.500
938 RUDGE Rapid 250cc nice bike full history	£8750
921 RUDGE Multi-TT 500cc, selling for customer	£16,500
911 TRIUMPH 3½ HP with pioneer certificate	£14,000
959 TRIUMPH Tiger Cub 200cc, nice, in silver	€4000
960 TRIUMPH Custom 500cc Gilbert Sills creation	£8650
927 TRIUMPH N 500cc nice tidy bike	69750
971 TRIUMPH T100P 500cc ex police	
954/55 TRIUMPH T100 500cc choice of 2	C8000/C8250
935 TRIUMPH 5/2 500cc nice one	C12 500
965 VELOCETTE Viper 350cc in Enduro trim real bargain	C4650
936 VELOCETTE KSS 350cc very attractive cammy	£13,850
950 VINCENT Rapide Series C 1000cc real rider's bike, all matching numbers	

FOR CURRENT STOCK PLUS LOADS OF INFO SEE OUR WEBSITE

www.andybuysbikes.com GOOD PRICES PAID. IMMEDIATE DECISIONS. NO MESSING

TEL: Andy or Jo (01728) 724321 Old Railway Station, Station Road, Framlingham, Woodbridge, Suffolk IP13 9EE. Mobile 07802 896114 email: andybuysbikes@hotmail.com

Trading place

BOOK YOUR AD NOW! online www.classicmotorcycle.co.uk post/fax Fill in the coupon on page 90 email freeads@classicmotorcycle.co.uk



ARIEL Twin Port, 1946, girders, stainless wheels etc, fully rebuild, bargain £5000 Tel. 07742 522371. Wiltshire



ARIEL RED HUNTER 1959, 350cc, high quality restoration, new wheels, exhaust silencer, bearings, oil pump, battery etc, starts easily, runs well, £4750 Tel. 01723 372219. Yorkshire



BANTAM 175 1961, great little bike, £1950 ono Tel. 07759 958859. Hertfordshire



BENELLI LETIZIA 1950, rare bike, museum piece, only one left in country, immaculate condition, ready to go, £4500 ono Tel. 07775 564321. London



BIANCHI MT61 1961, 318cc, rare post war Italian military, excellent original condition, still 6 volt electrics with new battery, V5C, £4250 Tel. 07798 866071.



BSA A65 Star, 1963, vgc, 2524 miles since engine rebuild, 12V electrics, electronic ignition, new concentric Amal carburettor, £4300 Tel. Colin 07736 975620. East Sussex



BSA B175 Bantam Bushman, rare UK bike, new stainless rims, spokes, new exhaust silencer, all bearings replaced, loads of new parts, £4250 Tel. 07999 862667. Somerset



BSA B33 1958, professional paint job, frame powder coated, stainless wheels and spokes, new seat, all chrome done, £5750 Tel. 01522 811735. Lincs



BSA C15 1963, a nice 250cc lightweight in good original condition, free tax no MoT required, £2100 Tel. 01246 475197. Derbyshire



DUCATI 750SS 2000, 24,000 miles, injection model, MoT May 2021, new belts fitted & serviced with new plugs, oil & filters & brake fluid flush & change, £2495 ovno Tel. 07969 992557. Warwickshire



HESKETH V1000 candy red metallic, new unregistered, unused, one of the last to come out of Easton Neston in 1983, true collectors motorcycle, £30,000 oiro p/x considered Tel. 01495 759234. Gwent



HONDA CB250N 1978, 5967 original miles, some spares also CD picture disc available covering the rebuild, £1500 Tel. 07742 887421. West Midlands



0800 781 9308 Carole Nash Insurance Consultants Ltd is authorised and regulated by the Financial Conduct Authority.



HONDA CB400F 1975, beautiful original, 400/4 original exhaust, vgc, Boyer Branson ignition, all rest standard, £4000 Tel. 01484 649119. Yorkshire



HONDA CB650 1981, fully rebuilt from frame being powder coated, needs a carb clean and you're away, starts and runs, £1800 Tel. 07816 603925. County Durham



HONDA CB750/4 1978, shed find so rusty & faded paint, some bits removed & in box, few bits missing, engine turns on kickstart, Sorned, V5C, £900 ono Tel. 07743 744719. Gloucs



HONDA CJ250T 1976, mostly original, will run, needs battery and tlc front brake overhauled, MoT exempt, historic tax, V5C £600 ono Tel. 07743 744719. Gloucs



HONDA VT500 trike, 1988, MoT June 2021, 61,000 miles, vgc, recent service, £2400 may p/x for sidecar outfit or low small classic machine Tel. 07470 387302. Durham



KAWASAKI W650 looks like a 1960s Triumph/BSA, owned since 2001, MoT March 2021, always parked overnight in dry garage, 27,500 mostly dry miles, £3300 Tel. 01179 686010; 07730 925759. Bristol



MANX NORTON Model 30M, 1946, IOM history, famous rider, vgc, rare machine, serious offers considered, call for more details Tel. 07523 700832. Surrey



MATCHLESS AFS G3L, 1960, 'Green Goddess' unrestored, new battery, carb, LED lights, electronic ignition, easy starter and good brakes, low miles, £4100 Tel. 02475 011213. Warwickshire



MATCHLESS G12A 1960, high standard restoration, quality paint & chromework, new parts inc wheels, tyres, exhausts, silencers, battery, seat etc, V5C, £6450 Tel. 01723 372219. North Yorks



MATCHLESS G15CS 1967, clean tidy running bike, vgc, fitted with single carb conversion & in line oil filter, many new parts including carb, clocks, bars, tank, V5C £8500 may take p/x Tel. 07876 704268. Norfolk



NORTON Model 50, 1936. matching numbers, original plate, used regularly, would exchange for a pre-war Mac or Velo Viper Tel. 01428 723056. Hants



NORTON DOMINATOR 1960, Slimline, 600cc, nice bike, £4450 Tel. 07513 269252. Staffs



NORTON DOMINATOR 88 1964, reconditioned magneto, many stainless steel parts, registered historic vehicle, matching numbers, dating certificate, £4800 ono Tel. 01670 521432.



RALEIGH RM 5 Supermatic 1968, excellent running condition, V5C, chrome good, unrestored and not pulled apart, £1000 Tel. 01702 206148. Essex



ROYAL ENFIELD Bullet, 630cc Alloy barrel, 2 gallon chrome tank, BSA hubs, alloy rims, s/s spokes, Commando clutch, £4000 Tel. 07772 743177.



ROYAL ENFIELD Bullet, 1959. 500cc off road bike (needs finishing), £2000. Also works rep forks, SR mags, chain cases Tel. 07772 743177. Notts



STEIB S250 sidecar partly restored, sidecar has been dismantled, the body and frame are painted and ready, new mudguard, all parts for the sidecar are inc, £1200 Tel. 07903 560840. London

Russell Motors

The Specialists for

AJS & MATCHLESS

BSA War Department M20 & M21. BSA B31 & B33. Norton singles and twins.

Ariel War Department 350 wng. Amal & Lucas 125/127 FALCON ROAD, BATTERSEA, LONDON SW11 2PE

Tel: 020 7228 1714 Fax: 020 7924 4273

E-mail: russellmotors@btconnect.com www.russellmotors.co.uk

NORTHANTS CLASSIC BIKE CENTRE

We have moved to 162 Wellingborough Rd, Rushden, Northants NN10 9SU

Tel: 01933 355525

1958 Ariel Huntmaster 650 1960 BSA Super Rocket £6995£4995 1963 Matchless CSR.....£5995 1961 BSA A10£5995 1960 Norton model 50 ... £6250 1965 BSA A65 Lightning 1960 Triumph 21£3995 Rocket.....£4995 1959 BSA powered by Norton Café Racer.....£5695

1971 Yamaha YR5 350 £4500

BIKES WANTED

www.northantsclassicbikes.co.uk

Viewing and Sales Tuesday to Saturday British Bikes bought for cash or sold on commission

PUT TOO MUCH PRESSURE ON THAT OLD BOLT? SNAPPED? STRIPPED THE THREADS? DON'T WORRY THAT'S WHERE WE ARE SPECIALISTS!



WE ALSO STOCK QUALITY TAPS, DIES, REAMERS, DRILLS, ETC.



WWW.UNI-THREAD.COM

CALL 01803 867832 Or Fax 01803 867982

20% OFF ALL CARBON TAPS. 30% OFF ALL CARBON DIES

for your free catalogue **CARBON STEEL TAPS & DIES NOW AVAILABLE**

www.motolug.com

Single & Twin models available

COLLAPSIBLE MOTORCYCLE TRAILERS



(0)1789 459234

QUALITY CASE PACKING AT OUR WAREHOUSE

Motorcycles and Parts

Exported Worldwide

for free advice and quotations neal@oakbridgelogistics.co.uk

www.drclassic.co.uk

(Burton-upon-Trent) Tel: 01283 536379 Post-war British & German Classic bike enthusiasts



1978 /83 Triumph T160 Legend, low mileage, 1 owner since Les Williams £14,750



1983 Rickman Metisse 650cc Triumph pre





1964 Norton 99 600cc, excellent



1949 Scott 600cc, unrestored cosmetic good



1946 AJS comp rep / rigid special 350cc



1957 AJS model 20 500cc, great runner

CLASSIC & VINTAGE MOTORCYCLES **ALWAYS WANTED** ANY CONDITION INCLUDING BASKET CASES!

D.R. Classic Motorcycles Ltd.

Viewing Strictly By Appointment Only!!! TEL 01283 536379

MOB 07889 292536 richard@drclassic.co.uk





Many more bikes!! Range of 50-60s & 70's classics always in stock - Check out the website! www.drclassic.co.uk



MOTORCYCLE SHIPPERS

OAKBRIDGE INTERNATIONAL

Contact Oakbridge on 01799 513366 www.oakbridgelogistics.co.uk



FOR ALL YOUR PRINTING NEEDS

From concept to door step



PACKAGE



CONTACT TELEPHONE: 01507 523456 WEBSITE: www.mortonsprint.com









O f 🔰 MortonsPrint

in Mortons Media Group Ltd

Trading place

BOOK YOUR AD NOW! online www.classicmotorcycle.co.uk post/fax Fill in the coupon on page 90 email freeads@classicmotorcycle.co.uk



SUNBEAM S8 1949, immaculate, maroon & black, quality chromework, recent tyres, battery, brakeshoes, ready to ride, help with delivery, £6450 Tel. 01723 372219. North Yorks



SUZUKI GSX250 1981, very clean & original, 21,000 miles, starts & runs ok, good tyres, battery etc, £1750 may take p/x Tel. 01328 700711. Norfolk



TRIUMPH Super Cub, vgc, exceptional condition, rides really nice, idles regular when warmed up, starts, usually first kick, ready to go, £3200 Tel. 07850 248759. Cornwall



TRIUMPH THUNDERBIRD 6T, 1959, matching numbers, stainless rims, spokes, engine rebuild, new chains, rewired, new battery, cables, seat, exhaust & silencers, £8500 Tel. 01453 842707. Gloucs



TRIUMPH TIGER 1000 1956, matching numbers, fully restored, mechanically rebuilt by renowned Triumph ace Hughie Hancox, with all bills & history to show £8000 Tel. 01932 231615; 07789 230684. Surrey

For Sale

AJS 1952, Model 20, rolling chassis, frame no 85239, no documents, £500 Tel. John 02086 512102. Croydon.

ARIEL HUNTMASTER 1958, refurb engine, new carb, exhaust, clutch, chains, tyres, all chrome done, ready to ride, £5950 Tel. 07564 242876. Kent.

DUCATI 900SS 1977, superb, rebuild, Monza tank, 28,000 miles, 1977 Guzzi Mk1 Le Mans 12k, very good condition, red Tel. 07914 639514. Hertfordshire. Email. bigmacal27@gmail.com

HARLEY-DAVIDSON **XR1200** 2008, orange, 20,000 miles, MoT, great useable investment, only made for five years, two keys, all paperwork, fantastic bike, £4950 no offers Tel. 07376 088023.

HONDA BENLY CB92, Super Sport 125cc, 1962, original engine and frame and transferable number rare historic machine in show condition, 58 years old MoT and tax exempt, £8950 ono Tel. 01522 703687. Lincolnshire.

HONDA C50 1972, runs well, log book and Honda book + key, £1400 Tel. 07833 937639. Lancs.

MOTO DUCATI Vintage 98cc O.H.V sport, 1955 complete for restoration, has NOVA certificate, quite a scarce early Ducati, £1000, can Email images to genuine enquirers Tel. 01284 753974; mobile 07783 277629. Suffolk. Email. swhitnall93@gmail.com

MOTO-GUZZI Le Mans Mk3, 1983, 12 months MoT, 62,475 miles, red, nice condition, £5500 ono Tel. 07398 845718. Birmingham.

NORTON DOMINATOR 1960, slimline, nice bike, £4975. Triumph 350cc, Twenty one, matching numbers, good bike, £3750 Tel. 07513 269252. Stoke-on-Trent.

NORTON JUBILEE 1962, paperwork lost but have dating certificate, reg number still available, good runner,£1450. Also Triumph T110 gearbox or fit any pre-unit bike, restored, £425 p&p at cost Tel. 07443 642408. West Yorkshire.

PANTHER Model 120, good original bike, starts and rides, very well loads work done, £5600 ono. Panther Model 75, 1957, good useable classic not original, runs and rides very well restore or ride contact for further information £2200 ono Tel. 07758 401324. Leics.

TRIUMPH TIGER 110 1955, barn find, original needs couple parts, exchange A10-A7 condition not important possible rolling chassis must be s/arm and have V5C look to see what you've got Tel. 01959 577788. Kent.

VELOCETTE MAC 1939, nice bike, Triumph 360cc, Twenty One, 1961, matching numbers, £3550 Tel. 07743 370641. Stoke-on-Trent.

VINCENT twin engine 998cc, HRD covers and inspection caps, assembled from used parts, crankcase number F10AB/1/2346, £32,000 obo Tel. 07973 828632. Notts.

Parts For Sale

BENELLI 2C 250, 1974, original complete exhaust, undamaged, needs rechrome, £75. Triumph 5TA crankcase, stripped, good condition, £75 Tel. 01484 649119. Yorkshire.

BSA DBD34 Goldstar flywheels, slight rust speckling, will repolish, otherwise very good condition, £25 buyer collects Tel. 07711 956049. South Yorks.

DOLPHIN FAIRING with brackets but no screen, contact with offers if any Tel. 07801 558930. Lancs.

HONDA SUPERDREAM 1980's new front sprocket & rear sprocket, £35. 350cc rear sprockets, £15 Tel. 07742 585130. South Yorks.

ITALIAN PARTS: sell off in lots by make, Ducati, Benelli, Laverda, Cagiva, Morini British BMW, Japanese Tel. 07833 906288. Essex.

JAP OUTBOARD ENGINE model S80, 1950s, £75. Royal Enfield GT Continental, 535cc, dual seat, new cost £162 want £50. Triumph pre-unit, 650cc, clutch chainwheel, new, £25 collection only Tel. 07548 207144. Essex.

TRIUMPH 3TA front mudguard, shaped and in good condition, offers please Tel. 01332 874790. Derby.

TRIUMPH C/R GEARBOX 1950s, excellent original front mudguard, 1945/1954 new speed twin crank flywheels complete Tel. 07523 700832. Surrey.

TRIUMPH SLICKSHIFT GEARBOX just been restored, will fit any preunit Triumph, new bearings, seals, too much to list, ready to fit bargain, £425 includes free postage, also Burman gearbox Tel. 07443 642408. West Yorkshire.

TRIUMPH SPEED TWIN 5T rigid model oil tank, nos stamped, 1946, maroon, it's superb, £425. Want Motoplas pannier, frames for BSA swing arm Bantam Tel. 07396 270365. Sussex.

MINI-MOTOR TROJAN ENGINE c/w carb, generator, exhaust, and tank with tap, offers, also 1960's Phillips ladies, 3-speed bicycle, 100% complete, g.w.o, needs paint etc, £70 Tel. 07951 536578. Herefordshire.

Wanted

ALF BOTTOMS 1918-1951. photographs etc wanted of this highly talented speedway rider who also went on to design the very successful JBS Formula Three cars Tel. 02086 507696. Kent. Email. Andrewking10@ btconnect.com

BRITISH BIKE ANY restoration project wanted, anything considered any size or condition, more of a tinkerer than a rider now so open to offers, pay accordingly, can collect, will consider older Japanese Tel. 07538 696157. Leics.

ARIEL OR BSA PROJECT BIKE wanted, any model in any condition, but early Fieldmaster or BSA twin/single great, anywhere considered Tel. 07956 296418. Derbyshire. BSA SLOPER 1929, ideal winter project restoration requires completion, DVLA Sorn. Tel. 07855 214172. Monmouthshire.

CCM ENGINE & PARTS WANTED for 1977 CCM motocross bike Tel. 01600 716515. Monmouthshire. Email. cmwatkins1@hotmail.co.uk

CLASSIC BIKE WANTED in any condition by genuine enthusiast anything considered top price paid Tel. Colin 07535 984417. Lancashire.

CLASSIC MOTORCYCLE wanted by enthusiast anything considered a wreck to a show bike top price paid Tel. Jack 01704 331519. Lancashire.

CORGI ORIGINAL TYRES wanted for display only, split, cracked, distorted, discoloured, WHY? Tel. Jon 07872 320227.

CZ 180 1995 ignition switch, its made by Zadi (Italian) and has PL 387 marked on the side, will pay fair price Tel. 01842 829848. Norfolk.

DUCATI ELITE PARTS wanted to complete restoration of 1960 Elite Tel. 01539 722466.

GREEVES 1960 TES front wheel or complete hub wanted Tel. 01422 886441. West Yorkshire.

HONDA RESTORATION **PROJECT** from 1970s/1980s wanted, any model considered, pay accordingly eg. CB125, CD175, CB250, CB450, CB550/750, XL250 etc, can collect Tel. 07538 696157. Leics

MONDIAL PIEGA 1000cc photography of Jack Findlay with 250cc, Mondial Vincent Firefly clip on engine TT and Manx Grand Prix replicas Tel. 07791 796983. Northern Ireland.

MZ JAWA CZ or other Eastern Block Soviet motorcycle, wanted in any condition, pay accordingly, collect anywhere Tel. 07983 832076. Staffordshire.

ROYAL ENFIELD 250cc, Continental GT lookalike, last sold in Suffolk 2020, red, I would be interested in repurchase if possible, Reg No: 86TKX Tel. 01284 753974; mobile 07783 277629. Suffolk.

SIDECAR WANTED prefer sports model, but consider anything, even prewar boat type in any condition Tel. 07956 296418. Derbyshire.

TRIUMPH 3TA WANTED bathtub or bikini model, any condition, but complete Tel. Mike 07824 375233. Kent.

WANTED DR400S side panels and a left hand rear indicator bracket and any other spares going Tel. 07907 843165. Walsall.

WANTED FLAT TANKER circa 1925-1929, oily rag condition, OHV/SV, 350/500cc. four stroke Tel. 07413 935748. Hants.

WANTED CLASSIC MOTORCYCLES. anv condition including projects, parts also wanted, collection from anywhere, motorcycles sold on your behalf. Tel. 0161 748 0865 Manchester, email: rajonesclassicmotorcycles@ gmail.com web: rajonesclassicmotorcycles.co.uk (T) RO681176C

Miscellaneous

BOOKS: VINCENT VEE twins - Osprey, £15. Vincent Buyers Guide, £10. Norton Complete Story Magrath, £10. The Giants of Small Heath, £15. Illustrated History Sunbeam Champ, £10 postage at cost Tel. 01225 872542. Somerset.

BSA C15 STAR 250cc, 1959/60 Instruction Manual and Service Sheets as supplied with bike, fair used condition, £20 free postage Tel. 01524 824439. North Lancs.

CLASSIC MOTORCYCLE **MAGAZINE** January 2000 to December 2002, well preserved and in yearly red binders, BBC, £10 per binder, buyer collects or pays postage Tel. 07906 093843. Kent.

CLASSIC QUALITY RACER PRINTS size 24" x 18", of Barry Sheen, Mick Grant, Eddie Lawson and Ross McEnla, also Vincent Rapide and AJS 7R, leftover stock from a retired Fine Art Mail order Co. 2600 prints with postage tubes. The prints will sell at Race meetings like the Barry Sheen Memorial meeting next July at Olivers Mount, or by Mail Order. Prints rrp total £18000, sell as a job lot for £1500 ono or deal Motorcycle or WHY? (cash adjustment) Tel. 01495 759234. Gwent.

THE KEIG COLLECTION volume 1 to 4, good condition, best offer secures Tel. 07415 316649. Liverpool.

Dynamos, dvnamos, dvnamos, dvnamos. Paul Dunn 01782-856839. (T). PA681174C

Wanted British autojumble spares or part projects, BSA, Norton, Triumph etc. Try us on top prices, friendly family firm for over 20 years. Collect anywhere especially Midlands, Stoke, Birmingham, Manchester, Nottingham, Derby. Tel. P. Dunn Dynamos, S-o-T 01782-856839. (T) PA681172C

ANDY TIERNAN buys all pre war BSA's, also consider flat tankers, all makes especially Y13 v-twins. Tel. 01728 724321, 07802 896114 (T) or email: andybuysbikes@hotmail. com AN681724

WANTED RUDGE ULSTER, would consider a Special, w.h.y. Tel. 01728 724321, 07802 896114 (T) or email: andybuysbikes@hotmail.com AN681725C

BALL AND ROLLER BEARINGS

Ball & Roller Bearings

Obsolete bearings supplied, reconditioned or manufactured

17 Studio One, Waterside Court, Burton-on-Trent DE14 2WQ • 01283 509562 vintagebearing@aol.com • www.vintagebearings.co.uk



BRAKE SHOES & CLUTCH PLATES

BRAKE AND CLUTCH RELINING

- Professional Service Est 1980
- Classic, Vintage, Specials & Obsolete
- Bonded, Riveted, Machined
- Wide choice of asbestos free lining compounds
- To suit all applications, Road use, Trails & Racing
- 24 Hour mail order service



Custom Brakes & Hydraulics Ltd, Unit 2 Holbrook Rise, Holbrook Ind Estate, Sheffield, S20 3FG

Tel: 01142 767971 www.custombrakes.co.uk

CLUBS



Visit us at www.jampot.com

www.classicmotorcycle.co.uk

CHROMING

Heritage Classic Chrome Est. 1985

TRADING AS MARKS TEY AUTOSPARES

MAIN appointed agents for Triple Plate Chroming in East Anglia Polished Nickel Plate • Zinc • Satin Chrome

> Phone Paul 07903 846682 or 01206 211782 www.marksteyautospares.co.uk

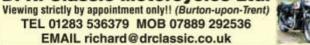
DEALERS UK

www.drclassic.

Range of 50-60s & 70s classics always in stock Check out the website! www.drclassic.co.uk - Export no problem!

WANTED! WANTED! Classic motorcycles always wanted! Bikes & collections bought outright for cash! In all conditions. Delivery and Collection Service

D. R. Classic Motorcycles Ltd.





MAGENTOS AND DYNAMOS

Dynamos, Regulators rebuilt guaranteed three years.

Some rebuilt magnetos available, similarly guaranteed. 11-tooth dynamo sprockets in stock

EXHAUST PIPES MANUFACTURED

D. H. Day, Aldrans, Church Hill, Wroughton, Swindon, Wiltshire SN4 9JR. Tel: Swindon (01793) 812323 dhday31@hotmail.com www.dhday.co.uk

NUMBER PLATES



VINTAGE AND CLASSIC NUMBER PLATES Pressed Metal
 Self Adhesive
 Perspex Plates

07854 195 114 - 01933 390143

NUTS AND BOLTS

CUSTOM FASTENERS

We stock a huge range of **NUTS, BOLTS & WASHERS**

Finishes available **CHROME • STAINLESS STEEL**

Threads available Metric, Fine, UNF, UNC, Whitworth & Cycle

Order Online at: www.custom-fasteners.co.uk

Email: info@custom-fasteners.co.uk Telephone 01686 629666

SPARES



www.vintage-replica.cz



PARTS, SPARES & SERVICES



We have over 250 tonnes of quality bike parts for most makes & models: over 10,000 sq.ft of new & used bike spares

ALL MAKES AND MODELS COVERED FROM 1970s ONWARDS 1980's bikes and superbikes a speciality - MAIL ORDER NO PROBLEM! Tel: 01224 899228 10 Cables Lane, Torry,

www.breakingpoint.co.uk E: dek@breakingpoint.co.uk Aberdeen AB11 9AD

PILGRIM PUMPS

01354 692423 07505 884261

P.O. Box 45, Chatteris PE16 9AT

PILGRIM PUMPS SINGLES AND TWINS OVERHAUL £80 + PARTS

Visit us at www.petesbikes.co.uk Please telephone for more information

Bikes and Parts for sale on website

WE HOLD A WIDE RANGE OF QUALITY SECOND HAND SPARES

SPEEDO REPAIRS

Ian Bartram peedo's Chronometrics repaired, restored, recalibrated.

Also clocks to anti-clock conversions (speedo's or rev counters), PA speedos, 8 day and Quartz clocks, prewar amp meters. All instruments to original specs. Fast efficient service Reasonable prices 12 months guarantee.

WE ARE ALSO HAPPY TO PURCHASE FAULTY SPEEDO'S OR TAKE THEM IN PART EXCHANGE lan Bartram, Enfield Mill Lane, Barnby, Beccles, Suffolk NR34 7PZ. Tel 01502 476612

Coating Specialists

Premium Restoration of Motorcycle, Bicycle & **Car Parts**

UK Collection & Delivery Service See website for details

Until 01/02/2021

Unit 3, Bradware Industrial Park Harris Street, Bingley, BD16 1AE www.TRIPLE-S.CO.UK 01274 562474

Quality is Not Expensive it is Priceless

POWDER COATING

SPECIAL OFFER FRAME and SWINGARM

any size shot blasted and polyester powder coated, followed by hot coat.

HIGH GLOSS BLACK from £80 +VAT (other colours available)

MICROBLAST POWDER COATING

Old Yard Workshop Arthur Road, Windsor SL4 ISE 15 mins from Junction 15 M25 & 5 mins from Junction 6 M4

microblastservices@yahoo.co.uk www.microblastservices.co.uk

TEL: 01753 620145

SHOCK ABSORBERS



TANK SEALANTS/ADHESIVES

DEVON BIKE TANK RESTORERS

All tanks repaired and ethanolresistant liners applied.

www.biketankrepair.co.uk tankrestorers@gmail.com 01409 254750/07585 606433

TRANSFERS



James Tank Badges now available to

Visit our fully illustrated website with secure online ordering facility!

9.00am - 1.00pm (Mon - Fri) +44 (0) 1454 260596

service@classic transfers.co.uk



The badges are 2.375' dia with holes centres al

£55.00 Pair £1.75 P&P

www.classictransfers.co.uk

PO Box 17. Wotton-Under-Edge. Gloucestershire, GL12 8YX, United Kingdom



RESTORATION

Heritage Motorcycles

keeping classic and retro motorcycles on the road and at their best Classic & Retro Motorcycle Repairs, Servicing & Restoration Hampshire 01264 861444

www.heritage-motorcycles.co.uk • heritage@bikerider.com

MOTORCYCLE SEAT RENOVATION SERVICE

SUPPLIERS OF NEW SEATS FOR MOST BRITISH CLASSIC BIKES LOOSE COVERS & FOAMS SUPPLIED Please phone for details and price list

R.K. LEIGHTON

Unit 2, Partridge Court, Price Street, Birmingham B4 6JZ Tel: 0121 359 0514 Email: info@rk-leighton.co.uk www.rk-leighton.co.uk



History is close at hand





We're bringing enthusiasts closer to the history of motorcycling through our extensive archive. There's always something new to discover.

ortons Archive is one of the biggest and best collections of motorcycle photographs in the world. Whether it's a top rider from the 1930s, a showroom photo of a rare motorcycle model or an action shot of the most memorable races in history - Mortons Archive is likely to have it.

Our archive hosts exclusive collections from famous photographers such as Nick Nicholls, plus glass plates from just after the First World War.

Mortons Archive has already worked alongside a number of national media organisations for various documentaries and features on iconic bikes, racers and events - giving access to millions of images and documents from different eras of motorcycling.

We offer a century's worth of motorcycle articles, news, interviews and images in our extensive collection of magazines. The archive has original copies of parts books, sales brochures, maintenance manuals and road tests.

See for yourself

You can now delve into and explore Mortons Archive for yourself by renting the archive for research purposes. Perhaps you're a journalist looking for information and footage of a famous rider, or are producing a book or documentary and want to take a look at some of our collections. You might even be looking for images for an event or business use.

Prices vary on the amount of time you rent the space for. For more information visit: www.mortonsarchive.com

MORTONS ARCHIVE

www.mortonsarchive.com

contact our archivist Jane Skayman on 01507 529423 email jskayman@mortons.co.uk for any enquiry.





The decline and demise

From the hard-pressed mid-1930s onwards, the demand for large JAP engines fell, exacerbated by Matchless also entering this arena. Although some factories were still using 250-1000cc JAP engines, they weren't buying enough.

Words: RICHARD ROSENTHAL Photograph: ROSENTHAL ARCHIVE

y the mid-1930s, JAP's prestige (and its profits) was slipping. Although their engines continued to enjoy successes, record breaking at Brooklands, sprinting, grasstrack, sand racing and, of course, speedway, dwindling sales were further hit by JAP's poor showing at the 1934 IoM TT and the drubbing Phillip Vincent gave the JAP race engines he'd used for his Senior entry Vincent-HRDs - all failed with engine problems. However, JAP continued to fight

Folklore implies that on sighting Joe Bayley's JB special - comprising a c1924 Anzani V-twin, developed by renowned Ariel tuner Lawrence Hartley, fitted into a Norton ES2 chassis - at the 1934 Brighton Speed Trials, world record beaker Eric Fernihough and recently retired Brooklands ace Barry Baragwaneth had a long hard chat with JAP engineer Stan Greening. This 'discussion' led to the performance V-twin series comprising the 8/80 (80x99mm bore x stroke) sprint engine coded JTOS, the dry sump 8/75 engine (JTOSZ) and, later, the 1100cc ohv Mk.1 racing engine (W/W). Great engines - which later found their way into racing cars as well as motorcycles - though these were, unhelpfully they sold in small numbers. Alongside, the factory continued with contract work and developing more specialised engines (stationary type) for nonmotorcycle applications.

Although engine evolution slowed, JAP continued to improve their motorcycle engines up to the Second World War. One of the last hurrahs was overseen by former Brooklands star and racing engine specialist Dougal Marchant (late of MAG) whose series launched for 1939 sported almost totally enclosed push rod tubes, more cylinder finning, revised cylinder head cooling and other improvements.

During the Second World War, the JAP factory worked for the Allied war effort, making items from armament fuses and aircraft parts to nearly a quarter of a million stationary engines. Up to 2500 people worked for JAP during the war, and the firm

In March 1946, JAP unveiled a new motorcycle engine, the 22bhp@5000rpm



The Joe Rolando designed four cylinder engine - now, one wonders, how would that have performed in a Featherbed frame?

494cc side-valve parallel twin. For fussfree touring it may have been ideal (and Triumph's Edward Turner had also designed a similar unit) but with the major over-250cc motorcycle UK makers building their own engines, who would actually buy it? Ambassador built one into a prototype, while AJW, Cotton and Zenith (Writers) acquired a handful.

During May 1947, the 3.5bhp (54.2 x 52mm) 125cc two-stroke engine unit with three-speed gearbox was unveiled to sell modestly. In late 1949, JAP launched three 'new' engines - actually developments of pre Second World War units – in the forms of 998cc and 1096cc ohv V-twins intended for motorcycle and car racing respectively and a tough 998cc side-valve V-twin for production motorcycles.

By 1953, the sale of JAP-made engines (not speedway units) was all but nil. However, after an absence of some time, they took a stand at the year's London Motor Cycle Show to display their engines, including a new, inline water-cooled 497cc dohc (52.5 x

57.4mm) four-cylinder unit. Designed by Joe Rolando (who had moved to JAP from MAG in the 1930s with Marchant) it was probably more appropriate for car racing and would enlarge to 750cc.

In the background, Villiers was carrying out limited work for JAP from circa 1949. JA Prestwich Industries Ltd was formed in 1951 combining JA Prestwich and Company Ltd and Pencils Ltd - and floated on the London stock exchange.

In 1957, Douglas and Teddy Prestwich resigned, ending the Prestwich association with JAP, by which time Villiers Engineering Company Ltd owned most shares. The Northumberland Park Engineering Works was closed in 1964 and the company liquidated the following year, when a box of catalogues, engine dockets, photos and other ephemera was given to Haringey Library. This was all the history that was left of this once great world-beating engine maker, condensed into a single large cardboard box. Very sad, because our JAP powered motorcycles are simply 'the business.'



Wrestling match

Excellent amateur picture of a big Ariel being overcome...

1961, comes this excellent picture captioned thus: "A picture that captures all the zest of scrambling by Peter Easton, of Standburn, Stirlingshire. The rider is Tommy Hughson and the venue Ryeflats Farm, Carstairs. Camera was a Rolleiflex, film F.P.3 (1/500s at f8)."

Photographs from readers were a big part of the magazine at the time, with hints and tips regularly given, while, as detailed, camera specifications and film used were also documented. Mr Easton's picture of Hughson is excellent, capturing the look on the rider's face as he thinks 'this has gone

rom *The Motor Cycle* of December 7, far enough' and has the throttle shut...

Hughson is riding what was fast becoming a dinosaur - an Ariel HS. Though the Gold Stars and G80 Matchlesses hung on in top level scrambling for a couple more years, the two-stroke and lightweight fourstrokes (so B40 based, Rickmans et al) were coming. The big, hefty Ariel, and the fitness workout it provided, was coming to a close.

While Ariel never enjoyed the success of others in scrambling (or indeed its own in trials) the factory competed for several years, listing the purposeful and handsome HS 1954 to 1959, the latter year being the one production of all four-stroke Ariels

ceased. On launch, the HS (which shared the all-alloy engine of its HT - T for trials, S for scrambles - sibling), boasted a 9.1:1 compression ratio and a claimed 33bhp, fitted with an Amal TT carb, those lasted just one year. Full-width hubs - like those fitted to Hughson's - came in 1956.

Tommy Hughson was the proprietor of a motorcycle shop, and, with his premises just along the road, he was heavily involved with the Edinburgh Monarchs speedway team. Tommy served as Monarchs' manager in the late 1960s, having earlier - as a small boy - been their 150cc JAP riding mascot. He died, aged 75, in January 2014.



Lithe and sparse

Superb sporting Ducati single

The Classic MotorCycle is brought to you by...

EDITOR

James Robinson Tel 01507 529405 Fax 01507 371066 email jrobinson@mortons.co.uk

REGULAR CONTRIBUTORS

Tim Britton, Rachael Clegg, Jonathan Hill, Roy Poynting, Richard Rosenthal, Martin Squires, Jerry Thurston, Andy Westlake

CONTRIBUTORS IN THIS ISSUE

Chris Cooling, Ian Kerr, Greg Pullen

PRODUCTION EDITOR

Sarah Wilkinson

ART EDITOR

Kelvin Clements

DESIGNER

Charlotte Fairman

PUBLISHER

Tim Hartley

DIVISIONAL ADVERTISING

MANAGER

Tom Lee

ADVERTISING

Sarah Mitchell-Savage Tel 01507 529418 email smitchell-savage@mortons.co.uk

SALES AND DISTRIBUTION

MANAGER

Carl Smith

MARKETING MANAGER

Charlotte Park

COMMERCIAL DIRECTOR

Nigel Hole

PUBLISHING DIRECTOR

Dan Savage

EDITORIAL ADDRESS

PO Box 99, Horncastle,

Lincolnshire LN9 6LZ

VISIT OUR WEBSITE www.classicmotorcycle.co.uk

GENERAL ENQUIRIES & BACK ISSUES

Tel 01507 529529, 24-hour answerphone email help@classicmagazines.co.uk www.classicmagazines.co.uk

ARCHIVE ENQUIRIES

Jane Skayman jskayman@mortons.co.uk Tel 01507 529423

SUBSCRIPTION

Full subscription rates (but see pages 12-13 for offer): (12 months 12 issues, inc post and packing) - UK £50.40. UK subscriptions are zero-rated for the purposes of Value Added Tax.

DISTRIBUTION

Marketforce (UK) Ltd, 3rd Floor, 161 Marsh Wall, London E14 9AP 0203 787 9001

NEXT ISSUE ADVERT DEADLINE

January 15, 2021

NEXT ISSUE ON SALE

February 5, 2021

THE CLASSIC MOTORCYCLE

(USPS: 710-470) is published monthly by Mortons Media Group Ltd, PO Box 99, Horncastle, Lincolnshire LN9 6LZ UK. USA subscriptions are \$63 per year from Motorsport Publications LLC, 7164 Cty Rd N #441, Bancroft WI 54921. Periodical Postage is paid at Bancroft, WI and additional entries. Postmaster: Send address changes to THE CLASSIC MOTORCYCLE, c/o Motorsport Publications LLC, 7164 Cty Rd N #441, Bancroft WI 54921. 715-572-4595 chris@classicbikebooks.com

PRINTED BY

William Gibbons & Sons, Wolverhampton.

© Mortons Media Group Ltd. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage retrieval system without prior permission in writing from the publisher. ISSN No 0263-0850













YESTERDAYS ANTIQUE MOTORCYCLES

Pannenweg 260, 6031 RK Nederweert, The Netherlands



1904 PEUGEOT 23/4 HP 353cc ..£23,350



1925 DOUGLAS 349cc MODEL CW





TRIUMPH MODEL X 174cc



1913 380cc



1928 AJS K7 349cc OHC£33,295



1929 NORTON MODEL 18 490cc



1920 SUNBEAM 31/2 HP 499cc .£14,250



1936 MOTO GUZZI GT 17



.....£83,500





1913 FN 500cc FOUR CYLINDER 1928 HENDERSON DE LUXE 1305cc 1920 REX 550cc MODEL 77.....£21,950

WANTED: Not only BROUGH SS 100, LÉON BOLLÉE, MEGOLA HILDEBRAND & WOLFMÜLLER, PENNINGTON, HOLDEN, but also any pre '40 500-1000cc SV, OHV, OHC and 4 cyl. Machines. All prices in GBP

WE HAVE 100+ BEAUTIFUL MACHINES, STILL TOO MANY TO LIST!

Due to the Brexit we reserve the right to change prices without prior notice

Tel: 0031 495 546054 Fax: 0031 495 526763 www.yesterdays.nl e-mail: office@yesterdays.nl Visitors by appointment. We ship worldwide at cost.