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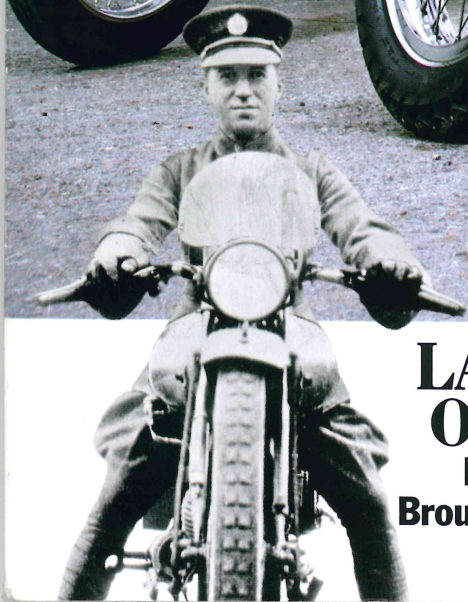
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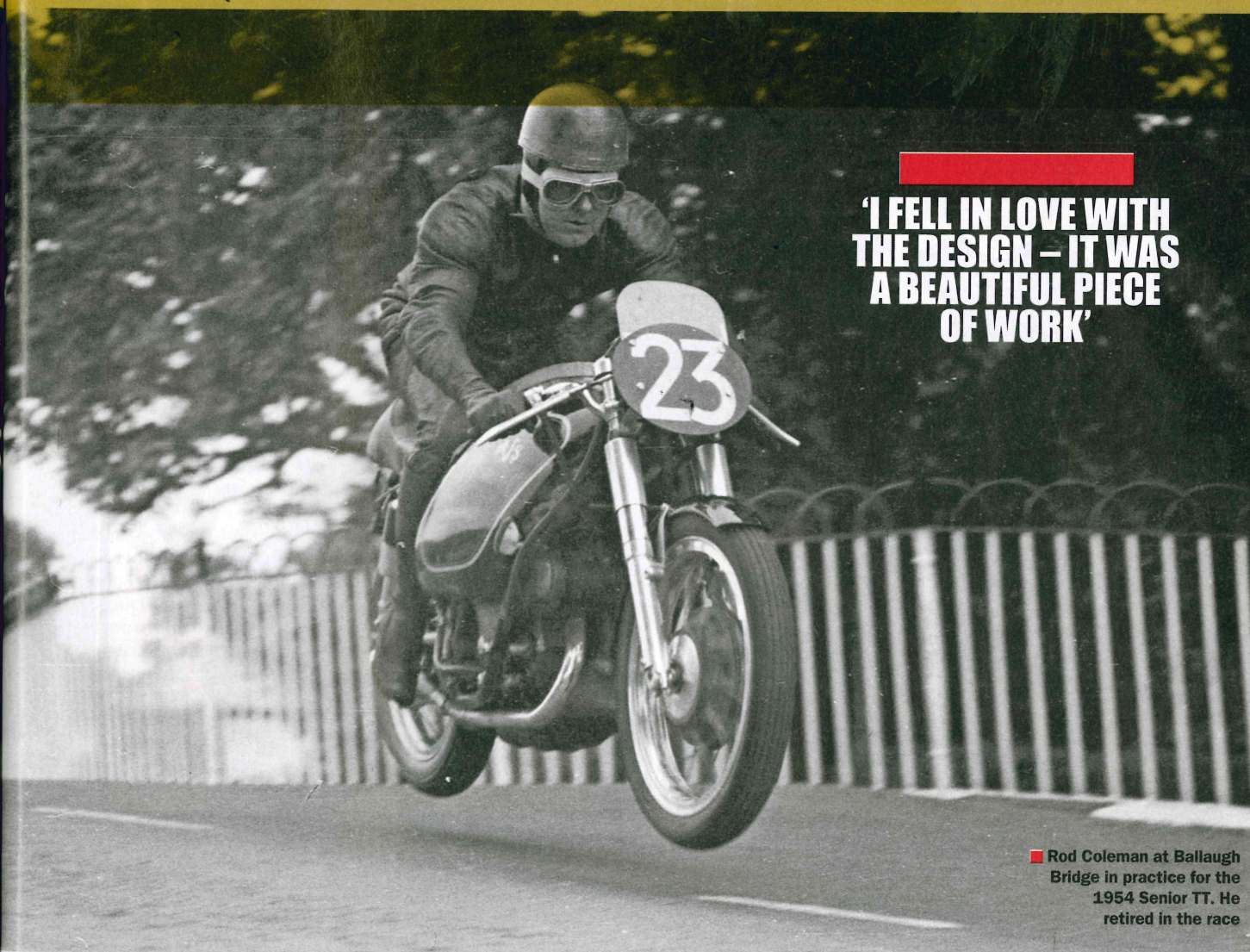
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'I FELL IN LOVE WITH THE DESIGN – IT WAS A BEAUTIFUL PIECE OF WORK'

■ Rod Coleman at Ballaugh Bridge in practice for the 1954 Senior TT. He retired in the race

RETURN *of the* PORCUPINE

The famed, double-overhead-cam AJS twin returns to the Mountain course after a 61-year-break thanks to the passion of one man, Robert Iannucci

WORDS: MIKE NICKS. PHOTOGRAPHY: TEAM OBSOLETE, TT FOTOFINDERS AND BAUER ARCHIVE

In 1954, Robert Iannucci was a nine-year-old boy growing up in New Jersey, just four years younger than Bruce Springsteen, absorbing the atmosphere of his home state and of blue-collar life in America that 'The Boss' would later express in his album 'Born in the USA'. In the same year, on a small island in the Irish Sea, the 500cc AJS E95 Porcupine was competing in its last Senior TT. For seven years, the Porcupines had contested the Isle of Man's premier race, without achieving a victory (the magneto failed on the last lap of the 1949 TT while leading).

The parallel-twin Porcupine had, however, booked its place in motorcycling history by winning the inaugural 500cc world championship in 1949, ridden by Les Graham, who was then 38. He beat opposition that included runner-up Nello Pagani, on a Gilera four, Moto Guzzi's 120-degree V-twin plus top riders on Manx Norton and Velocette singles. But Iannucci would know nothing of the Porcupine's history until nearly 20 years later.

In 1970, when he was 25, he bought a new 750cc Norton Commando while he was serving in the US Peace Corps in Barbados. This sparked his curiosity about the AMC group, which previously made the 500cc Matchless G50 and 350cc AJS 7R production racers, and also some limited-production, exotic GP racer bikes. They were perhaps the ultimate expressions of the classic British racing motorcycle, crafted by artisans from limited

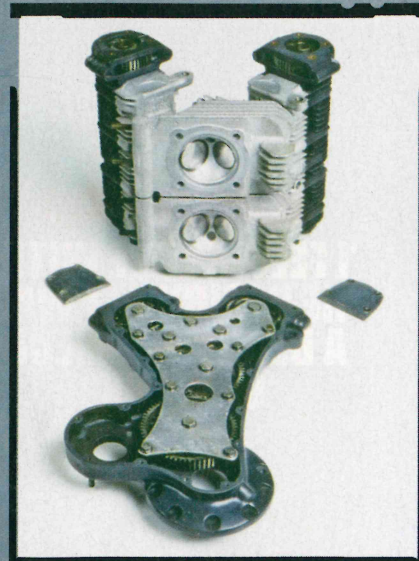
resources in a flagging industry.

"I became aware of the G50 in about 1971-72, when I saw an exploded drawing of the bike in an ancient copy of Cycle World magazine," Iannucci said. "I fell in love with the design – I thought it was a beautiful piece of work."

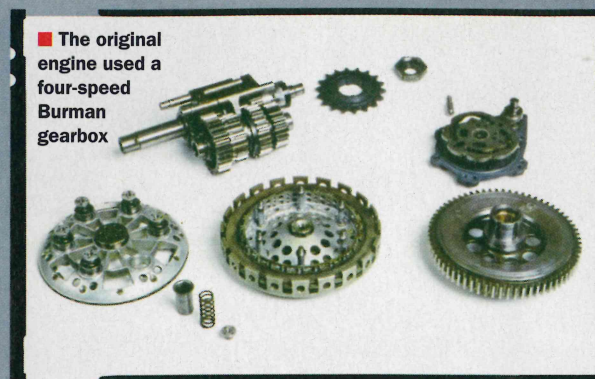
"The G50 is an infinitely adjustable engine, you can alter the squish band, ignition and cam timing, and the cam chain tension without making any parts or doing any machining or anything that is at all difficult."

"The Manx Norton is a crude engine compared to a G50 or 7R. The relationship between the G50's engine, gearbox and frame is also much more harmonious than in a Manx Norton. You can take a G50 engine out in 15 minutes, but a good mechanic would take an hour to do that with a Manx. It almost seems like the Manx's engine and frame were designed by two different committees who hated each other and never spoke."

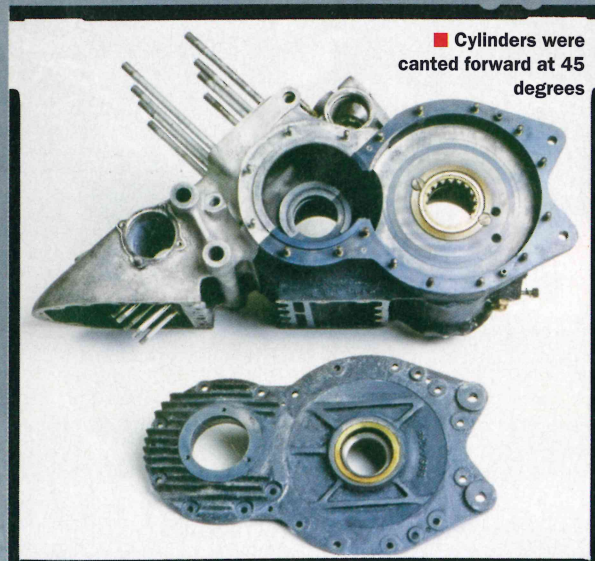
A popular image of collectors is that they splash unlimited cash to acquire the world's most exquisite motorcycles. But Iannucci started as a racer, not a collector (his Team Obsolete has competed in 1500 historic races worldwide!). He bought G50s when no one else wanted them. The lowest sum he paid for one was \$750, in the 1970s before the classic movement started – but even that was a lot of money for a young man who was then starting a career as an Assistant District Attorney. ▶▶



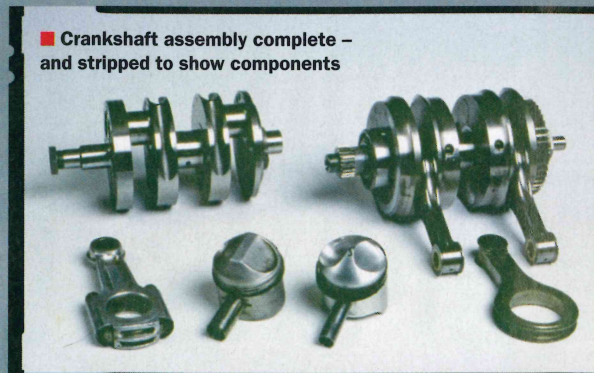
■ Porcupine used a train of gears to drive the twin overhead camshafts



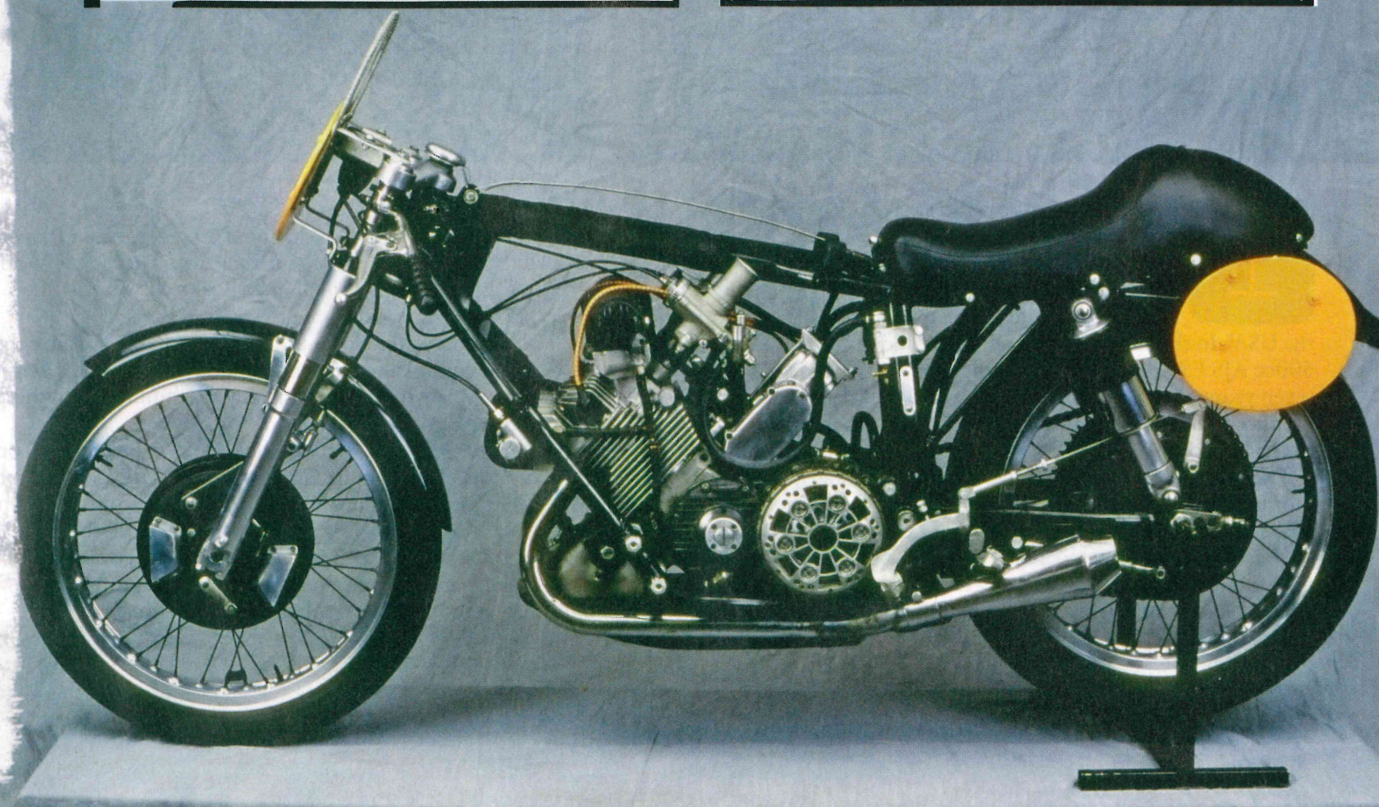
■ The original engine used a four-speed Burman gearbox



■ Cylinders were canted forward at 45 degrees



■ Crankshaft assembly complete – and stripped to show components



Iannucci's AMC passion became obsession. At various times he has owned two of the four 1973 ex-works Monocoque Nortons, all four of the 1954 AJS 7R3 triple knockers, and two of the four 1954 AJS E95 Porcupines!

His research into AMC then led him to what became his ultimate – the AJS Porcupine. When it was launched in 1947, the bike seemed innovative and modern – twin overhead camshafts, a horizontally-mounted engine with square bore and stroke dimensions, unit-construction engine and gearbox, magnesium engine cases, duplex frame, telescopic front suspension and swinging-arm rear end. The distinctive spike finning on the camboxes and barrels gave the bike its Porcupine nickname.

Les Graham almost won the 1949 Senior TT, the opening round of the newly instituted FIM World Championship: he led the 264-mile race until Hillberry on the last lap, when the magneto drive broke. He pushed the final two miles for 10th. Graham went on to win the Swiss and Ulster GPs, and finished second in the Dutch TT. With a rider's best three scores from six rounds counting, AJS won the riders' and manufacturers' titles!

However, due to a lack of funding, AJS was unable to apply to the Porcupine the relentless, continuous development necessary to achieve total success in racing. The Porcupine retained AMC rear suspension components, when better pieces were available from specialist makers, and retained a four-speed Burman gearbox when other teams were benefitting from five-speeders.

The bike was revamped in 1952 as the E95, when the cylinders were canted at 45 degrees and the engine adopted more conventional finning, although it would still be known as the Porc. But the bike struggled behind the dominant Gileras.

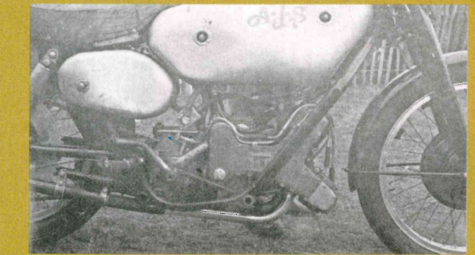
For 1954, Jack Williams, the AMC's newly-arrived development engineer, gave the Porcupine a lower frame and the handsome semi-pannier fuel tank, with a weir-system fuel supply. Unfortunately, the Porcupine programme was cancelled at the end of 1954, before Jack could begin working on the engine.

Iannucci said: "They were built on limited budgets by very passionate men, and were extremely beautiful machines to my eye, much more feline than the Manx Norton, by comparison."

Only four complete E90s were ever made (two survive), and four E95s. But in 1983, Iannucci got the chance to buy a 1954 ▶▶



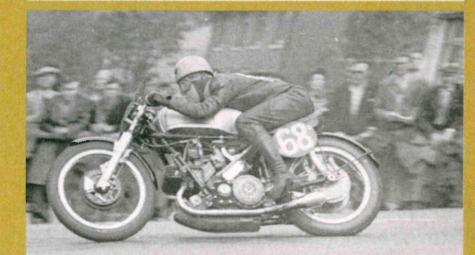
PORCUPINE TIMELINE



1947 E90 launched, with just 37bhp from 70-octane fuel



1949 Les Graham wins inaugural 500cc world championship on a Porc



1952 E95 version launched

1954 AMC, owner of AJS, Matchless and Norton, quits factory racing

1964 Tuner Tom Arter brings an E95 to the TT, but the bike doesn't race



1979 Road racing show, Alexandra Palace

1983 Team Obsolete's Robert Iannucci buys a 1954 Porcupine, minus engine internals

1983 TO reunites AMC engineers Vic Webb and Matt Wright with E95



2000 Iannucci buys E95 engine at Stafford Show auction

2000 TO E95 debuts in parades at Scarborough Gold Cup, followed by

■ Rod Coleman in short-circuit action on the Porcupine at Aintree, 1954

'IT'S NOT ABOUT RESULTS... IT'S THE STUFF THAT DREAMS ARE MADE OF'

E95, minus some engine internals, from the British collector John Griffith's son Steve. "Looking back, the price was a joke – so small," he said. "Even so, I didn't have all the money. But I said 'yes,' and set about looking for the money." Alf Mountford, a racing sponsor and good friend, supplied the missing funds.

Iannucci then conceived a wildly altruistic dream – to build two complete sets of Porcupine motor internals, one for parades, and another one modified for classic racing. He went to intense trouble and expense, tracking down Matt Wright, AMC's chief development engineer from 1948-52, and Vic Webb, the Porcupine's chief designer, and inviting them to a project meeting, that he hosted, in London in December 1983.

Also present were the John Player Norton rider/engineer Peter Williams, son of Jack Williams, who worked on the 1954 Porcupine, JPN technician Norman White, and gearbox maker Rod Quaife. The plan was to update original drawings that Webb brought along, so that all the missing parts could be made.

Even Iannucci's passion could not turn the dream into reality: the practical problems and expense were just too great. And Team Obsolete's huge G-50/7R race programme was a distraction. So his Porcupine sat for around 15 years, until a complete engine, previously owned by the Kent tuner Tom Arter, was auctioned in 2000. Iannucci bought it for large money, and installed the internals in the bike he already owned.

The E95 made its debut at Scarborough 2000, followed by Goodwood, and Daytona. Riders were Stuart Graham, Colin Seeley, and Dave Roper. The AMC Gods were pleased.

Now this piece of iconic British racing history is returning to the Mountain circuit, 61 years after the factory AJS team last campaigned it at the TT.

The Porc suffered the handicap of having originally been designed for supercharging – the blower would have fitted on top of the horizontal engine. But supercharging was then banned, leaving the Porc with inherent design handicaps. It lacked shallower, faster-burning combustion chambers, with narrower valve angles, of its rivals, for example.

In 1954, Jack Williams, AMC's then development engineer, gave the Porcupine a lower frame and the handsome semi-pannier fuel tank, with a weir-system fuel supply. But the Porcupine programme was cut before he could work on the engine.

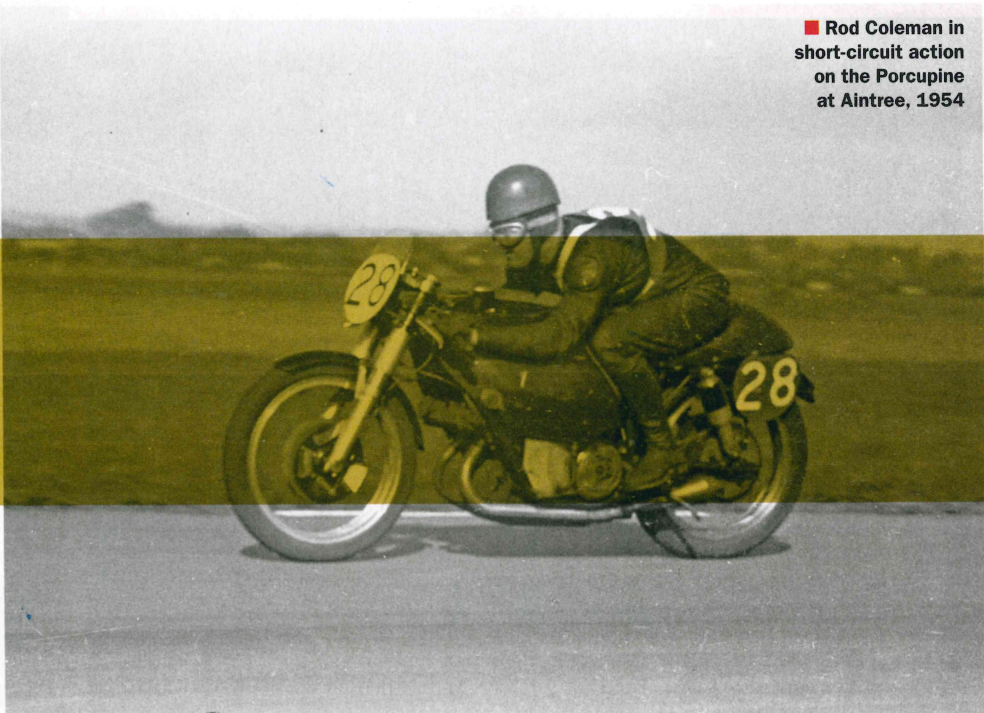
Iannucci, however, remains a passionate fan of the only factory multi-cylinder bike to emerge from the British industry in the post-war years. "The Porcupine and the 7R3 Triple Knocker (a three-valve 7R single) were the Holy

Grail. Few of them were made, and they were so innovative," he said. "Fewer still have survived, and the machines seem to have this 'almost there but not quite' existence (the 7R3 won the 1954 Junior TT). For me, it's not about racing results. The 1954 E95 remains arguably the most beautiful, iconic, grand prix racer of all time. I've spent years in pursuit of parts and technical know-how to restore this bike to run it on the famed 37.73-mile Mountain course once more. It's the stuff that dreams are made of."

Iannucci accepts, however, that one of the great unanswered questions in the history of AJS is what Williams could have done with the Porcupine and the 7R3 if development had continued. "He ultimately got 41bhp from the two-valve 7R and 52bhp from the G50. He would have likely achieved 60bhp from the Porc."

Would it have been enough to rein in the ill-handling Gileras? If Team Obsolete ever decides to seriously race the Porcupine, we can perhaps reach our own conclusion.

For now, when Team Obsolete's Porcupine takes part in the Classic TT Lap of Honour on August 31, ridden by Team Obsolete's regular pilot Dave Roper, and in the Jurby festival the day before, we will at least have an iconic preview, 61 years later. **CB**



■ Dave Roper will ride the Porcupine on the TT course