



The 1953 Bristol 404 Prototype

The 1950's was a decade of reinvention and reimagination.

Necessity being the mother of invention, six years of devastating global conflict had accelerated the birth of new ideas, technologies and engineering as never before.

This was the age of the jet and the atom.

The space race had begun in earnest, the Festival of Britain had introduced a little colour and light to a nation still wearily monochrome and austere, a new Elizabethan age had dawned, and Hillary and Tenzing had stood on the roof of the world.

People dared to hope.

It was an era in which imagination and ambition were, as yet, unhindered by management consultancy mindsets and risk-averse corporate culture.

It was a decade in which free thinkers, mavericks, visionaries and iconoclasts had the freedom to fail, succeed and, just occasionally, redefine what was thought possible.

The Bristol 404 was one such glorious, imaginative, brave leap of faith.

Created in parallel with the Le Mans class-winning Bristol 450, the 404 was a showcase for the best technologies of the day.

It was also a beautiful, tangible, visceral manifestation of Bristol's fundamental ethos and purpose: the pursuit of excellence in everything.

Born of the passion and genius of some of the foremost engineers and aerodynamicists of the day, people whose skills almost uniquely spanned the complementary worlds of aeronautical and automotive engineering, it was a landmark in British automotive development and one that helped pave the way for generations of cars to follow.

This is the fully restored, original, working prototype of that car – the only one in existence.

It has full, current, FIVA certification.



A Unique Car

When Nicholas Gatehouse bought this 404 - RAE 345 - in 2020, he already knew that he was buying a rare car.

After all, only 52 Bristol 404s are known to have been made.

Once he started looking over the car in detail, he noticed various internal fixtures and mounts that at first defied explanation.

He looked at the history and delved deep into the car's ownership records. There had been seven previous owners, one was Bristol Cars Limited and another, Sir George Stanley Middleton White, Chairman of Bristol Cars and scion of the family who had founded and run the Bristol Aeroplane Company since its inception in 1910.

It gradually became clear that this car was beyond rare.

The structures and mounts were there to support a sweeping vertical fin that had only ever featured on one 404, the unique and definitive 404 prototype - a vehicle deserving of a very special place in the annals of British automotive engineering.

The size and shape of the fin was known from period images and it was clear from the position of the mounting points that it was upscaled to match the smaller, rear corner fins.

IN Racing of Nottingham (the country's foremost Bristol engineers) were entrusted with the task of fabricating and fitting a new fin to the precise specifications of the original.

It transpires that the current Sir George White (son of Sir George Stanley Middleton White), fondly remembers being driven to and from prep school in RAE 345

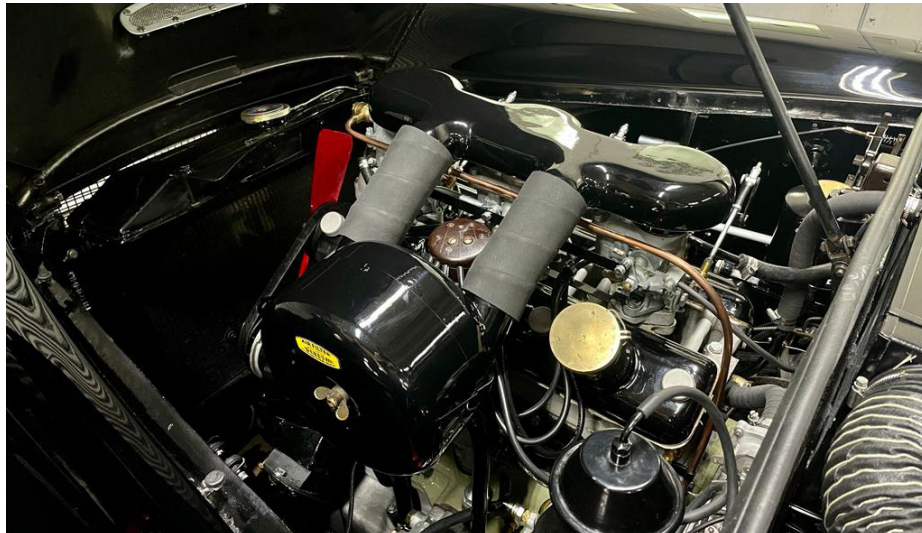
...a sleek dark car with a huge rear fin.



He recalls that it was particularly successful in elevating his kudos and street credibility among his schoolboy peers.

IN Racing were additionally commissioned to undertake a thorough overhaul of the vehicle, which had last been restored, refurbished and repainted in 1965 by Bristol themselves.

The engine was stripped and rebuilt, as were the rest of the drivetrain and mechanicals, including braking, exhaust, suspension and cooling systems.



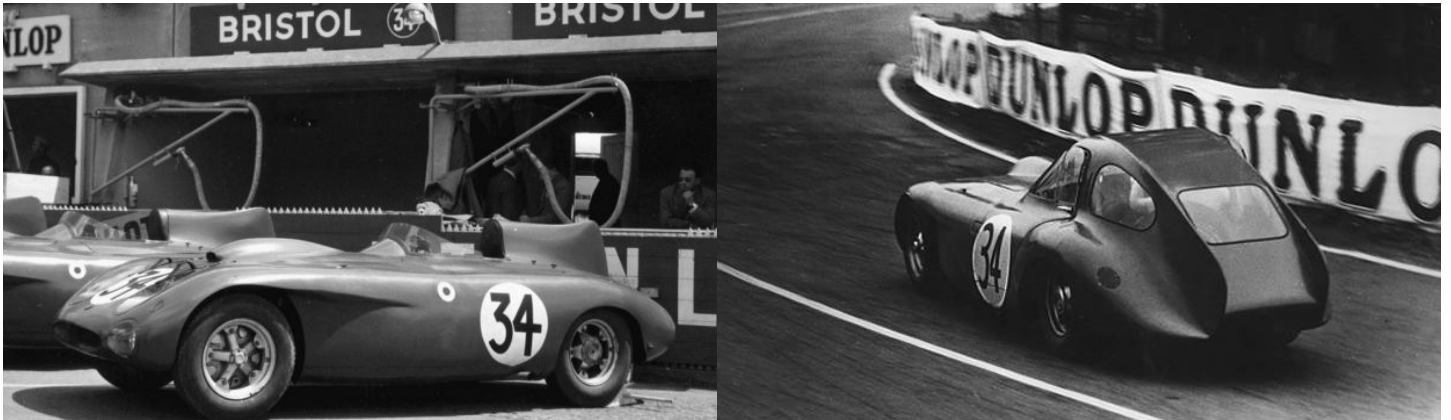
The objective was to optimise the car for regular driving whilst sympathetically and sensitively retaining the detail, patina and character of this irreplaceable car, both inside and out. The 1965 paint remains, and is testament to the skills of the Bristol artisans who applied it.



A Place in History

This car, the definitive prototype of the 404, was developed in tandem with Bristol's Le Mans winning 450 cars.

The 1953 450s had two large rear fins, the 1954 cars just one central fin, and the 1955 cars had a fin that ran to the back of the car from the driver's headrest – much like the D Type.



The relationship between the racing cars and the nascent 404 ('the Businessman's Express' as it became known) was truly symbiotic, and many technologies and ideas crossed from one to the other, in both directions.

For example, the 450 racers made innovative use of the space inside the front wings to accommodate twin fuel tanks.

And the 404 became the first Bristol car to feature what would become the marque's idiosyncratic predilection for placing the spare wheel, battery and tools inside the front wings.



When one thinks of Le Mans and victories hard won by cars that bore distinctive aerodynamic fins, the Jaguar D Type of 1954 springs inexorably to mind.

But the Bristol 450 was ably demonstrating the benefits of aero fin technology at Le Mans in 1953.

The fin on the D Type was the work of Malcolm Sayer, a man who had worked with the Bristol Aeroplane Company during the war and later acknowledged his debt to the company's aeronautical design heritage.

RAE 345 played a key role in developing and testing the aero fin potential for the 450 racers, for the road-going 404s that followed, and for many future generations of aerodynamically enhanced cars.

The lower body mixed aluminium and steel, with a honeycomb sandwich construction for the rear floor.

The upper structure formed a canopy from a wooden framework and door pillars, with the whole encased in aluminium.

The vehicle became a very familiar sight across Bristol's huge Filton site because, throughout its life as a test bed, an experimental platform, and even an unlikely school conveyance for the young 4th Baronet, RAE 345 was constantly evolving.

It went to and from Bristol's aeronautical and automotive engineering departments for engine upgrades, braking enhancements, a tweak here and a fettle there.

It was always a work in progress, a laboratory for radical new thinking, a palimpsest upon which new and better ideas were repeatedly scribbled over the fading outlines of previous thoughts and suggestions.

All of this experimentation and development is documented in the factory service records and many of the innovative parts fitted, like the short ratio gearbox, remain on the car to this day.

An Extraordinary Heritage

To the uninitiated, Bristol cars might seem rather anachronistic today.

Perhaps they summon up a whiff of tweed and gun oil, Brylcreem and Acqua di Parma, or saddle soap and pipe smoke.

They are of the past. They are heritage. They are yesterday.



**Nothing about the cars or the Bristol brand
could be further from the truth.**

Orville and Wilbur Wright made the first powered flight in 1903.

In 1909, George White (the 1st baronet and founder of what would become the Bristol empire) saw Wilbur Wright flying in Paris.

Less than a year later he had set up the British & Colonial Aeroplane Company, which became the Bristol Aeroplane company, and began producing the Bristol Boxkite in 1910.



Incredibly, his son, Sir George Stanley Middleton White, saw in his lifetime a company that went from producing the WWI Bristol Boxkite, made of Egyptian cotton, wood and piano wire to much of the design work and technical drawings for Concorde.

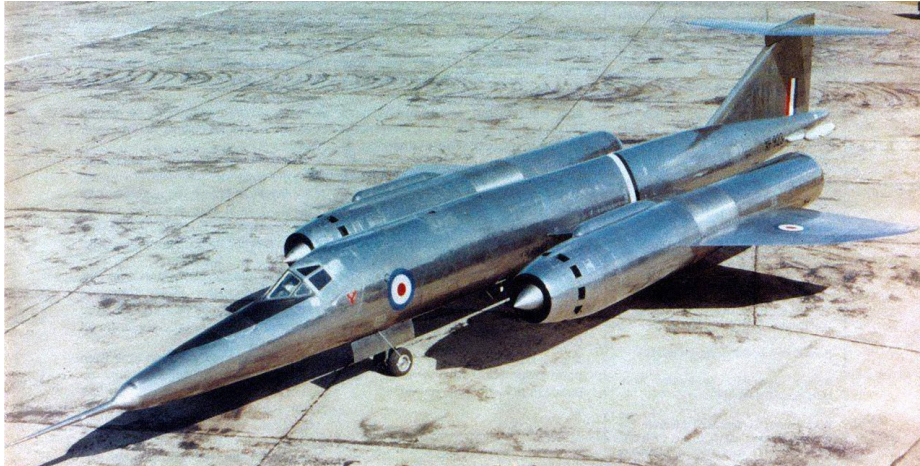


In between, Bristol produced some of the most successful aircraft of WWI and many of the legendary bombers and fighters of WWII.

By the time war broke out in 1939, the Bristol works at Filton were the largest single aircraft manufacturing unit in the world, with a floor area of almost 2,691,000 square feet.



Bristol went on to produce transatlantic airliners in the 1950s and the nearly Mach 2 Bristol 188 jet of the early 1960s.



Famously, Bristol also created the Brabazon, an aeronautical behemoth of simply staggering proportions – and a technological marvel whose chances of commercial viability, regrettably, were over before they'd begun.

The Brabazon was the largest plane ever built in Britain. Fully loaded, it weighed 130 tons. It was 177 feet long and had a wingspan that exceeded that of a Boeing 747 by 35 feet. It was powered by eight engines, driving contrarotating propellers.

It could carry 100 passengers, seated in individual private sleeper cabins, and a crew of around six. The plane featured a bar, smoking lounge, dining area and a 32-seat cinema.

It successfully took to the skies for the first time in 1949.

There are good arguments for considering the Brabazon to be little short of a technological miracle and, arguably, the forerunner of the modern jumbo jet or A380.

The 404 took the design cues for its grille from the Brabazon's air intakes.



Throughout its long and illustrious history, Bristol was at the cutting edge of innovative engineering and technological development.

From aeroplanes, trams, buses, trucks and helicopters to pre-fabricated houses, missiles, marine craft, composite materials....and, of course, cars....Bristol embraced the future like few other companies and pioneered a path for others to follow.



Bristol cars were always unapologetically modern and mould-breaking. Even today, 400-series cars look as if they've been designed by people who've never seen a car before.

And that's deliberate.

These people were working from first principles, they were challenging every aspect of accepted wisdom when it came to automotive engineering.

Aerodynamic, flowing, sculpted aluminium bodies, push-button doors, internal bonnet/boot releases, fresh-air or recirculated heating/ventilation, automatic reversing lights, multi-adjustable seats, alloy petrol tanks, spare wheel and battery concealed in the front wings....the list of Bristol innovations goes on and on.

They must have made other cars of the time seem positively antiquarian.

And the Bristol legacy is alive and well even today.

Its helicopter division became part of Westland (now Leonardo), its aero engine division part of Rolls-Royce, and The Bristol Aeroplane Company itself became part of BAC, which became part of British Aerospace, which became part of what is now BAE Systems.

Postscript

A few years ago, the current Sir George was driving back home in his personal 404 after attending a Royal event.

The elderly gentleman who was fast asleep in the passenger seat had been one of the first Bristol engineers Sir George remembered from his youth at Filton.

The retired engineer woke up suddenly and said, "We did make the best cars in the world, didn't we, Sir George?"

Before Sir George could answer, he added, "I really think we did. We used multi-coloured rivets to show where we'd joined different metals or thicknesses of materials. Nobody else did that. Nobody else made aeroplanes. We just did things better."

At £3,330 in October 1954, including Purchase Tax, the 404 was twice the price of a Jaguar XK140 and considerably more expensive than an Aston Martin DB2/4.

Not bad value for the best car in the world.

