T57G Overview

THE BUGATTI TYPE 57G 'Tank' racing car of 1936 was essentially a Grand Prix version of the 3.3-litre T57S sports car exhibited in October 1935, which, in turn, had evolved from the T57 touring car debuted in October 1933, and was being supplied by March 1934. The T57 touring model was the zenith of a long line of earlier models to have emerged from the factory in Molsheim, in the Alsace region of France. Specifically, though, the T57 was developed to replace the outmoded single-camshaft Type 49, but was arranged on a longer, 3.3m wheelbase chassis. However, unlike its predecessors, which had been principally directed by the hand of Ettore Bugatti, the T57 was fashioned under the supervision of his highly talented eldest son, Jean, who, at the age of just 23, had been given a very high level of autonomy to produce a more modern, luxurious, state of the art, fast touring car that would secure the future of the family business. Jean seems very young to have been handed this important duty, until one considers that his father established himself as a motor manufacturer at the tender age of just 19.

Whilst the parentage of the Type 57 is familiar, its composition differed dramatically from all of Ettore Bugatti's earlier practices, where the only material T49 element shared with the T57 was the rear axle; and that was for the first season only. However, the T57 engine retained the T49's 3.3-litre capacity, 72mm x 100mm bore/stroke aspect, better-balanced 2-4-2 crank timing, and a firing order of 1.6.2.5.8.3.7.4.

Now with a valve-included-angle of 96°, and valves operated through low-inertia fingers, the twin overhead camshaft engine was a totally new design from end to end.

It produced almost 50% more power, and was the quietest and most flexibly ranged ever made by Automobiles Bugatti. This new power unit was able to span commercial utility from luxury town carriage to Grand Prix racing car. The T57 was fitted with a completely new constant mesh gearbox, which, for the very first time at Molsheim, was in unit with its engine. The design office was clearly under new management. Here, Jean's undertaking was necessarily tempered by an urgent need to apply a more economic approach to manufacture and marketing, in order to meet the challenging world financial slump that swept into France at the beginning of that decade.

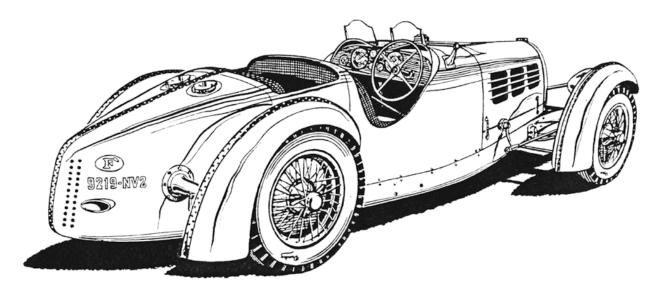
Depression in France

The Wall Street Crash of October 24, 1929, and the subsequent world depression, did not noticeably affect France until the summer of 1931. However, once this belated slump took hold, car production throughout the country quickly dwindled to a third of its earlier output. For Automobiles Bugatti, this meant an urgent rationalization of a wide range of enterprises that included its racing activities as well as car manufacture. Before long, the workforce of around 1200 was reluctantly halved, with the remainder limited to a 24-hour-week subsistence wage. Providentially for those employees and the company, welcome respite came in the form of French government intervention that granted contracts to several French motor companies, including Bugatti, to design and build advanced high-speed railcars for the state-owned railways.

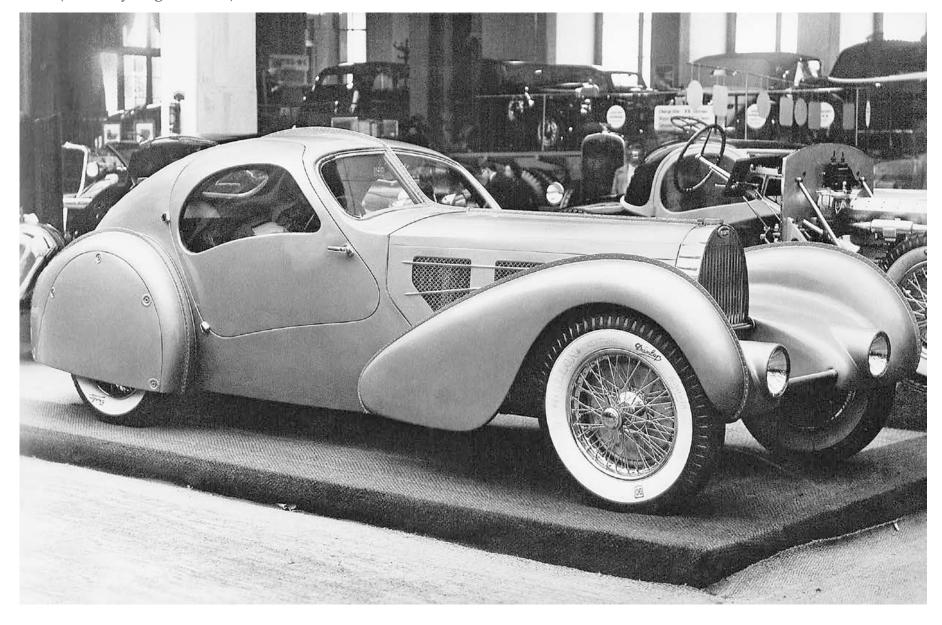
In the spring of 1932, whilst still retaining overall responsibility

1 T57G Overview

Illustration of the 1935 Type 57S Torpedo by John Dunscombe. Note the 'gondola' chassis. (Courtesy Bugatti Trust)

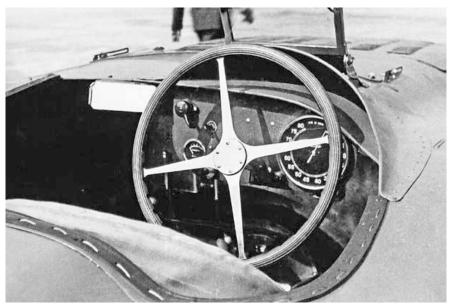


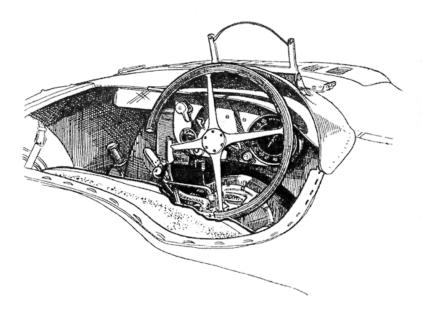
The futuristic Type 57S Aérolithe at the Paris Salon, 1935. (Courtesy Bugatti Trust)



3 1936 Grand Prix de l'ACF







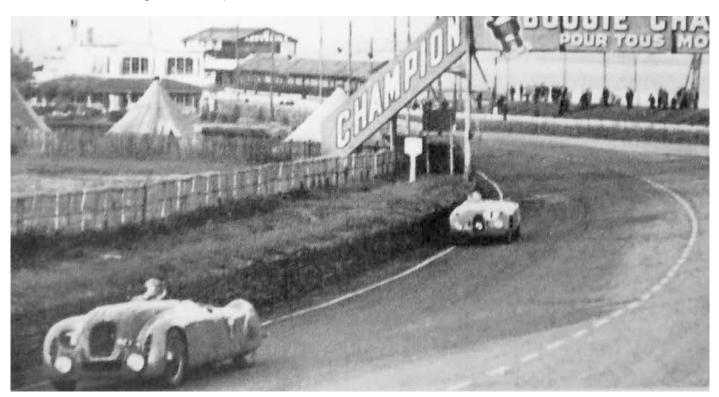
Bugatti Type 57 Grand Prix – A Celebration

for the Bugatti team, the physical and mental strain of the overnight engine rebuild had taken its toll on everyone. including Jean-Pierre Wimille. Observers remarked that he was unusually quiet and appeared ashen and unwell. When the flag dropped, the Talbot of Luigi Chinetti quickly went into the lead, and almost immediately, the Alfa-Romeo of Sommer and Bira began misfiring, caused by a leaking cylinder-head gasket. Four hours into the race, Mazaud's Delahaye and Louis Gerard's Delage challenged each other for the lead, although Chinetti's Talbot seemed happy to remain third. Bugatti's strategy was intelligent and cautious, especially since the Tank's new pistons and rings were still technically 'running in,' maintaining a steady fourth. The Delage-Delahaye-Talbot fight for the lead went on until 2.00am, when the Delahaye broke the lap record, but it then caught fire and burned out within sight of everyone in the grandstands.

Shortly after this misadventure, the Talbot, now driven by Mathieson, left the road at Tertre Rouge having lost a tyre. Around 4.00am, the Bugatti was just one lap behind the Delage when it also lost a tyre, damaging both the wheel and telescopic damper. Veyron stopped briefly on the Mulsanne Straight to assess the situation before carefully driving into the pits for repairs. This task took longer than expected, so, when

he finally got away from the pit-counter, the Bugatti was five laps behind the leader, having dropped back to sixth place. When Wimille took over, he steadily increased the pace so that by 10.00am, he was in second position and just three laps behind the Delage. The Bugatti continued toward a close finish, but then around 1.00pm, the Delage began misfiring, forcing Gerard into the pits for a plug change. He was quickly out again, but still misfiring. Upon returning to the pits the mechanics found that a valve-spring had broken. Nevertheless, Gerard continued, his Delage still misfiring but with very little chance of getting ahead unless the Bugatti broke down, too. However, as optimistically asserted in racing circles, 'No race is lost or won until the chequered flag has fallen.'

By 4.00pm, it was clear that race attrition had been considerable; there were only fifteen finishers from the original 42 starters. The Bugatti was three laps ahead of the Delage, exceeding its own 1937 record distance by 66km (41 miles), completing 3354.65km (2084.54 miles), averaging a speed of 139.78km/h (96.74mph). Jean Bugatti declared that the engine cover was never opened during the race. The fuel consumption had averaged 26 litres/100km (10.8mpg) on pump-standard 80-octane 'ESSO' (Ethyl), and the distance record set in 24 hours remained unbroken until 1950. Wimille had, yet again,



Postcard showing two 'Tanks' at the 1939 Le Mans. (Courtesy NMT Collection)

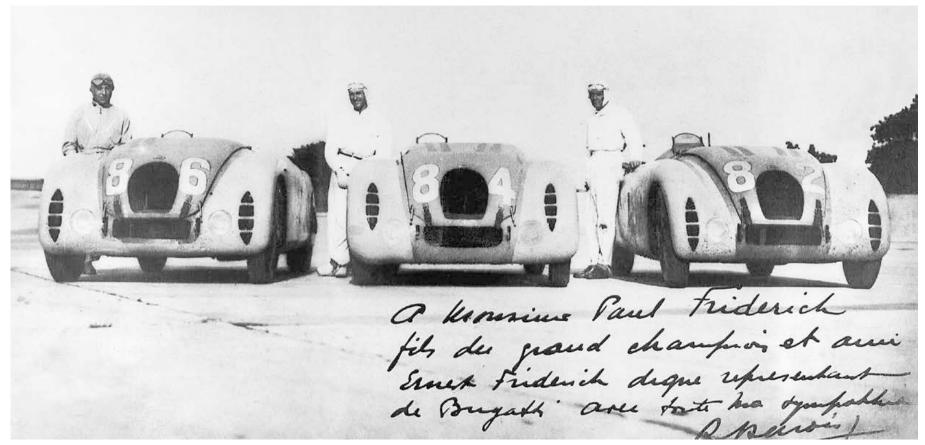
superbly researched book *The French Sports Car Revolution*, the source of the four-car story derives from a dinner in Paris, shared by Bugatti's principal works driver-cum-sales director Robert Benoist and motoring journalist Maurice Henry. Here, the very first revelation about the T57G Tanks' existence and their entry into the June 28, 1936 French Grand Prix (ACF), was made known through a small note published in the May 25 edition of *L'Auto*. Here Benoist acknowledged:

"Yes, it's true, we are building four cars of the current 57S model, and you will see three of them at the Grand Prix next month."

Such a public assertion should be reliable, for Benoist was highly placed within the organisation to know whether this was correct; and he was well regarded by the motoring press as an emissary for Bugatti, having previously acted as a spokesman on several occasions. Additionally, Jean Bugatti's plan to build four cars in time for the French Grand Prix is supported



The upturned Tank behind the western banking of the Montlhéry Autodrome. Note the absence of the rear quick-lift jacking bars. (Courtesy Bugatti Trust)



June 29, 1936 at Montlhéry. Note the differences between the bonnet lip, retaining straps, oil cooler air intake shape, wheelarch air intakes, and two-tone paint flash. (Courtesy Bugatti Trust)