

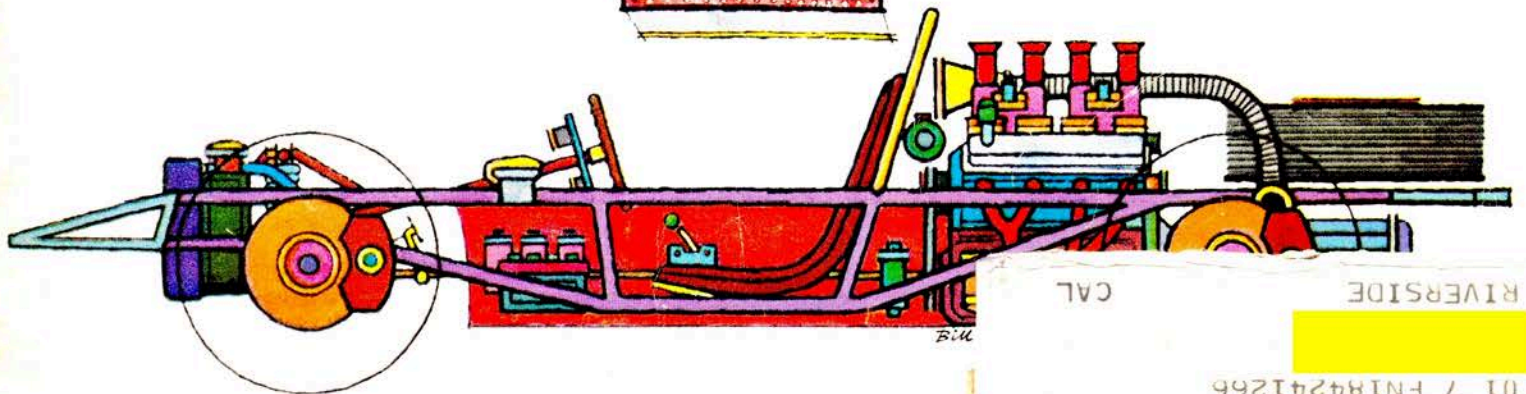
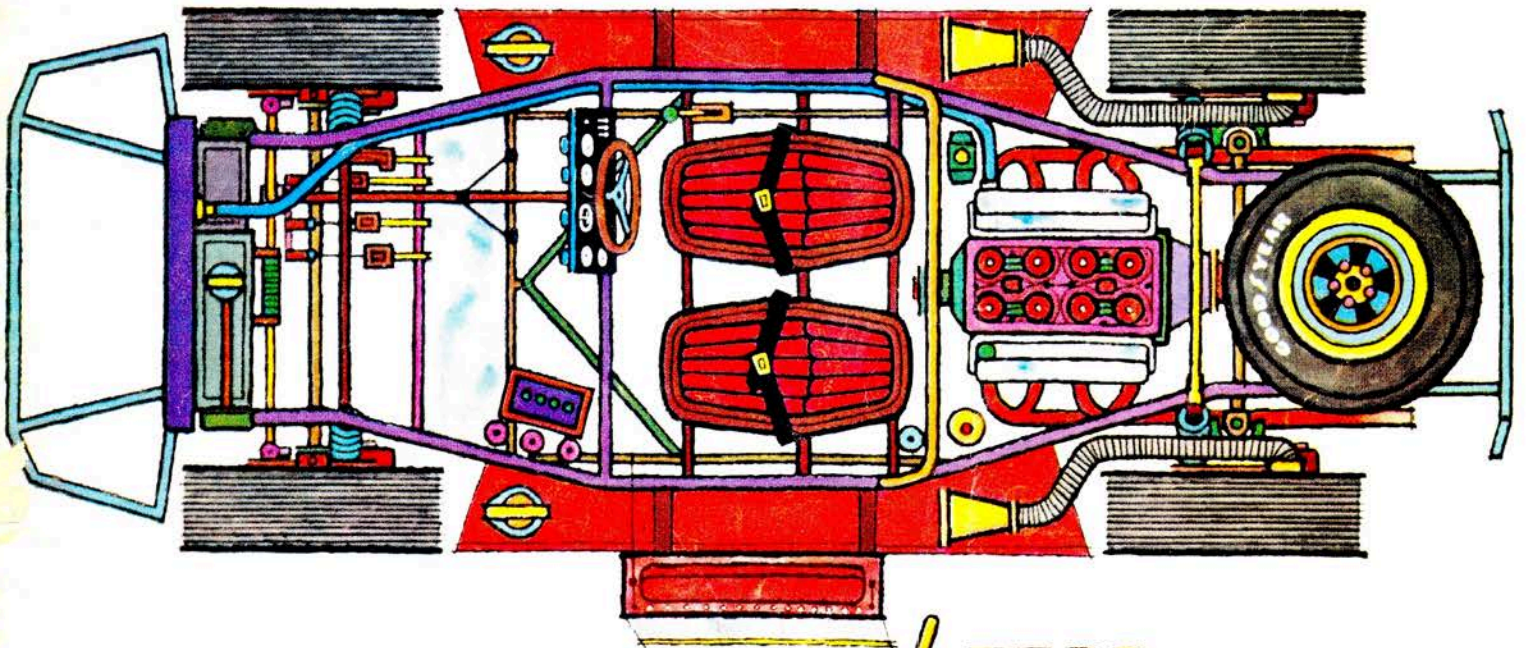
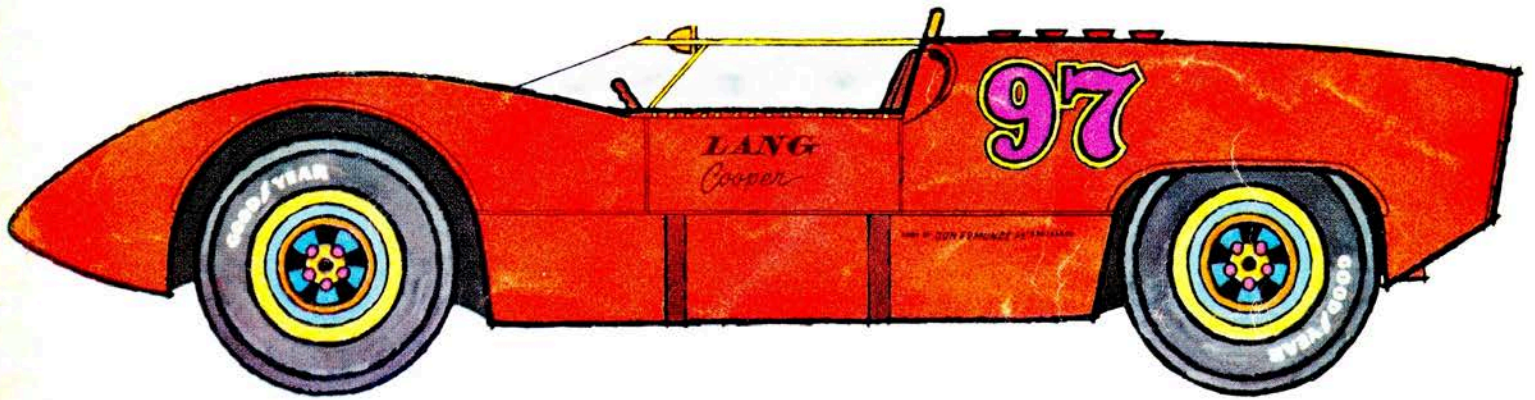
# SPORTS CAR

GRAPHIC

APRIL 1965 50¢



**SPECIAL RALLY ISSUE**  
**LONDON RACE CAR SHOW**  
**DESIGNING A NEW**  
**SPORTS/RACING CAR**



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*SPORTS/RACING CAR DESIGN:*

# SHELBY AMERICAN'S PETE BROCK

BY JERRY TITUS



## PETE BROCK

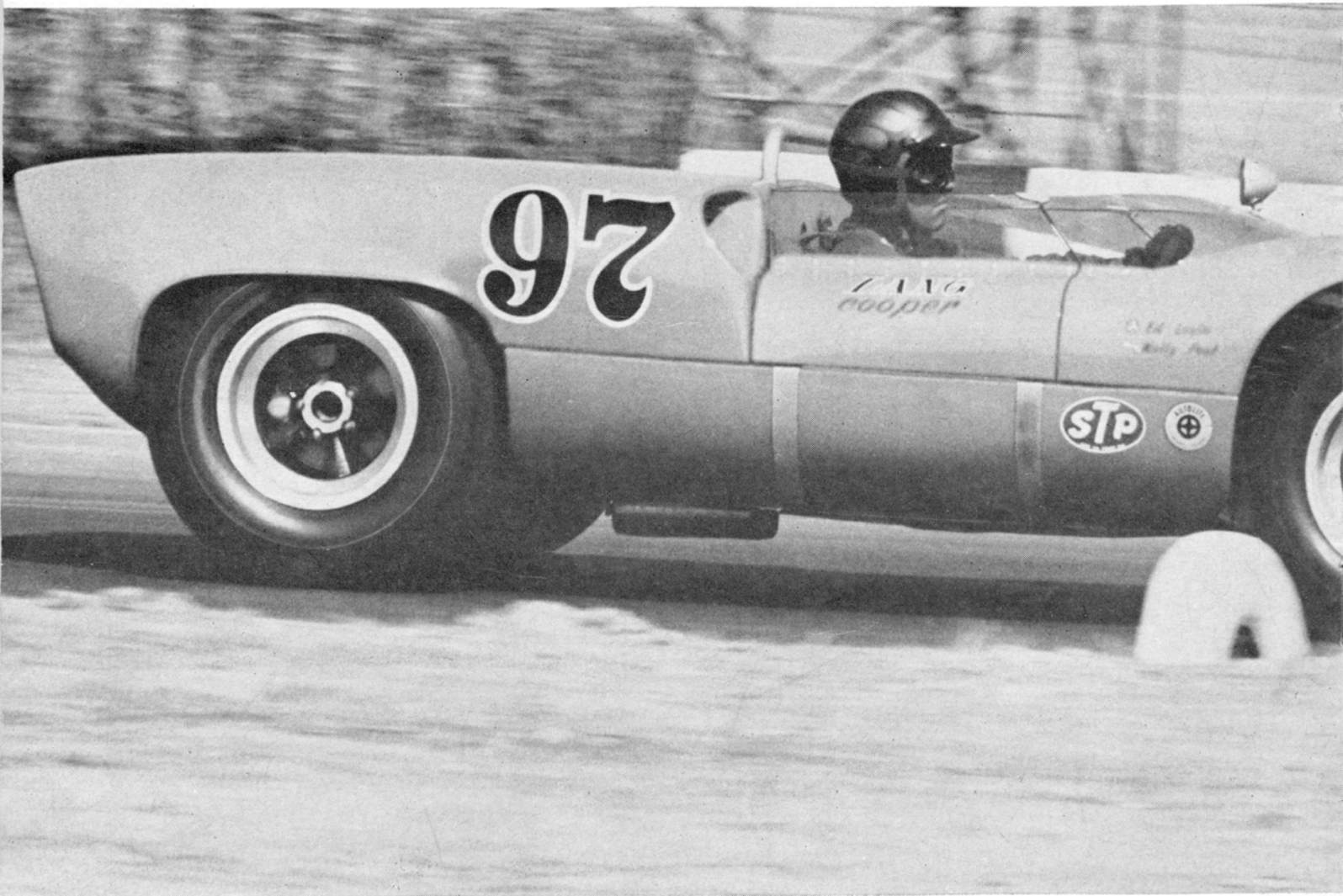
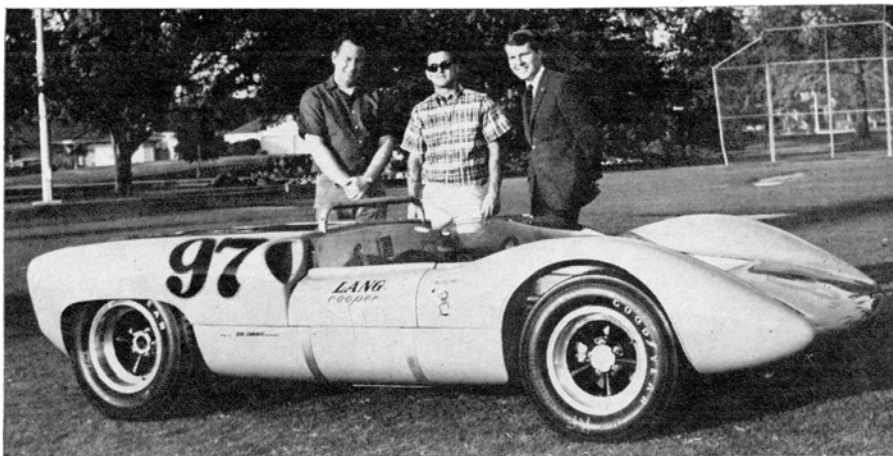
active in Southern California, so he settled in Los Angeles.

After several successful races in his well-prepared Cooper, he traded it for a Lotus 11. On his first outing with the new car, Pete tried to modify the Turn Six guard rail at Riverside and wound up with a basket case. Shaken, but not discouraged, he decided it was time to regroup and do the job right. The next move was to buy an old house on an acre-and-a-half adjacent to the Riverside facility. Pete soon made himself a fixture at the track, picking up odd driving jobs for movie footage, watching other drivers practice, analyzing what he saw and heard, and getting in a lot of track-time himself. Not very profitable, but it greatly accelerated his experience.

Enter Carroll Shelby. When the big Texan retired as a driver, he came out to Los Angeles with several ideas in mind. The first of these was the Shelby School of High Performance Driving. He met Pete at Riverside and was impressed with

the likeable young fellow's sincerity and enthusiasm. Further, he was able to express what he had painstakingly analyzed about driving. Soon Pete was helping Carroll with his students and today is the school's chief instructor. As the Cobra emerged as more than a gleam in Carroll's eye, Brock became Shelby-American's first employee...doing just about everything BUT design work, with the exception of an occasional brochure, ad, poster, or insignia.

After swamping its opposition on U.S. tracks, Shelby-American moved to take on the world's best. The need for an aerodynamic coupe became obvious if they were to be successful on such high-speed circuits as Daytona, Sebring, LeMans, and Rheims. Pete sharpened his pencil and at last returned to the drawing board. The first outing of the season, Daytona, was only weeks away. His design package was limited by the existing chassis, engine-location, seating



height, and that now-familiar bugaboo; Time. With only a practical background in aerodynamics based on observation and experimentation, he had to buck some theoretical opinions against his design. At one point, Carroll asked a well-known aircraft aerodynamicist to examine the drawings. "It won't work," he opined. Here Brock's strong loyalty to Shelby got another boost. "Carroll looked a little sick," he remembers, "but he never asked me to change a thing, just patted me on the back and said he sure hoped it worked." It did. The quickly rolled-out body was mounted on a beef-up chassis and, after a few frantic sorting-out laps at Riverside, was taken directly to Daytona, where its stability proved perfect.

A full lap ahead of its opposition at Daytona, Brock's coupe met disaster when it caught fire during a refueling stop and had to be retired. Refurbished, it went on to win the GT category at Sebring. It was at LeMans that the real test of aerodynamics came. With straightaway speeds exceeding the 180-mph barrier, the Ford GT and even Ferrari were having their fair share of problems. After the addition of a small

spoiler on the tail, the Cobra coupe was completely stable above this velocity. Proof of it came after Schissler crashed the Ford GT in trials, climbed into the Cobra only a couple of hours later and set a new lap record. He did this while bandaged and wired up, still very uncomfortable from the accident, indicating the security of the Cobra at high speed.

His ability proven, Brock was given the responsibility of future Cobra designs, along with some outside projects like the proposed DeTomaso. "I got a note from Carroll telling me to have the drawings ready in one week and deliver them to Italy myself." Pete arrived to find the dimensions changed quite a bit from the specifications he was sent and was forced to redesign on the spot. The original configuration wound up as the body for the Craig Lang Cooper. This handsome machine was admired by everyone who saw it last Fall when it appeared in the series of pro races. Duplicates of the shell were to be made for the Shelby team ex-Cooper "King Cobras," but this has been temporarily shelved during the development of the Ford GT, the GT350 Mustang, and the 427 Cobra.

Latest of Pete's efforts include an updated coupe design for the 427. He told us simply that this one would have less drag and improved internal ducting, but Ken Miles later commented that projected mathematics on the configuration indicated a top speed in the 240-mph neighborhood! Squat and fat, the coupe's lines exude efficiency as their prime purpose. Pete himself describes the appearance as "brutal", but we feel he's managed to include enough esthetics to make it handsome.

Married, with a 17-months-old son, Brock is only 28 years of age and can look forward to a bright future of doing exactly what he likes best. His staff is now a four-man unit and they're looking for more outside projects, currently dickering for a design contract on a Japanese sedan, with a couple of other interesting irons in the fire. One of these is the nearing-completion Nethercutt monocoque sports/racing car, Pete having accomplished the primary design. He is busy in his "spare" time acting as technical advisor and doing stunt film driving for film work. We predict it won't be long before you hear a LOT more about the talented Mr. Brock.



Upper left, body-builder Don Edmonds, owner Craig Lang, and Brock pose with justifiable pride next to the beautiful Lang Cooper/Cobra. It's shown in action below with Ed Leslie at the wheel. The shell will be duplicated on team cars. Directly above, Pete outlines details of the coupe body he's designed for the 427 Cobra to SCG's technical editor, Jerry Titus.



THE AUTOMOTIVE STYLING DEPARTMENT OF LOS ANGELES' ART CENTER SCHOOL has been turning out polished students for many years now. A large percentage of these go directly to Detroit studios upon graduation. Most of them soon digress to Product Design; things like toasters, drill motors, luggage, or similar uninspiring subjects. The remainder find themselves occupied with small segments of the automobile; instrument panels, tail lights, grills, and so on. Once their talent is proven, they learn a new definition of the word Stylist, as they become as deeply involved in the total design of the vehicle as the Engineering Department does. Simultaneously, they discover the stark and restrictive realism of a Corporate World, a world governed by Cost, Practicality, and Politics. To a crea-

tive mind, it is a frustrating experience that leaves three choices — conform, be permanently shelved, or quit.

A former Art Center student, Peter Brock wound up in General Motors Styling. Demonstrating his talent, he was soon involved in a project that ultimately evolved as the Corvette Sting Ray. In his spare time, he developed a design for a unique economy sports car; a fastback coupe on a 67-inch wheelbase that would sell for approximately one thousand dollars. This was in 1958 — the Era of the Whale in Detroit. But market research was already indicating a need for such a vehicle and Brock's superiors took an interest in his project, gave him the assistance to develop it to a full-sized fiberglass prototype that lacked only a powertrain. Pete's moment of truth arrived when the

car was displayed for management approval. Harlow Curtis, then GM President and Board Chairman, took one look, announced he didn't like small cars, and walked away. It was the proverbial kiss of death and the project, coded Cadet, was soon gathering dust. It is small consolation to Pete, after having his best efforts drop-kicked out the window so lightly, that the concept was later revised to the XP-79, which ultimately evolved as the Corvair.

It wasn't too long before a disenchanted Brock decided to load his 1100-cc bob-tailed Cooper on a trailer and head back to the West Coast. Schooled in San Francisco, he had become fully indoctrinated into the sports car field via admiration for one Nadeau Bourgeault, a local and very talented specials-builder. But Pete felt things were currently more

PHOTOS: DAVE FRIEDMAN — DARRYL NORENBURG

Driving-instructor/body designer Brock, at left, describes a cornering attitude to a student. At right, the Daytona coupe was his first drawing-board-to-track effort and, as the grin of Shelby's face reveals, it proved a real success in racing.

