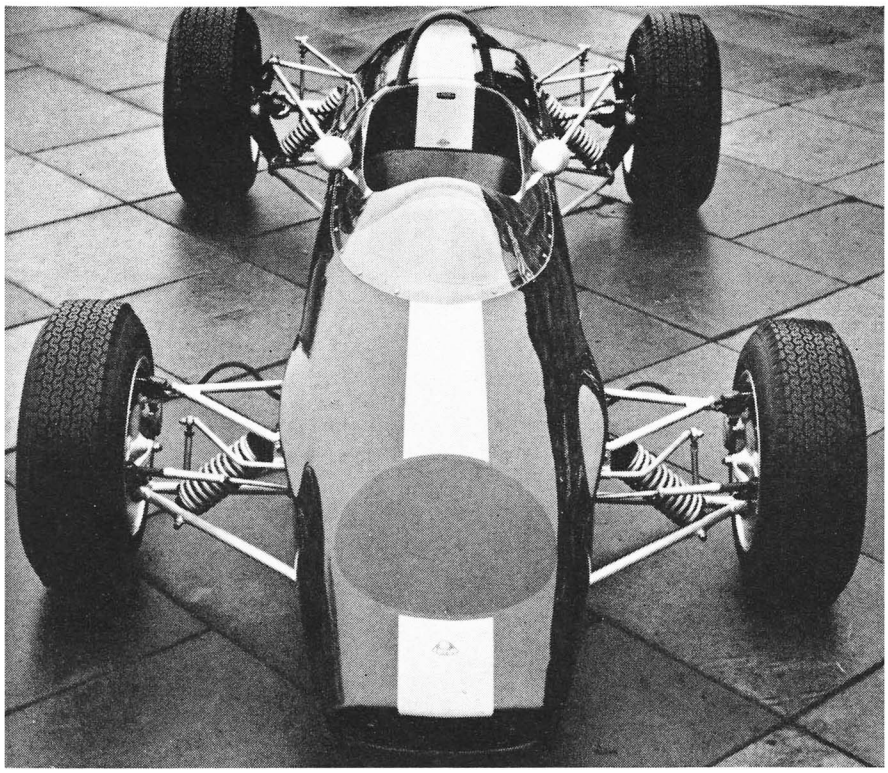
AUTOS ABROAD: GP UNCERTAINTY



LOTUS FORMULA II/III racer has multi-tubular construction instead of monocoque.

AT THIS moment, plans for most kinds of motoring sport are in a fantastic state of uncertainty, brought on by the numerous changes in regulations. On the Grand Prix front, everyone is hard at work on new cars which they hope will have roughly double the power of their 1965 predecessors, the ceiling on unsupercharged engine size having gone up from 1.5 to 3 liters (183 cu. in.). On the rally scene, more stringent rules about what counts as a "production touring car" and about what modifications can or cannot be made to it is in force for 1966 and I am just one of many folk who has paid $150 as entry fee for the Monte Carlo Rally without knowing for certain that the 1966-model car concerned will be ruled eligible!

More powerful Grand Prix racing cars for 1966 are certainly welcome. Beside tempting Maserati back into the business, the new formula has encouraged the Australians to design a V-8 racing engine. So far as rallies are concerned, the new rules encouraging events for more normal cars should also represent a change for the better, although enforcement of these rules will be terribly complicated.

CHASSIS DESIGN for road racing cars is nowadays influenced to a quite ridiculous extent by what Colin Chapman does. Even such factories as Ferrari tend to regard any new structural or suspension feature which appears on a racing Lotus as something which it is imperative to copy. Whether from a sense of humor or as an exercise in gamesmanship I cannot be sure, but in recent seasons Chapman has been leading his copyists a very merry old dance!

A few years ago, when virtually all racing cars had multi-tubular "space frame" chassis, Lotus introduced a so-called "monocoque" car which it had very secretly developed. It was a good design and it won races in spite of service and repair being more difficult than with the preceding "birdcages," so a lot of people stopped developing their multi-tubular chassis, rushing instead to produce inferior copies of the monocoque Lotus. Jack Brabham stayed with steel tubes and continued to do very nicely. American Dan Gurney completed the 1965 Formula I season in fourth position overall driving a Brabham car.

Now, Chapman seems to think that his rivals have become too good at building monocoque cars, so has dragged a new red herring across the trail. Two months before the London Racing Car Show at which a lot of new-season models are disclosed and ordered, a new Lotus 41 single-seat chassis for Formula II and III road racing was unveiled, and it reverted to a multi-tubular space frame although with considerable stiffening by fixed body panels and by rigid mounting of the rear engine unit. To be perfectly truthful, it appears that any advantage the tube principle has over the monocoque design is so small as to be quite outweighed by the very real advantages of good detail design over the not-so-good.

The timing was perfect! Two months is just long enough to make it pretty certain that some copyists would scrap their half-built monocoque cars and rush multi-tubular jobs into the Racing Car Show. However, the announcement came late enough to make it highly probable that folk who let themselves be diverted into a last-minute change of plans would produce cars inferior to a Lotus or a Brabham.

THE NEW Rolls-Royce model for 1966, which is much more up-to-date than hitherto in having independent rear wheel suspension with automatic height-control jacks for the coil springs, is still disappointing in that new gadgets outnumber the new engineering features. However, one interesting idea from the U.S. aerospace industry makes its automotive debut. Instead of sound-isolating rubber mountings for suspension sub-frames, the new Rolls-Royce uses Vibrashock all-metal mountings of crimped stainless steel wire mesh. Besides being more predictable than rubber, the "pan-scrubber" buffers made by Delaney Gallay Ltd. of Britain are flexible for small-amplitude vibrations at high frequencies, so that sound is not transmitted, then stiffen up and provide internal friction damping for larger low-frequency deflections. In some applications, coil springs encircling the Vibrashock buffers help to carry the static load. —*Joseph Lowrey*

"PAN-SCRUBBER" sound-isolating mounting pads are said to do better job than rubber.