

Driving the (Whoosh)

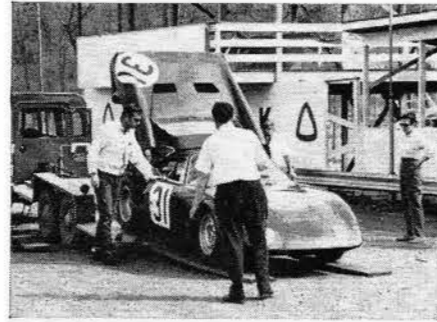
Drive up to Lime Rock on Monday morning to drive the Rover-BRM around the track? Sure! Bone up on Rover's turbine program. Auspicious start: Rover's Jet 1 is the world's first turbine-powered passenger car in 1950. Did 152 mph with 200 horsepower on a Belgian *autobahn*. Later T4 is a dead-ringer for the current Rover 2000; wonder if the 2000 was designed with future turbine power in mind?

First Rover-BRM race car averaged 107.8 mph for 24 hours at Le Mans in 1963. Sure was ugly. Present Rover-BRM (BRM built everything but the powerplant) much prettier, features heat exchanger for increased fuel economy. Ran at Le Mans last year, but slower: 98.8 mph. It has a 126-hp version of a commercial Rover turbine. Top speed 142 mph on Mulsanne straight. Looks like downhill progress—in 15 years Rover has lost 74 hp and 10 mph. Can't knock the invitation, though—rather have a go in Rover's racer than Chrysler's cornball turbine car.

Lime Rock coming up. There goes the gun-metal gray Rover-BRM, a little coupe squatting on a trailer towed by a tall green Land Rover. Quite a contrast. Who are all those funny people in funny clothes? Oh, English engineers. Carnaby Street Racing Team, eh? Just kidding, you don't have to get sore, chaps. Nice car you have here. Sure is little.

How do you get in? Try head first. No, stuck. Back out. Try feet first. No. Try backing in. Sit on sill, drop into seat. Now how do I get my feet in? Almost upside down, feet pattering on roof. I don't suppose you guys could cut bigger doors? The body cost \$50,000? Who built it, George Barris? Somehow rightside up again. Thread feet through cowl—if I hit a bump I'll amputate my leg at the knee on this bulkhead. Angle feet toward center of the car. This would be a million laughs in a Le Mans start. No, I wasn't trying to be funny. That's not the gas pedal I have my foot on, it's the steering column. Only two pedals: go and stop. No transmission gears except forward and reverse. No mechanical coupling; it's all done with hot air. The compressor turbine blows at the power turbine, all explained in technical talk. Don't argue; what do I

Would you like to spend a pleasant summer's day driving around a race track in a most unusual race car? "Don't be silly," said Our Man Smith, "you know I love the outdoors."



PHOTOGRAPHY: GENE BUTERA

know about gas turbines. It's like an automatic transmission, right?

Some driving position. Bolt upright. Steering wheel right in my chest. Like a Chevy Impala, for chrissake. Built to suit Graham Hill, who favors a very Victorian posture while racing. Bucket seat pressing my hips and thighs together. British aircraft industry supplied octopus-like seat harness. Strapped in like a bug in a Venus flytrap. A fella could get claustrophobia. Okay, now what?

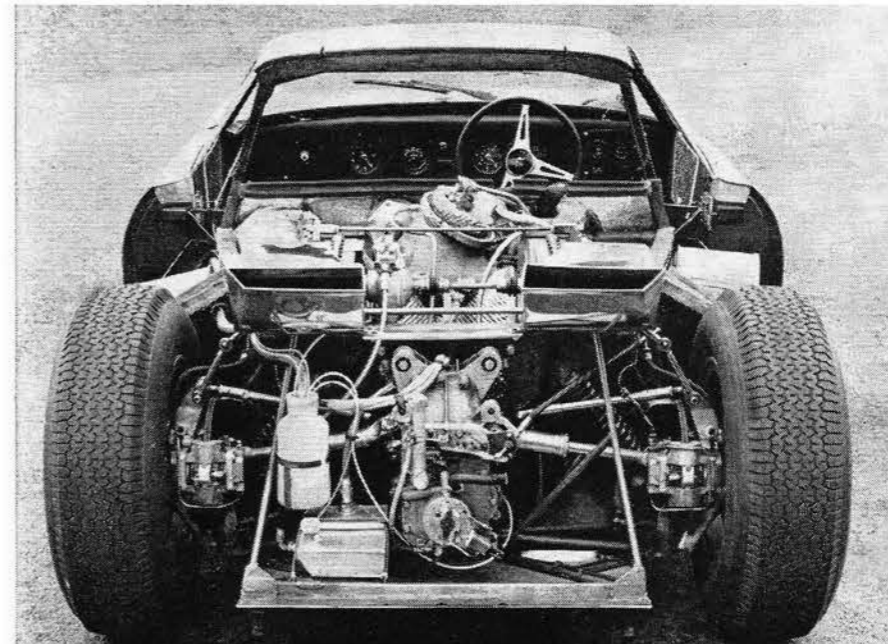
Right, main engine switch on. Push starter button. That's all there is to it? Nothing's happening. Wait a minute—I *do* hear something. A soft, low moan. The air stirs. Smell of kerosene. The whirring rises to a whistle. Looking through the tiny rear window, heat waves ripple above the exhaust ducts. Mirage! Lawrence of Lime Rock! Is it on the boil yet? Yes, the starter has cranked it up to its 35,000 idle speed, and a light goes out on the dash. It's ready. What a shriek!

Push throttle, lift other foot off brake. Revs rise to 60,000 and stay there. Preset redline. Like a loosely-coupled torque converter and an engine governor. The car creeps forward at a snail's pace. Is the throttle all the way open? Pedal travel is only about an inch. The noise is deafening. The sound, until now like a giant vacuum cleaner, becomes that of a Boeing 707 taxiing down the strip. Up, up, away! In the rear view mirror, the Rover people look worried.

Gathering speed like a wounded bird, the car sails majestically toward Turn One. Should I back off? Naw. The steering is great. Light at low speeds, getting firmer the faster you go or the harder you crank it. Super-quick, direct. I can feel the *texture* of the road surface through the wheel rim. The cornering forces would pitch me out of the car if I wasn't restrained by all this apparatus. No oversteer, just a suggestion of the front end pushing. As the limit of adhesion gets closer, the

Rover BRM

So we brought our people and they brought their people and their funny little car, and when it was over, Our Man Smith got moderately drunk and submitted this report.



feeling of the road texture gets a granular edge to it. Better not go beyond that, we wouldn't want to bend their nice \$100,000 car.

Let's try the brakes for this turn. Ooompf! Like diving into a vat of molasses. Feels like a whole "g" and then some. Steady brake pedal, no variation in pressure required. Car like a rock—no nosedive, no yaw, no instability of any kind. Braking and cornering sensations are as breathtaking as a ride in a roller coaster . . . and—with that infernal, constant noise—almost as disorienting. Easy to lose sense of direction and relationship to the car. Glad I don't have to do this for a living.

Turn tightens up here. Funny, in a righthand-drive car it's harder to find the apex on a righthand turn. Off the throttle. Revs dying fast. Cornering forces building up fast and to a very high level. Doesn't it slip or drift or slide or anything?

Guess not this time. Try harder. Back on the throttle. No question of steering with the throttle; there doesn't seem to be *any* response at first. It's like starting it up all over again. The compressor sluggishly climbs back up to 60,000, and the power turbine—the one that's connected to the wheels—takes even longer to react. Back off for just a second, and even though the car doesn't slow down much (there's practically no engine braking), it takes hundreds of yards to regain what you had before. I get it; you have to anticipate a demand for power by three or four seconds. Wouldn't *that* be hairy in traffic! Ideally, it'd be nice to leave the throttle screwed on full all the time and just give the brakes a smash once in awhile. But they told me not to do that; said it would fry the brakes within two laps. And that's why no gearbox; you'd need a third foot for the throttle; and even then the response would be too slow to rev it up between shifts.

I'm beginning to distinguish certain important sounds through the general din. A sound like a wrought-iron gate clanging open when the throttle opens. A new quality that intrudes on the rising scream when the revs are up where they should be. There's very little sensation of speed, but it feels as if it gets more powerful the faster it goes. Still has the Le Mans gearing. Eyes glued on the power turbine tach, which also indicates road speed. Not going to get 100 mph out of it on this straight. Somewhere behind me, there's an



intense wall of heat like a sun lamp aimed at the back of my head.

Past the pits. Cluster of anxious faces. Car rock-steady; I can even see fingers pressing stopwatch buttons. Give them a big "thumbs up" signal. Next lap they signal me the bad news. One minute, 16 seconds. Big deal, the lap record for the smallest production cars is 1:14. Better shut it down and let somebody else have a bash. As the noise dies away I'm thinking: I could save 23,000 revs in that corner, and 17,000 in that one, and . . .

C/D