1952

ALFA ROMEO DISCO VOLANTE

A documented Fifties' flying saucer

BY PHIL HILL
PHOTOS BY JOHN LAMM

EVERY AUTOMOBILE I'VE written about for *Road & Track* is one that I've actually driven. I admit with a few very rare, very expensive machines I haven't exactly been able to do many full-race laps, but I've come to know them all. Then there's Alfa Romeo's Disco Volante. Considering I've done two full modern Mille Miglias with one, plus all the usual going-to and coming-from miles, I've put around 2200 miles on this vintage racer.

I remember when the Disco Volante was introduced in 1952, and Alfa Romeo planned to run it at Le Mans. The name is Italian for "flying saucer," which refers to the shape, though it only approximates the supposed flying machine's silhouette. Remember that the subject of flying saucers was very big in the early Fifties.

Alfa's saucer never did compete, but got rounds of "ohs" and "ahs." As race drivers who were always concerned about how the other guys might get an upper hand, we were all very curious about this strange-looking race car. Was it a breakthrough or a curiosity?

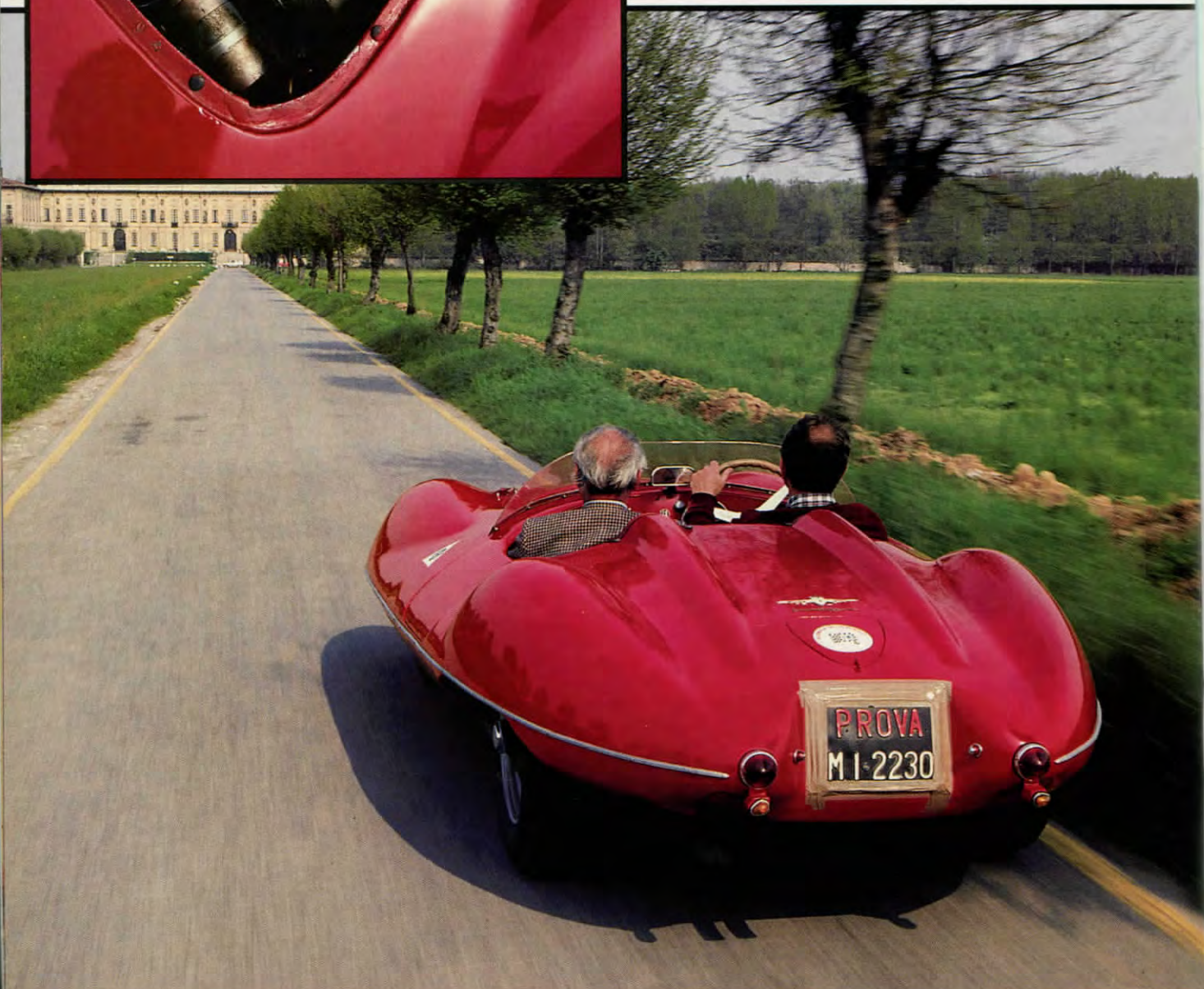
Improved aerodynamic drag was the point of it all. Considering what has been learned about aero in just the last five years, it's difficult to look at the Disco as an aerodynamic laboratory. But don't forget, back in the Fifties it was more of a black art than a science for most automakers.

Alfa Romeo and Carrozzeria Touring created the car; Comm Dott Ing Orizio Satta Pulgia of Alfa collaborated with Carlo Felice Bianchi Anderloni, Touring's head, on the project. The object of the exercise was to design a shape with an ogival cross section to give not only good penetration straight ahead, but also minimal effect from sidewinds. The designers also gave the car a full belly pan.

Some would call the Disco Volante's shape just distinctive, but in many ways I find it pretty. I like the smooth roundness of the front end, which has a very definite Fifties feeling about it. The little tubular-bar version of the traditional Alfa grille gives a sense of lightness and efficiency, almost seeming to be an extension of the car's light tube frame. From the side, the Disco is also attractive in an odd sort of way, the slight nose-down attitude adding to the aggressive nature of the machine.

My only objection is the rear view of the car seen low or from a distance. Only then do you realize how far the skinny tires are set in from the outside of the bodywork, giving the car something of a tippy look. Overall width of the Alfa is 68.1 in. on a front track of 48.4 in., while most modern touring cars have a track that is only 8–10 in. narrower than the overall measurement. On the other hand, if you're standing right behind the Disco looking down at the car

What a beauty: A little gem of a twincam four, a cockpit complete with padded armchairs and Flying Saucer bodywork.



from eye level, it's quite handsome, particularly Touring's handiwork in tapering the body back to the taillights.

I had one particular problem with the car on the modern Mille Miglia: trying to remember that the bodywork sticks out so far from the wheels and slopes so far away from the driver's view that I might clip someone's knees or shins as I crept through the fans. However, that bulging bodywork is excellent for storing the extra clothing, wet-weather gear, cameras, snacks, tools and anything else we wanted to carry on the rally. Not exactly the most efficient luggage space, but then how many race cars have any at all?

There were three different Disco Volantes built: the one I drove, a coupe version of the same shape and another with narrower coachwork. This last design was meant for hillclimbs, and because crosswinds weren't figured to be such a factor, the sides had a more normal curve.

There's an additional Alfa model called the 6C 3000 CM, and it's often considered a Disco Volante as well. It has a 6- instead of a 4-cylinder powerplant, a much more conventional design and more of a racing history, Fangio having finished 2nd in the 1953 Mille Miglia with it. If you go to Alfa Romeo's museum at the Arese factory just outside Milan, you'll see both the open and closed Disco Volantes, plus the 6C 3000 CM.

When you're visiting the museum, please don't lean on the Disco's bodywork because it's all aluminum and fitted over the light tubular spaceframe of the sort that was used in the early Fifties. Curb weight of the car is only 1650 lb. The suspension is basically the 1900's system adapted to the race car. At the rear is a live axle with an aluminum center section, held in place by a pair of trailing arms and located laterally by a centrally mounted triangular arm. The front suspension is independent with upper and lower A-arms. At both ends are coil springs and tube shocks. The tires tucked well in under that bodywork are 6.00-16s.

The small Alfa's handling is quite nice by the standards of its day, neutral and predictable in most respects, and the car seemed to be essentially free of vices. The second year I drove it in the Mille Miglia, the car was fitted with brand-new Pirellis and I was delighted to find that the general *maneggevolezza* had improved enormously through these tires alone.

The one questionable aspect of the handling remained and was probably a direct result of the attempts at aerodynamics in the Disco. Above 100 mph, I could feel the car becoming increasingly light under hard cornering, and it began to eat up an alarming amount of road, forcing me to back off. I could sense a considerable amount of what we might call a frisbee effect of the broad, flat body as it attacked the wind at those speeds. I'd be interested to see the Disco Volante's aerodynamic drag numbers, along with front and rear lift. I'd especially like to see what effect a rear-mounted spoiler would have.

Decelerating from 120 mph is no problem in the Alfa; the drum brakes are fine examples of their type in this era just before the great movement to disc brakes. The steering is light and direct, and the light shimmy that may occur at low speeds on certain surfaces can easily be cured once you learn not to grip the wheel too tightly.

Specifications of the 4-cylinder engine in the Disco Volante would be familiar to any Alfa fan. Like the suspension, the basis for the powerplant is the 1900, the engine displacement taken out to 1997 cc by increasing the bore. The factory used an aluminum block with steel cylinder liners where previous versions of the engine had cast-iron blocks; it then added the usual twincam aluminum head with two valves per cylinder. Carburetion is accomplished through a pair of twin-choke Webers. With a compression ratio of 8.73:1, the dry sump 2.0-liter 4-cylinder manages 158 bhp at 6500 rpm.

This was our car for two years of the Mille Miglia, and I must admit that at first I was a little put off having only a 2.0-liter car. I would have rather had something with at least three. But once I began to live with the Alfa, it came to be a friend, and a competent one at that. The 2.0-liter engine not only is torquey but also has a very wide band. And it likes revs. There are numerous times in this event when you might find yourself cruising along at 100 mph, only to be stopped in traffic a kilometer later, sweating in the midday sun. And yet the Alfa never complained, never overheated, never fouled a plug.

I really like the interior of the Disco Volante, which is a very enjoyable, comfortable place to be. The seats look like little padded armchairs, complete with armrests. Though the seatback is a little too vertical, it is a comfy spot once I get a little extra padding behind me. The shift lever for the 4-speed gearbox is pure Italian mid-Fifties, topped by an aluminum knob with a reverse lock-out button. The center of attention on the dash is a big Veglia tachometer, with the usual set of dials for water and oil temperature, oil and fuel pressure.

I'm certain I'll participate in many more vintage-car events, but I must say that doing the Mille Miglia in the Disco Volante will always be a very special memory.

What I'll recall most is the section of road from Radicofani north as you wind along the tops of the hills looking left and right into the lush, green valleys. You really couldn't use that much horsepower at this point without getting into a serious racing mode, so the 2.0-liter is just right. The view out the front of the Alfa is very Italian. The car is roundish and has a lot of bare aluminum trim and a short, effective windscreen. The bodywork is finished in red. It's the perfect foreground for this twisty road.

No, it wasn't really a racer, but it came along at a time in Italy when people were finally able to shake off the problems and horrors of the war. The Disco caught their imagination and they held onto it. Now it seems to be as much a part of Italy's postwar racing heritage as a number of famous race-winning automobiles.