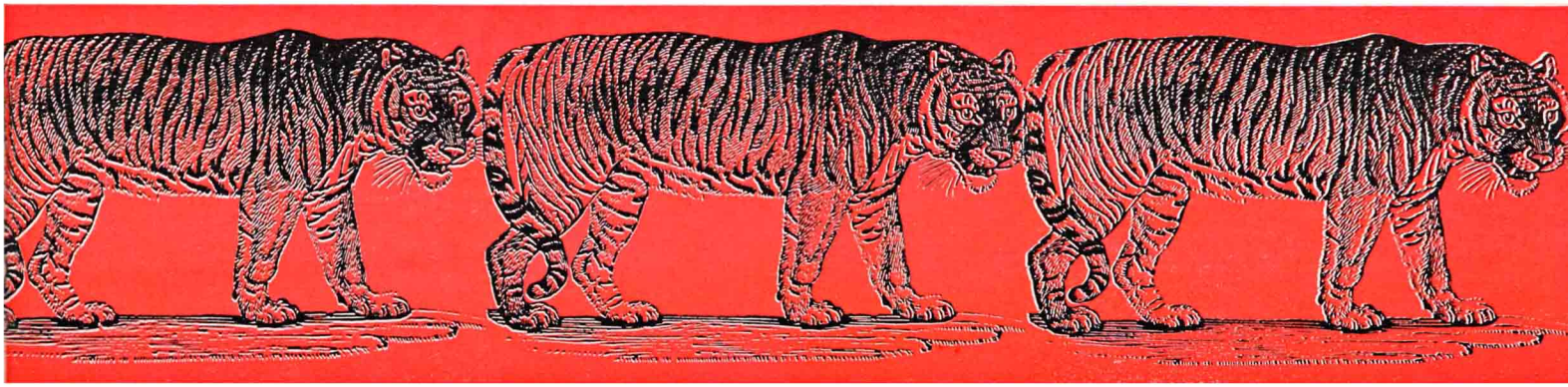
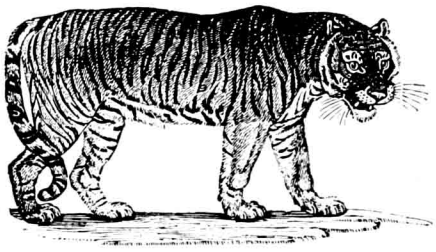
Man in the Tiger Suit

BY GENE BOOTH

All Big Engine in a Lithe Frame and Long-Geared, the GTO Is Pontiac's John Z. DeLorean

THE VISITOR is never quite ready when he meets John DeLorean for the first time. The first appearance of the man, rising to seemingly great heights from between twin mahogany desks and striding across the room in greeting, is startling. He is a young man, almost boyish of feature, lean and lanky and unexpected. There is no resemblance to the men ▶





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who so commonly fit the accepted General Motors mold. His crisply tailored suit seems even a unique style—neither Ivy nor Continental nor English, but distinctively DeLorean. For a brief instant, the visitor is overpowered by the notion that sharply creased trousers surely disguise stilts upon which he stands, but when he moves it is with the grace of an Oscar Robertson or a Cazzie Russell. It is, in all, an initial impression for which no one can be properly prepared.

The next thing that gives the visitor pause is DeLorean's willingness to talk, thoroughly oblivious to the strictures and restraints usually observed by a chief engineer. But John Zachary DeLorean has been moving rapidly toward the top, the acknowledged Crown Prince of Pontiac, being groomed for the chair of Pete Estes once the general manager is moved upward in reward for Pontiac's fantastic sales performance. DeLorean didn't help Estes put Pontiac where it is by being overly cautious about his beliefs, nor by hesitating to build the hardware to back them up.

Leaning back in his huge black leather chair, between the dual desk arrangement, DeLorean speaks quickly, quietly and directly. His answers to questions come in summarizing paragraphs, as if repeated from some special engineering textbook. The interviewer's notetaking lags behind DeLorean's rapid succinctness, so that pregnant pauses plug the word gap between speaking and recording. Absence of the customary rambling-on is both refreshing and disconcerting, for suddenly he has said what he had to say and stopped. But in looking up, the reporter finds himself fixed in a patient stare.

He talks about 6-cyl. engines, agreeing that they long have been neglected, and about overhead camshafts: "We have something coming up which I'm sure you'll be interested in, and I want you to be sure to try it out. Maybe at our engineering show (new model preview) we can have a car for you to put some miles on. I think we've done some things with an engine that will really appeal to you, and to your readers."

About disc brakes: "We've been testing discs for quite a while but they still don't satisfy us. We're going to put the best brakes we can find on our cars, and those we have now are the best available. Discs have problems and we're not going to offer them until we can be sure there is some sort of substantial improvement. We have offered many kinds of brakes, as you know, from metallic linings to the aluminum integral drum and wheel. They're not as prone to fade, for one thing, and they have more effectiveness for driver effort."

The comment comes level, straight. Without any edge of irony. The interviewer looks up to meet inscrutable eyes taking the measure of the words' effect, probing to see if the unique observation has touched a nerve. DeLorean, in being asked, probes the questioner for answers.

ON FLEXIBLE frames: "I don't think our Tempest has too flexible a frame. Corner to corner, the frame flexing is only a quarter of an inch, which is pretty negligible. The thing which determines whether it is too much is the amount of flex which it can permit and still let you open the doors. You can open all the doors with the car jacked up, and that is far less twist than anything that would affect the frame through the suspension."

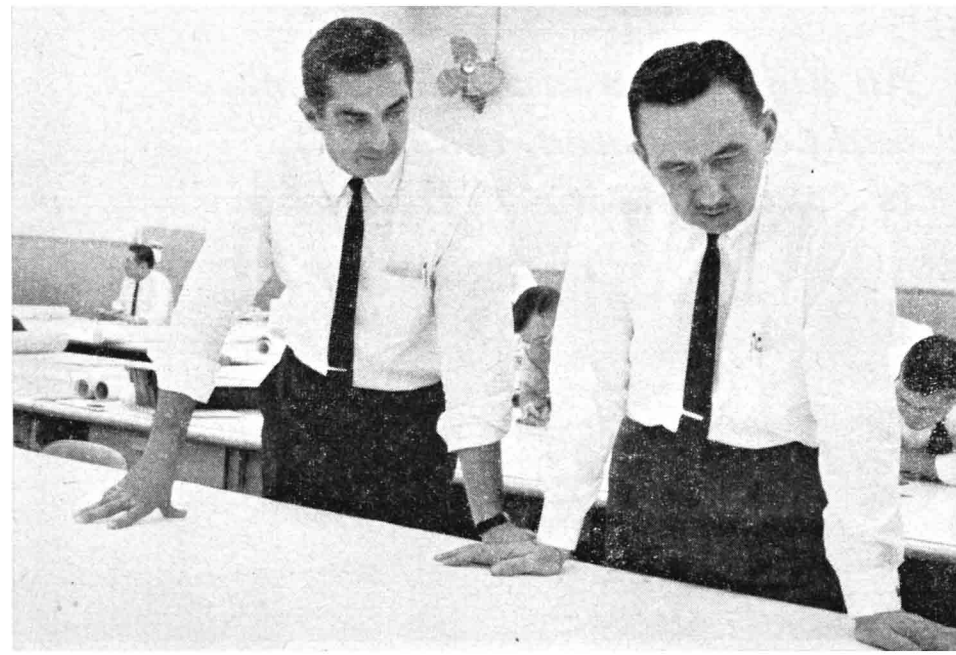
Regarding big-engined/little cars: "Our philosophy is simply that we're trying to build an exciting sports-type car that the average guy can afford. With the GTO, he has about all the performance he can use. We're trying to build a good family car, but a guy still can have a little fun with it."

He grows impatient with suggestions that engines of 400 cu. in. in the A-body vehicles, originally designed for under 300 cu. in. power, cause problems. DeLorean and his engineers have been the pacesetters in the development of the big-engined/little cars, which have been referred to as Supercars (CL May) and which will see new brands among their ranks come October. The GTO served as the prototype for this breed of automotive cat, spawning imitators with huge engines, hot performance and awkward weight distribution. All have been criticized for their imbalance, with the GM models additionally under fire for their willowy perimeter frames under the bodywork.

"We offer the option of a heavy frame," DeLorean answers, "but we like to keep as flexible a structure as possible. It gives you better conformation to the road surface. A low frequency structure, well damped, is the best way to go."

Discussing riding qualities and roadability, DeLorean touches on many subjects and his statements—like those about brakes—sometimes shatter the conventional comprehension of vehicle dynamics. "How often have you heard that a shorter wheelbase means a harsher, choppier ride? This just isn't true," he declares. Or, in reference to frontward weight bias, "Our weight distribution doesn't have an adverse effect on handling." Or, in speaking of unsprung weight, "Decreasing it is not going to improve your ride and, by the same token, increased unsprung weight is not all that important." Lack of time prohibits further examination of such statements and one is left with the decided impression that such things, in DeLorean's view, are mere myths.

PORING OVER plans for a future Pontiac, DeLorean briefs Top Tiger E. M. (Pete) Estes. As general manager, Estes has permitted DeLorean wide-ranging latitude.



"Every car rides good on some roads, bad on others," he observes. "It's always a compromise. A lot of shock control which would be desirable on bad roads gives you a tough ride on good roads. This is one of the reasons for our (heavy duty) option package." He sees little benefit from rear anti-roll bars, such as that featured by the competitive Oldsmobile F-85 442 performance package. "It's obvious that the best possible handling is when all tires at both ends slide at the same time. That's the maximum amount of lateral acceleration the car will stand."

DeLorean mentions, without going into specifics, the importance of the tires' slip angles: "The way to achieve this degree of handling is to adjust the spring rates, front and rear, which we have done. Then you have to take into consideration the roll couples to balance them off properly." Striding across the room, he asks his secretary for a copy of a handling analysis which served as the basis for Pontiac's rejection of a rear anti-roll bar.

"Our car doesn't roll any more than theirs," DeLorean says of the 442, "but we do it with higher wheel rates. And, I might add, it has less 'waddle' as a result." DeLorean looks up as his secretary hands him the handling report. It begins:

It is a well-known fact that the cornering power from a pair of front or rear tires decreases as the roll couple on them is increased. As the vertical loads on the tires change due to the roll couple, the side force from the outside or heavily loaded tire increases more slowly than the side force from the inside or lightly loaded tire decreases. This, of course, makes their sum less.

Detrimental as it may be, there is no way to avoid roll couple. It can only be reduced by keeping the c.g. as close to the ground as possible. The thing that can be controlled is the distribution of roll couple between the front and rear suspensions. This is done by varying the suspension springing and geometry and the use of a roll bar or bars.

The GTO (and its brethren) has a large imbalance of roll couple to the rear because of the 4-link solid rear axle and DeLorean points out that this "imbalance is corrected" by the addition of an anti-roll bar in the front. The GTO bar is 30% stiffer than standard Tempest bars, being 0.937 in. in diameter, as the size "worked out to give the best handling possible for this type of car. We tried and rejected the rear roll bar," he again states, "for the reasons shown in the report."

It (addition of a rear anti-roll bar) increases the roll couple on the rear wheels and reduces it on the front ones. Going into a turn, the rear requires more slip angle to maintain the same cornering force and tends to move out and even break away during severe cornering or rapid transition.

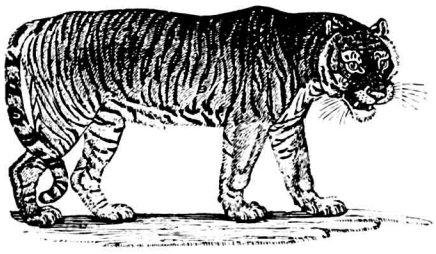
The car rolls less so the roll understeer of the geometry is not as great, adding to the stability problems. Also the car, being stiffer in roll, is less pleasant to drive, being more high sprung in the roll direction and tending to follow an irregular road more closely.

"We're about as close as we're going to come to the perfect car," DeLorean has said, and then added that his job is to improve an already good car. His prediction that the trend sure to be followed was the emphasis on high performance features and options tailored to individual buyer taste continues to be borne out. Somewhat more significantly, he also has been quoted: "Unlike the larger auto makers, we can design for the 10,000-car potential market. The GTO is more or less a custom car designed for a very limited market. . . . We like the custom car business because it raises our prestige and lets us sell the extraordinary type of person who sets the trends for his moiety." And to back up that statement from the early days of the GTO, DeLorean now emphasizes that "GTO is the best-selling first year car we've ever had."

DeLorean's philosophy, that the customer ought to be able to tailor-make his own car, has permeated Pontiac for some time. "We probably have the largest variety of engines, ride packages, transmissions and axle ratios in the industry," he says. Over 50 power train variations are available, all with "engine performance that is really usable to the customer. Our engines all have hydraulic lifters and they're designed to idle and run smoothly in either around-town errands or high-speed superhighway service. We've long been firm believers that a powerful engine and a low axle ratio make the best car. We still have the lowest axle ratio in the industry, with the new 2.41:1 ratio on some larger Pontiacs this year. The engine runs more slowly for any given speed with the lower ratio and the only factor you lose is a slight amount of highway passing performance, but the automatic transmission's throttle downshift gets that back."

DeLorean admits to keeping close watch on the enthusiast magazines, or ▶

UNCONCERNED BY convention, DeLorean makes a point at staff meeting in his shirtsleeves. His talent for turning out well-engineered hardware has made the Sales Department's task easier.



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"buff books," in order to spot trends. "The kind of guy we're trying to appeal to is the kind of guy who reads your magazine," he says. References to articles in leading magazines often punctuate his comments, with ill-concealed preference shown for one periodical, more buffoon than buff, that has equated his cars with Italian originals. "You're reaching a market which is the same one we're interested in and it's coming to be a more and more important market. We get a lot of letters from these people, and those we get are extremely knowledgeable."

Testimony to DeLorean's enthusiasm is a set of framed pictures on his office wall, showing Paul Goldsmith in Tempest No. 50 charging past a Sting Ray during the Daytona Continental of 1963. It was one of the last episodes of GM involvement in racing and a DeLorean co-worker confides: "It was the high point of his career."

DE LOREAN RISES, and loose ends and uncertain directions form into a specific shape. "The GTO is the type of car that I personally like," he says, "and as long as I'm chief engineer around here, I'm able to do things about cars that I like." What had been vague and indistinct now becomes sharply focused. Random thoughts and comments are suddenly solidly packaged. Looming between those two massive desks, all crisply styled and bluntly direct and exhibiting a blend of power and charm, is the Pontiac GTO.

There's the big engine installed in a lithe frame, with long-legged gears to gobble up ground in effortless haste. There's the direct confrontation of complete and thorough groundwork in basic concepts with a world of subtleties and superficial sophistication. This is polish and dash and verve, but with strength and toughness and tenacity. Factors come to view on a balance: Power-to-weight ratio is more basic than weight distribution, stiff springs more fundamental than subtle suspension, and a virile vitality more intrinsic than splashy veneer. The only thing missing are the three initials on the lapel that stand for Gran Turismo Omologato. There's a 3 pinned there instead, the badge of the Pontiac people to denote their rank in the hierarchy of sales.

There are lots of executives and engineers who have hot cams with free-breathing, high-life characteristics and more than ordinary overlap. DeLorean isn't alone there, any more than his GTO is alone among its contemporaries with such features. The difference in this man and his machine is more thorough, all-encompassing, basic. Standing there, DeLorean leaves no question about why his GTO has a longer pedal-to-seat back dimension than any competitor. When speaking, there is no question of his determined purposefulness. And if manhandling is necessary for effective control, then let there be no mistake about the effort which will be exerted to achieve it.

It becomes easier to understand the overhead camshaft Six, too, after DeLorean admits that he has to avoid his own high performance cars. "I prefer a car like that over anything else, but I don't drive them anymore. I've gotten too many points." Slowed down to driving a staid Six by virtue of an impending driver's license review, such a chief engineer undoubtedly thinks in terms of making that Six just a little bit stronger.

For a man not given to sedateness, mention of his membership in Bloomfield Hills Country Club, just south of Pontiac, probably goes unnoticed by the out-of-town visitor. But to the Detroiter, it's pedigree. It wraps up everything, proclaims a man's arrival, serves as verbal shorthand much like that of the Jet Set. DeLorean's rationale for membership is golf. It is a pastime about which he speaks, and undoubtedly practices, with obsessive passion.

One can picture him, while he talks casually of seeking out courses of suitable difficulty, addressing the ball with the same grim determination he would employ in searching out an elusive rattle in a new model, isolating a source of vibration in a new engine. Each substantial thwack of the driver slams home the firm conviction that This Executive is Participating in Prescribed Relaxation. A Club member in the Men's Bar bewails a particularly tough Eighteen he has just played, and DeLorean takes quick mental note that his next trip into that region will serve to conquer it.

There is nothing original about comparing a man's golf game to his business record, but it is no less valid. DeLorean's rise through Pontiac began as soon as he joined the company in September, 1956, a 31-year-old charger who had put in eight previous years with Chrysler Engineering and Packard Motor. His initial appointment was as director of advanced engineering, a post he held down just under three years until he was made assistant chief engineer to Pete Estes. When Estes took over the Pontiac helm a mere 30 months later, DeLorean moved up to fill the top engineering spot in November, 1961.

NO LESS familiar is the preparation, the ladder to the top. DeLorean was graduated from Lawrence Tech, from Chrysler Institute, and from the University of Michigan. He holds a bachelor of science in industrial engineering, masters in automotive engineering and in business administration, and has attended Detroit College of Law. Memberships in SAE, American Society of Body Engineers, Engineering Society of Detroit, Michigan Professional Engineers, American Ordnance Assn., Founders Society of Detroit Institute of Arts, and Masons and Elks add to the background. So, too, in DeLorean fashion, does membership in the Mound Road Irregulars —as much of an enigma as the Z between his names. But now, after 3½ years, his determined play on the Pontiac course has brought him to the final tee, ready to play the 18th hole—with a couple of strokes under par in hand at that. ■

BEFORE overhead cams, DeLorean still had hot V-8s to his credit.