

DATELINE: DETROIT

DRIVING PONTIAC'S SAFARI

NOT PARTICULARLY SUITED to African treks but ideal for trips to the supermarket, country club or cottage—that's Pontiac's new Safari, an ultra-ultra two-door station wagon. The new vehicle first saw light of day in GM's 1954 Motorama as one of the many "dream cars." It went over so well with the public that Pontiac decided to put it into production and pick off some of the rapidly increasing station wagon market.

MOTOR *Life* arranged to see and drive one of the first production models. Due to the fact that the wagon was neither licensed nor insured it couldn't be driven outside the confines of the Pontiac, Michigan plant, so this was no road test by any means. However, there is a small track within the plant so it was possible to get some idea of how it handles and performs. The answer is—good! The 180-hp engine gives it very good performance for this type of vehicle. It rode well over the bumpy little track and there is less sway and heel-over on turns than with previous models of Pontiacs.

It's in the looks department that this new wagon is very much different, however. If you like Pontiacs, you'll love this job! "Styled in minute detail for luxury..." Pontiac claims.

It is lower (59.6 inches), longer (204.3 inches) than other Pontiac wagons and has different front and rear styling, plus unique side window and molding treatment that's strictly new.

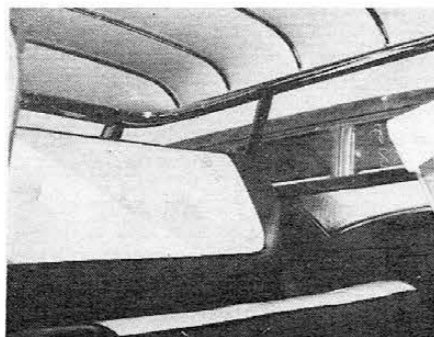
The grille has a built-in bumper guard arrangement which contributes to the massive look. Rear fender treatment follows that of the rest of the '55 Pontiac line very closely, much more so than the standard wagons. There's plenty of visibility with the wrap-around windshield and side windows which curve around at the corners. The roof, from the front seat back, is scored with horizontal design lines to accentuate the Safari's considerable interior width.

The interior is really plush, with chrome roof bows and genuine leather two-tone upholstery. Loading space from the rear of the back seat, with rear seat folded down and tail gate closed, is 73.3 inches long. Available in Firegold or Turquoise combined with White Mist, the Safari lists at \$2,714 (F.O.B. Pontiac,



Pontiac's Safari was driven by MOTOR *Life's* Detroit editor, Ken Fermoye, who reports here on his impressions of car first seen in GM's 1954 Motorama spectacular.

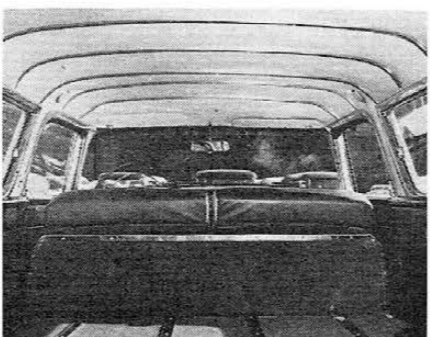
Safari's interior is striking, with genuine leather two-tone upholstery giving the new station wagon a true custom touch.



Mich.) and models should be showing up in dealer showrooms by the time you read this preliminary report.

The general impression of the Safari is that it's designed more for hauling golf clubs, groceries and lots of luggage for long trips than more strictly utilitarian purposes. "It would be almost sacrilegious to load lumber or hunting dogs in the back of this job!" commented one observer. It looks like a wonderful answer for suburbanites and others who want passenger car comfort and styling luxury—plus—along with the roominess and convenience of a station wagon.

Cargo space is so luxurious that owners probably will want to be careful what they haul. Note the chrome roof bows.



PACKAGED AIR CONDITIONING

YOU DODGE V-8 and DeSoto owners who bought your cars without air-conditioning and now would like to have it installed can do so. Up until recently, you were out of luck unless you bought your car with a factory-installed unit. A new packaged air-conditioning unit has been developed for installation in dealer service shops, however. The system can circulate 325 cubic feet of air per minute, provide a complete change of air in a minute and a half, which is good news for hot-weather driving.

STANDARDIZE DIP STICKS

STANDARDIZATION of markings on oil dip sticks has been urged on the industry by a petroleum industry official. Carl Georgi, technical director of Quaker State's research labs, pointed out that harried service men often have difficulty in reading the many different markings on dip sticks. Why not make 'em all alike, he asked auto engineers?

Good idea, Mr. Georgi! Only why not go a step further and press for auto makers to come up with an inexpensive device that would indicate oil level on the instrument panel? This has been done and accessories of this type are available. Detroit engineers can lick the cost problem and incorporate an item of this type in today's cars—at least, in the higher-priced luxury models. It would undoubtedly prevent a lot of needless engine wear due to too-low oil level. This is one spot where the industry has lagged. We're still in the horseless carriage stage as far as keeping track of oil level is concerned on today's automobiles.

CHRYSLER'S POWER KITS

MORE NEWS for Chrysler product owners—a MoPar power brake package which can be installed in approximately two hours is available for all Chrysler-built automobiles produced from 1951 through 1955. Suggested retail price of the kit is \$46.75 with a two-hour flat rate charge for installation at your neighborhood dealership.

A goodie especially for 1955 DeSoto Fireflite and Firedome buyers is a dual exhaust system now available as special equipment for both those models. The system includes separate straight-line exhausting for each bank to improve breathing efficiency of the 200-horsepower Fireflite and 185-horsepower Firedome engines.

Another forecast from GM? This 1955 Motorama Cadillac has a 14-inch TV set, phone and tape recorder, as seen here.



MOTOR *Life*, May, 1955



Chevrolet calls its new Nomad station wagon a "mobile solarium," for obvious reasons. Note vast amount of front, side and rear glass on the dream car now a reality.

CHEVROLET'S NOMAD WAGON

ANOTHER LATE GM ENTRY into the station wagon set is the Chevrolet Nomad. Like the Safari, this is a result of last year's Motorama. The most distinctive feature of the Nomad is its virtually unobstructed vision which prompts Chevrolet to term it a "mobile solarium" on wheels.

Unfortunately MOTOR *Life* was unable to arrange to drive one in time for this issue; production was still very limited at deadline time and all those being built were being shipped to auto shows around the country. The situation was complicated by the fact that bodies were being made in Cleveland and shipped to Atlanta for assembly.

The new wagon is a two-door and includes many of the features of the Safari.

MORE HORSES FOR CHEVROLET CORVETTE

AS HAS BEEN EXPECTED Chevrolet is unleashing more horses in the Corvette engine room by offering it with a hotted-up version of the new ohv V-8 mill, which turns out 195 hp. This move was inevitable as soon as the Ford Thunderbird appeared last year boasting 193 hp with stick shift, 198 with automatic

COMBINE S-P SERVICING

A STEP which has been anticipated, yet is very significant, is the announced consolidation of Studebaker and Packard service departments, along with those of parts, accessories and business management.

Mechanics in each make of cars will receive special training to become familiar with both product lines of the recently merged corporation. It also is a forecast of greater standardization in component parts in the two lines of cars.

mentioned earlier. It's mounted on a conventional Chevrolet chassis but has many added luxury touches that set it apart from the other four station wagons in the 1955 Chevrolet line. Some of these are: forward sloping rear quarters, which contain tail and lift gates; exclusive bright metal trim; grooved roof panel; chrome roof bows inside with vinyl headlining, which lends a bright touch.

"Favorable comments on the experimental model" along with "our conviction that current decentralization of population has created a new mode of city-country living, which in turn has created a need for a fresh station wagon design," were among reasons for the Nomad's introduction, according to T. H. Keating, Chevrolet general manager.

transmission which was an optional extra. An interesting point is that the V-8 in the Corvette is rated 15 hp higher than anything you can get in a stock Chevrolet. The standard V-8 is rated at 162 hp; a power pack consisting of dual exhaust, large-port intake manifold with four-barrel carb and special air cleaner boosts this to 180 horses.

Where does that 15 extra horsepower come from? Best guess is in the cam and valve timing. It's difficult to boost compression on this engine by head milling and costs run pretty high on other methods of boosting compression in production. No details had been learned at press time, but it looks like Chevrolet has gone to a wilder cam and possibly higher valve lift to get that extra stuff at the top end—probably sacrificing a little bottom end torque in the process.

One thing is certain; it goes! And you can take the word of Mauri Rose, three-

time winner at Indianapolis, for that. "It will go from 0 to 60 in eight to nine seconds," he reports! The famous race driver, now with Chevrolet, should know!

Incidentally, several Corvettes have appeared in auto shows sporting standard transmissions! They have been available only with Powerglide; could this portend a change in policy? The T-Bird comes with automatic, standard or overdrive transmissions.

METRO TOPS FOREIGN CARS

WHAT WAS THE TOP SELLER among foreign-built cars here in the U. S. in 1954? If your answer was the Volkswagen, Jaguar or MG, you were wrong! It was American Motors' Metropolitan, introduced last year.

Although this pert little car didn't make an appearance here until last March, it captured 19.3 per cent of the foreign-built market in the first 11 months of 1954. The Volkswagen was second with 16 per cent and the Jag, 10 per cent, and MG, 9.15 per cent, followed. Economy was the most-liked feature of the Metropolitan, followed by size, appearance and handling, in that order, according to an American Motors survey. Most buyers, 45 per cent, reported they bought the car for commuting, while 23 per cent said they purchased it mainly for shopping and heavy traffic.

RETREAD TIRE BOOM

RETREADED TIRES are becoming big business. Given a big boost during the war years of tire scarcity, the industry is now estimated to be selling close to a quarter billion dollars' worth of retreads annually at present.

Roughly one passenger car tire is now retreaded for every four produced and seven truck tires retreaded for every one built! And experts look for the car tire retread rate to equal that of trucks now by the year 1960, or earlier.

Why? The business is growing because of development of new cord materials—such as nylon and rayon—and the increasing use of tubeless tires. Such developments are reducing the number of impact breaks," which have been the largest factor in premature tire failures. Result: more sound carcasses suitable for re-treading operations.

Improvements in retreading processes have also raised retreads in the eyes of the average motorist. They look better today and they are better. Add to that the fact that comparisons show retreaded tires cost slightly less than half the price of the original tire and you can see why this industry is booming. If you need some new shoes for the old bus, why

not check into retreads. You'll find you often can't tell them from new tires and you can save yourself some money. Retreads are proving particularly popular with motorists who do most of their driving in cities and at low speeds.



Chrysler's new 300 won NASCAR's 160-miler after Century was disqualified. For details on car, turn to report on page 22.

LOOKING AHEAD!

THE 1956 CARS will appear earlier than has been normal for new models. Evidence is the date set for the next Chicago Auto Show, which has been scheduled for November (rather than January, as in previous years). Show officials clear dates with the factories before making their own plans, so this indication is a pretty good one.

REMEMBER the ill-fated Tucker car? A trade paper has just reported that Preston Tucker—his financial and legal problems cleared away—is about to re-enter the automotive field. His next effort: sports cars. No further details.

AN APPARENTLY solid report says the 1955 Motorama LaSalle II is equipped with GM's new automatic transmission. It may be an improved version of Hydra-Matic featuring smoother shifting between gears.



Chevrolet is introducing this "dream truck." Called the Cameo Carrier, it makes extensive use of fiberglass panels.

FLUORINE IN CAR RADIATORS

MAYBE IT HADN'T occurred to you to wonder what effect water treated with fluorine to prevent tooth decay would have when used in car radiators. It did to Ford engineers, however, and they checked. If you live in a community where the water is fluorine-treated, don't worry. Solutions 4,000 times stronger than those ordinarily used failed to cause pitting or corrosion.

DEFENSE CUTS ON CARS

CHRYSLER, rapidly rebounding from its low point of last year, is watching the Far East situation with even more attention than most of us. The corporation is concerned about the possibility of new material controls being slapped on by the President in the event of a national emergency. Here's why:

Under the Defense Production Act, should emergency material controls be reinstated, a representative period after June 30, 1953, will be chosen for the basis of dividing controlled items. This would mean that auto companies would be allotted steel, copper and aluminum according to the share of the civilian market each had during the base period. During World War II and the Korean emergency the government set a precedent of using long base periods. Holding to this would hurt Chrysler badly.

With its new '55 models, Chrysler has been getting approximately 20 per cent of the market; in 1954, however, it averaged only 13.13 per cent. Overall since June, 1953, it has averaged about 16 per cent. Should any period from June, 1953, to the present be chosen as base period, Chrysler would receive far less materials proportionately than General Motors and Ford—less than enough to enable it to hold the percentage of the market it now holds during 1955.

The period which the law says must be used is the only time since World War II that Chrysler has been at such a disadvantage. From 1946 to 1953 the firm consistently held from 18 to 25 per cent of the market. By comparison, Ford averaged between 19 and 20 per cent during most of the postwar era, has climbed to more than 30 per cent. GM, always the leader, jumped from 38 per cent in 1946 to 52 per cent last year.

The Independents would be hurt even worse by the base period clause in the act. They got as high as 19.66 per cent of the market—in 1948—but slipped to just over four per cent last year.

Look for changes in the Defense Production Act to remedy this situation when the act comes up for renewal this summer.

A LOOK AT FORD'S TURBINE

FORD has a gas turbine engine; what is more surprising is the way it was developed! It's been an open secret in Detroit that Ford was hard at work developing such a power plant, so when official confirmation that an experimental gas turbine engine had been assembled came during an SAE talk by A. H. Beaufre, manager of the Gas Turbine department in Ford's scientific lab, no one was very greatly surprised.

What was surprising was that Beaufre's group started by tackling individual components first—designing, developing, testing and improving each separately. Each "package" was designed so it could be hooked up with the others, however, to make up a complete regenerative free turbine-type power plant. This meant sacrificing, at least temporarily, advantages of light weight and clean configuration to obtain reliable, flexible test components in the unit.

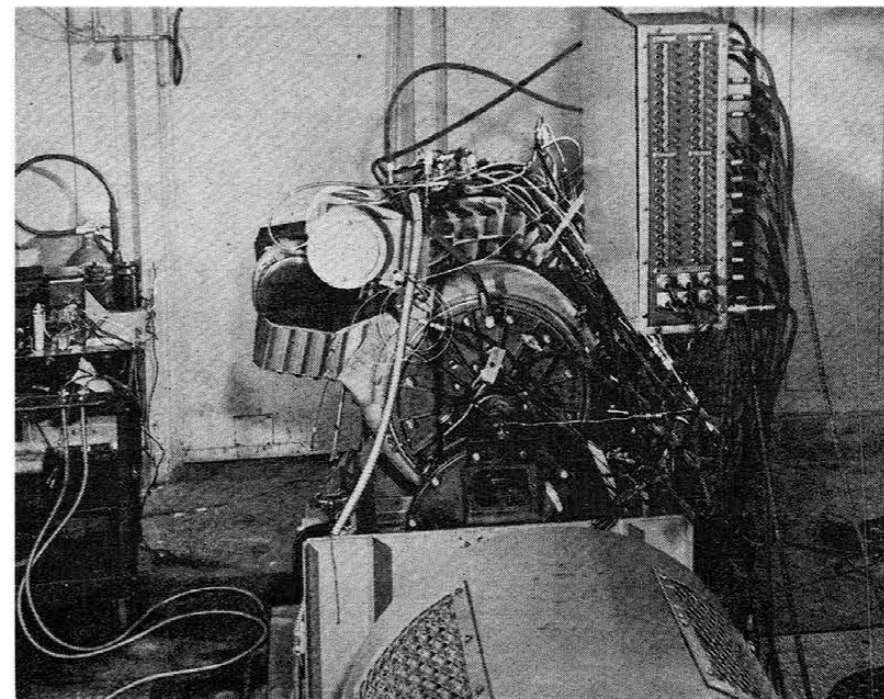
This would indicate, incidentally, that the engine Beaufre mentioned won't be showing up in a car very soon. A glance at a picture of it helps confirm this; it's a pretty bulky engine. How far Ford has progressed past this engine that it's now willing to talk about is anybody's guess. It's well known in the Motor City that an excellent array of talent has been assembled to man the Gas Turbine department at the company's Engineering Staff. Young Henry's recruiters beat the bushes for men with gas turbine know-how like big league baseball scouts looking for potential Ty Cobbs and Babe Ruths—and it's generally conceded they did a good job in finding talent.

The Ford engine uses a heat exchanger, which most experts feel is the best way to make such an engine efficient enough for automotive use. (Chrysler used a similar arrangement in its gas turbine demonstrated last year in a Plymouth.)

Briefly it works like this: Air is drawn into a compressor, then pre-heated in the heat exchanger—or regenerator—before entering the burner where it is further heated. It's then expanded in the compressor drive turbine and further expanded in a free second stage or power turbine where useful power output of the engine is developed. Power turbine exhaust passes thru the exchanger (where it helps pre-heat new air being drawn in) and on out thru the exhaust system, as shown in drawing at the right.

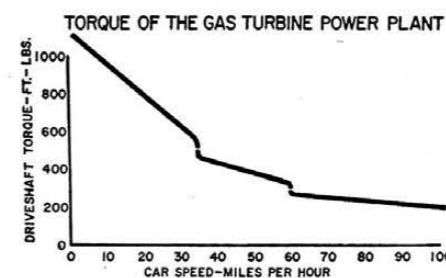
The power turbine is mechanically free from the compressor-turbine assembly, but is connected to the vehicle transmission thru reduction gears.

Last year came a modest announcement, overlooked by many, that Ford had completed a pilot gas turbine lab at its

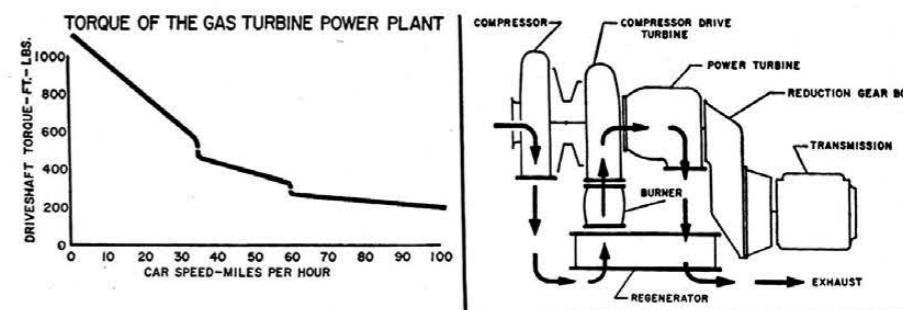


Ford's new gas turbine being tested on a dynamometer in the company's laboratory. Panel at right contains recording instruments used for gathering performance data.

Chart reveals the torque output in relation to car speed. Ford is concentrating upon detailed components in its research.



Flow diagram of gas turbine shows how the air is pulled in and then passes various stages before being exhausted.



Dearborn Research and Engineering Center. That was a tipoff that you could look for developments. The word was that the company preferred not to make a big publicity splash until it felt it had something and was on the right track. In discussing the new engine Beaufre said with satisfaction: "The results of our research are encouraging and inspire us to accelerate our efforts in the development of the automotive gas turbine."

Conjecture is that much of this effort is aimed at developing materials and production methods which would make gas turbines economically feasible. One phase of this program is known to be in the field of "cermets," combinations of metals and silicon-based ceramics.

MORE EMPHASIS ON TORQUE

TORQUE VALUES are liable to assume as much importance as horsepower ratings to car buyers in the next few years if the auto industry has its way. As Roger Huntington has pointed out in earlier MOTOR Life columns, this important measurement of an engine is being referred to more often all the time by most engineers.

For years the importance of torque values has been lost on most laymen. Lately, you will notice, torque is being played up by manufacturers. The trend seems to be to promote torque as the best criterion of acceleration, performance and safe passing—which it is!