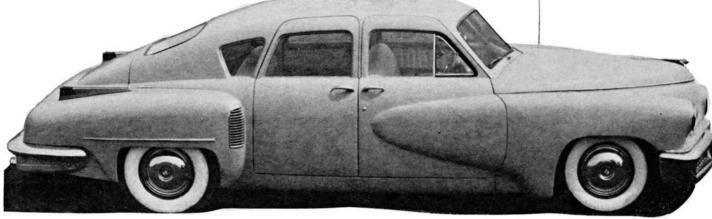
TUCKER'S



TIN GOOSE Pigeon or Flimflam?

BY GENE BOOTH

T'S HARD TO believe, for smooth-chinned old mossbacks over the age of 30, that a whole generation has come of age without any clear memory of the Tucker automobile. It was only 20 years ago that Tucker and his automobile was a cause, and an important one, for people all over the country whether or not they knew anything about cars. Sort of like Nader, and his crusade today.

Preston Thomas Tucker was a guy too many people bought a car from, or ironically, not enough did. He was the archetype used car salesman in appearance—a little too slicked up, wearing white socks with his blue suits and brown wing-tip oxfords, wavy dark hair glistening with a bit too much greasy-kid's-stuff. His car was revolutionary, in this country at least.

His troubles in getting it into production led him to methods of financing that were, to say the least, novel and somewhat unprecedented. And it all caused him to be smashed like a little bug—though a bug with a legacy of 50 vehicles and a following of fanatics—at almost the precise moment he was to triumph over his all-too-

human adversity and adversaries. The Tucker story was a \$28-million epic tragedy, in an era before billion was a commonly used word.

To this day, Tucker and his car are regarded in one of a handful of stock stereotypes:

- He was a fraud, a cheat, a charlatan who swindled millions of simple folk, widows and orphans, of their life's savings.
- He was an arrant Don Quixote doing battle against the dragons of Detroit, but was, instead, done in by them.
- His car was a hand-built phony, unable to back up, apt to break loose at the suspension arms, impractical for production, and in essence, meant only as a means to accomplish the monumental swindle.

Or, conversely, according to an almost equal number of partisans:

- His car actually was put into initial production, and was so far ahead of its time that only now are the established automakers incorporating all its features.
- He was a sincere man who perhaps cut a few corners too closely in

his unswerving desire to give the American people the best automobile they had ever seen.

• He made powerful enemies, in Detroit and in Washington, who would stop at nothing until they had destroyed this upstart trying to play in their big league ballpark.

Somewhere in there, between venality and virginity, between monster and martyr, between sinner and saint, is the real Preston Tucker and his Tucker Torpedo (later called the "48" to avoid an unsafe image). Yet, despite 20 years of hindsight, it still is difficult to define them exactly. The whole story seemed to inspire extremes of emotion and rancor—on both sides—which blurred, perhaps forever, any factually rational appraisal of the case.

It seems almost another age—an age before TV-induced euphoria and apathy, an age when *Police Gazette* was still the staple reading matter at the barber shop and newspapers still fought circulation wars with screaming banner headlines instead of sedate prize contests.

Go back to the wartime days: The Allies had assaulted Fortress Europe.





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Marines were engaged in bloody island hopping through the Solomons. And Preston Tucker was building poweroperated machine gun turrets for ships and planes out of a converted barn in Yipsilanti, Mich. But he also was looking ahead, planning and scheming to produce a car of his dreams once the shooting stopped.

Tucker's car was inspired by his long-standing enthusiasm for auto racing, which in those days meant Indianapolis and the 500. Indy held a hypnotic fascination for him, and before the war he had been associated for a time with Harry Miller in a race car production enterprise.

Tucker dreamed of a passenger sedan blended of some of the best race car ideas. It would have a rear engine, large and relatively slow turning, however, for economical operation; full independent suspension; disc brakes; and an unusual drive system, taking power from both ends of a transversely mounted horizontally opposed engine through identical fluid drive transmissions at each side. It would have front fenders and headlights that would turn with the wheels. And it would have a carefully padded interior for crash protection of passengers and a central seat for the driver. It blended some of the basic ideas from such diverse vehicles as the prewar Auto Union race cars and coming far after his time, the Liberty Mutual "Safety Car."

Tucker is given credit for the "design" of the car, in the popularly accepted misconception of the term. A Detroit commercial artist sketched the early renderings of his proposed car, which was used in initial advertising. But Alex Tremulis, then a young stylist-aerodynamicist seeking to make his mark in the world, actually translated the vague Tucker ideas onto paper, from which patterns and production tooling could be taken.

Tremulis was as surprised as anyone when Tucker decided one of his sample sketches would be the ultimate car. "So far as I was concerned," Tremulis wrote later, "the sketches are just preliminaries, but Tucker insisted that first thoughts are always the best." It was New Year's Eve, the dawn of 1947, when Tucker chose the sketch and promptly made Tremulis chief stylist. He also assigned him to have the first prototype car "ready for paint in 60 days."

Tucker's haste was well-founded. He needed to have a tangible automobile quickly in order to keep a dearly won production plant and to raise needed capital. With nothing like his car available in America, it was doubly important to have a working prototype. Tremulis and his hastily assembled styling staff needed 100 days to get the first prototype rolling, but even that was unheard of in modern automobile design. The prototype, affectionately called the "Tin Goose," was destined to add to Tucker's woes, however.

It was responsible for the long lingering libel that the Tucker car was merely a customized Oldsmobile, a belief that remains firmly implanted in many minds today. There was a grain of half-truth in it. An Oldsmobile had been used as the basis for original dimensional measurements and then as the basis for a body buck. When the prototype Tin Goose was finished, it was graced by that Oldsmobile's roof panel, although greatly reshaped-but nothing more. It was less a cobbled Oldsmobile than a miracle of skip-step

Time and a scarcity of modeling clay prevented the designers from building an intermediate clay mockup, the normal and rational practice within the industry. Instead, with a small group of fine racing car metal benders on the staff, they plunged right ahead

with steel. Using the Oldsmobile as a basis, the metalsmiths would pound out the body panels to the stylists' dayto-day specifications and install them on the waiting chassis. It was a ridiculous way to build a car, but frantic haste was essential to get the entire enterprise fully launched.

For its era, it was a radically styled car. It blended some of Tucker's hunches about streamlining with Tremulis' more studied aerodynamic principles. Contemporary cars still had separate fenders (the envelope body remained a few years away until Detroit could retool from pre-war body dies); but the Tucker hinted at what was to come. Despite Tucker's admonition-"just make sure it doesn't look as if it were frightened by an airplane"-the metal monster, heavy with body lead and unengineered prototype paneling, still had its share of grotesqueries. But it attracted attention, caused comment, looked like tomorrow (at least to people who rarely thought about tomorrow), and was highly distinctive from the contemporary sedans on the streets.

The lack of solid engineering groundwork plagued the Tin Goose prototype throughout its life, although production Tuckers avoided most such problems. It almost didn't make it to its own garish "world premier" unveiling, a fantastic gathering of dealers, pre-sold buyers, prospects, personalities and press, held in the Tucker plant on June 19, 1947. More than 5000 people restlessly waited through stalling speeches until workmen behind the stage curtains could get it to run and to remain properly aligned on its suspension arms, which had developed a disconcerting tendency to snap. At long last, the maroon Tin Goose rolled out to receive a smash across its nose by a champagne bottle and enthusiastic adulation from the crowd.

Another persistent slander that stuck with the Tucker was the belief that it couldn't back up, that they all had a faulty reverse gear in the transmission.

Tucker's original idea-a Buick Dynaflow type fluid drive with fully reversing vanes to provide the reverse gearwould not, indeed, work. But all the original cars then were equipped with Cord pre-selector manual gearboxes, salvaged and rebuilt from junkvards across the country. These were to have been replaced by a new automatic transmission, along the lines of today's Chrysler torque converter, as soon as it was put into production. All Tuckers could back up, although the Cord gearbox admittedly was too weak to withstand the huge Tucker engine's full throttle torque in low gear.

Actually, the Tucker was the country's most homespun motorcar. It was radical enough, also, to be of questionable appeal for a really mass market. Nevertheless, a reservoir of buyers did await its arrival-impatiently-if for no other reason than new cars-any new cars-were just too tough to get. By the time it was too late for Tucker, it was also too late for his market. Regular automobile pipelines had begun to flow freely and scarcity of cars had ceased to be a factor.

Tucker partisans believed, as an article of faith, that the car was so radical and so far ahead of its competition that that was what prevented it from going into full production. In retrospect, any half-knowledgeable individual with only rudimentary conceptions of how automobiles are manufactured can see that that was not the fatal imperfection. Rather, it was the sheer ineptitude of the producerswell-meaning and long-associated with the auto business though they werethat really killed the car. Even a cursory look at the workings of the Tucker Corp. shows it was like Amateur City.

To produce the car, Tucker wanted the gargantuan Dodge plant sprawling over 475 acres in the Chicago suburb of Cicero, the then-largest building under one roof in the world. War Assets Administration controlled it, and in January of 1946, Tucker wheeled and dealed through Washington to get it. The first publicity releases about the car had only then started to appear in magazines. The plant, built at a cost of \$170-million to produce B-29 engines, was leased to Tucker following some financial skirmishing. The lease was effective on March 1 the following year, provided Tucker could raise at least \$15-million capital by then. The Tucker operation moved in during July, 1946, however, while was began to inventory the \$30-million worth of production machinery already installed.

To raise the necessary cash, Tucker began selling dealer and distributor franchises. All told, some \$6-million was raised this way, but held in escrow

TUCKER UNDER THE SKIN

years ahead of its time. It was, in fact, ahead of itself. Some of the revolutionary features promised for it could not be delivered within the state of the art at the time. Most important ones, involving performance and handling, however, did appear on the production car.

Original specifications for the car called for a 589-cu. in. engine, having a square 5 x 5 bore and stroke and overall dimensions of 48 x 24 x 17 in. It would produce 150 bhp at a leisurely 1800 rpm to provide an easy highway cruising speed of 100 mph. Direct fuel injection and a radical hydraulic valve actuating system—operating via hydraulic lines from a distributor-like pump-were specified. It would have sealed-system water cooling and 24volt electrics for starting and to operate a myriad of accessories.

The engine would be rear-mounted and eliminate up to 800 lb. of weight and a multitude of component parts (used in conventional cars) by means of a unique fluid drive/transaxle coupling: Each end of the crankshaft in the transversely mounted engine would drive a separate rear wheel through individual torque converters (i.e., one on each side of the engine) having variable pitch vanes that could swing through enough to provide reverse "gear." Full four-wheel independent suspension using rubber torsion springing and four-wheel disc brakes would

The car itself was set on a 126-in.

PECHNICALLY, THE TUCKER Torpedo was acclaimed to be 10 wheelbase, with treads of 63 in. front, 65 in. rear (compared to conventional 56 in. at the time), and boasted of a step-down frame and 60 in. overall height. Doors curved up into the roof for easier entry. The driver would be centered with swiveling passenger seats on each side. Front fenders and headlights would turn with the wheels. The interior was completely padded for passenger protection. And the windshield could pop out in a collision. Initial goal was to build the Tucker to sell at around \$1000.

> In the 50 cars produced on the pilot production line, most of the body and chassis features were achieved. A bench seat with the driver conventionally seated at the left replaced the early idea and front fenders were fixed, although a central "cyclops" headlight turned with the wheels. The powertrain, however, was totally changed in components if not in underlying concept.

A redesigned Franklin 6-cyl. aircraft engine with water cooling, 335 cu. in. in size and developing 166 bhp, was used. Twin carburetors were used because the fuel injection system could not be refined in time. At 1750 rpm. it provided an 80-90 mph cruise and was capable of 300 bhp at 4250 rpm, comparable to today's engine speeds and power outputs. Like the proposed giant engine, it was horizontally opposed and, at the time the company was shut down was being redesigned back to an air cooled powerplant developing 200 bhp with the same basic dimensions. A 6-v. system was used

because 12-v. batteries, accessories and equipment were not then available.

The engine drove through a Cordlike transmission/differential instead of the dual torque converters planned, operated by a vacuum-activated preselector key-like shift switch on the steering column. Eighteen Tuckers were produced with rebuilt Cord transmissions, all but four later having them replaced with the Tucker Y-1 transmission which was outwardly similar in appearance. Tucker's R-1 torque converter automatic transaxle was installed on a few chassis, but never made it into production.

The Tucker 48 nee Torpedo could easily cruise at 100 mph and had a top speed of over 120 mph (130 mph had been the goal). It was clocked to 82 mph over a quarter-mile dragstrip (starting in second gear to save its rear axles from high torque first gear loads) and 0-60 times of 10 sec. It was priced out to compete in the contemporary Buick Roadmaster range: \$2700 stripped to about \$3000 fully equipped. It weighed about 3600 lb. dry.

Fully independent suspension rather than the more simple swing axle configuration of the early Corvair or Volkswagen—was realized in the cars produced. Rubber technology, however, had not progressed to the point where adequate tires or torsional suspension blocks could be produced. Disc brakes of the era, which were clutch-like friction plates that Chrysler could not successfully use a few years later, were abandoned in favor of large drum brakes.



TUCKER

continued

until car delivery could begin. While used by other would-be automakers, this method of financing triggered the onset of a bureaucratic interference that ultimately collapsed the entire enterprise. The Securities and Exchange Commission decided Tucker franchises were "securities" and as such subject to its regulation. The regulators objected to the wording of the agreements; they were redrawn to SEC satisfaction, and the sale proceeded. In October, Tucker announced a stock issue of \$20-million to begin as soon as it was cleared by SEC. Tucker's brokerage house handling the sale agreed that a prototype car would have to be ready before the first share was offered

A more serious threat arose. Wilson Wyatt, head of the National Housing Agency, ordered was to renege on the Tucker lease and allocate the plant to a company proposing to develop metal pre-fabricated houses. It was one agency against another, essentially, and when the bureaucratic fog lifted, Tucker had managed to corral enough political muscle to keep his plant. But the hassle caused several problems. It created powerful enemies for Tucker in Washington, it put a damper on franchise sales, and it caused an unfortunate delay in preparing for the stock issue sale.

With capital from the stock sale delayed, Tucker got lease terms extended. And work on the prototype began at a feverish pace. But SEC was firmly in the picture with registration of Tucker stock. SEC halted the stock issue proceedings while Michigan Senator Homer Ferguson, whom many observers assumed to be paying off political debts to Detroit backers, threatened to have his Senate Surplus Property Committee force was to evict Tucker if he didn't produce his required \$15-million cash by July 1, the extended deadline.

But Tucker could play the same game. He prevailed upon Senator

George Malone of Nevada, a persistent foe of SEC and its procedures which he felt exceeded legal authority, who announced an investigation of SEC by his committee. The SEC backed off, permitted the Tucker stock sale to proceed through with another delay until July 15. Despite all the adverse publicity, Tucker managed to sell about three-fourths of the \$20-million stock issue during the next two months.

During this time of travail, a series of resignations by several higher company officials and directors reinforced a growing public opinion that Tucker was in trouble. Always a flamboyant and obstinate individual, Tucker was proving to be an abrasive man with whom to work. The resignations invariably were accompanied by bitter recriminations which were thoroughly covered in the newspapers.

Tucker tried to buy a steel plant, both for diversification and for a controlled source of supply, and was thwarted by what appeared to be a collusion among WAA and other businessmen. Another attempt to buy an even larger steel plant once more brought out the wrath of Senator Ferguson, and it was awarded to Kaiser-Frazer for less than the Tucker bid.

Yet, despite suspicions about Detroit's vested interests, there seems to be little evidence to support the claim that the Establishment there tried to throttle Tucker. Normal business competitiveness may have played a role in Tucker's difficulties in getting raw materials and basic parts. But there certainly was no more than normal avarice evident in whatever successes his established competitors may have had. Most important, it must be remembered, the Detroit automakers had their hands full with their own problems in just returning to full civilian production.

Tucker had no trouble in buying an engine plant. He purchased Aircooled Motors Inc. of Syracuse, N.Y., builders of the Franklin aircraft engine, from Republic Aviation in mid-March of 1947 for \$1.8-million. The air cooled aircraft engine had to be redesigned, which was done by a group of trusted engineers in the Tucker kitchen in Yipsilanti, to make it into a water cooled engine having the same crankcase, crankshaft, rods and pistons. The conversion project took 55 days. Like everything else, it was a hurry-up job, with a multitude of detailing work left for later. But it ran-barely. After four preliminary engines were finished in Yipsilanti, the whole job was transferred to Syracuse for refinement and final testing.

Events progressed reasonably well up through the spring of 1948. A pilot production line had been set up, engines and body panels were arriving at the plant, dies and tooling were on order, but Tucker needed more money to pay immediate expenses. The stock issue had been \$5-million short. So a gimmick was dreamed up, whereby Tucker car buyers could pre-purchase accessories—radios, mirrors, seat covers, heaters, etc.—to insure a sequency number for receiving their cars off the production line. More than \$2-million was collected this way, advance payments for accessories to go on a car not yet in production. It was too much for SEC.

On May 28, 1948, amid shouts of "Fraud!" SEC and a by-now allied Justice Department turned their big guns on Tucker. In an unprecedented investigation, SEC sent an army of accountants and attorneys swarming through the Tucker plant, examining every scrap of paper. Tucker was forced to close the plant and lay off 1600 employees. Creditors panicked and began filing suits demanding the company be put into receivership. Stock prices plummeted and an occasional stockholder suit was filed.

The initial blast of heat gradually subsided and Tucker reopened the plant again to demonstrate that he could produce the cars if the Government would only get off his back. With a skeleton crew of 300, he restarted the pilot production line in late July and assembled cars from parts and materials in stock and secured on a piecemeal basis. SEC snorted it was a "mock assembly line;" they were unimpressed and continued their harassment.

The hand of Senator Ferguson could be glimpsed pulling strings behind the scenes; but the most visible black hat was worn by Thomas B. Hart, SEC regional administrator in Chicago, who directed the unending assault with hatchet-faced zeal. Another was Robert Downing, assistant U.S. attorney who conducted the grilling of witnesses before a Grand Jury. Newsweek magazine reported, late in October, the news that 40 FBI agents had been thrown into the investigation of the company and its officers. A Chicago Sun Times columnist added that the FBI's interest was to find out if the mails had been used to defraud (i.e., sending brochures, etc.).

Tucker tried unsuccessfully to get a loan from Reconstruction Finance Corp., which had lavished \$200-million on Kaiser; but he had become a political liability to those friends he had had in government. Only was maintained any connection with him. In a report to Federal District Court in Chicago, answering the receivership and bankruptcy suits which were piling up, Tucker showed the company still had more than \$8-million in assets, in-

cluding almost \$4-million in dealer's notes. In mid-December, the final gladiator entered the arena.

Otto Kerner Jr., U.S. Attorney who later was to become governor of Illinois and today a Federal District Judge, revealed he had thrown his staff into the case to sniff out "possible violations of federal law."

To prove the charge of fraud, the investigators all had to demonstrate that the Tucker car could not be built and, if it ever could be built, would not perform as advertised. Throughout the investigation, the falsity of the charge was borne out by witness after witness. Tucker was building cars. He even had sent seven cars to Indianapolis before Thanksgiving for speed trials. They were driven for two weeks, some around the clock, consistently at 90 mph lap speeds and well over 100 mph on the straights. One had rolled over in an accident, and while only mildly damaged, demonstrated conclusively that the pop-out windshield worked as advertised. It was the only one not driven back to Chicago under its own power.

By the end of 1948, the Tucker situation was critical. After Thanksgiving. some 300 workers manned the pilot production line again for a few weeks, turning out the last of the 50 automobiles the company was to produce. More key men left the company, often with the bitter charges against their former boss. Lawsuits multiplied, and a Chicago judge set a hearing for January 4, 1949, which was postponed abruptly the day before, along with all other legal actions for 60 days. The judge ordered the plant closed to a maintenance level and the company placed under trusteeship.

Kerner, on February 15, announced a Grand Jury would deliberate the case. Ominously, that same day, the existence of an 800-page secret report prepared by SEC came to light with the rumor that it had been sent to the Justice Department. While the SEC continued to deny the existence of any such report, or that they had been consistently leaking damaging information to certain newspapers, the truth surfaced on March 13. The Detroit News, in a bannered front page story, reported some of the contents of the "secret" report. The head ine told it as the newspaper had been given it: "GIGANTIC TUCKER FRAUD CHARGED IN SEC REPORT."

SEC Commissioner John McDonald later admitted he delivered a copy of the document to a *News* reporter, boasting he would do it again had he the opportunity despite the violence it caused SEC's own policies and procedures. A similar but more lengthy article in *Colliers* magazine, "The Fantastic Story of the Tucker Car," ap-

peared while the Grand Jury was deliberating. It had been written by Lester Velie, a muckraking writer who had been invited into Kerner's office to examine the report and given a desk in Hart's office to write his story.

Tucker and seven associates were indicted by the Grand Jury on 31 counts—25 for mail fraud, five for SEC regulation violations, and one on conspiracy to defraud—on June 10. Tucker would get his day in court, but the indictments were as good as a conviction in the way events were going. On the day the trial opened, October 5, 1949, Federal Judge Michael L. Igoe ordered the sprawling Tucker plant returned to WAA.

As it had throughout the whole sordid affair, the government used the prototype Tin Goose as the basis for its whole case. It refused to acknowledge the existence of 50 production cars, or when forced to, dismissed them airily as "hand-built" cars. The prosecution dragged on, hearing witness after witness who hampered the government's case as much as helping it by insisting that cars were being built and that they performed as well as or better than contemporary cars. Defense attorneys cross-examined witnesses carefully, a tactic that blew the whole government case following a year-end holiday recess.

A sec accountant, Joseph A. Turnbull, was the 73rd and last witness who provided astronomical figures showing Tucker and his co-defendants had realized excessive profits from the corporation. But under tough crossexamination, item after item was proven to be a mis-representation by the investigators. The only questionable transaction remaining, after crossexamination set Turnbull's records straight, was the cost of a corporate twin Beechcraft airplane, which Turnbull set at \$57,283, but which could have been as low as \$15,000. When Turnbull stepped down, defense attorneys simply pointed out that the government had failed to prove the existence of any offense and therefore they could not present any defense against a non-crime. Tucker rested.

Twenty-eight and a half hours later, on the early evening of January 22, the jury returned to report the defendants innocent and clear of any attempt to defraud. It was a hollow victory. Tucker already was out of business.

The corporation went into bankruptcy. Claims are still being paid today to creditors, ranging from suppliers to dealers who had paid \$20 down per car for franchises.

(Tucker died in 1956 after failing in a bid to build cars in Brazil.)

It should be mentioned in passing that Tucker had been pilloried by the press, tried and convicted in print even before his appearance in the courtroom. True, he gave as well as he got, carrying out his side of the battle of the press releases with as much fervor as he could muster. He did amass glowing reports, too, but rarely in the daily newspapers. Tom Mc-Cahill, the prototype "road tester" of Mechanix Illustrated magazine, suffocated the car with praise. Ken Purdy, then editor of True magazine, compared Tucker and his car to Cord, Duesenberg and Stutz and their creations. Certainly, they were far more knowledgeable reporters of the auto industry than those whose stories proved to be Tucker's undoing. Yet, to be sure, the fortunes of Tucker Corp. and its revolutionary car had ballooned forth in a publicity ballyhoo and public puffery that had carried it along through its few years of preproduction consolidation.

Tucker partisans are fond of pointing out that the auto industry only now is catching up with ideas Tucker put into, or tried to put into, his car. In his final days, Tucker himself agreed that he had tried to do too much too fast. Examination of the operation at Cicero would bear that out—completely.

WHERE TO SEE THEM

READERS OF CAR LIFE can get a first-hand, close view of the Tucker 48 at major auto museums around the country. They are:

Zimmerman Automobilorama Harrisburg, Penn.

Henry Ford Museum Dearborn, Mich. Harrah's Auto Collection Reno, Nev.

In addition, more detailed reading material about the car and the company may be found in the following:

The Indomitable Tin Goose: The

True Story of Preston Tucker and His Car, by Charles T. Pearson, 1960, Abelard-Schuman Ltd., New York, published at \$4.95.

"Ordeal By Trial: The Decline and Fall of Preston Tucker," by Robert F. Scott, AUTOMOBILE QUARTERLY, Vol. 2, No. 4, Winter 1963-64.

"Epitaph for the Tin Goose," by Alex Tremulis, and "Tucker Number Two, The Carioca," by Alexis de Sakhnoffsky, AUTOMOBILE QUARTERLY, Vol. 4, No. 1, Spring-Summer 1965.