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Why the Learjet Is Such a Badass Plane

Even Frank Sinatra fell in love with the world's first mass-produced business jet.

BY [ERIC TEGLER](#)

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When the iconic Learjet first flew in October 1963, it heralded the beginning of an era of luxurious, chic, and fast executive jets. The [Learjet 23](#) was so quick—with a top speed of 561 mph and a 3G rate of climb at 6,900 feet per minute—that only frontline U.S. Air Force and Navy fighters outperformed it. That made it, among other things, a great getaway vehicle.

Frank Sinatra proved it. By 1965, Ol' Blue Eyes had decades of global hit records and hit films behind him, led the “Rat Pack” through Vegas, and had a revitalized career which included running his own record and film companies. He was in demand at venues all over America, shuttling frequently from his home in Palm Springs, California, to the casinos of Las Vegas and beyond.

By car, the Vegas trip was a five-hour mission, but with a fast airplane you could zip there in 45 minutes. Sinatra had previously owned airplanes, but nothing like a Learjet. He took delivery of a Lear 23 in early 1965, complete with a fully stocked bar and a card table within its small leather-upholstered, six-passenger cabin. He named it *Christina II* after his youngest daughter, and it came in handy from the start.



Alamy



Alamy

In June 1966, Sinatra helped Rat Pack member Dean Martin celebrate his birthday at a raucous party taking place at the Polo Lounge in Beverly Hills, California. Not everyone there was into it. A well-known executive complained, words were exchanged, and a brawl broke out. The next morning, Clay Lacy—an Air Force and airline pilot who was also an early Learjet dealer—got a call just before taking off in Sinatra’s jet.

He was bound for Edwards Air Force Base, where he’d pilot the Lear 23 during a publicity event for North American Aviation’s ill-fated Mach 3 XB-70 Valkyrie bomber; the cameraman needed an aircraft fast enough to chase the bomber, and Sinatra’s Lear was the fastest civilian plane they could muster up in Southern California. But instead of heading north out of Los Angeles to Edwards, he was instructed to make a two-minute flight over to Burbank

Airport. He taxied in just after 6 a.m. to find a pair of waiting passengers: Sinatra and Martin, still wearing their suits from the night before.

According to Lacy, Sinatra's left arm hung in a sling made from a pillowcase. Martin had a black eye and bloodstains on his shirt, and reportedly said something about leaving the country, but Sinatra is reported to have settled into his seat and quipped, "Nah, we'll hide out for a few days. It'll be fine."

About 40 minutes later, Lacy decanted the stars at Palm Springs Airport, and pointed the Lear's nose toward Edwards Air Force Base—the day wasn't over for Clay or for *Christina II*. And this was only the beginning for Learjets at large, ascending into six decades of celebrity soaked glamour, adventure, and disaster.

The Self-Taught Genius and His Jet

By the time Sinatra and Martin bugged out of Beverly Hills, William Powell Lear Sr. was a vastly successful inventor, innovator, and businessman. By 1950, his knack for improving radio technology and electronics had been recognized with the Collier Trophy—an award that the Washington, D.C.-based National Aeronautic Association bestows on an inventor “for the greatest achievement in aeronautics or astronautics in America, with respect to improving the performance, efficiency, and safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year.”



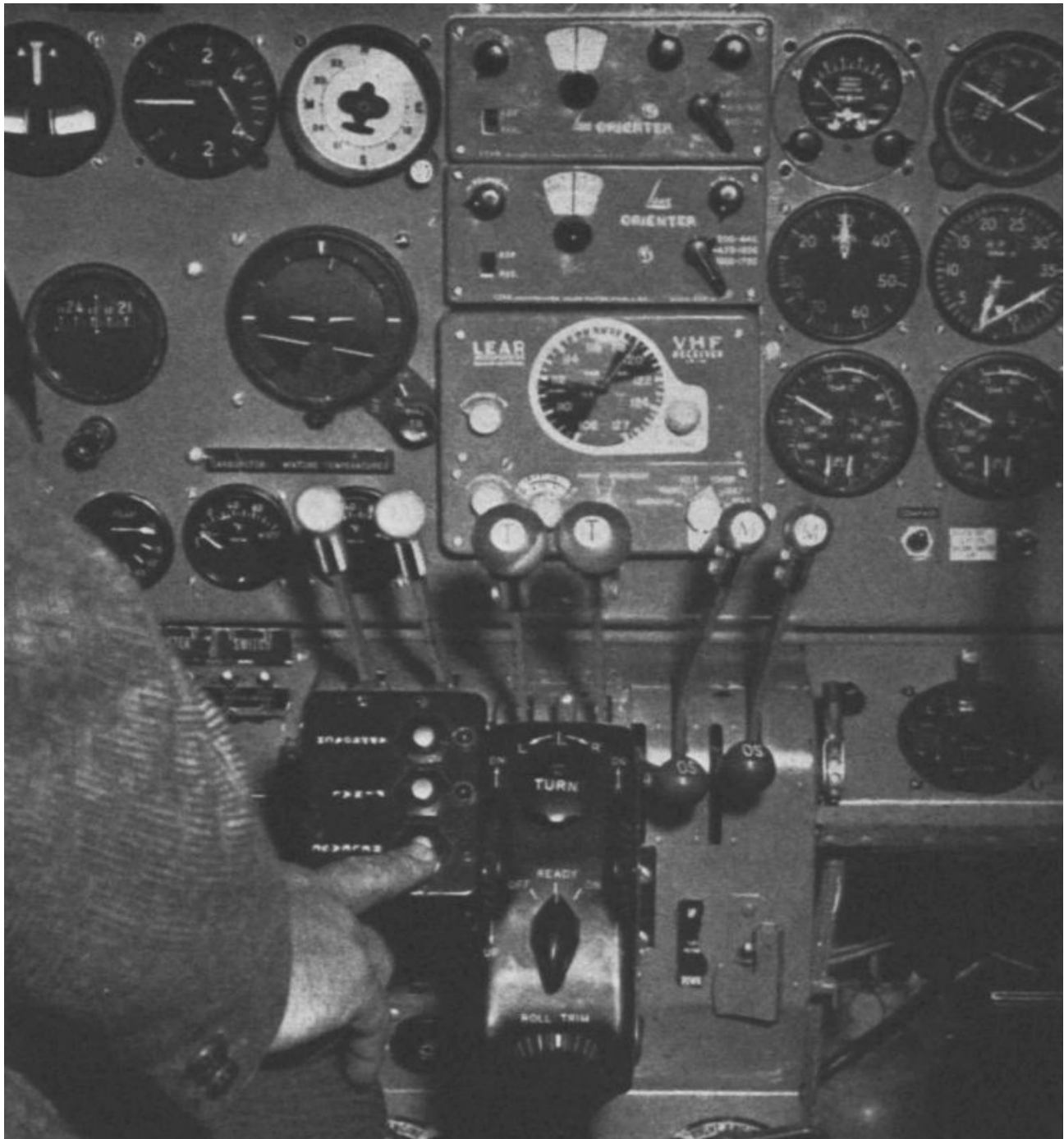
William Powell Lear Sr.

Getty Images

The Collier Trophy honored Lear's work in developing the first fully automatic aircraft landing system, the Lear F-5 Automatic Pilot and Automatic Approach Control Coupler System, "which makes possible the safe landing of jet aircraft regardless of extreme weather or visibility conditions," per *Of Current Interest*, an publication of the Institute of Electrical and Electronics Engineers (IEEE).

Lear was also known for his work on radio direction finders, autopilots, and the first practical car radio; the latter led to co-founding the renowned

Motorola company. His eponymous avionics firm, Lear Aviation, made millions of dollars during WWII. After the war, it became Lear Incorporated, and remained under its namesake's control until the early 1960s.



The Lear F-5 autopilot as installed on the instrument panel of a Twin Beech showing controller and automatic approach control coupler. Lear Dual ADF-12 and Lear VHF receiver and transmitter combined with low-frequency range and broadcast receiver is shown above on the instrument panel
Of Current Interest / IEEE

Aided by a short stint in the U.S. Navy during WWI, during which he trained as a radio operator, Lear taught himself electrical engineering and

electronics. He took high school courses after his service, but never graduated. In 1931, he bought and learned to fly a biplane, an early type of fixed-wing aircraft with two pairs of wings stacked on top of each other. Flying furthered his understanding of advanced avionics and what private aircraft could do. By 1956, he became the first Westerner to fly a private aircraft into Moscow.

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Why the B-2 Bomber Is Such a Badass Plane

Lear's flying experience lit a fire inside of him—his greatest desire was to turn Lear Incorporated into an aircraft manufacturing company that could build executive jets. But his board of directors wasn't exactly ... on board. A determined Lear sold his shares in the company and moved to Switzerland in 1960. There, he formed the Swiss American Aviation Company (SAAC) in St. Gallen near Swiss aircraft manufacturer Flug und Fahrzeugwerke Altenrhein (FFA).

FFA had designed and built the P-16, a prototype ground-attack fighter jet that the Swiss government selected for its air force. When one of the two P-16 prototypes crashed during a test flight in 1958, the Swiss canceled their order. FFA continued trying to find customers for the promising design, but ultimately failed, flying the P-16 for the last time in 1960.



A prototype Learjet 23 executive jet on a test flight, February, 24, 1964.

Getty Images

Lear was aware of the project through his son, William P. Lear Jr., who had worked with FFA as a test pilot and liked the P-16. With his son's encouragement, Lear Sr. brought a number of FFA staff onboard at SAAC, including P-16 designer Hans Studer, utilizing some of their concepts in a new passenger jet design for the SAAC-23 (which would later become the Lear 23). While the airplane was similarly sized to the P-16 and used elements of its wingbox, airfoil, and tip tank layout, the executive jet was a distinct design.

But things moved slowly in Switzerland, and Lear Sr.'s patience waned. In 1962, he loaded up the prototype executive jet's hardware and designs and moved them to Wichita, Kansas, where he reformed SAAC as the Learjet Corporation. Wichita was home to a variety of American aircraft

manufacturers—and lots of engineering talent. Ten months after the new Learjet Corp. set up in Kansas, the first Learjet 23 prototype was ready to fly. In late 1963, the prototype Model 23 (N801L) made its first flight, showing its speedy potential even with a very conservative test plan.

The fully pressurized, all-metal airplane featured a fuselage that narrowed as it went aft (where the wing and engine nacelles extended outward), a design concept known as “area rule,” to provide smooth airflow around the engines. A pair of General Electric CJ610-4 turbojet engines gave it 5,700 pounds of total thrust (2,850 pounds of thrust each).

Lear Sr.’s celebrity connections are what really cemented the Learjet as a pop-culture phenomenon.

With an empty weight of 6,150 pounds, that equated to a thrust-to-weight ratio of 1:2.2. As a result, the Model 23 could out-climb an F-100 Super Sabre to 10,000 feet.

In the spring of 1964, the airplane looked set to march slowly through Federal Aviation Administration (FAA) certification. But when an FAA check pilot forgot to retract the Lear’s spoilers (speed control devices on the upper surface of each wing panel, forward of the flaps) while simulating a left engine failure on takeoff, the jet couldn’t climb, and belly landed in a wheat field beyond the runway. The FAA check pilot and co-pilot emerged unscathed.

Furious at the loss of his prototype, Lear Sr. used the government pilot’s error to strong-arm the FAA into providing more resources to certify his jet. A second prototype, already in-build, was quickly finished and pressed into testing. Just seven weeks later, in July 1964, the Learjet 23 was certified.



View of a Learjet 23, serial number 23-001 (N801L), as it takes off on its first flight, Wichita, Kansas, October 7, 1963.

Getty Images

Lear Sr. immediately went about publicizing it by setting formally recognized speed records. In May 1965, a cross-continent flight with pilots Clay Lacy and John Conroy (joined by five observers) covered 5,005 statute miles from Los Angeles to New York and back in 11 hours, 36 minutes. That December, another Lear 23 took off from Wichita and climbed to 40,000 feet in 7 minutes, 21 seconds.

In 1966, a Lear 24 with a crew of four broke 18 records on a round-the-world flight, spanning a distance of 22,992.8 statute miles in 50 hours, 39 minutes. A decade later, renowned golfer Arnold Palmer and a co-pilot left Denver, Colorado in a Lear 36 on another globe-girdling flight, setting a new executive jet record with a 48-hour, 48-minute hop at an average speed of 400.23 mph. In 1979, astronaut Neil Armstrong set five world records in a

Lear 28: two for altitude achieved, two for sustained flight at 51,000 feet, and one for high-altitude time-to-climb.

The publicity garnered attention in the aviation business community, but Lear Sr.'s celebrity connections are what really cemented the Learjet as a pop-culture phenomenon synonymous with the term "bizjet."

Famous and Tragic



Other bizjets including the North American Sabreliner and Lockheed JetStar actually beat the Learjet to market. They cost millions, but carried eight to ten passengers, and offered enough headroom to stand upright or stoop; however, sky-high operating costs put them out of reach to all but the biggest corporations and richest individuals.

The Lear 23's \$500,000 price tag was less heady, but for the money, you didn't get a lot of space. It was a head-bumping, duck-in and sit down light

jet that could test your back—and your bladder. But Lear Sr. met reluctant customers with a style and speed argument that most couldn't resist. In his autobiography, Lear Jr. relayed his father's "sales pitch" to one dubious potential buyer:

When one potential client sat in the Learjet mock-up and complained to Dad that he couldn't stand up in it, Dad replied "You're absolutely right ... and you can't stand up in your f**king Rolls-Royce either. If you want to be able to stand up, walk around and fly three times slower, then buy yourself a DC-3." That conversation over, the dude ordered a Learjet.

Coupled with star backing, the pitch had power. Actor and comedian Danny Kaye was a friend of Lear Sr. who bought a Lear 23, flew frequently with Lacy, and posed for photos with the early Lear 40 mock-up. Sinatra did his part, too, introducing many celebrities to the aircraft, including Elvis Presley, Kirk Douglas, Sammy Davis Jr., Marlon Brando, and more. Sinatra also used his Lear as a tool to woo a 20-year-old actress named Mia Farrow, ultimately taking the jet to the south of France for their honeymoon.



Learjets were featured in the ABC gameshow, *The Dating Game*, flying contestants like Farrah Fawcett, Lindsay Wagner, Lee Majors, and Arnold Schwarzenegger to Las Vegas or San Francisco. Singer John Denver bought and flew a Lear 35 that he named “WindStar 1.” Learjets continued to make myriad TV and movie appearances, including a Lear 23 featured in the final episode of the *Mad Men* series.

But the planes’ celebrity affiliations led to other, less flattering, headlines. Early Learjets were challenging to fly. Their high performance came with high stall and landing speeds. By 1967, 23 out of 104 Learjets produced crashed—four with fatal results. Ten years later, Frank Sinatra’s 82-year-old mother, Dolly, died when the Learjet 24 he had chartered to take her from Palm Springs to Las Vegas for an opening night at Caesar’s Palace flew into a blizzard and crashed on San Gorgonio mountain.

Renowned golfer Payne Stewart’s Lear 35 crashed in 1999 after losing cabin pressurization. Hypoxia—a life-threatening condition in which the body’s tissues have insufficient levels of oxygen, causing confusion, difficulty breathing, and rapid heart rate—incapacitated Stewart and five others who perished, a scenario that repeated itself in June 2023, when a Cessna Citation V crashed in Virginia. But the vast majority of the 3,000+ Learjets produced led—and continue to lead—productive careers.



A Gates Learjet 25 executive jet on the tarmac at the Farnborough Air Show, September 1, 1974.

Getty Images

With other interests competing for his attention, including the development of the eight-track tape-player and a free-stream turbine engine for cars and buses, Lear Sr. sold his 60-percent share of Learjet in 1967 for \$27 million to the Gates Rubber Co. Gates would go on to develop the rest of the larger Lear 20 series: the popular Lear 35 and the Lear 55. In 1990, Canadian manufacturer Bombardier acquired the Learjet line from Gates, refining the design to produce the Lear 31, 45, 60, and 70/75.

In March 2022, the final Learjet, a Lear 75, was delivered to a charter company in Michigan; it will take on the kinds of shorter point-to-point flights that Lears have long excelled at. Aviation intelligence and analysis firm [JETNET](https://www.jetnet.com/), a market research firm for the aviation industry, shows most Learjet flights clocked a duration of between 60 and 150 minutes.

✔ Get the Facts: Astrovision

In 1968, Clay Lacy established his eponymous aviation firm, Clay Lacy Aviation, the first executive jet charter company in the Western United States. But three years beforehand, Lacy took an interest in aerial photography and began developing a camera system called “Astrovision.” Aircraft equipped with this system have filmed “over 2,800 projects for the military, general aviation, airlines, television, and feature films worldwide,” according to [Lacy’s website](#).

Today, experts in the fields of aviation and film consider Lacy one of the top aerial cinematographers in the world for his role in creating Astrovision, which could film in 360 degrees with “[continuous and unrestricted use](#),” per the Frederick, Maryland-based Aircraft Owners and Pilots Association.

[Hollywood](#) was always a part of Lacy’s landscape and it’s no surprise that he developed a camera system on the Learjet that revolutionized moviemaking. The camera system, Astrovision, could film 360 degrees and was the first such system that offered continuous and unrestricted use. Lacy made another name for himself in Hollywood, photographing air-to-air scenes in movies such as *Top Gun*, *The Great Santini*, and *Armageddon*. He is a member of the Screen Actors Guild.

Learjets still continue all sorts of missions. They’ve served with the U.S. Air Force as C-21s, performed as chase aircraft with NASA, worked as flight test aircraft, and have taken up roles as military aggressor and range training aircraft. As camera platforms equipped with [Astrovision](#)—an aerial cinematography system developed by none other than the pilot Clay Lacy, himself—the planes have captured video for numerous movies including [Top Gun](#), as well as myriad commercials and promotional videos.

Lear Sr. died of leukemia in 1978 at the age of 75. He was still at work on a number of projects, and had received over [120 patents](#) throughout the course of his career. Nearly 50 years later, his name is remembered whenever any of the 2,000-plus Learjets still operating are seen on a ramp or in the sky—as sleek, chic, and *badass* as ever.

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