

The Chastains'



**Three generations and
a heartwarming family history**

BY SPARKY BARNES SARGENT

1952 RAWDON T-1



Seeing an airworthy Rawdon T-1 is a special treat, since only 36 were ever manufactured. Today, just 15 remain on the FAA registry, and it's likely that not all of those are airworthy. Occasionally you may see one flying as a workhorse—towing banners, skywriting, or spraying crops. And then there is N5160 (s/n 6), a handsome and lovingly maintained T-1 that has garnered eight Air-Venture awards throughout a span of 30 years. It is an elegantly restored airplane, and the Chastains of Missouri treasure it primarily because their personal family history is inextricably intertwined with Rawdon aircraft.



The Chastains' elegantly restored and lovingly maintained 1952 Rawdon T-1.



The Rawdon is soloed from the front seat.

SPARKY BARNES SARGENT PHOTOS

This past summer, Teri Lee Chastain became the third generation of her family to fly the Rawdon to EAA AirVenture Oshkosh 2008. Her father, Terry, proudly accompanied her, as together they celebrated their family's 30th anniversary of their first flight to Oshkosh. But before we delve into the Chastain family's history, let's take a look back in time to discover more about Rawdon Brothers Aircraft Company.

RAWDON BROTHERS AIRCRAFT

During the late 1920s, Herb Rawdon was employed by Travel Air and, along with Walter Burnham, was known for designing the successful Travel Air Mystery Ship—which flew faster than the favored military aircraft and won the first Thompson Trophy air race in 1929. Many of these engineers eventually formed their own companies, and Rawdon was among them. Herb was the aircraft designer, and Gene Rawdon fulfilled the role of business manager.

A prototype, the side-by-side R-1, was built in 1938 and tested as a civilian pilot trainer, but was rejected. Not to be defeated by that attempt to enter the aircraft manufacturing market, Rawdon Brothers Aircraft Company began production after World War II with its tandem cockpit T-1 models in Wichita, Kansas. The T-1 had been tested for mil-



Cleveland brakes have replaced the original Goodyear brakes.

itary use, but wasn't selected. But by 1947, the fixed gear monoplane, which was designed for training, touring, and crop spraying, was finally certified. Production models also included the T-1CS (crop sprayer), T-1M (Colombian Air Force version), T-1S (sprayer), and the T-1SD (sprayer/duster with wingtip end plates and a modified tail).

The T-1 was originally powered by a 125-hp Lycoming engine, and later upgraded to 150 hp in its agricultural configuration. The semicantilever, low-wing plane stood just over seven feet tall and was barely 24 feet long, with a wingspan over 33 feet. Early models were fabric-covered with wooden wings. Later models used sheet metal in place of the fabric, and the wings were constructed of metal. Corrugated metal was even used at one time for the wing section between the front and rear spars, and the aircraft also went through wingtip variations.

The Rawdons wanted to make their T-1 fill an agricultural niche. Its large inboard struts rising up from the low wings to structural tubing inside the canopy created a protective turnover structure for the pilot. They designed and added a spray manifold system and spray nozzles in the wing, along with a hopper tank behind the pilot's seat. But the latter feature made it less crashworthy than other agricultural sprayers, which placed the load in front of the pilot. Apparently the Rawdon design was labor intensive, resulting in higher manufacturing costs, and it was difficult to sell the aircraft competitively. Pilot safety, cost, and eye appeal were major selling points, and the Rawdon was eventually edged out of the market.

Rawdon Brothers Aircraft incorporated several interesting design features in its airplane, and one of them was selected for use on military trainers. Rawdon canopies,

SPARKY BARNES SARGENT PHOTOS



This Rawdon is powered by a Lycoming O-320.



Closeup view of the tail, with its neatly painted trim.



Closeup view of the inboard strut.



Right: Close-up view of the elevator trim mechanism.



SPARKY BARNES SARGENT

Teri Lee was the third-generation Chastain to fly the Rawdon to Air-Venture; her father, Terry, accompanied her.

“MY DAD WAS THE SHOP FOREMAN AND TEST PILOT FOR RAWDON BROTHERS AIRCRAFT COMPANY, AND THAT’S HOW WE CAME TO BE ATTACHED TO A T-1.”

—TERRY CHASTAIN

which covered the entire cockpit area, were contracted for use on the Fairchild PT-19/23 flown in cold weather climates. Quite a few were also manufactured for use on the PT series of Stearman trainers. About 800 were sold as an aftermarket addition to enclose the open-cockpit trainers. Herb worked as an engineer and draftsman for several well-known aircraft companies throughout the years, including Beech, Boeing, and Cessna.

The T-1 has survived the test of time, albeit in even smaller numbers than were manufactured. Perhaps the most significant tribute



(Chastain family photo OSH 1980) The Chastain family at Oshkosh 1980 (L-R): Phil, Betty, Bill, MayBelle, Jack, Terry, Mary, and Teri Lee.

PHOTOS COURTESY TERRY CHASTAIN



Jack Chastain, test pilot and shop foreman for Rawdon Brothers Aircraft. Photo taken in 1948 with T-1 N44505.



This Aeronca Champ was the Chastain family’s first restoration project.



This Fairchild PT-26 was the Chastain family’s second restoration project.

to Rawdon’s classic, well-designed, and solidly built airplane is that more than half a century since its original manufacture, no Airworthiness Directives (AD) have been issued for the airframe.

Today, brothers Phil and Terry Chastain are co-owners of N5160, and Terry can’t help but smile when he describes the T-1: “It’s a fun airplane to fly, it really is! It holds 38 gallons of fuel, burns



Young brothers Phil and Terry Chastain with their father's Mirage in 1951. Their father raced the Mirage at Detroit in the early 1950s against Steve Wittman, Bill Flack, and other greats of that era.



After AirVenture 2008, the Chastains can add another "award winner" sticker to N5160.

1952 RAWDON T1 N5160 AIRVENTURE AWARDS

CLASSIC RESERVE GRAND CHAMPION 1978
 RESERVE GRAND CHAMPION 1979
 BRONZE LINDY—CLASSIC 1980
 OUTSTANDING LIMITED PRODUCTION 1981
 BEST RAWDON 1983
 RESERVE GRAND CHAMPION 1984
 OUTSTANDING LIMITED PRODUCTION 1987
 PRESERVATION AWARD—CLASSIC 2008
 NUMEROUS OTHER AWARDS, INCLUDING ANTIQUE
 AIRPLANE ASSOCIATION'S GRAND CHAMPION 1978

about 9 gallons per hour, and cruises about 118 mph. It has a short takeoff, and lands about 55 mph—you can bring it in and land it in probably 250-300 feet. The flight controls are very well harmonized, and it has a fast roll rate—it's very aerobatic."

CHASTAIN FAMILY

"My dad, Jack, was the shop foreman and test pilot for Rawdon Brothers Aircraft Company in the 1940s and early 1950s," smiles Terry, "and that's how we came to be attached to a T-1. He and my

mom, MayBelle, flew a T-1 from Wichita, Kansas, to Bogota, Colombia, and back in the early 1950s to demonstrate its capabilities to the Colombian Air Force. During that trip, Dad also flew the T-1 from Bogota to Quito, Ecuador, over the Andes Mountains. He performed aerobatic demonstrations there, at a field altitude of over 9,200 feet."

The Colombian government was impressed with the Rawdon T-1's capabilities and purchased three of them. "Dad and two other Rawdon pilots delivered the three Colombian T-1s in 1952. Along the way,

one of the T-1s developed an oil leak and had to land, unauthorized, in Nicaragua," Terry shares. "In order to proceed to Bogota, he was forced to deliver a prisoner being extradited to Colombia. The prisoner was handcuffed to the longeron in the rear seat! The T-1s were armed with 30-caliber machine guns in the wings, and a 100-pound bomb on a belly rack. They were used for ground attack ships during those unsettled times in South America."

Jack also demonstrated the T-1's highly maneuverable aerobatic capabilities during the early 1950s. "My dad flew it in air shows for many years at Wichita and all around the Midwest. And he gave air show announcer Roscoe Morton his checkride in Wichita. Roscoe's first air show announcing job was in 1952, and my dad was flying the T-1 during that show. Dad also flew the T-1 in the 1949 Miami All American Air Maneuvers aerobatic competition."

In 1954, Jack became a corporate pilot, flying a Beech E-18S. Terry and his brother, Phil, started their flight training in the twin Beech, and each of them made their first takeoffs and landings in that airplane. In 1962, both Phil and Terry soloed a 1946 Aeronca Champ at Creve Coeur Airport. "Dad, an instructor, traded his time for use of the Champ to instruct us," recalls Terry. "Phil, being two years older, was ready to solo as soon as the Champ became available to us, but I had to wait until my 16th birthday arrived. We later purchased the Champ for \$200 and completely restored it as our first family project around 1964. We upgraded it to a 7CCM with a Continental O-200 and installed a complete IFR panel. Phil and I both earned our private licenses in the Champ, and Phil even earned his commercial in the Champ."

The Chastain family's next project was a Fairchild PT-26—at \$500, it was just a bit more costly than the Champ. The PT-26 was completed in 1969, and the Champ was sold to make room in the hangar.



DON PARSONS

The sons had grown up listening to their father's intriguing stories about flying T-1s and working at Rawdon Brothers Aircraft Company, and with two restorations completed, they encouraged their father to start looking for a T-1 as their next family project.

Finally, in 1974, they found N5160. "It was a basket case," says Terry, "but it had a set of new Rawdon metal wings. It had been in a spraying accident; it was a crop sprayer at the time. My dad built this plane originally, and his signature is all over the logbook. So we bought the pieces, and Phil and my dad and mom and myself all worked on it. It took about three and a half years, and we had it scattered out all over the place—I had parts at my house, and Phil did all of the tail surface covering at his house. We didn't build it as a show airplane, just a fun airplane for the family."

Terry, who worked internationally for the oil industry, was transferred to Singapore during that time, so the bulk of the restoration was then completed by his brother and dad. Sadness coursed through the Chastain family toward the end of the Rawdon restoration, as their hearts were made heavy when they learned that Jack had cancer.

"Dad was diagnosed with lymphoma in 1977, but did not let the illness deter him from working on the Rawdon. By 1978, the lymphoma was in remission, and the T-1 was ready to fly. I had been transferred to Sumatra, Indonesia, that year," shares Terry. "So the first flight after restoration had Dad in the front seat and Phil in back. The date was April 13, 1978, or better said as Friday the 13th! After the first flight, Dad got out and told Phil that he wanted to see the T-1 fly. After all those years of hearing about the T-1, its harmonized controls and great performance, Phil finally had the chance to experience it firsthand. I had to wait until vacation from the Far East before my chance came, which was in July of 1978. We found that all of Dad's 'braggin' about the T-1 was justified!"

The Chastains had read about the great experiences people were having at Oshkosh every year, and since they'd recently completed the Rawdon and Jack was feeling pretty good, they decided to head north to Wisconsin in 1978. "Dad and Mom flew the Rawdon, Phil and his wife, Betty, flew their N model Bonanza, and Mary rode with me in the family's PT-26. We had planned for only a two-day stay, since the kids were with

babysitters—but Dad and Mom were asked to stay on a little longer, since the classic judges had the T-1 in contention for one of the Grand Champion awards," says Terry, fondly reminiscing. "So Mom and Dad stayed in Oshkosh while Phil, Betty, Mary, and I flew back to St. Louis. A couple of days later, we received a call from Dad saying they were asked to stay until the awards presentations. They wanted to know if we could fly up and bring some money so they could stay! Phil and I flew back to Oshkosh in his Bonanza, with money in hand, and proudly watched Dad receive the Reserve Grand Champion Classic award."

On the return flight home, May-Belle rode with Phil in the Bonanza, and Terry flew the T-1, while Jack rode in the back to complete some fuel burn and other systems tests. A week later, Terry and his family went back to Singapore, and just three short months later, received a heart-wrenching phone call. "Dad was in the hospital with acute leukemia. He went 'west' just a few days later at the young age of 58," shares Terry. "Dad's passing put even more focus on the great time and memories we all had at EAA Oshkosh 1978 and my last flight with him."

As the family gathered together



fore retiring and is currently a pilot for the Historical Aviation Restoration Museum, which means he has flown everything from Jennys to jets. His wife, Betty, flies her own Cessna 150, *Betty Boop*. Terry is now retired from his career in international oil production, and he restores antique airplanes for John Cournoyer's Old Style Aircraft at Creve Coeur. Terry's wife, Mary, is a youth minister and shares in the joy of flying with her family.

As for MayBelle, Terry grins and says, "Mom is 86, and she's a bona fide airport bum! She came up to Oshkosh with me several times after Dad died, and she parked herself by the T-1 and wouldn't leave it. She said she had to be there to answer questions that people might have."

for their beloved patriarch's funeral, their good friend Doug Watanabe was preparing to take delivery of a Rawdon T-1 (s/n 2, N44505) that he had recently purchased. "N44505 was the T-1 that Dad used in all of his air show work and the 1949 Miami All American Air Maneuvers. Doug had asked if we would perform the check flights when it arrived. Its delivery to St. Louis was scheduled for the day of Dad's funeral," Terry shares in a wistful tone, "and we thought it would not only be a tribute to Dad to fly his 'old mount,' but it would also give us the opportunity to be alone with him, beyond any earthly bounds. Phil and I flew N44505 and our N5160 in formation that day, before breaking off to say our final farewells."

For the Chastain family, the following year was filled with the mingled emotions of sadness and loss, swirled together with hope and anticipation—for it was in Singapore that Terry and his wife, Mary, along with their two young sons, would joyfully welcome the addition of a baby girl—Teri Lee—to their family in October 1979.

In later years, Terry's brother, Phil, became a corporate pilot, flying an MU-2 and a Cessna Citation 5. He earned his A&P and IA be-

THIRD GENERATION

And then there is the third generation of Chastains. Phil and Betty's sons, Mike and Rob, are both quite naturally interested in flying. Terry and Mary's sons, Jack and Bill, work for NASA. Bill is a lead engineer on the space shuttle program, and Jack is a design engineer on the international space station program. Their baby sister, Teri Lee, soloed in a Champ at age 26 and earned her private in 2007 in a Cessna 140.

"I always wanted to fly, and the opportunity came up where it wasn't that expensive," says Teri Lee, "so it was a perfect time!" Smiling brightly, with her long blonde hair kissed by the summer sun, her sparkling light blue eyes reveal a quiet inner determination and confidence. She transitioned to the Rawdon T-1 in early 2008; to date, she's logged more than 100 hours' total flight time—all of which is in tailwheel aircraft. She enjoys taking friends and family up for rides, including her girlfriends, her two-year old niece, her brothers and mother, and even her boss.

Comparing the three airplanes, Teri Lee smiles and says, "The Champ's slow and pretty much flies itself because it wants to fly. The 140 was a little squirrely when I

first started with it, because it's a lot faster and bigger. And then the T-1 was just pretty easy. When I was younger, he used to let me fly it in the air, so that was not a problem. It took me a while to get the landings on concrete because the tail is longer, so it always wanted to whip. But once you get it down, it's not that bad."

Teri Lee flew the entire five-hour flight from Missouri to Wisconsin, with her dad riding in the back seat. It's easy to sense the love between this father and daughter; it's virtually tangible, as is the humble pride they share in their family history. Brimming over with happiness, Teri Lee shares that "it's just really exciting to fly the T-1 here for the 30th anniversary, and my grandma's so excited! We called her when I landed in the Champ after my first solo, and that was the first time ever I saw my dad tear up. It just gave him a special feeling, and it's exciting coming here. I'm glad to have this experience with my dad. It's exciting to see him so proud."

Currently, Teri Lee is learning to fly a Waco, and she's starting to build her very own Hatz biplane. "It's a neat feeling to be that close to my dad and work on Wacos and stuff with him," she says with a smile. "He's going to help me build my classic Hatz, too. We have to finish the WacoYKS-7 first, but I can make a jig and start ribs in my basement now."

As for N5160, it is a frequent flier, whether it's the second or third generation at the stick (and there may well be a fourth and fifth generation of flying Chastains, when they become of age). Additionally, the T-1 is often used as a photo ship for air-to-air photography of the antique and classic aircraft at Creve Coeur Airport. It's no surprise that this cherished Rawdon will remain in the Chastain family—especially now that the third generation has climbed into the cockpit. Together, father and daughter happily maintain and honor their unique Rawdon family heritage.