



BEST^{of} SHOW

A T-28 Trojan roars back into the air

STORY AND PHOTOS BY DAVE LEININGER

Chuck Wahl recently reached a pinnacle with his love of aviation completing a four-year restoration on his award-winning T-28C Trojan, but this story actually starts some 35 years earlier. Ensign Larry Wahl, Chuck's father, had more than 100 hours at the controls of the T-28, the Navy's primary trainer, and needed to complete only two touch-and-goes and four traps on the USS *Lexington* to earn his wings of gold and join the ranks as a Naval aviator. The senior Wahl was successful, and retired as a commander, having flown the A-7 Corsair II, AV-8 Harrier, and a variety of helicopters

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during his service in the Navy. He also flew combat missions over Vietnam, and has always remembered fondly his time spent flying the Trojan.

Chuck Wahl was a young lad who dreamed of reaching the skies and following in his father's footsteps. Coming from an aviation family Chuck was encouraged to learn to fly. Living next to Julie Clark, herself an accomplished airline pilot and air show performer, only fed his desire to become a pilot. Larry began teaching Chuck to fly at the age of 14. He celebrated his 16th birthday with his first solo flight, and received his private pilot certificate the following year. During his senior year of high

school, Chuck was a certified flight instructor at Naval Air Station (NAS) Lemoore's flying club.

Over the years, Chuck had flown many times with Clark in her T-34 Mentor, but a flying experience they shared would change his life and send him on an adventure he is still fulfilling. One evening in 1998 he received a call from Clark who had recently acquired a T-28C, and she asked if he would be interested in going for a flight. "Absolutely," Chuck responded. "I'll be there bright and early." To this point Chuck had logged many hours in the T-34, but

During the research of the aircraft's history Chuck found the T-28C was assigned to Training Squadron VT-5. Chuck chose these markings for the paint scheme on this T-28C.

had never really thought about the possibility of flying other warbirds. On a clear warm morning Chuck strapped himself into the back seat of the bright yellow T-28 that Clark affectionately calls *Top Banana*. After a brief checklist rundown, the R-1820 roared to life. The aircraft accelerated and climbed into the sky with such speed it surprised Chuck. "We performed loops and rolls, and the aircraft was incredible, with more speed than any aircraft I had flown before," he said. Once back on the ground, Chuck stepped down from the aircraft and decided right then and there he would not rest until he acquired his own T-28. His search would forever change his life and redefine his relationship with his father.

Chuck spent the next six months searching for an available T-28. A decision had to be made on whether to purchase a military surplus aircraft complete with original outdated radios and wearing many years of grease and oil,

or pick up a project he could call his own. He received some photographs of a T-28C for sale by a private collector in South Carolina. The aircraft was apart and had not flown since being stored at Davis-Monthan in February 1975. After considering all the options, Chuck purchased T-28C Bureau No. 140068. In researching the aircraft's history he found that the aircraft had been assigned to Florida's NAS Saufley and NAS Whiting Field. Now the difficult task of restoring the big trainer would begin in earnest.

"Originally, my goal was to restore those components deemed too old to be reused in order to get the aircraft to an airworthy condition faster. After all, I purchased the aircraft to fly. I started with the wings, disassembling them into four panels and fabricating rotisseries for each section. Each part removed from the aircraft was bagged and cataloged using figures and part numbers from the

With the gear safely tucked into their bays the T-28C climbs for altitude after take-off.





From the looks of the engine compartment it is hard to believe Chuck flies this award-winning aircraft on a regular basis.



During every facet of the aircraft's restoration absolutely nothing was overlooked as every detail was meticulously researched and re-created, transforming nearly four years of hard work into a multi award-winning showpiece.



aircraft's illustrated parts manuals. The landing gear was removed and overhauled as well as the fuel system and a majority of the wiring," Chuck explained.

With nearly 800 hours invested in the wings Chuck's friends suggested he restore the aircraft to show condition. They felt Chuck's attention to detail and determination for accuracy was over the hill for a weekend flier.

After he considered their suggestions, the direction of the restoration took on a new meaning. It would take more than 1,500 man-hours and a whole year to complete the wing sections. Then Chuck spent nearly four months disassembling the fuselage into manageable sections. He found himself using every available hour after work and on weekends restoring his

Trojan. He was devoting 12-plus hours a day on weekends and averaging 45 hours per week for the next four years getting the aircraft in show condition. Even vacation time was spent crawling around the airframe.

Nearly 225 pounds of wiring was removed from the aircraft as well as radios, inverter racks, instruments, etc. "I was determined to remove all panels regardless if they were bolted

or riveted in order to inspect every inch of the airframe and prep all surfaces for new paint," he said. Friends offered lots of help, and he learned several skills during the restoration process. Chuck set up what he calls the "Weird Science Lab" in the corner of his hangar. There, he and friend Sam Toy re-plated hundreds of original steel and anodized aluminum parts. The cockpit was updated with new instruments, which included a modern avionics system using color moving map GPS, autopilot, fuel flow, and engine monitors. Even an electronic dipstick sensor was installed in the oil tank to monitor engine oil quantity.



The restoration was making steady progress, but there were times when Chuck would wonder what he had gotten himself into. With days turning into months and then years, the magnitude of the project started to wear on him. Performing nearly 90 percent of the work himself, Chuck found it difficult at times to focus when his friends were flying their aircraft. Prior to starting the proj-

ect Chuck had found some original photos of his aircraft in military service, and those pictures reminded him of the final result he was working toward. Something else was happening during the restoration. Chuck had made a number of new friends who had taught him new crafts like advanced metal fabrication, how to manufacture new parts using a metal lathe/mill, riveting, polishing, and round engine care and feeding, to name just a few.

There were a number of times during the restoration when the progress would come to a halt. Many parts were corroded badly enough they needed to be replaced. Unlike other warbirds, spare parts are plentiful for the T-28, but there were certain parts that required fabrication. Several of the damaged parts and brackets would have to be made new. In the case of the brackets and bushings, Chuck's friend Dick Maney showed him how to fabricate parts on his lathe/mill. For nearly a year Chuck and Dick fabricated the necessary parts until Chuck talked to his fiancée about purchasing a lathe for himself. She responded by purchasing the lathe for him as a Christmas present. "I look back at the whole experience today and say, 'Oh, no problem, we'll just do it like this...' and I simply fabricated the needed part," he said. During the restoration it was a different situation altogether. Learning the process involved a learning curve, and a number of mistakes were made and corrected along the way—but Chuck kept after it.

After two years, Chuck finally got the wing sections joined and mated to the fuselage. Now the

aircraft was standing on its own gear, and for the first time in more than 20 years the T-28 was taking shape. The next two months were spent fabricating and running new hydraulic lines and plumbing the aircraft. The cockpits were completely rebuilt with Chuck designing a new front instrument panel to accommodate the new GPS and additional engine instruments using AutoCAD software and fabricated on a CNC mill. In September 2001, just in time for Chuck's 40th birthday, the engine and propeller were installed.

When the larger components of the aircraft were being worked on, progress on the restoration could be measured easily. With the smaller detailed work left to perform, Chuck would go home at night asking himself what he had accomplished in the past week or month for that matter. Mentally, it was difficult for him to keep walking into the hangar to continue working. Chuck manufactured more than 200 hydraulic lines, installed nearly 3,500 feet of wiring, crimped and soldered more than a thousand wire connectors, and painted thousands of parts. At this point Chuck did not want to tally the hours spent in and around the aircraft. He continued to spend all his spare time determined to see the project finished.

In January 2003, Chuck rolled the T-28 outside of the hangar to run the engine for the first time. Surprisingly the radial engine came to life and ran with little problem. With just a few items on the list to sort out, Chuck took the opportunity to file the necessary forms for an FAA airworthiness certificate. Then on February 15, 2003, after four years and almost 10,000 man-hours invested in the restoration, Chuck fired up the radial engine once again. With his father watching from the edge of the taxiway, Chuck pointed the nose down the runway, increased the



Chuck brings the gear up on the big trainer as he lifts off at a local airshow.

power, released the brakes, and after just a few seconds lifted the T-28 Trojan off and headed skyward. At that point all those hours spent working on the restoration faded. Twenty-eight years after the trainer's last flight to the boneyard in Arizona, it was once again in the air. The flight was fairly short with a major systems check being the priority. With no major squawks found during the flight it was time to return.

Chuck's father was on hand to witness the maiden flight since the completion of the restoration and thought back on his own training flights 37 years earlier. Chuck landed the aircraft and taxied back. He stepped down off the wing and was met by his father. For the first time since the mid-1960s, father and son could talk about their experiences flying the stout Navy trainer. Chuck painted his T-28 in the colors of training squadron VT-5. Chuck has taken his T-28 to a number of air shows and has brought home a lot of hardware winning numerous awards. At the Golden West EAA Re-

gional Fly-In, held in Northern California, Chuck flew away with the Grand Champion Warbird award. Next he flew the aircraft to EAA AirVenture Oshkosh 2003, the showcase for the EAA and brought home Best T-28, Silver Wrench, and Judges Appreciation awards. Judged against other T-28s Chuck's workmanship and dedication was rewarded for being the best. Now based out of Cameron Park, California, the aircraft has become like a family member, and Chuck intends to fly his T-28 often and attend as many air shows as time will allow. "My goal is to

keep the aircraft airworthy," he said proudly.

Nearly 40 years earlier a young Naval aviator earned his wings flying this powerful stout trainer. Now Chuck carries on his family's legacy with his beautifully restored and award-winning T-28. The next time you attend an air show look up Chuck Wahl and his T-28, and you will begin to appreciate his efforts to preserve a part of military aviation. You can visit www.cwahl.com and view images covering the extensive restoration of this beautiful aircraft. ✈

The bright orange and white training colors of Chuck's T-28 stand out against the green Sierra Nevada landscape.

