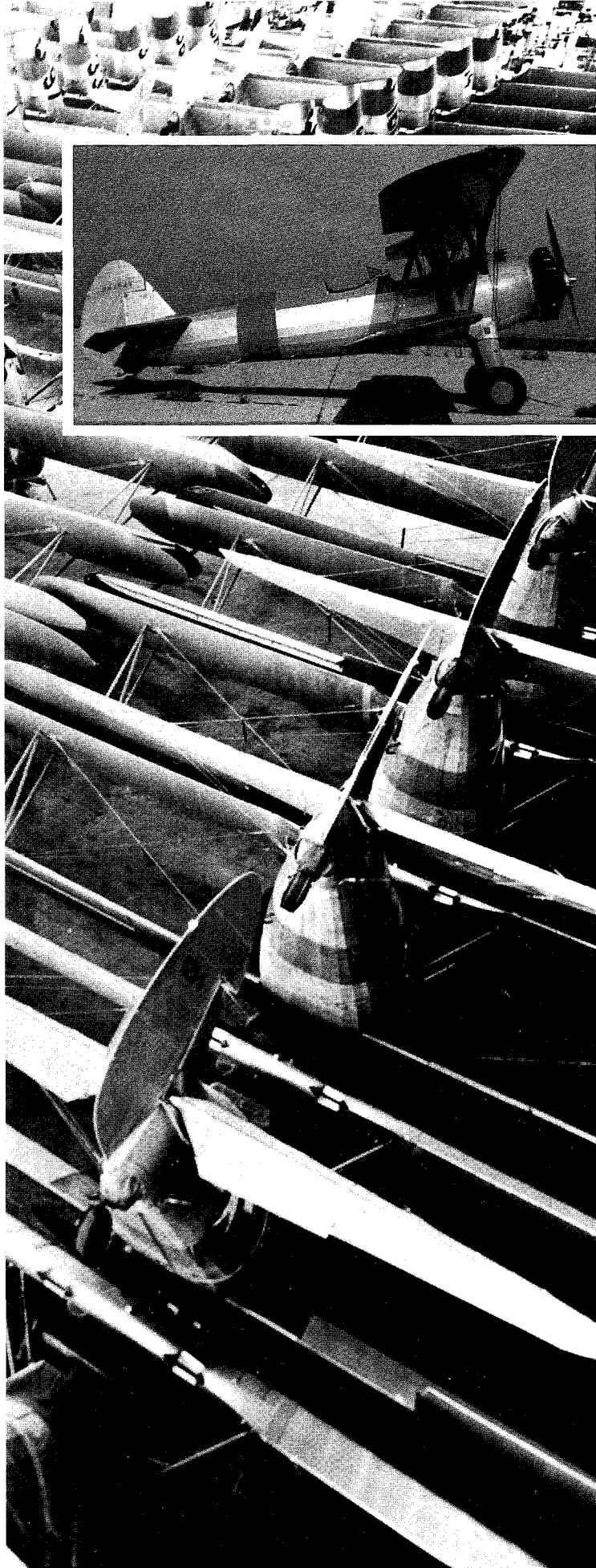






A STEARMAN ADVENTURE

USAF Hill Field, Utah—1949

by Bob Meakin

AS A RESIDENT PROFESSIONAL AVIATOR IN SALT LAKE CITY following World War II, with a few hundred hours in Stearmans and other Navy and civilian aircraft, my ears twitched a bit more than usual one summer day when I heard someone at the airport remark that a flock of near-new Stearmans were up for surplus sale at nearby Hill Air Force Base, Ogden, Utah. During my next copilot layover in Salt Lake, I borrowed a speedy Bellanca retractable and flew into Hill Field to see for myself.

Sure enough, to my utter amazement and pure joy, there stood some 212 surplus Navy N2S-5 primary trainers in one of the large wooden warehouses near the south end of the base. There they were, row upon row, many with tails tipped up at 45-degree angles, steel props turned crosswise and down onto blocks, fully rigged wings and tails still in place, all silver in color. What a sight!

Controlling my emotions somewhat by deep breathing, I moved close to one at the end of a line, reverently knelt down to touch its propeller and still shining nine-cylinder, 230-hp Lycoming radial engine. This was an unusually novel and desirable powerplant for Stearmans. On the spot, I pledged to myself that I must own at least one of those now classic flying machines.

I soon learned that all of those Lycoming-powered trainers had been mothballed as being operationally incompatible for maintenance because the Navy overhaul and repair shops involved were geared to handle only seven-cylinder Continentals, the universally installed engines in hundreds of wartime Stearmans. There could have been other reasons, but that was the story I was told at Hill Field.

Fortunately for me, I happened to have been one of the very first customers allowed in to inspect and select, “pick of the litter,” so to speak. While carefully scrutinizing several more of the tail-high ones, I noticed a few wingless fuselages standing off to one side. Moving closer, I saw that each was equipped with a retractable canvas hood attached to the rear cockpit. To my astonishment, each of those N2S-5s had apparently been equipped for primary instrument training, including battery-powered intercom but without radios. These were the first such configured Stearmans I had ever seen, and I certainly had seen

Spectacular view of some of the 212 Stearman N2S-5s stored inside the large warehouse at Hill Field during closing months of WWII. A number of these Navy primary trainers were also parked tail high, but with wings removed.
(Bob Meakin)



more than a few in the Navy!

My next move was to identify and inspect the appropriate wings according to fuselage serial numbers. A warehouseman directed me to a long row of them neatly stored in racks along one wall. Spotting the correct numbers, with his help I was able to thoroughly inspect my selections. With my Seyboth tester I determined that all fabric in the lot was still "in the green" due to inside storage. Good news! The friendly warehouseman then informed me that all of the N2S-5s in the building were only about five years old, which I'd already guessed.

That did it! Into the records office I went, trying not to appear too eager. After reading through the logbooks of those fitted out for instrument training, I selected two which had only about 75 hours' total time, aircraft and engines, since rolling off Boeing's Wichita, Kansas Stearman production line.

At that moment a thought from the past struck me. As a Naval aviator I had flown several new Stearman N2S-5s from Boeing-Wichita to various Primary Naval Air Stations during the war. We ferry pilots used to crack slightly obscene jokes at the sight of our tiny Stearmans being hand pushed out a small side door of the same building where huge new Boeing B-29 bombers were being laboriously towed out the front doors. Now, perhaps, I would be bidding on one or two of those very planes.

Turning to the records clerk I stated that I wished to submit bids on the two very lowest-time ships. He directed me to a bidding official. Upon passing two bid packets to me, he stated that I should be aware of the fact that the several wingless Stearmans I had inspected had all been rejected by the Civil Air Patrol due to cracks, actual and suspected, at the ends of the center section wing spars, relative minor weathering cracks from the attach-fitting bolt holes to the spar ends, front, rear or both. The red flag went up!

Excusing myself, I hurried back out to "my" two planes and, standing on a high ladder, did indeed spot one such crack on the front spars on both ships. The good news was that both were of a minor hairline type. Then and there, however, I decided to delay submitting bids for a day and to visit the Salt Lake City

Manhandling an N2S-5 to clear the dirt runway at base of two-mile-long ridge-soaring mountain, south of Salt Lake City. This pioneering gliding and soaring site was first used by University of Utah Gliding Club in 1928, followed by the Salt Lake Glider Club for many years afterwards. Site now used exclusively by area hang glider enthusiasts. (Bob Meakin)

Pleasing lines of the Stearman N2S-5 is very apparent in this view. Powered by smooth-running nine-cylinder Lycoming engine, this advanced model was a pleasure to fly—less vibration plus a bit of extra horsepower. (Bob Meakin)

Glider and tow plane lineup at Point of the Mountain ridge-soaring field near Salt Lake City, Utah. Left to right: surplus Robinson Pratt-Reed two-place Navy/Marine trainer, Stearman N2S-5, Bowlius Baby Albatross. (Bob Meakin)

CAA office regarding a repair. As it turned out, CAA Engineering was already familiar with the situation. I was informed that the addition of one bolt to the existing bolt pattern would ensure adequate strength. One such fix was permitted per spar end. Otherwise, a new spar had to be installed.

"One other item!" exclaimed the inspector. "The existing thin gauge aluminum firewalls on all of those N2S-5 Stearmans must be replaced with 3/32-inch galvanized sheet iron, or the equivalent." Everything considered, I decided that I could live with all that, if the acceptable bid prices were right for my bank account. New copilots were barely paid enough to survive in those days.

At that point my decision was made, despite the spar cracks, the firewalls and the fact that I'd have to transport fuselages, wings and tail surfaces over the highway some 30 miles southward to Salt Lake City. Also, taking into account their practically new condition, I would bypass all the fully assembled but higher flying-time Stearmans. As a result I bid exceedingly low. I am somewhat embarrassed, even today, when I recall the amount. After depositing all the required paperwork with the man, I returned home to await the bid openings a few weeks later.

Somewhat to my surprise, just two weeks later the phone rang as I was preparing for another scheduled flight north to Canada. It was a Hill Field contracts officer. "Mr. Meakin, I am pleased to inform you that both of your bids have been accepted. Final payment must be made by bank-certified check. You small-lot buyers have just seven days to remove your aircraft from the base at your own expense. No aircraft assembly will be allowed on base. No flyaways for disassembled aircraft."

That last statement made a certain amount of sense. Hanging up the phone, I was surely excited. The order had come down . . . "Get final payment . . . move 'em out!" My lucky day!

As the days rolled by, an increasing armada of winning bidders arrived to transport their aircraft to home airports. Those with the fully assembled Stearmans were permitted to fly them away, after inspections and servicing. As stated, however, due to the standing order, no assembly or major mechanical work would be allowed on base. Obviously, there were liability concerns even in those days. Anyway, it was out of the gate "as-is" for us "bare fuselage" boys.

As a result, a number of such new owners were soon dashing out into nearby civilian neighborhoods making deals with any landowner willing to rent his vacant lot for temporary off-base Stearman storage. In a short time nearly every such piece of ground for blocks around the south gate was spotted with fuselages, wings and tailpieces awaiting highway transport. I learned later, too, that a substantial number of Stearmans were allowed to be disassembled on base and loaded aboard railroad



boxcars for shipment. It was said that one major California crop-dusting outfit's bidding won 75 of the N2S-5s, many being subsequently sold to agricultural operators in Latin and South America. Some remained in California.

Incidentally, at this time, a number of surplus Waco invasion gliders also went out the gate in huge crates on flatbed trucks. Some of those fuselages and crates were converted to serve as chicken coops and storage sheds in the area. I witnessed such desecration.

I now had to move quickly. As a very active gliding and soaring pilot in the Salt Lake Valley at the time, I succeeded in borrowing a large tarp-covered Pratt-Reed glider trailer from close friend and veteran Utah gliding pioneer, Glen "Ace" Robinson. Shortly thereafter, we began hauling wing panels and tail sections the 30 miles south to the Carter Airport in Salt Lake City for temporary storage in a hangar there.

Next, I installed a special "U"-shaped hitch on the rear bumper of my Plymouth sedan, backed up to the rear of the first Stearman fuselage, removed the tail wheel and placed the axle bolt crosswise into the hitch. Thus, I had a secure and full swivel connection. Positioning the propeller vertically for side clearance, I trailered on out that south gate. Incidentally, each time any of us "new Stearman owners" towed or trucked our prizes out the gate, we were approached by wild-eyed bid losers and others offering to buy our planes on the spot. Poor devils! I supposed that some planes were sold that way.

Each fuselage tow to Salt Lake behind the Plymouth went very smoothly. The Stearmans trailered perfectly, meeting highway requirements for width, length and height. Of course, the big Pratt-Reed trailer handled the loads of wings and tails with no problem.

At this point, while writing this article and as if I'd suddenly received a message from Aviators' Valhalla, believe it or not, a flight of four vintage Stearmans actually flew directly over my house in Huntington Beach. They were just below a low solid overcast, no doubt headed that day for an open house weekend at nearby Marine Corps Helicopter Base at Tustin, California. I jumped up from my typewriter and dashed outside to witness

an inspiring and unsolicited salute to Stearmans some 44 years after my Hill Field adventure!

Still without adequate storage space, I parked both fuselages temporarily at home in my narrow driveway until arrangements for assembly could be made. The wings and tails were still stored at Vern Carter's Airport. Needless to say, quite a crowd gathered to check out this unusual neighborhood "air force."

Fortunately, as it soon turned out, there were several vacant World War II ex-military warehouses for rent at the Salt Lake Municipal Airport. I rented one and we moved everything in. Perfect setup! During my next layover I got right to work inspecting all the aircraft components more carefully with an eye toward getting each plane licensed by the CAA as soon as possible. First, as stated, all fabric had tested in "the green." However, there were a few minor brittle spots, cracks and ringworm blemishes on some surfaces. The fabric underneath was sound, though. I knew from experience that a generous wet coat of aluminum buturate drops sprayed on over the aging surfaces would drastically soften the original acetate dope and cause it to reset satin smooth.

It worked, resulting in a beautifully restored aluminum colored finish. For a final touch, a wide band was painted around each fuselage behind the rear cockpit and at each upper and lower wingtip, one plane green and the other yellow. Class!

Next came the center section spar repairs. Upon an even closer inspection, one Stearman did, indeed, have only a single crack. But, to my dismay, two were uncovered on the other plane. A new front spar would be required per the friendly CAA, which involved gas tank removal. It was a relatively easy job, as it turned out.

Glen Robinson, among other things, was a highly skilled aircraft woodworker. He and I went to work on the problem. The rented warehouse, quite long but very narrow, provided an adequate workshop for the "wingless" Stearmans. In due course, we completed the repair and received a CAA blessing for a job well done.

The fun continued. Next came the new galvanized iron "boiler room" firewalls, fabricated by us and ready for installa-

tion. Of course, engine disconnection and removal was required. A proper chain hoist was borrowed and the approved firewalls attached with a sigh of relief.

Finally, at last, the most delicate task of attaching and rigging the four wing panels and two tail sections on each plane was begun. Due to the narrowness of the warehouse, and with no affordable hangar space available to us at the time, that job had to be performed out on the ramp. A minimum wind day was solicited from the airport weather guru. Five or six hours would be required for the rigging ritual on each plane. During the wait for a windless day, plenty of volunteer slave labor was lined up to help with the assembly.

Having constructed, assembled and flown several gliders, sailplanes and home-built powered aircraft over the years, our group had at least some rigging experience to fall back upon. Bubble levels, protractors, long angularly tapered incidence and dihedral boards, rules, plumb lines and assorted tools were procured. An N2S-5 Stearman rigging manual was borrowed from the CAA and digested. The stage was set.

Finally, the perfect day arrived. For a group of highly enthusiastic aviators, not particularly adept at rigging "biplanes," the jobs went surprisingly well. After selecting a particularly level section of the ramp and leveling the first fuselage longitudinally and laterally, the lower wings and struts were attached, supported first by landing wires sloping diagonally downward from the center section. Then the upper wing panels were lifted into place and bolted into a rough rigged position, followed by the flying wires. Next, dihedral, incidence and wash were accurately measured, set and locked into place by tensioning both landing and flying wires and adjusting the struts. Overall, the process was something like tuning a piano!

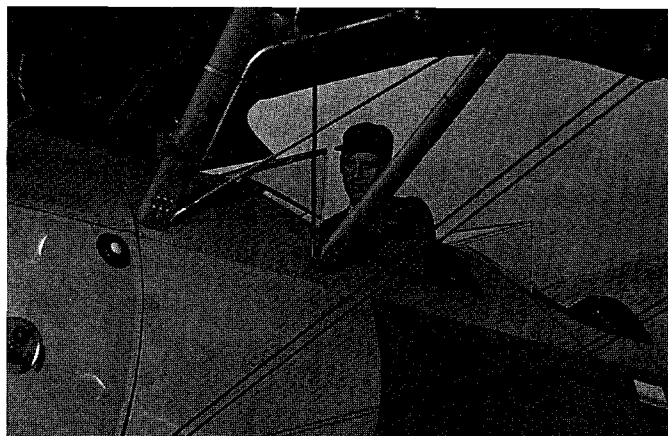
All control surfaces were then installed and angular movement precisely set. The second Stearman was successfully rigged a few days later. Another sigh of relief certainly swept through the participants following those rigging sessions. Soon afterward, the required weight and balance operations were performed in calm air inside a hangar. A local fixed-base operator had taken pity on us and invited us inside, in exchange for a couple of Stearman flights later on.

Then came the propellers. It was not yet known to what exact pitch each of the ground adjustable steel blades were set. Probably for cruise. In any event, the decision was made to have both props set more for climbing, as both aircraft were to be put to work towing our sailplanes. Into the prop shop they went. Within a few days the call came that the first prop was ready for installation. When picked up, it looked very sharp in fresh coats of black paint and with red tips.

After inspecting and lubricating the prop shaft splines, and with tools at the ready, we lifted the prop up and slipped it into place with a clunk. The retaining nut was engaged and rotated a few turns, at which point a three-foot round bar was inserted for the final torque. Then came an unexpected moment of truth! From my perch on the ladder and sighting out along a blade, something looked very wrong.

At that instant, the sharp lad holding the blade against my nut-tightening force called out, "The shop has goofed . . . they have reset both blade angles to the exactly reverse thrust position!" Amen! Surely, if we had gone ahead and started the engine, no doubt the prop blast would have kicked up ramp dust out ahead of the plane, instead of rearward.

Needless to say, we hot-footed it back to the shop with the



Author Bob Meakin at controls of near-new Stearman N2S-5 preparing for glider tow.
(Bob Meakin)

bad prop under our arms. Confronting the mechanic he suddenly turned red-faced and apologetic. He quickly explained that the confusion would have had to have occurred upon re-assembly after he had pulled both blades from the hub for inspection. Sorry!

His apology was accepted and we watched him correct his mistake. He also announced that the second propeller was ready and "correctly" pitched for climb according to the manual. Protractor in hand, he proved it to us. Incidentally, that prop shop technician tended to avoid us in the coffee shop for a time. We smoothed things over later by taking him for a Stearman ride! So much for the propellers.

With the engine "unpickled," inspected, serviced and gas tank filled, it was startup time. I was at the controls while two eager beavers were on the hand crank. The inertia starter began to grind. The sound soon increased to a high-pitched howl. Then the usual pre-start patter . . . brakes, clear, contact! The chief cranker then quickly pulled out hard on the engagement handle and the engine fired up beautifully the first try. The sound of that exceptionally smooth-running nine-cylinder Lycoming was music to our ears.

In due course the second Stearman was ready to go. Test flights went off without a hitch, except for very minor (ahem!) rigging adjustments for slight wing heaviness for both planes. Ferry permits were obtained for the short five-mile flight from Salt Lake Municipal Airport southward to the Carter Airport, where the two "new" Stearmans were tied down permanently and inspected by the CAA for licensing. Flying my own Stearmans over to Carter made me swell with pride. I could not have felt more elated than to have been able to call "the King" my uncle!

The two war surplus Stearmans were soon put to work towing our war surplus sailplanes up and around the Great Salt Lake Valley . . . Pratt-Reeds, Schweitzers and Laister-Kaufmans. During tow behind the Stearmans, climb performance was never particularly spectacular after takeoff from the valley's 4,000-foot elevation above sea level, but what the heck, it was respectful enough, everything considered. We hopefully let the thermals do much of the work.

Another incident of Stearman interest occurred later that summer. A severe northwest wind blasted into the Salt Lake Valley early one afternoon. I was at home when the phone rang. It was Carter Airport calling. An alarmed female voice shouted, "Bob, you had better come right out to the airport! One of your Stearmans has broken loose . . . just went by my office window . . . rolling backward at high speed . . . dragging tie-down ropes and stakes along behind! In fact, it has already disappeared from sight toward that farmer's field about half a mile to

the southeast!" Such a highly concerned "action in progress" announcement surely got my attention. I was in my Plymouth and on my way!

Arriving at the airport I thankfully noticed that my other Stearman's tie-downs had held. I sped on across the east end of the graveled runway, bumping along through the low brush, and followed a set of three wheel tracks. Still, no sight of my precious Stearman! The car and I bounced along for about one quarter of a mile to the airport boundary fence, where a generous section of barbed wire fencing and several lightweight wooden posts were missing. Rolling on through the opening onto a patch of stubble hay, I suddenly saw a pair of the Stearman's wheels sticking up majestically into the air, just beyond a low rise. Then, the moment of truth!

Just over the hump was my beauty, flat on its back, with the engine and prop facing toward me. A flash of relief came upon seeing that the prop was still perfectly horizontal, apparently undamaged. Next, an instant flash of despair! Both lower wing panels, now on top of the belly-up flying machine, still had that section of missing fencing jammed into both leading edges. Obviously, the plane had finally spun around end-for-end and rolled headlong into a shallow ditch. It then nosed completely up and over to land flat on its back in the soft dirt. Sadness overcame me at the sight.

I leaped out of the car and then walked slowly around the stricken plane. Additional damage was seen, for the upper third of the rudder was crushed. By this time a carload of lads from the hangar arrived. I called out, "Somebody get a rope!" That somebody trotted back to the hangar and soon returned with a coil of strong tie-down rope, at which point I proceeded to lay it out along the exposed belly of the fuselage, from the tail wheel forward and between the landing gear struts. From there I strung it for some distance out in front of the engine and then hitched it to the Plymouth's front bumper.

After first removing the propeller and digging a shallow round hole in the soft dirt in front of the engine, I had several of the helpers positioned at the tail end and others at the wingtips. I backed the car up slightly putting tension on the rope, then inched rearward until the plane was standing almost vertically on its nose, balanced perfectly in the soft earth. What a sight!

Fortunately, the wind had died down to a gentle breeze. On signal, all of the tail lifters moved quickly around to a position beneath the fuselage below the cockpits. They reached upward and took the weight of the slowly descending fuselage onto their outstretched hands as I moved the car back. With a soft thud, the tail dropped the final three feet to the ground. There stood my pride and joy, looking more or less like its old self.

After towing the plane back to its parking spot on the airport, I drove much stronger stakes deeper into the ground. Again, the Stearman was tied down. I then made a thorough damage inspection. The result: extensive and costly repairs would obviously be required, or four replacement wing panels, a couple of struts and a rudder were needed. Lucking out, the wing center section, fuselage, landing gear, engine, cowlings and propeller were undamaged, thanks mostly to soft ground.

Upon brooding over the disaster for a couple of days during my next flight out of town, a remarkable thought suddenly went through my still disturbed mind. Indeed, it was a flash of highly optimistic inspiration! I wondered if, just by chance, there were any spare Stearman parts left over at Hill Field. Grabbing a telephone late in the afternoon on a Thursday, I

dialled the surplus sales official and carefully explained my recent misfortune to him. His response: "Mr. Meakin, as it happens, we do still have quite a load of odds and ends to clear out, including a few wing panels, struts, tail pieces, ailerons, engine mounts, cowlings, wheels and miscellaneous hardware." The potentially bad news: "Mr. Meakin, are you still there? Good. I must inform you that any and all bids for this complete lot, together with deposits, must be in this office by 3 P.M. tomorrow. That's a Friday. Can you make it?"

I arrived at Hill Field first thing the next morning. The lot included enough wing panels for about three planes and all the other parts he'd mentioned, some still in crates. Everything I needed was there, and then some. The clock was running. I filled out the required forms, inked in another quite modest bid amount and finally, with a dry mouth, licked and sealed the envelope and handed it over. The clock on the wall showed 2:15 P.M. on that Friday.

My frugal bid for the lot was accepted. I learned later that only three bids had been made for that valuable collection of Stearman parts. Again, I'm not going to tell what I paid. My conscience still bothers me somewhat after 44 years. One thing, though. If my bid was low enough to tweak my conscience, what about those other two characters who had the nerve to bid lower than me? That Hill Field deal was the first and last time that I ever bid on any government surplus inventory, aircraft or otherwise. I've never purposely attempted to push my luck that far again in any airplane deal.

The damaged Stearman was soon returned to sailplane towing and delightful "just for fun" flying with its twin. After many long flying years until now, I still look back on that Stearman adventure with very pleasant memories. Some of those same Hill Field Stearman N2S-5s are, no doubt, still flying today—wherever they are! All told, that Stearman sale turned out to be a "once in a lifetime" circus for all participants. I wonder what those 212 Stearman N2S-5s would be worth today? One of my Stearmans was eventually sold to a Nevada crop-dusting outfit, along with a truckload of those leftover parts. The other was flown to Managua, Nicaragua, for dusting banana plantations—eventual fate of both unknown. □

ABOUT THE AUTHOR

Bob Meakin's interest in aviation began about the time of Lindbergh's New York-to-Paris flight. Born and raised in the west, Bob recalls seeing the very earliest airmail and airline passenger flights into and out of Salt Lake City as a young boy; began building model airplanes; had first airplane ride in Fokker Universal in 1931; reconstructed and made first solo in an old single-place Mead Challenger glider; employed as teenage apprentice by barnstormers operating Fords, Condors, New Standard biplane, and Admiral Richard E. Byrd's Fairchild "Stars and Stripes." Bob logged some student pilot time in those historic planes.

Next came completion of Civilian Pilot Training courses prior to World War II; wartime duty as Naval aviator; airline copilot for several years; operated flying service; eventually retired from Douglas Aircraft Company Flight Department (DC-10); wound up lifetime aviation career instructing, flying and towing sailplanes and banners; flew Freeway Watch stint in Los Angeles area.

Researching and writing aviation historical articles is another of Bob's favorite endeavors. He authored a special book titled *50th Anniversary of Naval Aviation—1911 to 1961* for Douglas Aircraft Company, as well as the AAHS article, "Flying the Albatross With Lindbergh" (*Journal*/Winter 1964), an account of Lindbergh's soaring flights at Lebec-Gorman area north of Los Angeles in 1930. Bob now resides in Huntington Beach, California—still looks up at each passing aircraft!

