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Photos by the author

The New Cessna

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Factory statisticians report that the first 172, the wheel in front version of the Model 170-B, rolled out the door in 1956. Since then more than 14,000 have been sold, plus another 500 military versions (designated the T-41) to the U.S. Army and Air Force, Peru and Ecuador.

When you take a popular design and make a radical change, it's news. That's why we asked to ferry the first available new 150 h.p. Lycoming "Blue Streak" powered Skyhawk from the factory to the West Coast. The only way you can really learn the finer points of any design is to spend some time with the plane. And we spent exactly 13.32 hours crossing some of the most interesting and inaccessible country in the West during the next three days.

"We" included veteran aircraft builder Rudy Adler, who has been around airplanes since attending the Marine Corps aviation mechanics school in 1926. He's a private pilot with just over 200 hours, owns a Thorp *Skyskooter* and has just

completed his own homebuilt, a Thorp T-18. Remember this experience level because it applies to an incident later in our story.

Red and white Skyhawk N35578 was about as standard as they come. When we walked up to her, she was straining in the wind against the tiedown chains at Cessna's Wichita delivery center. The thing that distinguished her from the 14,000-plus 172/Skyhawks that had come before was under the cowling. Cessna replaced the Continental six-cylinder 145 h.p. unit with the high production Lycoming 150 h.p. "four-banger" that is also used in the *Cardinal*.

Reducing two cylinders saved 45 pounds of weight so the power package has been moved farther forward to partially compensate for the decreased weight. Even so, the empty aircraft center of gravity is moved aft 1.1 inches. The latest design Lord mounts are installed to dampen the vibration usually associated with a four-cylinder engine, and they do a good job.

Anyone who can fly Cessna's 150 trainer can climb right into the 172/Skyhawk and go with nothing more than a once-around-the-field checkout to become accustomed to the heavier 2,300-

pound gross weight. Somehow you expect the 172 series to be a smaller airplane than the more powerful, sophisticated and expensive *Skylane* series, but the length and wingspan are identical. The cockpit, four inches narrower than the *Skylane's*, is still adequate for full-sized people.

Adler's reason for the Wichita trip was two-fold: to see new production techniques at the factory that he might use in his own one-man shop and to log some cross-country dual in preparation for flights in his new T-18. He took the "driver's seat" at the factory and flew left seat all the way home, with the exception of one landing to visit the Rev. Robert Kirsch (AOPA 99663) on his dirt flight strip at Abiquiu, N.M., where the elevation is 6,000 feet and the just completed airport could be classed as adequate. "Father Bob" can get his Cessna 210 in and out of it with all kinds of loads, so we expected no trouble with the new lightweight Skyhawk. That assumption was correct.

We preflighted the new bird that showed only 1.34 hours on the recording tach. I opened the conventional engine inspection panel on the left side



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Newly equipped with Lycoming 150 h.p. 'Blue Streak' engine, Cessna's 1968 version of its most consistent selling single-engine four-placer is described as a happy wedding of airframe and power plant

by DON DOWNIE / AOPA 188441

of the cowling to find no oil dip stick and no fuel strainer release. I walked back to the office and asked fly-away Major Domo Keith Tobin if the inspection panel had been left on the aircraft accidentally after the engine change.

"No," grinned Tobin. "It's still there for a good purpose. You can replace the battery through that hole without removing the cowling. The regular oil and fuel drain are now in the right side of the cowling."

With that explanation, we fired up the remarkably smooth 150 h.p. "Blue Streak" and took off. Actually, everything—with one glaring exception—is so straightforward on this airplane that a step-by-step recounting of the check list should not be required.

We circled low under McConnell Air Force Base jet traffic and headed west down the section lines toward Liberal, Kan. It is a good rule of thumb to stop

Tex., or Clayton, N.M. We decided to call it a night at Liberal. In 2:18 flying, including two landings, we added only 18.6 gallons of gas.

There's a free telephone to Dodge City FSS for weather and flight plans, but perhaps this wasn't my day for such things. Before deciding whether or not to put the new *Skyhawk* in the hangar, I checked to see what the weather held in store for us. The FSS specialist advised of a mild cold front but no associated weather. Later in the evening when the ridiculous plastic palm trees at the motel were whipping in the wind, I regretted staying at Liberal.

Early the next morning we looked at a rainy, windblown overcast and called Liberal Aircraft Company for word on the weather. Locally it was blowing 25 knots and westbound the winds decreased, so we gulped breakfast and

headed for the airport.

Then followed one of those little problems that could happen in any airplane. The "good book" cautions that it is the pilot's responsibility to check the AIM (Airman's Information Manual) for information concerning the proposed route of flight. I goofed in filing for Tucumcari, N.M., a broad expanse of airport that I've been using without a problem since the early 40's (without checking AIM).

Dodge City FSS gave a delightful forecast of 25 to 30-knots tail winds to Tucumcari with improving ceilings to the west. I filed down U.S. Highway 54 and Adler walked the upwind wing strut as we taxied from the ramp in gusts to 30 knots. Takeoff was brief and spectacular and we turned downwind toward Tucumcari.

Each ground check showed our speed increasing until we were clocking 147 m.p.h. at 2,400 r.p.m., using eight gallons an hour. That's not hard to take.

When we could read Tucumcari FSS, I called prior to landing. The specialist on duty replied, "Cessna five seven eight. For your information, the Tucumcari airport is closed for construction. Only 3,200 feet of runway 8/26 is usable. A Cessna 172 just landed after making three passes. Surface winds are 040°, 25 knots gusting to 35 knots."

That was bad news. I asked why Dodge City FSS had accepted our flight plan without relaying this rather essential bit of information and Tucumcari advised (correctly) that it was the

172 / SKYHAWK

after the first hour or so with any new airplane to check for oil or fuel leaks, so we circled and touched down into a brisk wind at the three-hangar dirt strip at Medicine Lodge, Kan. There were no leaks, no fuel service nor interested spectators. We took off again for Liberal where there was fuel and checked weather with the remoted FSS connected with Dodge City.

Adler had a chance to get the feel of the new *Skyhawk* and appreciate the built-in stability and smooth control response of the four-placer. The only problem he had was with the brakes. His *Skyskooter* has a hand brake (à la *Tri-Pacer*) and Adler was forever letting his big toes ride the brakes both on takeoff and landing. There was an anguished squawk as we touched down at Liberal because of inadvertent brake application while still airborne. However, Adler soon learned to keep his toes back where they belonged on toe brakes.

We made a late start from the factory following a plant tour, a flight in a plush new Cessna 421 and a short hop in the recently modified *Cardinal*. So it was a question of an RON (remain-over-night) in Liberal, Dalhart,



At remote village of Abiquiu, N.M., Father Bob Kirsch taxis his Cessna 210 while Rudy Adler stands next to the new Cessna Skyhawk being ferried to California. The Skyhawk was the second plane to land on the 6,000-foot high, 3,200-foot long dirt strip.

Skyhawk "drags" Goulding's Lodge at Monument Valley, Ut., before landing on dirt strip visible in the foreground. Airport reportedly is adequate for DC-3 size aircraft, but all landings should be made uphill toward the cliff.

Photo by M.C. Knee

along the east end of the strip yet. There's no wind sock but you'll find a windmill on each end of the field. Oh yes, stay to the right of the runway on rollout. I've had some of my boys pick up all the stones on that side of the strip."

As we walked back to the shiny new *Skyhawk*, yet to have its baptism to high dirt strips, I commented to Adler, "Father Bob says that his strip is still a little primitive. Do you mind if I fly left seat on this leg? Anyhow, you need the practice in a takeoff out of here from the right." Adler agreed. Perhaps he gulped, but it didn't show.

It's just over 50 miles up the Chama River Valley past the prohibited AEC area of Los Alamos to Abiquiu. Two circles of town, a very slow, high downwind leg to get the feel of the *Skyhawk* at minimum approach speed, and we turned in for a landing. The reed-type stall warner on N35578 wailed at about 8 m.p.h. before stall with half flaps and indicating just over 50 m.p.h. I lined up on a long two-mile final approach with half flaps (you can't make a go-around at this altitude with full flaps) and let the ship settle until we were low enough to drag in over the trees. Then I applied enough power to stay out of the branches and dropped full flaps after the last obstruction was passed. We were on the ground solidly and could have stopped easily in 1,200 feet, even at our 6,000-foot elevation. But our destination was at the far end of the runway so I let the ship roll on downhill and even had to add a little power to get off the end of the still-soft 3,200-foot-long strip.

Father Kirsch drove up in his battered 1959 Volkswagen and told us that, aside from his 210, we were the first airplane to visit the new strip.

Takeoff from the "Abiquiu Municipal Airport" was just a little downwind, just a little uphill, but into open territory. I practiced the dirt-airport tri-gear technique that has always proved satisfactory to minimize propeller damage. As I slowly applied throttle, I came all the way back on the control wheel. The nose pitched up, getting the prop out of the gravel. As our speed increased, the prop was soon upwind of the vortex that sucks gravel into the blades and I released the back pressure to let the aircraft accelerate normally.

We were airborne at midfield and had time to retract the 10° flaps before crossing the end of the runway. The *Skyhawk* is an excellent high altitude aircraft for an "economy type" (\$11,700 for the 172 and \$13,250 for the *Skyhawk*, plus an interesting selection of accessories).

The owners manual says the service ceiling is 13,100 feet. There was an interesting late afternoon frontal and convectional weather system developing



pilot's responsibility to find these things out before flight. Later, I queried the FAA Western Region and was advised that each FSS is responsible for relaying all Notams within a 400-mile radius of their station. And Tucumcari is within 400 miles of Dodge City.

Adler and I looked at the blowing dust, checked our one hour, and 22 minutes in flight and figured that we had more than enough fuel to reach Santa Fe, N.M., with Las Vegas, N.M., as a nearer alternate. We extended our flight plan and headed out over Conchas Dam, the fascinating isolation of Canon Largo and through the gorge of the Pecos River into Santa Fe. Since we were planning a high altitude landing to visit Father Kirsch, I had only one tank topped.

A phone call established that the flying priest would be in town for an hour and that his new dirt airport was just open. "It's calm up here now," said the ex-bush pilot turned sky pilot. "If it's still that way when you get here, land from the west because I haven't gotten the wires taken down

between Abiquiu and Farmington. We had watched the gathering dark clouds with considerable apprehension as we'd swapped flying misadventures with Father Bob, and he assured us that the local weather was scattered and easy to circumvent. At one point in "circumventing" that weather, the altimeter of N35578 read 14,900 feet, carburetor heat was all the way on, the throttle completely closed and we were registering a rate of climb of 1,000 f.p.m.

Actually, there was no sweat because the *Skyhawk* was handling the strong updrafts easily, there were a number of clear areas ahead where downdrafts could be expected and I'd just let the ship coast upstairs for a free ride. However, that's high enough without oxygen, so we headed away from the king-sized updrafts (tops were reported above 35,000 feet and later that night an *Electra* came apart in flight near Dallas) and slid downhill all the way to Farmington.

As a comment on the safest way to handle weather like this: *Never* try to dive away from a strong updraft. You'll usually exceed red-line speeds in turbulent air and stand a chance of ruining

your whole flight. Keep your speed down to the maneuvering point (stall speed plus .3) and head for the nearest clear spot. Updrafts usually form under clouds and downdrafts usually can be found in the clear air surrounding them. Keep your airspeed slow and coast out from under those big cumulus clouds. If you ever get sucked up into one, pull power off, keep your directional gyro heading toward the nearest light spot and don't panic. It may be a bit rough but you'll come out the side into clear air and a downdraft before long.

The unstable weather we encountered over a place appropriately called "Stinking Lake" continued into Farmington. We called 10 miles out from the east and were given "wind calm" and a straight-in approach. At five miles, the tower changed it to Runway 5. By the time we turned on final approach, the tumbleweeds were tumbling vigorously across the assigned runway and the tower advised "wind from 010° at 25 knots, gusting to 35."

The Farmington airport sits on a mesa west of town and there was considerable turbulence on final approach. As we touched down between the tumbleweeds, I heard a quiet gasp from Adler as I cranked in full upwind aileron to keep the left wing from rising in the strong crosswind. We relaxed and called it a night once the *Skyhawk* was securely chained down. Wild West weather like this gives instant proof that the venerable 172 design and its new power plant make a solid combination that can handle the unusual weather that seems to develop on most ferry flights.

It was a storybook dawn next morning when we filed a delay en route flight plan to Monument Valley, Page, the Grand Canyon and on into Las

Vegas, Nev., by 5 p.m. We didn't make it. The tower gave us an optional west-bound departure and we leveled off 1,000 feet above the ground, following the paved highway past Teec-Nos-Pos and on into Monument Valley. This "four corners" (the corners of Arizona, New Mexico, Colorado and Utah) is the most colorful part of the world for me. We zigged and zagged between towering sandstone cathedral spires and finally landed on the good dirt strip (one way, uphill to the west) at Goulding's Lodge for coffee.

From Goulding's, we circled north of towering Navajo Mountain, over Rainbow Bridge and down the azure path of Lake Powell for a landing at Page, Ariz. Adler shot up every foot of movie film and every color slide that he had brought along. The scenery is spectacular.

At Page, we flew a little formation with Royce Knight (AOPA 40787) the veteran scenic tour operator who has used Cessnas in the area since the dam was under construction in 1959. By the time we had gone to town for lunch, the weather closed in. A toll-free call to Bryce Canyon FSS disclosed thunderstorms with cloud to ground lightning in all quadrants. Flagstaff weather reports were missing because of a local power failure. The forecast was for more of the same until dusk, so when Knight began putting his own planes in his hangar, we chained down N35578 and called for a motel reservation.

Early the next morning we called Bryce Canyon again, received the word that there was nothing but haze along our route and filed over the Grand Canyon for Needles, Calif. This 220-mile trip is like something out of a colored travel book, even in haze. Landing fields are few and far between, but

you can remain in contact with Bryce Canyon's high-site receiver "dish" through almost all the area.

Adler was again out of film by the time we left the Canyon area and began our letdown into "Slim" Kidwell's brand new casino, lodge, cafe and motel combination at Cal-Nev-Ari, 13 miles south of Searchlight, Nev., where the three states converge.

Earlier, I made mention of Adler's lifetime experience around aircraft. It was while landing at Cal-Nev-Ari that he showed, better than anything I could write, the single flaw we found in the *Skyhawk*.

We were in a normal pattern for Kidwell's mile-long oiled airport. As we turned base in calm air, Adler was watching the runway. He reached over for the carburetor heat control and pulled the mixture control all the way out. Naturally, things became predictably quiet, but since we were high and had the airport made, I sat there and let Adler get this "reach-but-don't-look" mistake out of his system.

Any unsafetied mixture control close to either the throttle or the carburetor heat control is an accident waiting to happen. You can paint the knob day-glow, put spikes on it (Cessna does) or whatever, but a guy named Murphy will somewhere enter the picture. In essence, "Murphy's Law" states that if something can be done wrong, someone will do it. Murphy's second law states that this occurrence can be expected to take place at the most inopportune time.

Murphy's Law took effect at Cal-Nev-Ari. Fortunately, the secondary version didn't happen to us, but it may happen to someone unless Cessna installs the simple, proven "squeeze to lean" control, in production for many years on the 182/*Skylane* series, or reverts to the cumbersome but safe two-handed "pinch to pull out" clamp on the older Cessna mixture controls.

We left Kidwell's and stopped briefly at Banning for fuel when the weather around Long Beach was reported as "overcast and five miles." At the end of the trip, including photo flights at Monument Valley and Page, we had logged 13.32 hours, burned 110.8 gallons of fuel for an average of 8.31 gallons an hour and spent exactly \$48.96 on the aircraft. Had there been an exhaust gas analyzer aboard, we could have leaned more efficiently and perhaps saved five gallons of fuel, but break-in time at a cool, rich mixture is one of the first steps toward long engine life. Since the Lycoming 150 h.p. has built a reputation of at least 1,500 hours between overhauls, it appears that Cessna has come up with another happy combination of proven airframe and proven power plant.

Here's a bird that would be easy to love. □

Clean, easily scanned instrument panel of new Cessna 172/*Skyhawk* is a plus factor, in author's opinion, but unsafetied mixture control (lower right) was cited as adverse and potentially dangerous feature.

