Only Remington makes this guarantee: If you don't love us, you have a year to return us.*

What has convinced Remington you'll love us so much you won't be back to us in a year?

Our Replaceable Blades help you to keep getting a close, comfortable shave every time.

Our Comfort Head has tiny slot openings to trap your beard, but not your skin.

Our Comfort Dial lets you dial a shave from tough to tender, depending on the kind of beard you have.

No wonder we're so confident. Replaceable Blades. Comfort Head. Comfort Dial.

These are the reasons we believe in our Remington Shaver.

And why we're so sure you're going to love us, we give you a year to return us.

Only Remington is confident enough to give you a one year, money back DOUBLE GUARANTEE: one year on parts, plus one year on PERFORMANCE. No questions asked.* Mail shaver and sales slip to Remington for complete refund. P.O. Box 572, West Haven, Conn. 06516.

We're so sure you're going to love us, we'll give you a year to return us.

*Offer good on Mark I, Mark III, Mark IV and Mark Compact shavers bought between November 1 and December 24, 1973.

SPERRY REMINGTON ELECTRIC SHAVERS

CIRCLE NO. 36 ON READER SERVICE PAGE

Traveler Country

Anywhere you find people with a penchant for sport, you're likely to see Grumman American's spiffy and inviting little four-place.

by Richard L. Collins

color photography by James Collison

GRUMMAN AMERICAN'S four-place Traveler is going to have to scramble to get its share of the business in 1974. Cessna Skyhawks are rolling off the line in record numbers, headed for a banner year after reigning as king of the basic four-place fleet for almost two decades, and Piper is in there pitching with its brand-new 150-hp Warrior (see page 44). The Traveler has a lot going for it in that scramble for the four-place business, though. Grumman American has developed its flight-school network to the point where they have a sizable captive audience of loyal students who they can lead on to the next step in airplanes, the Traveler. They also have an expanding dealer force to sell the airplane.

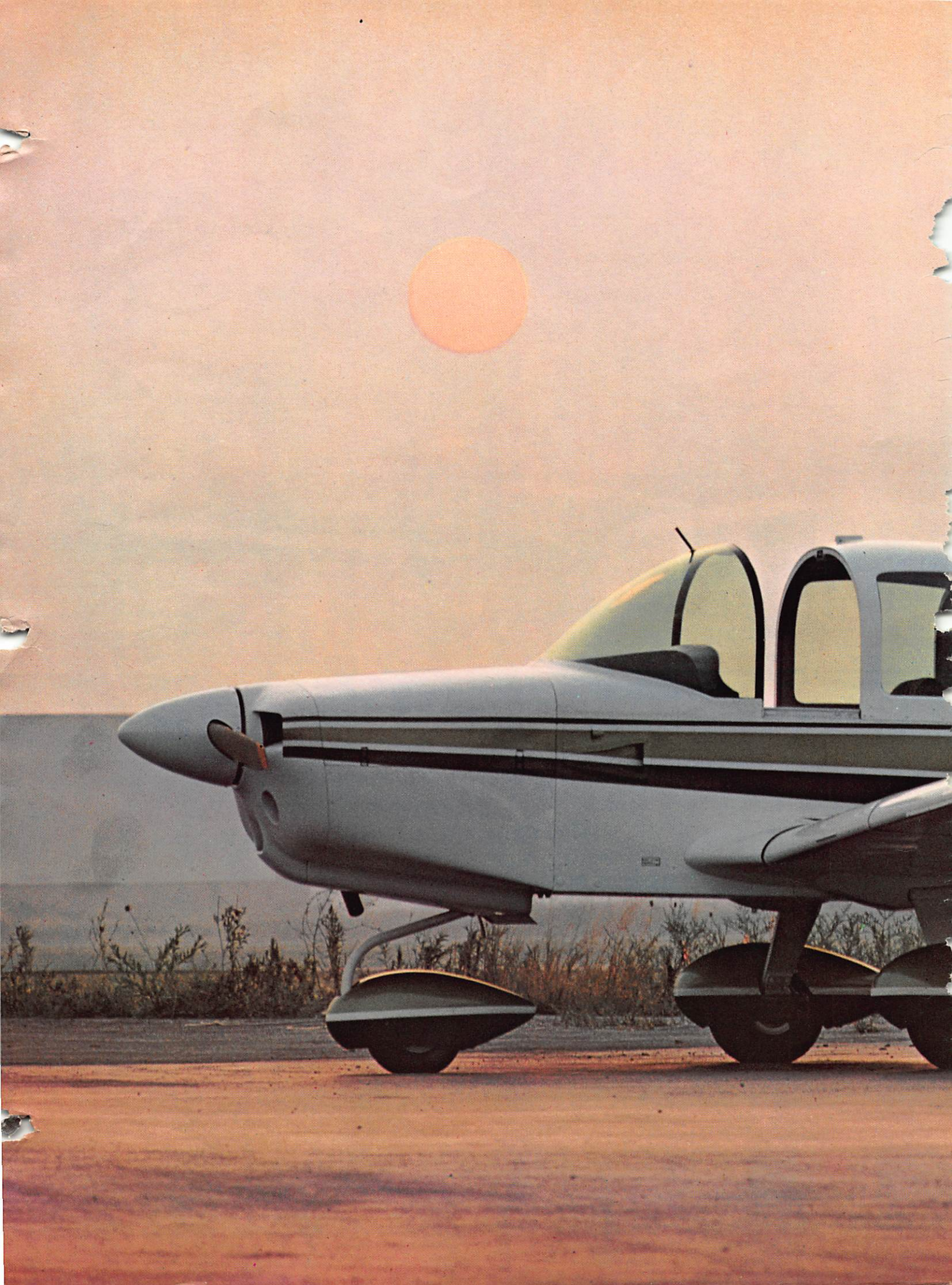
The Traveler completes the picture. It is a good, competitive machine—one that you should fly, inspect, evaluate and compare with the Skyhawk and the Warrior before you make up your mind.

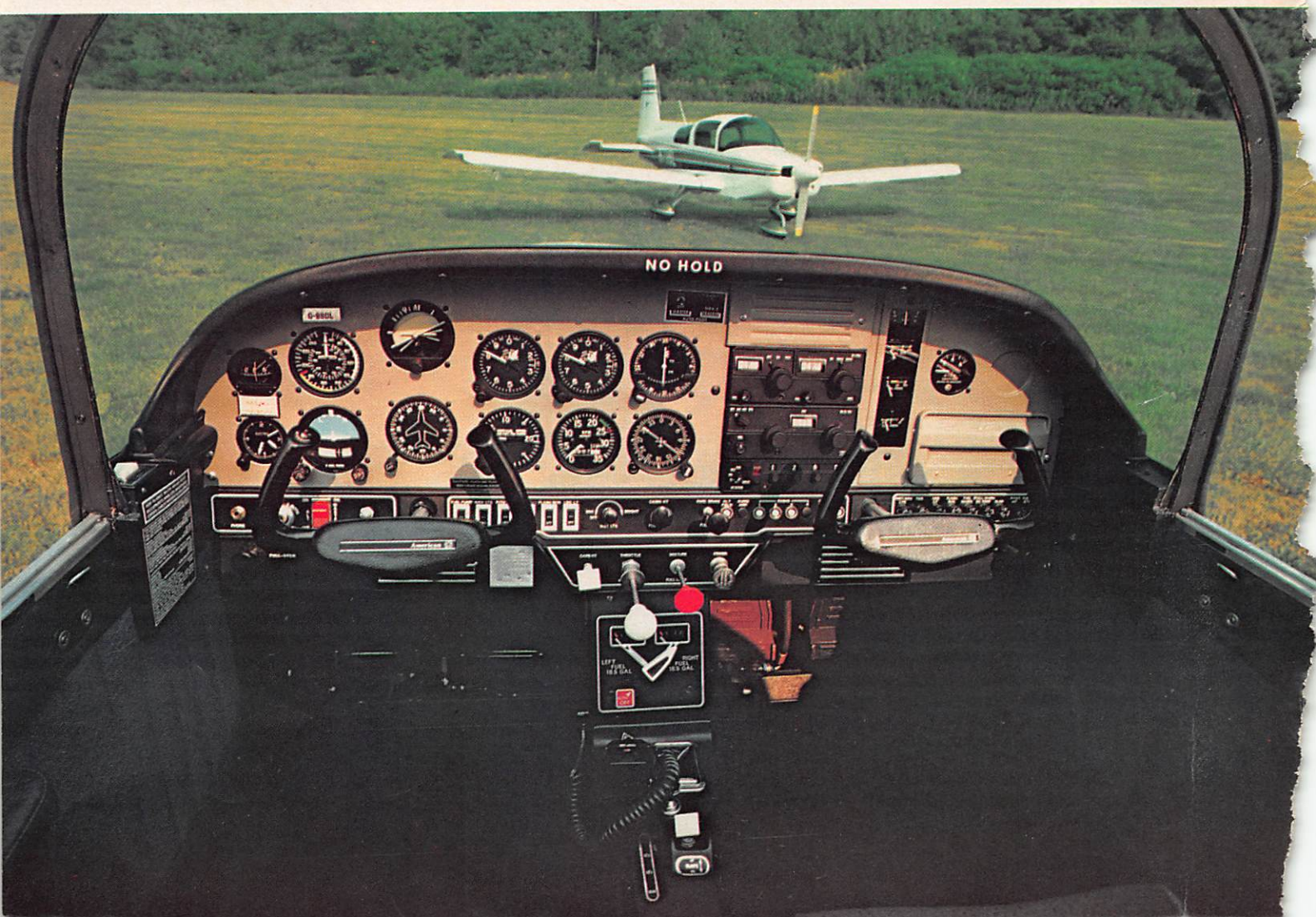
The first strong impression you'll probably have of the Traveler is that the airplane has a personality of its own. A sliding canopy replaces the familiar doors. The nosewheel is not steerable. The interior looks more like a sports car's than a station wagon's. The crisp and lively controls remind you of good power steering in an automobile. The visibility is excellent. The skin is smooth and rivetless, for the metal is bonded together.

The 1974 model isn't the first Traveler, and tangible improvement over last year's model tells you that this is an airplane that has had the benefit of some evolutionary development. A baggage door—albeit a rather small one—has been added, and the baggage area has been enlarged. The sports-car interior is brand-new. The aft windows are larger. A modified nose gear gives two inches more prop clearance. A new dorsal fin improves the silhouette of the airplane. Many other small improvements also enhance the basic value of the airplane.

Study the Traveler from outside and you may notice a couple of things that don't look quite right: The lower cowling and the fuselage just aft of the cowling have an ungraceful line, and the vertical tail is not swept. The latter is no doubt something that has been often cussed and discussed at Grumman American, and it is probably to their credit that the tail remains upright. A swept tail would cost—and weigh—a bit more, and it would make no compensating contribution other than giving the airplane a tail that looks like every other airplane's tail.

The sliding canopy is an interesting exercise, and it proves that you don't have to be conventional to compete. While many view it as a liability, there are enough demonstrable advantages to the canopy to even up the




NO HOLD

Grumman American Traveler

Basic price	$17,450
Basic IFR price	$23,725
Price as equipped	$21,802
Engine	Lyco O-320-E2G, 150 hp @ 2,700 rpm
TBO	2,000 hrs.
Propeller	McCauley fixed-pitch
Length	22 ft.
Height	8 ft.
Wingspan	31 ft. 5 in.
Airfoil	64_2415 modified
Aspect ratio	7.1
Wing area	140 sq. ft.
Wing loading	15.7 lb./sq. ft.
Seats	4
Empty weight, as equipped	1,355 lbs.
Useful load, as equipped	845 lbs.
Payload with full fuel, average equipt	608 lbs.
Gross weight	2,200 lbs.
Power loading	14.7 lbs./hp
Fuel capacity	37 gals./222 lbs.
Baggage capacity	120 lbs.

Performance

Minimum runway requirement	1,600 ft.
Rate of climb	660 fpm
Service ceiling	12,650 ft.
Maximum speed	150 mph/130 knots
Cruise (75% @ 9,000')	140 mph/121 knots
Econ cruise (65% @ 9,000')	129 mph/114 knots
Range @ max cruise (45-min reserve)	495 sm/430 nm
Range @ econ cruise (45-min reserve)	550 sm/477 nm
Duration @ max cruise (no reserve)	4.3 hrs.
Stall speed (clean)	62 mph/54 knots
Stall speed (flaps down)	58 mph/50 knots

Flight characteristics

Handling qualities (cruise)	Very good
Handling qualities (slow flight)	Very good
Stall recovery	Good
Hands-off stability	Good
Runway and taxi handling	Fair
Crosswind handling	Fair

Pilot utility

Visibility	Excellent
Seat comfort	Good
Occupant-protection features	Okay
Accessibility of switches, etc.	Good
Panel layout	Good

Cabin comfort

Entry-exit ease	Good
Front-seat room	Good
Rear-seat room	Good
Ventilation (in flight)	Good
Ventilation (on ground)	Excellent
Cabin sound (@75% power)	Good

Quality

Interior finish	Spartan but good
Exterior finish	Very good
Accessories and mechanisms	Good

Traveler Country

A dusky sunset accentuates in silhouette the Traveler's generous span; the powerful elevator looks modest by comparison. The new panel is unchanged, but then why change something so simple and functional?

account. On a hot day, it can be left open for taxi, and the 150-horsepower fan will keep everyone cool. It can also be opened a bit in flight, at indicated airspeeds up to 130 mph, for maximum ventilation. (The noise is also maximum in that configuration.) Passenger and crew boarding is logical with the canopy, too. The rear-seat folks get in first, then the pilot and copilot settle into their seats. The pilot can easily reach the canopy when it's time to button up, and there's no worry about passengers closing a door improperly. Even if the canopy isn't hooked correctly, the pilot can simply secure it after takeoff. (Try that with a conventional door sometime.)

Some canopy disadvantages are obvious—tight skirts, for example—and others, such as the flap switch, aren't. The *flap* switch? Yes: The flap switch is mounted vertically on the console between the seats, and it has a new-for-1974 rubber seal to keep water out of the mechanism, since the canopies have been known to leak when the plane is at rest. A new canopy seal is another move to help keep the flap switch dry.

There's no denying, however, that a Traveler sitting jauntily on the grass, canopy open, has a seductive "jump in and take me flying" look. And once he does jump in, a pilot has only to sit up straight and appear alert to look like the ace of the base in a Traveler with the canopy slid back.

The Traveler instrument panel is very conventional but well arranged. The only minus is a lack of padding except in the center of the control wheel. Shoulder harnesses are standard, though. The fuel system is a two-tank deal with a selector, but the possibility of fuel mismanagement is minimized by the arrangement of the selector and the gauges: Select the right tank and the tip of the pointer is next to the gauge for the right tank. Same goes for the left. It's a good arrangement, and if they would relocate the auxiliary fuel pump switch to this area, it would be complete.

The checklist is simple, and you soon come to item nine, "starter—press." There's a 150 Lycoming up front—the same engine used in the Hawk and the Warrior—and it comes to life in the same manner. Four-cylinder engines just won't purr at idle, and one must overlook their lack of ego-building sounds and instead think of the economy they offer.

On the first Traveler flight, a pilot quickly confronts that nonsteerable nosewheel. The meeting might well be friendly, though; if the airplane is parked in a tight space and must be maneuvered, the Traveler will turn quickly. You can lock one wheel and pivot, as a matter of fact. Taxiing on a straightaway, it is less obedient. Brakes must be used some, especially in a crosswind or when trundling along a slanting surface, and the Traveler's brakes aren't the strongest in the world. The airplane is very manageable, though, and if simplicity is a virtue, the lack of a steerable nosewheel is an asset. Nor are there any oleo struts on a Traveler, and this omission can also be a blessing. (The shop has been fooling with leaks in the oleo struts on my Cherokee Six for some time now with precious little success, and simplicity in such things can save a dollar here and a dollar there.)

The Traveler ride on a grass field was acceptable, if not silky smooth. The grass field I used happens to be home base for a couple of King Airs, and to get a comparison, I took a frequent King Air passenger for a

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What's a Warrior?

It's what may turn out to be the most significant new single in years, for Piper's first real competitor to the Skyhawk is a light-handling, spirited little airplane.

pilot report by Stephan Wilkinson

photography by George C. Larson

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Traveler ride and asked him if the field seemed smoother in those airplanes. The reply was that it did not. Perhaps the test to which I put the Traveler gear was a tough one.

Some light brake pressure to maintain directional control would probably be necessary in the first stages of a crosswind takeoff, but I found the required brake inputs to be minimal and made a number of takeoffs without touching a brake at all. When the throttle is opened, a lot of breeze finds the rudder very quickly, and the free nosewheel means that it doesn't take a lot of force at the rear to change the heading of the airplane when on the ground.

Takeoff gives one the first lesson on the Traveler's crisp controls. A pilot used to barreling down the runway to lift-off speed and then tugging mightily on the wheel to go up will find his first Traveler ascent pretty sudden. The elevators are light and powerful, and there might be some tendency to overcontrol on the first takeoff. It would be a mistake to only make one or two circuits of the field in judging this airplane, too, for it takes several to develop the fine touch necessary for a totally graceful rotation and lift-off. (Same goes for landing.)

Once off, the airplane climbs eagerly—even at gross weight on a warm day. The best angle-of-climb speed is 78 mph—low enough to give a good climb gradient for clearing obstacles. The distance required to take off and clear a 50-foot obstacle is listed as 1,600 feet on a standard day, which is 75 feet more than the Hawk and 160 feet less than the Warrior. (Compare other numbers on these airplanes and you'll note that they are almost all very close to each other.)

The Traveler is not noisy in a full-throttle climb, and the vibration level is low. On a first flight in the airplane, though, the second most noticeable feature (after the responsive controls) won't be the quiet and smooth ride—it will probably be the visibility. The Traveler pilot can really see, both forward and to the sides. You sit tall in the saddle, and the Traveler pilot who doesn't spot traffic when there is traffic to be spotted simply isn't looking out the windows. The new and longer rear windows for 1974 help out when looking for a five or seven o'clock intruder, too.

The first turn brings us to the Traveler's lively ailerons. The rate of roll and responsiveness seem just about right—lively enough, but not so lively that the airplane seems jumpy at first touch.

Leveled for cruise, the indicated airspeed settled on 120 mph at low altitude and at a power setting a bit shy of 75 percent. Maximum cruise is given as 140 mph at 9,000 feet, and the results of two unofficial air races between a Traveler and a 1974 Hawk would tend to bear out the fact that the airplanes cruise within two mph of each other. (The Hawk's magic number for 1974 is 138 mph.) The Traveler is quiet and smooth at cruise, too, and the good visibility over the nose during climb becomes even better in level flight.

The way an airplane rides in turbulence is one of its most important features, and based on observations made while flying in some light bumps, the Traveler does very well. There's little yaw response to turbulence, the lively ailerons give the pilot a way to smoothly correct any roll induced by a bump or three, and the pitch attitude tends to remain relatively undisturbed. The exceptional visibility might help make turbulence feel lighter, too. The airplane invites you to look outside, and I've always thought that bumps aren't as bumpy when I'm looking out the window.

Stalls are enjoyable in the Traveler. Roll control seems available through the stall in all configurations—flaps up or down, power on or off—and stall warning is provided through a horn and some aerodynamic shake. Recoveries are usually instant, too, though on one stall I entered with low power and the nose not very high, I applied full power and maintained pitch attitude to see if it would fly out of the stalled condition. It did in a while, but for a couple of seconds after power application, the stall seemed to actually progress. Our staff aerodynamicist says this was probably caused by an unnoticed pitch-up that accompanied power application, and I'll buy that. It does prove, though, that when one really wants to recover from a stall, lowering the nose is a primary part of the procedure.

Steep turns are great in any airplane with a high roll rate and good visibility—meaning you'll get a boot out of them in a Traveler.

Perhaps the best piece of advice a homecoming Traveler pilot can get is to beware of an overshoot. The flaps are not especially effective, and the airplane is a neat glider. Plan the approach accordingly and you'll land where you want. Normal approach speed is 75 to 80 mph; obstacle-clearance approach speed is 70 mph. There is plenty of roll control and margin above the stall even at the lower speed, and the Traveler pilot with a substantial obstacle to clear and a short runway to land on might feel the need to make a power approach at a speed slightly below 70 mph. Slips are also effective in the airplane.

Many pilots will make a few landings and brand the Traveler a floater; they'll say it wafts across the airport even after an approach at the proper speed. The airplane does have that tendency, but with a little practice, you can easily get the Traveler slow enough to land it on quite a short runway. More effective brakes would help a bit, though.

The landing itself is nice, but I tended to drop the airplane in a bit on the first few. I was beginning the flare a little high, to decelerate some while out of the ground cushion and thus work around the floating tendency, and perhaps this is what led to the firm arrivals. The powerful elevator is a good asset on the landing, though it does take a couple of rounds to feel at home with it. The effectiveness of the elevator became especially apparent after one landing on the grass field; I thought I'd keep the nosewheel off while rolling through a little depression, and I managed to bump the tail skid on the ground.

There's a passage in the owner's manual that alerts a Traveler pilot to another landing consideration. It deals with pilot-induced porpoise that might be encountered during a landing at excessive speed and on the nosewheel first. The elevator is indeed powerful, and if a pilot induced a porpoise after a fast approach and an attempt at a level landing, things could wind up wrinkled unless the proper procedure is followed: The book says to apply full power and go around. Porpoising is not a characteristic belonging only to the Traveler. Nosewheels on all types of light aircraft are broken off following fast approaches, level landings and porpoising. The Traveler's powerful elevator might make it more of a consideration in this airplane than some others, however. Also, the airplane's gliding ability combined with the inclination of some pilots to make a high-speed dive for the airport when overshooting could lead to nosewheel-first landings. Approach at the proper speed, land correctly (tail low and at minimum speed) and you can forget all about porpoising.

The cabin of the Traveler is comfortable and well-sized for four people. The new bucket seats did at first feel as though they might be too firm, but after more than three hours in the airplane, I had no complaints. The rear seats are comfortable, too. Legroom is very adequate, and is more limited by the spar, which is under the front seats, than by the location of the front seats unless they happen to be all the way back. All seats are beautifully upholstered, but the rest of the cabin fittings are very Spartan. Headroom in the rear is not overly generous, and if the passenger happened to be more than six feet tall, he might feel a bit cramped. A special cabin feature is the folding rear seat, which allows everything aft of the front seats to be converted into a flat-floor cargo area—like many of the new hatchback cars.

The airplane's basic designation is the AA-5, with an optional package changing its name to Traveler. This package includes full instrumentation, dual controls, pitot heat, a Narco Com 10A/Nav 10 and other frequently ordered options. The suggested list price of a Traveler is $17,450. This Traveler avionics package would be adequate for basic VFR operation away from terminal airports. The Narco Com 10A/Nav 10 includes a 360-channel communicatons transceiver and a 200-channel navigational unit that shares a receiver with the communications radio. You can talk,

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Traveler Country

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Total usable fuel comes to only 222 pounds, so there's really no reasonable way to leave out gas to accommodate another person.

With the rear seat folded down in the cargo configuration, special consideration would have to be given to the CG when loading. With full fuel, a 170-pound pilot in front, 340 pounds in the cargo area and 98 pounds in the baggage compartment (thus bringing Traveler G-BBDL to gross), the CG would be aft of the limit. The solution would be to move one of the lead ingots from the baggage area to the right front seat and strap it in securely. Nevertheless, the amount of room for cargo is impressive. The Traveler would also make a great camping airplane for two people; put lots of gear back there and head for the wilds.

The Traveler's best cruising altitude is high—between 9,000 and 10,500 feet, the choice depending on whether the flight is IFR or VFR, eastbound or westbound. At 10,500, it will cruise 138 mph on 8.3 gallons per hour. That is nearly 17 air miles per gallon, and I'd wager that on a downtown Cleveland to downtown Chicago round trip, a Traveler would consume less fuel than a Volkswagen Beetle. (A shopper comparing the 150-hp four-place airplanes might notice that fuel consumption varies a few tenths of a gallon from airplane to airplane even though the engines are all the same. These differences must be charged to variations in fuel-flow computations, and for all practical purposes, gas consumption is the same for the Skyhawk, Traveler and Warrior.) Of course, if a pilot were to fly a lot in that 9,000-to-10,500 range, a small oxygen bottle would be a good thing to take along.

If Traveler VFR trips are planned on the basis of using 75-percent power and landing with an hour's fuel aboard, they will run three hours. On IFR flights, the allowance for the trip to an alternate would have to come out of the three hours. Slow down a bit and four-hour trips become a possibility.

Grumman American has had a definite identity problem with the Traveler. Call it a Grumman on the radio and the controller looks for a Gulfstream. Call it an American and he looks for an airliner. Call it a Grumman American or a Traveler and he's likely to say "What?" That is being overcome, though, as more of the airplanes are produced. The prime identity problem remaining is with the airplane buyer. Some still mistakenly think of the Traveler as a stretched Yankee, harking back to the first product of American Aviation, before the merger with Grumman. While it does share many common parts with the Trainer and Tr-2 (which replace the Yankee), the Traveler is still a completely separate airplane. It is a basic four-place, 150-hp bird, with very competitive numbers and with a personality and spirit of its own. Grumman American feels that if they can just get a substantial percentage of the buyers to try the Traveler and compare all the available choices in this field before buying, they'll sell scads of airplanes.

and listen, and navigate, but to listen and navigate at the same time, you must listen on the navigation frequency.

Add a Narco AT-50 transponder for terminal-airport operations and the total price becomes $18,095. Complete IFR packages—both Narco and King—are available, with most Travelers going into the United States market equipped with Narco radios. The export airplanes usually have King.

The top-of-the-line avionics package would include dual 360-channel communication transceivers, dual 200-channel navigation receivers, glide slope, a DG0-10 horizontal-situation indicator, marker-beacon receiver and a PDF-35 ADF, all from Narco. This package, with the transponder, would bring the suggested list price of the airplane to $24,620 and would give full IFR capability. The DG0-10 would also add some icing to the cake, displaying as it does navigation and heading information in one instrument. The IFR price would drop to $23,735 with the avionics but without the DG0-10.

The 1974 Traveler I flew—a Britisher named G-BBDL—was equipped with a King radio package plus an Edo-Aire Mitchell Century I autopilot (or wing leveler, as they call it on the price list). The airplane also had an extra altimeter, required in England for IFR. The King equipment consisted of a KX 170A navcom with nav indicator, a KR 85 ADF and a KT 78 transponder. This would send the airplane on its way IFR, although most pilots would prefer another navcom—even if it had to come at the expense of the ADF.

The Mitchell autopilot flew the airplane nicely, and even though it does not have a heading hold, it would stay very close to a heading for extended periods of time. The navigation-tracker feature of this will track a VOR radial or localizer. It is a low-cost option and would be a welcome addition in a Traveler used for longer trips and IFR flying.

The airplane had a useful load of 845 pounds, as equipped. As a matter of comparison, the Skyhawk II that I flew for a September FLYING pilot report had a useful load of 846 pounds. Traveler G-BBDL's useful load will do good work, but it will not accommodate the supposedly typical four 170-pound people with 25 pounds of baggage each. This loading would leave only about 50 pounds for less than nine gallons of fuel, and that's more like the amount you'd want to land with than the amount you'd choose to have on board when starting out. Also, with four 170-pounders on board and 100 pounds in the baggage compartment, the aft CG limit would be exceeded. The average IFR-equipped Traveler's load would be a family of four, with the kids in the back. Two couples could also make good use of the airplane, though the ladies might have to sit in the rear seat. As far as standard 170-pounders go, it is a three-place with a good baggage allowance.

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