


FRENCH TUTOR

*Aerospatiale's Tampico is at home
in the U.S. training fleet.*

BY WILLIAM L. GRUBER



You gotta admit, it looks sexy on the ramp. • I'd just flown Aerospatiale Tampico N28199 from AOPA's home base in Frederick, Maryland, over to nearby Carroll County Regional Airport/Jack B. Poage Field to try some takeoffs and landings away from the busy traffic pattern at Frederick Municipal. After a few circuits at Poage, I parked the TB-9 on the tarmac and strolled into Westair, the fixed-base operation, enjoying the perfect spring day. It wasn't until I emerged, with a can of soda and some crackers, that it struck me just how spiffy that Tampico seemed out there amid a pack of somewhat weary-looking Cessna 152s. The thing stood out like a cheerleader at a frat party. • I sat on a bench in the sunshine to enjoy my Diet Coke and Cheese on Cheese and to contemplate the Tampico. With its sleek physique, gull-wing doors, yards of plexiglass, and big, swept tail, the

PHOTOGRAPHY BY MIKE FIZER



airplane was positively rakish (it may not be very fast, but it sure *looks* fast). Was this, I wondered, the future of general aviation in America? My initial gut response, rooted in the xenophobia so strong in aviation, was, gee, I hope not. Like Detroit in the 1970s, we in GA cling to the concept that the natural order of things is for the airplanes we fly to be built right here in the good ol' U.S. of A. Global economy? What global economy?

Sure, when Cessna starts building pistons again and Piper gets back on its feet, why, the Aerospatiales will provide a welcome addition to the U.S. fleet, right? But until that apocalyptic day when the Skyhawk rises again, the new aircraft of Aerospatiale General Aviation (AGA) represent one of the very few games in town. Knee-jerk chauvinism aside, maybe it's best for now to worry less about where the aircraft come from and just be glad they're here. Lucky for us, they're pretty good airplanes.

About 1,400 aircraft comprise the worldwide, piston-powered fleet of the Tarbes, France-based Aerospatiale Group. It's made up of roughly a third each TB-9 Tampicos, TB-10 Tobagos, and TB-20 Trinidads. The low-end

Tampico, with its fixed-pitch propeller and 160-horsepower engine, was the first aircraft in the "Caribbean Series" to be certified, back in 1977, but it was the last to be imported to the United States. Aerospatiale began making inroads to the U.S. market in 1985 with the retractable, 250-hp Trinidad. The 180-hp Tobago, with its fixed gear and constant-speed prop, soon followed. Although one Tampico came to America in 1988, serious sales efforts got under way here only about a year ago,

according to Bill Monroe, vice president of sales and marketing for Grand Prairie, Texas-based AGA.

"We didn't introduce the Tampico, really, until Piper disappeared," explains Monroe. "There was just no way we were going to charge \$100,000 for an airplane when Stuart Millar was out there selling \$65,000 Cadets. Plus, it's a foreign airplane, and Piper's American."

But when Piper got into deep financial trouble and the Cadet production





line fell silent, AGA stood ready as one of precious few companies able to help meet the strong demand for new aircraft in the aging U.S. training fleet. Acceptance of the Tampico was slow at first. But as the airplanes became better known and their owners reported positive experiences with them, the market began to open up. About 30 Tampicos sold here over the past year—all to flight schools—have swelled the ranks of U.S.-owned Caribbean Series aircraft to around 275, says Monroe.

"It's a shock to try to absorb a six-figure airplane into a flight training program," Monroe acknowledges. "It's taken them a year to realize that that's what it takes to get a new airplane these days."

Besides their dashing looks, the airplanes' main selling point is their very newness. AGA's foreign ownership "is an issue only to the people in this industry. The students don't care," says Monroe. When a prospective student walks into a flight school asking about flying lessons, the Tampicos can be the most potent salesmen. "Tell you what," Monroe says, addressing a hypothetical prospect, "you get in our airplane, and you sit in it, and then

you go over to that FBO across the way, and you sit in their Cessna 152, and then tell me which one you'd like to learn to fly in."

Flight schools like the Tampico for its straightforward handling, excellent visibility, and ease of maintenance. Parts availability and customer support, a concern for buyers of any foreign-made airplane, is considered a top priority by AGA. "We've got a complete parts-support department right here in Grand Prairie; it's the largest part of our staff," says Monroe.

Actions being more articulate than verbiage, the experience of the University of North Dakota flight training department helps to confirm Monroe's sales-speak. When UND bought three Tampicos last November, the only problem was their heaters. "There's a pretty big temperature differential between Grand Prairie and Grand Forks," says Don Dubuque, assistant director of flight operations at UND. "The heaters weren't what we expected." Dubuque called AGA to complain of his students' frozen toes, and "right away, they jumped on it." AGA sent a technician to Grand Forks to install beefed-up heater kits, and the cockpits have been toasty ever

since. "I was real pleased with their customer service," says Dubuque. "Their support has been excellent. We're very happy with the Tampicos. The mechanics are happy with them."

Dubuque says UND started looking at the Tampico when it became apparent Piper couldn't fill the school's full order for Cadets. The university was lucky—it got 13 Cadets before production stopped. But it needed more trainers to replace aging Cessna 172s. "We checked around, and the Tampico was very similar to the Cadet. We decided to give them a try. The students like them. They're very easy to learn to fly in."

Officials at UND considered American General Aircraft Corporation's Tiger, but the Tiger has 20 hp more than the Tampico. "We decided we didn't need 180 hp," says Dubuque.

"I don't know if there's a perfect airplane," says Dubuque. "The Tampico is a comfortable airplane, it's sporty looking, and it is easy to fly. The students like them. It does the job. . . . I would like more Cadets and new 172s; they are all good trainers, and they all would do a good job. But the Tampico would be a good replacement for our Cadets. I would have no problem

going with the TB-9."

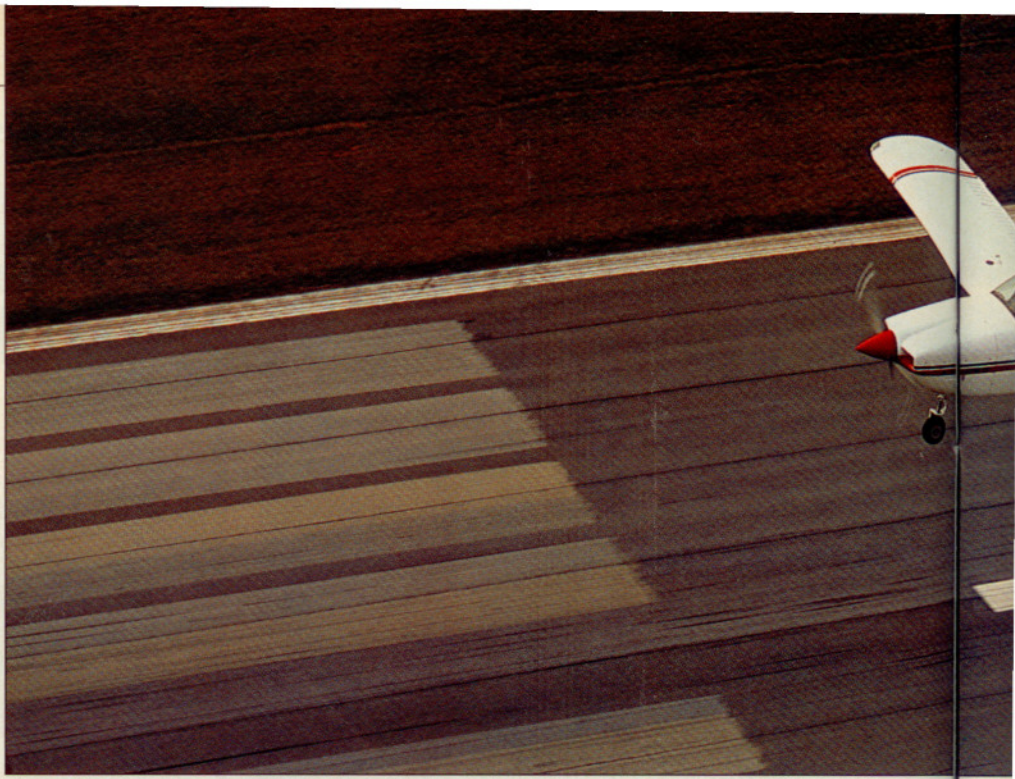
The UND flight department was one of two big-name schools to buy Tampicos this year; Embry-Riddle Aeronautical University recently bought 14 TB-9s to replace its high-time Skyhawks, with delivery of the full order expected to be completed this month. The Tampicos, along with three new Mooney ATS advanced trainers, will be based at Riddle's campus in Daytona Beach, Florida. The university also bought 10 American General Tigers for training at its Prescott, Arizona, campus.

"If we could have stayed with a U.S. manufacturer, we would have. There's just not the supply," confides Paul McDuffee, chief flight instructor at Embry-Riddle.

When we spoke with McDuffee, just three of the new TB-9s had been delivered, and Embry-Riddle's flight instructors had only been flying them for a few weeks. But early reviews were rave. "First impressions are that the airplane is going to be a very satisfactory trainer for us. The kids seem to be very excited about the airplanes, their configuration, the visibility. It's a bit unique, so it certainly draws attention."

The most noted first impression among the instructors was the excellent visibility for which Aerospaciale airplanes have become known. "One of our instructors commented after a flight that he never knew there were so many other airplanes in the sky. Some of the guys liken it to flying a helicopter," says McDuffee. "The location of the controls, the comfort of the seats, really make it a very comfortable training platform. It's very forgiving. It's a very docile airplane."

There's just one drawback: "The only complaint I get from the troops is that it's slow. We're talking 96-, 97-knot cruise," says McDuffee (the book calls for 105 KTAS at 73-percent power and 96 KTAS at 63-percent power at 4,000 feet). But speed isn't the top priority in a trainer, and as Monroe readily points out, being 10 or 15 knots faster only makes a difference of a few minutes on a 50- or 100-mile cross country. The Tampico was certified with a climb prop—there are a lot of high-altitude operations in Europe—and they all come standard that way. Aerospaciale is working on a supplemental type certificate for a cruise prop, and McDuffee expects Embry-Riddle to be one of the first customers





for the modification.

Our limited experience with the Tampico confirmed that—yep—it's slow. We indicated 97 knots at 2,000 feet and 2,450 rpm (100 KTAS, 67-percent power) and just over 100 knots at 2,550 rpm (103 KTAS, 75-percent power). The temperature at 2,000 feet was 55 degrees Fahrenheit, and at 4,000 feet, it was 48°F. But before you go for your E6B, we should point out that the weather during our flight test, although picturesque, was pretty bumpy, and pegging the needle on the airspeed indicator at any particular point for long was near impossible. Those who know the airplane, though, say to count on about 100 knots TAS. Which isn't terribly fleet, but again, in a trainer, it's okay to have a little extra time to figure out where you are, tune the VOR, and study the sectional.

We also can vouch for the fact that the Tampico climbs like a bat. After takeoff, we saw a 1,000-fpm climb rate at 80 knots, with one notch of flaps and full throttle (best rate of climb is 78 knots). With flaps retracted and 90 knots, we were still going upstairs at 900 fpm. This was with full tanks and one large person aboard. This climb performance is welcome because, at book speeds (best angle of climb is 67 knots in the TB-9), the Caribbean Series airplanes leave you blind as a bat, too, at least straight ahead; that wide nose just fills the windscreen at steep climb angles.

The Tampico handles well and easily in the various basic maneuvers such as steep turns and stalls. The stall break is more of a slow mush than a break, with no tendency toward a nasty wing drop. Pitch and trim changes with flap extension are modest. The airplane does tend to wallow a little in turbulence, and I personally would prefer a little more aileron authority. It's no aerobat, but it's not meant to be. Instead, it's a solid platform, reminiscent of the Cherokees, that serves up no unpleasant surprises. Visibility (except over that nose in climbs) is, as has been said before, terrific. That asset is especially appreciated in turns and in the traffic pattern.

The cockpit is roomy width-wise, although I found the Tampico, like the Tobago, decidedly lacking in headroom. AOPA until recently leased a Tobago that I flew regularly, and I had to fairly recline in the thing to keep my headset from touching the roof. Flying

in and out of moderate turbulence in the Tampico, I had my noggin bashed repeatedly against the ceiling, which does a job on your neck after a while. The automobile-style bucket seats in the Caribbean Series, complete with car-style seat belts, are made much of, however, and many pilots find them unusually comfortable. Also a matter of taste is the yoke in the Aerospaciales, which I find uncomfortable and aesthetically displeasing but other pilots seem to like just fine. In the Tampico, I missed the little left-side elbow rest that the Tobago is equipped with and the small inset window on the pilot's side.

The throttle quadrant, situated be-

tween the seats on a center console along with the trim wheel, fuel tank selector, and headset jacks, is attractive and in a comfortable spot. Electrical switches also are on the center console. In the Tampico, all instruments are located on the pilot's side, with annunciator lights aligned in a row along the top of the panel, which makes things tidy. Aircraft are shipped to the States equipped for day and night VFR, with a transponder and a single nav/com (an IFR package is available for \$15,400). Location of the circuit-breaker panel, on the left side panel below the pilot's knee level, is a bit awkward and makes the breakers a little difficult to check.

MADE IN FRANCE . . . MORE OR LESS

Deepening its commitment to the U.S. marketplace, Aerospaciale this year unveiled plans to start assembling Tampicos at its facility in Texas, with assembly of Tobagos and Trinidads to follow. But even the airplanes built from scratch in France feature a host of American-made components.

Although major airframe structures, such as the aluminum, interiors, and plexiglass, are French-made, 80 percent of the vendor-supplied components of the Caribbean Series airplanes comes from U.S. manufacturers.

Europe has no real support industry for general aviation, according to Bill Monroe, vice president for sales and marketing for Grand Prairie, Texas-based Aerospaciale General Aviation (AGA), the U.S. subsidiary of the Tarbes, France-based Aerospaciale Group. Without the participation of American vendors, production of the AGA aircraft line would be impossible.

The Tampico features a Lycoming engine, Sensenich prop, Cleveland wheels and brakes, Bendix ignition systems, Bendix/King avionics, and an array of other gauges, instruments, and parts that come from old-line American aviation companies. Although its name is French, it can honestly be called an at least partially American-made machine.

Monroe says 55 cents of every dollar in the average-equipped Tampico's \$113,500 price tag stays in the United States. When assembly at Grand Prairie begins (the target is to have the first U.S.-built airplane out the door by the end of the year), that figure will increase to 70 or 75 cents. The more complex the American-made avionics suite, the larger the portion of the total price tag that remains here.

Currently, all U.S. components are shipped to France. The aircraft are built and test-flown in Tarbes, then the ones bound for the American market are partially disassembled and shipped to the States. They are shipped two to a carton, with the wings, cowling, propeller, and stabilator removed and everything wrapped in plastic. It takes 36 man-hours to put them back together when they get here. Obviously, shipping something as big and heavy as an aircraft powerplant to France, only to ship it back to the United States again, involves considerable inefficiencies. The Grand Prairie assembly facility is meant to address that problem.

Initially, fully assembled sub-assemblies, such as the wings and fuselage, will be shipped to Texas, where the parts will come together, the powerplants and components will be installed, and the airplanes will be painted. Eventually, Grand Prairie will undertake production starting with only the bent-and-cut aluminum. The goal is to assemble 50 airplanes the first year, with a target rate of four a month. American assembly of the Tobago, then Trinidad, is seen a year or two down the road.

—WLG

Fuel resides in two 21-gallon wing tanks, with 40 gallons usable providing endurance of about 4.5 hours at 65-percent power. The airplane weighs in at 2,337 pounds max gross, with a useful load of 926 pounds.

Overall, the Tampico is a straightforward airplane. It's not a go-faster, but the nice thing about the Caribbean Series is that, after you train in the Tampico, you can move up to the speedier Tobago and then to the high-performance Trinidad. That's an important selling point for the series. They really are the only family of new piston airplanes that allows pilots to progress to increasingly sophisticated models, the way you used to be able to with Cessnas and Pipers.

The Tampico's handsome looks and docile handling help draw people into aviation, and in the training business, isn't that what it's all about? □

Aerospaciale TB-9 Tampico Club Base price: \$109,000

Specifications

Powerplant	Lycoming O-320-D2A, 160 hp
Propeller	Sensenich two-blade, fixed-pitch
Length	25 ft 3 in
Height	9 ft 11 in
Wingspan	32 ft
Wing area	128 sq ft
Wing loading	18.3 lb/sq ft
Power loading	14.6 lb/hp
Aspect ratio	8
Seats	4
Empty weight	1,411 lb
Max takeoff and landing weight	2,337 lb
Useful load	926 lb
Fuel capacity, std	42 gal (40 gal usable)
Oil capacity	8 qt

Performance

Takeoff distance, ground roll	1,116 ft
Takeoff distance over 50-ft obstacle	1,706 ft
Max crosswind component	25 kt
Rate of climb, sea level	738 fpm
Landing distance over 50-ft obstacle	1,378 ft
Landing distance, ground roll	640 ft
Cruise speed, 65-percent power, 2,550 rpm, 6,000 feet	101 KTAS
Endurance, 65-percent power, 2,550 rpm, 6,000 feet	4.5 hrs
Fuel flow, 65-percent power, 2,550 rpm, 6,000 feet	9 gal/hr

Limiting and Recommended Airspeeds

V _A (design maneuvering)	122 KIAS
V _{NO} (max structural cruising)	128 KIAS
V _{S1} (stall, clean)	58 KIAS
V _{SO} (stall, flaps)	50 KIAS

For more information, contact Aerospaciale General Aviation, 2701 Forum Drive, Grand Prairie, Texas 75053; telephone 214/641-3614; facsimile 214/641-3781.

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, sea level, gross weight conditions unless otherwise noted. □