

■ ■ "See Naples and die"—They were saying this long before the advent of all-inclusive tours, or even the birth of the holiday touring industry.

Naples, with its historic, winding streets and romantic waterfront, is certainly worth a visit, but in more recent times it had another form of free entertainment to offer. For if you stood in the right part of Naples at the right time, a tiny circus parade would be enacted that was a blend of the old and the new.

Out of a little works in one of the back streets would emerge a lightplane fuselage. This, followed by the wings and other bits we have come to regard as necessary for flight, would move in procession, holding up the traffic on the way to Naples Airport, where assembly would take place and another Partenavia lightplane would be born.

In those days the little firm of Partenavia was building the Oscar range of light singles, which looked rather similar to Cessna singles. However, the company was soon to realize that it is no use building today what others have been marketing successfully for years. The secret of success in any endeavor is to find a gap in the market, inquire if a demand exists and, if so, go ahead with the design and production of the best product possible to fill the need. Partenavia settled on a simple, cheap light twin that could operate out of small grass fields and cruise six people in a roomy cabin at the best part of 200 mph.

The transition from building light singles to even a simple twin is a big one for a small, private concern. Clearly, the design had to be right the first time.

At Naples University the head of the aerodynamics faculty is Professor Pascale, and his talents were enlisted when design work commenced on the Partenavia P68B Victor. At first the company continued pushing this much larger airframe through the streets of Naples, but now a fine, modern factory has been built on the airport. Professor Pascale has become president of the company.

Usually, high-wing aircraft look bigger on the ground than comparable low-wing designs; however, one's first impression of the Victor is that it is surprisingly small. "She is bigger inside than out," commented the pilot who brought the plane to Biggin Hill Airport for me to fly.

Viewed from outside, the Partenavia Victor is a clean, nicely finished little twin of graceful proportions. Nose and windscreen form a continuous, unbroken contour from the foremost part of the aircraft to near roof level, where the line gently flattens to blend with the top surface of the wing. Such is the

Pilot Flight Check

**From Naples with pride:
a trim little fixed-gear twin
that can operate from short fields
and cruise six in comfort
at nearly 200 mph**



The Partenavia P68B Victor

by ALAN BRAMSON

aerodynamic shape of the fuselage that it must contribute significantly to the total lift of the aircraft.

The 39-foot wing has an area of 200 square feet, and that is quite a small mainplane for an aircraft weighing more than 4,300 pounds; however, fuselage lift is sufficient to ensure a low stalling speed and excellent short-field performance.

Two wing tanks hold a total of 100 gallons of usable fuel, and this is fed to the engines via selectors situated in the cabin roof.

The fixed undercarriage on the test aircraft had very neat wheel fairings (an optional extra). Since the mainwheels are carried on a simple leaf spring, landing-gear maintenance should be minimal.

A large door on the port side of the fuselage gives access to the cabin, while another of even more generous proportions opens to reveal a vast luggage area behind the rear seats that can accept loads up to 400 pounds. Alternatively, this door can be removed for parachute dropping.

As in most high-wing designs, the floor of the Victor is relatively near the ground, so passengers can enter and leave the aircraft with ease, although the crew must wriggle between the seats to reach the business end of the ship.

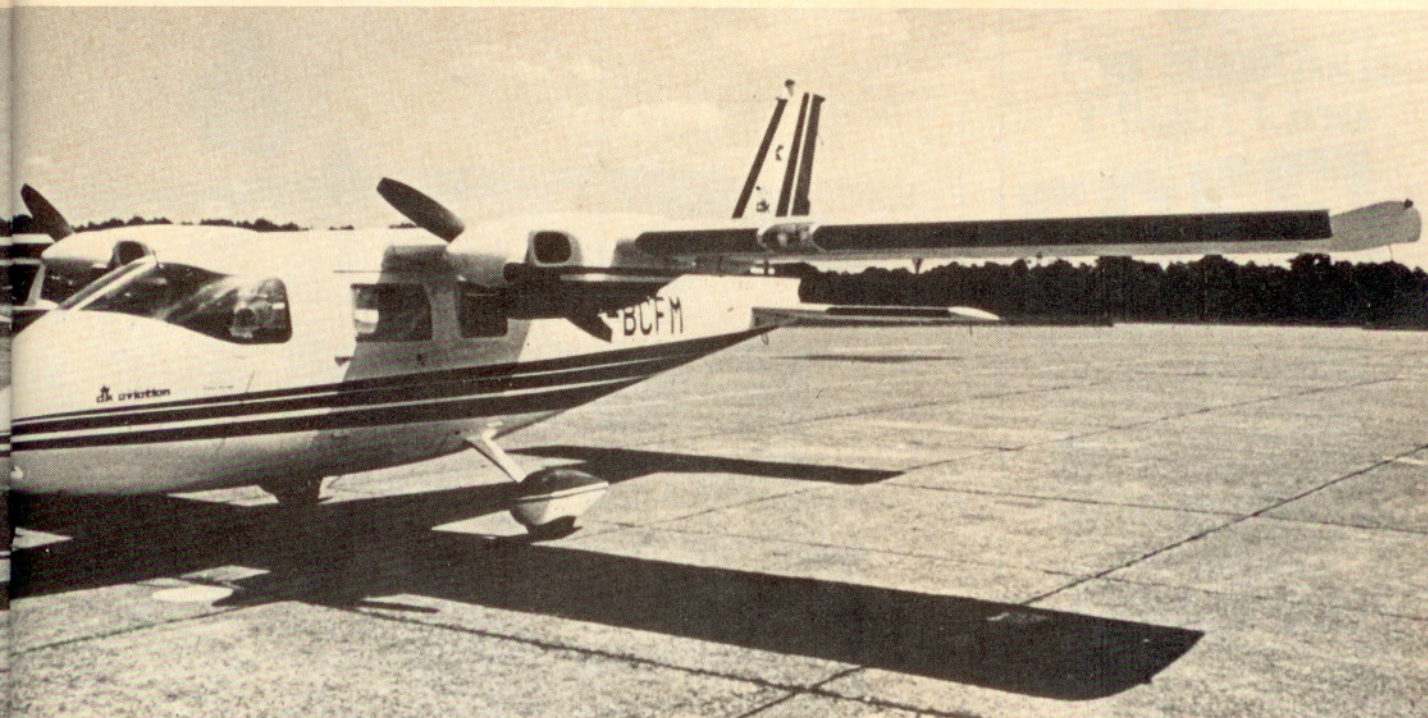
In this respect the Victor is no worse than most other aircraft in this class.

The Victor's cabin is surprisingly large for so compact an aircraft. G-BCFM, the example tested, was upholstered in light tan simulated suede with matching leather trim, and the six seats could be moved on tracking. Six fresh-air vents are provided for the occupants, along with six hot-air inlets positioned near the floor so that heat, when selected, can rise and fill the cabin.

Layout of the flight deck is excellent. All electrics are on a left-hand panel, while starting and fuel management have been banished to the roof. The pilot and copilot sit well forward of the high wing so that visibility sideways, even during turns, is good.

My main complaint about the Victor is the restricted forward visibility: the instrument panel is set high in front of the pilot's and copilot's faces. This panel height, coupled with a nose that slopes sharply away, makes attitude recognition difficult. I understand that Partenavia is now fitting crew seats that adjust for height, and these may go a long way toward improving a feature that, in my opinion, spoils an otherwise excellent flight deck.

The Victor flies on a pair of Lycoming IO-360 fuel-injected engines of 200 hp each.



Partenavia's graceful high-winger may look small, but it has a roomy cabin and hefts a 1,600-pound useful load. Photos by the author.

PARTENAVIA P68B VICTOR*

Specifications

Engines	Two Lycoming IO-360-A1B, 200 hp, fuel injected
Propellers	Hartzell constant-speed, feathering
Wingspan	39 ft 4 3/4 in
Wing area	200.21 sq ft
Length	30 ft 8 in
Height	11 ft 2 in
Gross weight	4,321 lb
Empty weight	2,645 lb
Useful load	1,676 lb
Baggage capacity	400 lb
Fuel capacity (standard)	100 gal

Performance

Range at 75% power (no reserves)	955 sm
Range at 65% power (no reserves)	1,030 sm
Range at 55% power (no reserves)	1,111 sm
Max speed, sea level	200 mph
Cruise, 75% power, 5,500 ft	190 mph
Cruise, 65% power, 9,000 ft	184 mph
Cruise, 55% power, 12,000 ft	175 mph
Stall speed at gross, full flaps	61 mph
Takeoff distance (50-ft obstacle)	1,130 ft
Landing distance (50-ft obstacle)	1,400 ft
Rate of climb, max power, sea level	1,600 fpm
Single-engine rate of climb	310 fpm
Service ceiling	20,000 ft

* Manufacturer: Partenavia Costruzioni Aeronautiche S.p.A.
C.P. 2179
Naples, Italy

Starting procedure completed, we moved off for Biggin Hill's 6,270-foot Runway 3. Taxiing is straightforward, and nosewheel steering through the rudder pedals is light and positive.

I estimate that we were some 700 pounds below the maximum takeoff weight of 4,321 pounds, so my measured performance figures should be recognized as relating to an aircraft at light weight. Manufacturer's figures for a fully loaded Victor accompany this report.

Minimum control speed on takeoff is 60 knots (69 mph), hard up against the stall, so rotation at 65 knots (75 mph) and liftoff at 70 knots (80 mph) is recommended, followed by a best rate of climb at 89 knots (102 mph). Best angle of climb is attained in a steep, nose-up attitude at 73 knots (84 mph).

Liftoff occurred in 12 rather noisy seconds, and I felt moved to reduce power to 2,500 rpm and 25 inches mp, although full power may be used for the climb. Even so, we went up at a measured 1,400 fpm.

At 5,500 feet (OAT +9°C) 75% power returned a true airspeed of 164 knots (190 mph). In the pilot's seat, the noise level seemed higher than that of an Aztec but quieter than that of the early Seneca. At this speed the manufacturers claim a P68B will fly a no-

reserve range of 955 statute miles.

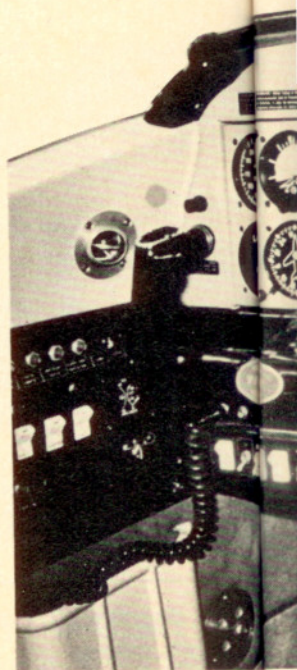
The Victor becomes much quieter at 65% power—at which setting I recorded a TAS of 147 knots (169 mph)—but the performance graphs indicate that 55% power at 12,000 feet will give an absolute range of 1,111 statute miles at a brisk 152 knots (175 mph), and this seems to be an ideal way to operate a Victor.

The stall is straightforward. Clean, the Victor nodded gently at 60 knots (69 mph), but with full flap the "G" break at our light weight did not occur until 51 knots (58 mph).

No rudder is required to achieve properly balanced turns and, by high-wing standards, visibility is good in the direction of bank. The elevators are fairly heavy and so is the rudder, but the ailerons require very little effort, even at high cruising speeds, and for a light twin they are very responsive. The Italians have a talent for designing good handling into their cars and aircraft, and the Victor is typical of this tradition: even the trimmers are beautifully geared.

Generally, it is a delightful aircraft to fly, although at first I experienced some difficulty in holding a steady airspeed—so much so that I suspected slight pitch instability. This was odd, because the Victor settled quickly into its trimmed

The Victor's panel is commodious and well planned, but its height restricts forward visibility. Height-adjustable crew seats, reportedly now being installed, should help.



THE PARTENAVIA P68B VICTOR *continued*

speed after I had disturbed it by 10 knots or so and then let the controls ride free. I feel that part of the problem results from the restricted forward view and the slope of the nose, which offers little or no reference point. One gets used to this after a while, but I look forward to trying the aircraft with the revised seats already mentioned.

Lateral stability is average, and there is the usual pronounced directional stability one expects in a modern aircraft.

At 3,500 feet I shut down one engine and feathered the propeller. We settled into a single-engine cruise of 123 knots (142 mph) true. Using maximum power on the live engine, I measured a single-engine climb of 500 fpm, which is in line with the manufacturer's claimed 310 fpm for a fully loaded aircraft.

Fuel management is simple, and there are the usual crossfeed arrangements.

The initial approach for landing is made at 80 knots (92 mph), aiming for 70 knots (80 mph) over the threshold. Visibility during this phase of flight is average, but the aircraft feels good and predictable, with only slight trim changes when the flaps are lowered or

the power is adjusted. The landing is simplicity itself, and I would expect the average pilot to feel at home in the P68B after very little conversion time.

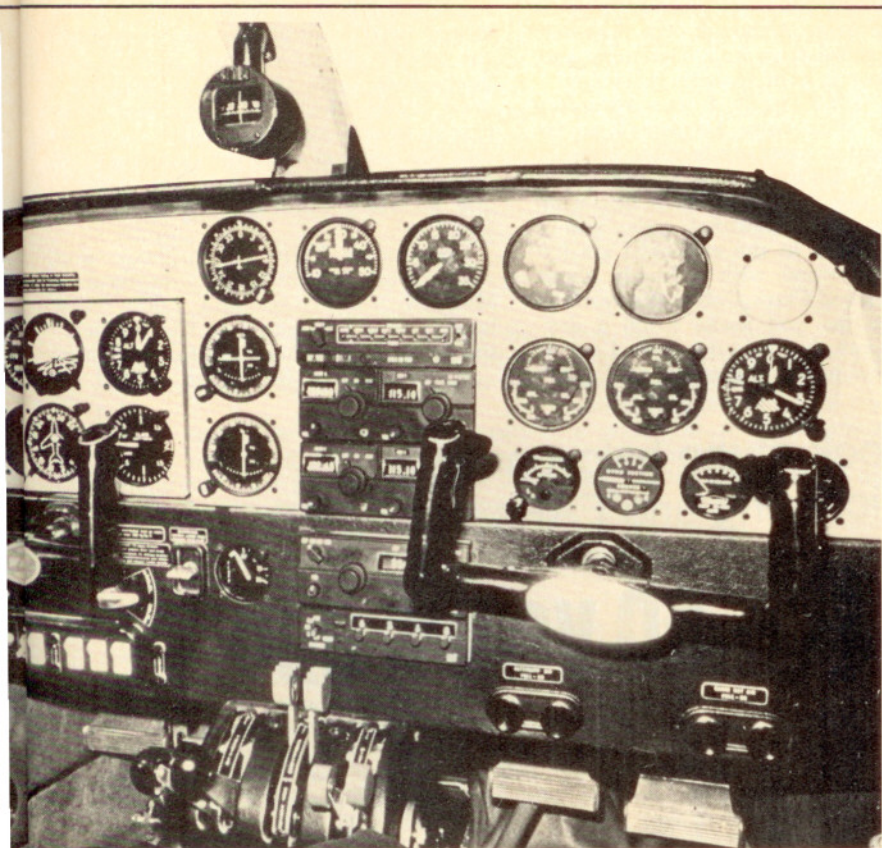
What are the capabilities of a Partenavia P68B Victor? Well, it will fly a pilot, four passengers, and 120 pounds of baggage with full tanks, and do it for an absolute range of 955 to 1,111 statute miles, depending on power setting and cruising level. Alternatively, you can fill all six seats, carry a very generous 389 pounds of baggage, and put enough fuel in the tanks for 288 statute miles at 75% power or 368 statute miles at a 55% setting. Of course if no baggage is required, the 389 pounds translates into an extra 64 gallons of fuel.

Now I must indulge myself and express some opinions.

I did not like:

- The restricted forward visibility. Partenavia could gain an inch or so by lowering the bottom edge of the windshield. This would not mean altering the instrument panel. Seats adjustable for height will also help.

- The noise level. To some extent, the Victor suffers because it is a high-wing design, and high-wing light twins are inclined to be noisy. The otherwise excellent Lycoming engines are four-cylinder units, and these tend to be a little vocal. Nevertheless, I believe care-



ful attention to soundproofing would improve the clatter during takeoff and make the cruise a little more silent.

- The seat adjustments. On the example tested, the tracking was very stiff. Seats should glide and lock; otherwise, one is never sure if the pin has located after adjustment. Have you ever suffered a back-sliding seat just before liftoff? It's not my idea of flying for fun.

I liked:

- The general appearance of the Victor.

- The simplicity of the design, and low-maintenance features such as the fixed, low-drag undercarriage.

- The big doors.

- The generous baggage hold and big weight allowance.

- The excellent rate of climb, the high cruise performance with a fixed undercarriage, and the good payload/range.

- The flight-deck layout.

- The big cabin, with adequate room for six people.

- The honest handling.

When a small company like Parnavia takes on the world and comes up with such a fine technical achievement as the P68B, one hesitates to offer advice; clearly, the gentlemen in Naples know what they are about. But I have a suggestion to make.

Suppose they re-engine the Victor with the six-cylinder, turbocharged Continental units now being fitted to the Seneca II. The noise level would improve, as it has in the case of the Piper twin. But these engines also increase their power from 200 hp at sea level to 215 hp at 12,000 feet. So equipped, the Parnavia Victor would become an even more attractive light twin than it is at present, for the cruise performance would go through the 200-mph barrier.

The Victor is the cheapest light twin we can buy in Britain. The ex-factory price for a P68B—with dual controls, full instruments, corrosion proofing, second sensitive altimeter, exhaust gas temperature gauges, and eight-day clock—is U.S. \$74,358. Wheel fairings are another \$300, and there are various autopilot options. Wing/tail deicing and propeller deicing are also available, and additional (42 gallon) long-range tanks can be fitted for another \$1,000.

The Parnavia P68B has now obtained its British Certificate of Airworthiness, and I understand there should be no difficulties in the U.S.

In these days when we are led to believe that only giant corporations can exist in aviation, it is refreshing to see a good little one. The Parnavia Victor deserves to do well. □