

Fantastic Cabin Fans



Five 12-volt fans are still whirring away after six months of continuous operation.

Back in April of 2008, *Practical Sailor* rounded up 11 fans from seven manufacturers. From Caframo, we tested the Camano, Bora, Kona, Sirocco, and Ultimate. Also in the lineup was the Fan-Tastic Vent's Endless Breeze, Hella's Turbo Fan, HotWire's Port Fan, MarinePro's Tornado Fan, and oscillating fans from SeaBowld and West Marine. All were specifically marketed for marine application. Prices ranged from \$27 to \$100.

By the end of the initial blowfest, testers came up with five Recommended fans and one Budget Buy. The testers' favorite, at that point, were Hella's Turbo Fan, a familiar, efficient design that generated a moderate breeze with very little noise, the heavy-duty Kona

(held back only by its price and metallic grill face); the sophisticated Sirocco (featuring four different timer settings); and the Port Fan, a quiet compact unit designed to fit in an opening portlight. The oversized Fan-Tastic Vent, essentially a small box fan, was suggested for dockside use, but did not make our recommended list because of its higher power requirements.

When *PS* revisited fans in August 2009, Caframo had brought two new fans to the market: a quieter and more efficient 748 Bora fan with a new blade design and a weatherproof version of the Kona. The quieter, more efficient Bora moved up into the Recommended group, but the new Kona, which had just been introduced, was still untested. The

AMENITIES

The timer switch on the Sirocco fan required daily activation, reducing its total operating time.

Budget Buy, a \$27 oscillating fan from SeaBowld was no longer available, opening the door for Caframo's \$40 Ultimate fan to earn the Budget Buy title.

In this update, we report on the new Kona, along with the other remaining contenders, all of which have been running continuously for six months, or 4,320 hours.

WHAT WE TESTED

The protocol for the six-month test was the same used for the initial evaluation. While attached to a mounting board and plugged into a 12-volt power source, the fan was run at its available speeds and tested for sound and wind output and current draw. The sound was tested at 3 feet (directly in front of each fan) and at 1 foot (from the side, pointed at the motor housing), using a Radio Shack digital sound-level decibel meter attached to a camera tripod. It was set for the "A" weighing level, which eliminates low frequencies below 500 Hertz.

The air output, or wind speed, was tested in feet per second using a Kestrel 1000 pocket weather meter attached to a camera tripod and set 3 feet in front of the fans. Testers were well aware that simply measuring wind speed coming off a fan is a relative indicator of forced air movement, and the reading can be

PS VALUE GUIDE CABIN FANS

MAKER	PRODUCT	PRICE	SIZE	MOUNTING	MOTOR RATING/WARRANTY	SOUND 3 FEET	SOUND 1 FEET
CAFRAMO	Ultimate	\$40	7 x 8 in.	Screw or suction	1 year	60 dB	64 dB
CAFRAMO	Bora	\$80	6.75 x 8.5 in.	Screw base	5,000 hrs.	55 dB	60 dB
CAFRAMO	Kona	\$100	6.75 x 9 in.	Screw or suction	2 years	63 dB	66 dB
CAFRAMO	Sirocco	\$100	9.75 x 12 in.	Screw or suction	2 years	57 dB	62 dB
HELLA	Turbo Fan	\$70	7.5 x 7.88 in.	Screw	5,000 hrs.	52 dB	55 dB
HOTWIRE	Deluxe Port Fan	\$55	7.5 x 6.25	Multiple	70,000 hrs.	55 dB	60 dB

Recommended Budget Buy

* Current and wind measured on high speed. Rating for Ultimate fan is at last tested interval.

AMENITIES



Sirocco



Port Fan



Ultimate Fan



Hella Turbo

different from the total volume of air or CFM (cubic feet per minute) that manufacturers use to rate their fans. Current was measured at 12.3 volts with an Ac-tron digital multimeter with accuracy +/- 1.2 percent.

WHAT WE FOUND

The new Kona impressed testers with its robust, spray-proof motor housing, quiet operation, and solid output. The metal grill on the original has been replaced with a plastic one, but the mount itself is powder-coated aluminum, which can be susceptible to coating failure in a marine environment.

One of the typical failure points on 12-volt fans is the on-off switch, and since beginning this test, we've had two switch failures. The on/off/speed switches on one of our original Bora fans and the on/off/variable speed switch on one of our original Kona

fans both failed after less than 200 hours of operation.

Although the electronic switch on the current Bora model looks unchanged, testers noted that Caframo has changed the Kona's variable rotary switch to a three-position rotary switch. The Ultimate, Hella, and Port Fans all use simple mechanical contact switches, while the Sirocco uses an electronic timer switch.

Because the switch on the Sirocco allowed only continuous operation for a maximum of eight hours (convenient if you're the kind who forgets to turn the lights off), it has been operating for just less than 1,000 hours, far less than the others.

At this stage in the test, we're beginning to see some fatigue in the motors and bearings. Although output remains undiminished in all of our survivors, two of the most efficient fans, the Bora and the Hella, temporarily rumble when they are switched off and started up again. Our only complete failure was the Ultimate fan, which started rattling after 2,860 hours and died two days later.

CONCLUSION

For a conventional cabin fan, the choice comes down to the Hella (our Best Choice in 2000) or the new Bora. Caframo has clearly made an effort to give Hella a run for its money in terms of efficiency and noise. Like the Hella, its Bora is guaranteed for 5,000 hours, but our experience with the electronic switches raises some concern. The most significant difference



Kona



Bora

between the two is the lack of a back cover on the Hella, which improves wind flow and makes the fan easier to clean, but also leaves it vulnerable to fingers and other objects that could harm the motor. If it's quiet you want, the little Port Fan isn't a wind machine but it is almost silent, and we don't expect it to fail any time soon. The Sirocco has an elegant shape and a powerful two-blade design (the same found in the Ultimate), but we'd only opt for this if we were intent on having a timer switch.

While the powerful Ultimate might seem a bargain, its unprotected blades are vulnerable, and when you factor in its shorter lifespan, the dollar savings, if any, is insignificant. ▲

	BREEZE *	SPEEDS	CURRENT *
	465 ft./min.	2	.55 amps
	280 ft./min.	3	.19 amps
	350 ft./min.	3	.35 amps
	365 ft./min.	2	.38 amps
	350 ft./min.	2	.54 amps
	175 ft./min.	2	.50 amps

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