

Panther Electronics C.A.T. System headset

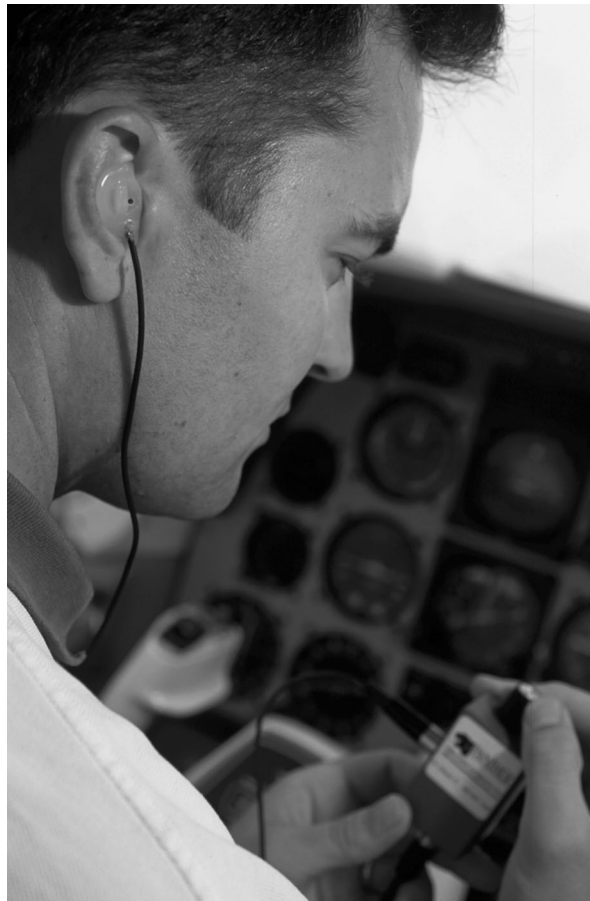
For years headset manufacturers have tried to make the traditional aviation headset as comfortable as possible. Today's models are lighter than ever and use sophisticated electronics to cancel out noise. One company, however,

has done away with the often clamp-like headset apparatus in favor of hearing-aid-like devices that contain a speaker buried in one earpiece and a microphone in the other. This setup completely eliminates the traditional headband, ear cups, and boom microphone—the compact and comfortable set may be just what many pilots have been waiting for—the headsetless headset. Ear pieces in each ear block noise passively and with active noise reduction electronics. One earpiece contains a speaker for intercom and radio transmissions. The other carries a microphone, replacing the traditional boom mic.

Panther Electronics, of St. Cloud, Florida, is the maker of this device, called the C.A.T. (cranial audio transmission) System. List price is \$464 plus shipping. Each set comes with the earpieces, which are claimed to weigh an ounce or less, and a small 9-ounce controller box that can be clipped nearly anywhere. The controller has a volume control and optimizes the transmission performance. The unit is just like a regular passive headset in the sense that it needs no batteries.

Panther sent me an ear-molding kit; the company uses the molds to create customized earpieces. The ear-molding process is definitely a two-person job so be sure to have a volunteer who is able and—most important—willing to squirt clay in your ears. Strict adherence to the instructions is

critical because the quality of the ear mold directly affects the quality of the headset that you'll receive from Panther.



In a few weeks my new "headset" arrived, and I put it to use in a Cessna 172 equipped with a PS Engineering Aerocom III intercom. When extra care was used to fit the earpieces properly, the Panther's noise-reduction properties

were as good as the noise-canceling Flightcom 6ANX that I ordinarily use in the Skyhawk. This was quite impressive, since I didn't have the bulk of a traditional headset or a boom mic to hassle with. Panther claims a 46-decibel noise-reduction rating without any battery-eating, noise-canceling electronics.

One downside to the C.A.T. System was immediately apparent. Like a stethoscope, the wires dangling from your ears transmit an amplified sound from any contact. If you touch the wires with your hands or a chart, or simply turn your head so the wires drag across your shirt, the noise is piped right into your ears. A clip on the wire allows you to fix the wire to your shirt, which minimizes this effect somewhat. Over time, however, I grew accustomed to it much as I became comfortable with wearing a headset 20 years ago.

Panther recommends using the supplied ear lube for several months until the ear molds "break in" completely. The lube—nothing more than K-Y Jelly—allows for easy installation and removal of the earpieces while assuring optimum performance and noise reduction. The lube does make a difference for the user—and anyone else on the intercom.

Why would others on the intercom care if you use K-Y Jelly in your ears? Background noise in the cockpit funnels into your ears and is picked up by the unit's ultrasensitive microphone. A poor-fitting earpiece allows more background noise to go past the earpiece and break squelch on the intercom.

In addition, the more noise you can keep out of your ears, the better noise-canceling you'll get.

With an ultrasensitive microphone buried in one of your ears, the Panther set picks up every sound from your head

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including swallowing, sneezing, humming, and coughing. Since the intercom in our test airplane has automatic squelch circuitry, it opens the intercom so everyone in the cabin can hear your bodily functions. Panther solved this problem by adding a mute button on the cord. When you feel a sneeze or cough coming on, you simply press the button to inhibit the microphone, sparing everyone an ear-splitting racket.

In another airplane with a Sigtronics SPA-400 intercom, which has adjustable squelch control, the Panther headset was much more compatible since I was able to set the squelch threshold high enough to

filter out most of my bodily noises. The aforementioned new muting function should take care of the rest of the predictable noises making the C.A.T. System headset more suited to intercoms that have an adjustable squelch.

Several calls to different ATC facilities were met with "loud and clear" responses, which was amazing since I was talking through my left ear. Comments from others on the intercom ranged from "slightly muffled" to "underwater but readable." I rarely, if ever, had to repeat anything I said for lack of comprehension.

Other advantages of the Panther C.A.T. System: You will no longer have to deal with "headset hair." You can say goodbye to the clamping feel and often-resulting headache that traditional headsets cause.

You can eat or drink without having to deal with a boom mic—although chewing and swallowing may break squelch on the intercom. The entire assembly can be coiled up and stored in a small glove box—try that with a regular headset.

Those who listen to stereo music in flight or have intercoms with automatic squelch may find a conventional headset more suitable. But for those pilots or passengers who loathe the traditional headset, Panther's C.A.T. System may be the long-awaited answer to their problems.

For more information, contact Panther Electronics, 4540 Lake Gentry Road, Building 100, Saint Cloud, Florida 34772; telephone 877/957-1600 or 407/957-1600; or visit the Web site (www.pantherelectronics.com). —*Peter A. Bedell*