

A specialist optician is providing eye tests and lenses specifically for aviation use, as **Pat Malone** reports

don't know about you, but I've got two pairs of glasses – one for everyday use, and one for passing my medical. The 'AME specials' are varifocals which allow me to read the eye chart and the close-up writing, but I've never been able to get on with them when I'm flying. For a start the point of focus seems to be tiny, so you've got to move your head around like a nodding dog in the back of a car in order to scan, and that's bad news in a helicopter – the best possible way of inducing the leans. So between medicals, they stay in the flight bag.

Trouble is, as I get older the everyday specs become less efficient. I'm okay on distance, but the panel and the map are getting fuzzier. Either I need a bigger helicopter with the panel further away, or I've got to get this glasses business sorted. But I've just discovered that help is at hand. I'm going to have a bespoke pair made by an outfit run by pilots for pilots, people to whom I can explain my problem and who will understand it.

Pilot, AOPA member and accident and emergency consultant Tony Bleetman has set up Aviation Optical and Medical Ltd, the first

Top: Aviation Optical and Medical's Danny Bleetman is a London-based dispensing optician

Right: brother Tony is a pilot and a consultant who flies with Warwickshire air ambulance

fly-in eye-testing and opticians shop in the country, possibly in the world. Based in a suite of rooms at Coventry Flying Club, Tony and his brother Danny, a London-based dispensing

optician, intend to do for aviation what Dennis Taylor's eye specialist did for snooker players when he created those upside-down spectacles – furnish bespoke lenses to individual pilots, tailored to suit the work they do.

Given my own experience, I'm surprised nobody has thought of it before. I would pay good money to have this problem disappear – although looking at the Bleetman brothers'



General Aviation April 2007

scale of prices, I'd say they're not over the odds. Their eye test is more expensive, running out at £85, but it lasts for 45 minutes and covers all the bases. It checks for every incipient eye disease that can be detected, runs the rule over peripheral vision to see what enhancements might be possible, and it checks near, far and intermediate vision in every situation a pilot is likely to encounter, including bright sunlight, night and IMC. A Cessna 310 flight deck simulator has been built to help with the testing, and it has a partial glass cockpit because they can play tricks with the eyes (your GPS and glass panels can disappear at certain angles if you're wearing Polaroids, I'm told). Aviation Optical's lenses and frames come at normal prices - you can walk away with a bill about the same as you'd get at SpecSavers, or you can opt for the hot Oakleys and just leave your wallet.

Tony, who is a Consultant in Emergency Medicine at Birmingham's Heartlands Hospital, flies as a doctor with the Warwickshire and Northamptonshire and County Air Ambulances and has almost 1,000 hours on Cessnas, PA28s, Chipmunks, and aerobatic Robin 2160s. He says: "I've been wearing glasses since I was about 11 and varifocals for the last couple of years, but I found I was unable to get the precise prescription I needed as a pilot. Having a brother in the business is an obvious advantage, and I got him to create spectacles to suit my requirements.

"But no two pilots have the same needs. Apart from the fact that their eyes are all different, a glider pilot does not operate in the same environment as a pilot who flies IMC at night, nor does a helicopter pilot flying day VMC need the same solution as an airline pilot."

Below: eye test includes a session on a specially-built Cessna 310 cockpit simulator which can be switched between night and day, IMC and bright sunlight Right: Tony Bleetman models prescription

As I understand it, if you go to a high street optician vou'll be categorised rather than treated as an individual. You'll be tested for near and distant vision, and compromises will be reached in order to give you the best glasses to do all the jobs. It works for most applications, but doesn't optimise the individual eye's potential.

There's a lot you can do to improve matters. The crafting of the lenses can be less uniform than you'd get in the high street, and you can use tinting to address issues of brightness perception and contrast. Photochromatic lenses, which brighten or darken according to light levels, are apparently much better than they were when





The Bleetmans' shop has the advantage of having a runway outside the door so you can fly in, have your test, and if it's a simple job, choose your frames and hang around in the Coventry Flying Club bar or the air museum for an hour, then pick up your new glasses. For more complicated work you might have to come back in a week or rely on the postman. If you're an open cockpit flier, they'll make you a pair of prescription goggles.

My own problems are compounded by the fact that I'm a helicopter pilot, and in autorotation I need to be able to see the ground at a distance between my feet. Tony is addressing this by giving me a distancevision area along the bottom of the lenses Should work, in theory. I'll let you know after I've lived with them for a while.

You can contact Tony Bleetman on 02476 304444. See www.aviationoptical.co.uk



*Any other members who have experience us an email and let us know how they worked out.



of Bleetman spectacles might care to send

General Aviation April 2007