



# The Eyes of Bill DuBois

Bill DuBois holds up one of the more than 4,000 artificial eyes he's made. At top left, he veins and tints an eyeball to match the patient's real eye.

Story by KAREN M. HENSON  
Photos by PAMELA S. HINDEN

Journal Staff Writer and Photographer

**B**ill DuBois' eyes are literally a work of art. "I've made eyes with American flags for the pupil, one that looked like an eight ball, one like dice," DuBois laughs. "I even had a race car driver who wanted his insignia as the pupil. I did it for him."

DuBois guesses that he is one of only nine people in the country who practice the craft he does, in the same way he does it. If you want to be technical — and DuBois certainly doesn't — you could call him an ophthalmoprosthetic technician.

"That means I make eyeballs," DuBois explains in his soft, raspy southern drawl. The 64-year-old Rockville resident guesses that he's made more than 4,000 plastic "eyeballs" since he and a team of six other servicemen developed their revolutionary technique during World War II.

Before that, those who lost an eye were forced to rely on ill-fitting, artificial-looking glass eyes.

Now DuBois can customize an eye so completely that it is almost impossible to distinguish from the real thing. In fact, his creations look so realistic it sends shivers up your spine to hold one.

By and large, those who seek out DuBois' services want to look normal again — those who have lost an eye in an accident, to disease, or who were born with congenital defects that left them without eyes. He's made eyes for infants as young as three months, people in their 80s and just about every age in between.

"There's a lot more people out there wearing artificial eyes than you realize," DuBois said.

While there are many artificial eye services in the country, only DuBois and a handful of others practice the art of making customized artificial eyes from start to finish. Officially retired now, he still manages to work off and on at the business he helped found, the Contact Lens and Artificial Eye Service in Bethesda.

Although he has spent most of his adult life making artificial eyes — more than 40 years — he was originally trained as a dental technician. The two fields are not as unrelated as they

might seem.

His transformation from dental technician to "eyeball maker" came during World War II, when a team of six Army medical corps members were assigned to devise a better solution than glass eyes for the hundreds of soldiers who had lost their eyes to shrapnel or other war injuries.

Since all the instruments and materials used to construct the eyes were from dentistry, the Army medical team was composed of three dentists, two dental technicians and one artificial eye-maker. After months of 18-hour days, they developed the technique that DuBois uses still.

"It's hard to tell exactly how you do it," DuBois said. "It's just like a gal cooking. When you ask her how she does it she says, 'Ah, I just throw in some of this and some of that.'"

The process involves a series of intricate steps, processes and materials, but begins with a plastic wafer one millimeter thick that will eventually become the iris — the colored part of the eye. By looking at a patient's remaining eye, DuBois paints colors on the wafer.

"First you paint the background colors — the ones you don't see unless you know where to look," DuBois said.

Then he goes on to apply the visible colors with a special stroke to allow the background colors to show through.

The color is then baked into the wafer, a mold is made to conform to the shape of the patient's eye socket, plastic is attached to the wafer to become the white of the eye, the white is tinted and tiny nylon fibers are attached to simulate veins.

There are a number of intervening steps and processes, and DuBois' workroom is stacked with the ovens, polishers, molds and other essentials of his trade.

A person must come into the office for five appointments over about 10 days to have an eye custom-made, DuBois said. He provides two months of follow-up care to correct any problems that may occur.

The cost is \$500, which is often covered at least partially by medical insurance.

He keeps 300 or so "stock eyes" for patients to wear as temporaries while their customized eyes are being made. Some artificial eye clinics sell stock eyes as permanent replacements, but DuBois is not satisfied with that.

"If you get a good color or shape, something else will be wrong with them,"

DuBois said.

Some of his clients who have lost both eyes have liked their customized artificial eyes so well that they've asked him for two pairs — one brown and one blue, for example. A typical DuBois eye will last for 10 to 15 years.

DuBois admits that the technical part of his work often becomes extremely tedious — so much so that he knows three fellow eyemakers who have committed suicide. But he said he feels a great deal of satisfaction from taking people who feel their bodies have been mutilated and making them feel good about themselves again.

"After the shock of losing an eye you need reassurance," DuBois said. "When people come in here we have fun. I start to needle them, kid them. Usually by the time the eye is ready they are comfortable."

The first thing people generally do after DuBois inserts their new eye is to run up to the mirror to check it out.

"One girl said she could see a minute, teeny difference between the new eye and her own. I told her, 'Honey, if anyone gets that close to you to see that, they're just going to close their eyes and enjoy it, they're not going to see any difference,'" he said.



Wearing magnifier glasses, DuBois examines a patient (left) before inserting her new "eye" (above).