16. Herb Graf Remembers

Carlos Stroud and Maria Schnitzler

Herb Graf joined the staff of the optics shop as an optician in 1943 and remained there doing precision optical fabrication and testing until he retired in 1987. In addition to his duties as an optician he is familiar to generations of students he helped train to grind, polish, and test their telescope mirrors in the “Fab and Testing” course. In November 2003 he visited the Institute where his recollections were taped in an interview. The audiotape is saved in the University archives.

Herb described how, after graduating from Edison Technical High School in Rochester, he worked briefly as a machinist at Delco and then at Bausch & Lomb, where he began working with optics. He described how he came to be hired at the Institute.

I took off a couple of days from Bausch & Lomb where we were working ten-hour days putting optics in the range finders for battlewagons. I went duck hunting down in Irondequoit Bay on Stony Point. And I met a fellow down there that had a Springer Spaniel and he was duck hunting also. He asked if we could hunt together, and I said “sure,” and so we hunted together a couple of times. Then, one day he said, “Herb, I’ve got a class that I have to tend to, but I’ll be back if you’re going to be here.” And, I said, “Yeah, I’ll be here.” I didn’t put anything together that he was a professor at the UR, but he was Dr. Fred Paul. One day my mother got a call from a Dr. Fred Paul at the University of Rochester. They’d like to have Herb Graf to come up and have an interview, at his convenience. They said that they were starting a research project in the optics lab, which was then underneath the right side of the library. So, I said sure I’d be happy to work here on the project. We did diamond grinding to generate all of the curves that went into Hopkins stereoscopic camera. Then we sent them over to the machine shop that was in the Biology Department in Dewey to be mounted. After that they took it out to be tested, and Bob came back into the shop and he said, “Wow, 10,000 feet and you can see a fly on a railroad track.” He was real pleased.

Just after the war, Herb and Fred Paul had quite an adventure.

I was very close to Fred because Fred got me to come up here. We really had a good time together. Before I was married Fred wanted to go back to Oregon to visit his family. And so, he took his wife, Ruth, and the three children and fixed it up so I could have a two-month leave of absence, and the whole family and I took off in their big Buick in 1946 across the country. Fred was a great outdoors person. We took along a .22 rifle and when we were out on the plains there were a few hawks sitting on telephone poles, and he said, “Herb, I bet you can’t touch that hawk.” So, I got out of the car and leaned over the hood with the rifle and then I fired. I can remember he hollered, “Ha, ha, I knew you’d miss them.” But the hawk took off and about two wing beats later he dropped.

Herb was unusual in that he was an optician with a German surname who was not trained at Zeiss in Germany.

I learned right here at the UR. When I first came we had a fellow whose name was Hugo Guenther who came from Bausch & Lomb, and later Bill Klinkert who took over the shop when Guenther died. Bill and Hugo were both Germans trained over there. Their
background was okay and not okay. Me being of German descent though American born—why, I got along great with both of them.

He did a little fishing along with his hunting.

Mary Banning, Fred Paul and I would go up to Oatka Creek fishing together, and Bob Hopkins, Fred Paul and I would go too. Bob tried, he tried so hard to catch trout. Fred and I would catch one right after the other. Bob was just having an awful time. And then down at his place in Springwater, I guess that he got so frustrated he says, “Well, I’m going to put my own trout ponds in.” So, he put his own ponds in, but he still couldn’t catch fish. So, I’ve got some very good memories.

With the coming of the Laboratory for Laser Energetics, the optics shop became an essential part of the fabrication of the big laser systems, and was eventually transferred to control of the Laser Lab.

Bill Klinkert and I, we made all of the neodymium doped glass laser slabs for the first laser, and then the big glass rods for the next system. . . . I liked Lubin. I had lots of fun with Jay Eastman and Duncan Moore, and Jimmy Forsyth. I guess Jimmy came in as an undergraduate, then a masters, then got his doctorate. So we were associated for eight years or more. And then when he and Lubin left and started their own place over there, they called me over to assemble their first laser. . . . Yeah, if I saw Jimmy Forsyth right now I’d give him a hug.