

## Philip Stahl, PhD, 1985

### What influenced your decision to attend graduate school at OSC?

In 1978 I had a summer job in the optics branch of Wright-Patterson Air Force Base. It was a good fit for me and they offered me a full-time job. Then one of my undergraduate professors suggested that I consider going to graduate school for a degree in optics. He told me about the programs at the University of Arizona and at the University of Rochester. I wrote to both, and OSC wrote back, so I applied and was accepted—but without an assistantship. I took out a student loan, got married and moved to Arizona.



### What do you wish you would have known your first day of graduate school? Was there anything you wish you had done to prepare more for graduate school?

Nothing. To have advance knowledge of anything would have resulted in a different outcome.

### Which classes did you find most enjoyable? Which ones did you find most difficult?

Most enjoyable—anything taught by Jim Wyant. Most difficult—anything taught by Harry Barrett.

### Was there an individual (professor, advisor, staff, friend, family member) who played a particularly important role in your education?

Bob Parks and Fred Bartell.

### What was your research while attending OSC?

MS—'Light Scattering and Linear Degree of Polarization of Ammonia Ice Crystals relative to Voyager data from Jupiter and Saturn'

PhD—'Infrared Phase Shifting Interferometry using a Pyroelectric Vidicon'

### What was the cost of rent in Tucson while you were in school?

Rent was around \$210/month. Upon arriving in Tucson, Bill Wolfe hired me as a research assistant. My first-year stipend was \$4,280.

### If you owned a car during graduate school, what year and model was it?

New 1979 Ford Fairmont station wagon—cost \$3,500. My wife, Karen, and I moved all our worldly belongings to Tucson in it. When we left 11 years later, we had to use a moving company.

### What was your favorite restaurant/student hangout near campus?

Didn't have one. We were too poor.

### What did you do for fun during your time in graduate school?

Mostly Karen and I just socialized with fellow students—Glenn Boreman, Paul Hillman and Till Liepman—and their wives.

### What was most memorable about your commencement ceremony?

Karen received her MS degree at the same time as I received my PhD, and we took our parents to the Tack Room to celebrate.

### At the time of your graduation, what were the most sought-after jobs/most popular industries/most popular companies?

I had nine job offers from seven different aerospace companies. I even had competing offers from different divisions of two companies.

### What was your first job after graduation?

Breault Research Organization in Tucson.

**What was the most significant world event during your time in graduate school. How were you affected by this event?**

My first child was born; USSR invaded Afghanistan, so President Carter canceled USA participation in the Olympics. I had a summer job in Los Angeles with Hughes Aircraft, so I took Karen to see the USA Gymnastics Team Olympic Qualifying competition at the LA Forum; Regan was elected President and started the 'Star Wars' program, which turbo charged optics defense spending; and personal computers were introduced.

**Was there a campus or community event in Tucson that was especially important to you?**

Camping/hiking once a month with the Boy Scout Troop for whom I was the Scoutmaster; sneaking into McKale Center for the last five minutes of a basketball game, after studying all evening; attending football games for free by volunteering with Scouts to help seat people; Shakespeare in the Park; Tucson Toros; and the children's program at Reid Park Zoo.

**What advice would you give to this year's graduating class?**

The start of one's career can be exciting and stressful. Finding the perfect job. Establishing a reputation. Starting a family. Having a life. At the start of mine, I was told that a career stood on three legs: your job, your family; and your service to others.

About finding that perfect job: Follow your bliss. If you don't love what you are doing, do something different. And, having a great boss is more important than you might think. They are the only person who can advocate on your behalf in the organization. It is worth changing jobs to rid yourself of a bad boss. Life is too short to spend time around negative people who do not lift you up. It is ok to fail. Wisdom comes from making and acknowledging your mistakes. Play well in the sand box. Science and engineering are team sports. What you know and your experience may get you a job. But, your success depends on how well you work with others.

People talk about work-life balance. But, in my experience, they are not separate items to be weighed against each other, they are part of an integrated whole. Who I am professionally and who I am personally are the same. Who I am is not defined by what I do, rather what I do is an extension of who I am. Please remember that a career is not a sprint but a marathon, it is the work of your life. And, at the end of your life all that is really important is the family you have created – both personally and professionally—for they are your legacy. So, pace yourself—your marriage and family are more important than your job—don't work more than about 45 hours per week.

Be of service. Make your life about more than yourself. Join a professional society and participate actively. Join and participate in civic organizations. Lift up the next generation.

You have been blessed with an invaluable gift—an OSC degree—it is a key that will open doors of opportunity for the rest of your life. You have an enormous obligation to use this gift in combination with your talents wisely, to serve others and to give back to our profession.