

SEM HISTORY
SEPTEMBER/OCTOBER 2003



ROSCOE GUERNSEY, JR.
23rd President of SESA
1917 - 2002

Ros Guernsey was an important part of many SESA activities for more than two decades. He served during the formative years of the Society, which had just changed its mode of operation from one that relied mostly on volunteer help to one which was administered by a paid professional staff. In that period SESA inaugurated its monthly journal *Experimental Mechanics*, and Ros held many important positions, including SESA President in 1965-1966.

Ros was a highly respected photo-elastician, and for that he had an impeccable pedigree, a Ph.D. degree earned at the Illinois Institute of Technology under Max Frocht. He was probably best known for his extension of the shear-difference method to include three-dimensional problems. A less frequently remembered fact is that his paper, "Photoelastic Study of Centrifugal Stresses in a Single Wheel and Hub," appeared in Vol.1, No. 1 on page 1 of *Experimental Mechanics*. Thus he was the author of the first paper published in the Society's new journal.

In the middle 1960's Ros was responsible for *The Observation Post*, a monthly feature in the new Journal. Its purpose was to review significant articles appearing in recent literature. Following is the forward for one of those articles and is reprinted to illustrate the scope and purpose of the feature, and also to illustrate Ros' subtle sense of humor. Anyone who has worked with volunteer help will understand the subtleness in his remarks.

Reprinted from Experimental Mechanics, January 1966
The Observation Post
Roscoe Guernsey, Editor

In the September 1965 issue of EXPERIMENTAL MECHANICS, we published a list of journals which we propose to review in this column, together with an invitation to all those interested in participating to volunteer their services. This plea elicited a generous response from several individuals and a number of gaps have been plugged. The offer is still open – for a limited time only. Do your volunteering now and avoid the draft, which may come later!

With this issue, we present another fine set of reviews of foreign papers by J. T. Pindera. More will appear in the February issue. Also featured are some reviews by Jim Whittier and Al

Kobayashi who are hereby awarded the Order of the Faithful Reviewer for being the first, other than Dr. Pindera, to contribute.

We will be back next month and, hopefully, every month thereafter. Keep watching this space.

After finishing his PhD degree at IIT, Ros joined the General Engineering Laboratory of the General Electric Company to develop a photoelastic laboratory in the Applied Mechanics Section. SESA Past President Hans Meier was the manager of that section, which was undoubtedly one of the best-ever industrial research groups in mechanics. Ros Guernsey headed the photoelastic group, which included notable photoelasticians Paul Flynn and Tom Slot. Hans' group also included Robert Plunkett, Dick DeMichele, Jack Lubahn, Bob Felgar, Paul Paslay, Ed Walsh, and Mort Gurtin. Times changed and GE decentralized much of that work to other departments. Many of them left GE. Hans went to IBM to head up similar activities, Plunkett to the University of Minnesota, and in 1961 Ros went to work on space satellites at TRW in Redondo Beach, CA. In 1971 Ros returned to Schenectady to work in Management at G.E.'s Knolls Atomic Power Laboratory from which he retired in 1982. His son Bill wrote, "A few years ago Dad remarked that his last years at GE were very enjoyable and rewarding. I think he came to relish the management role."

Ros and I first met in the early 1950s while he was a graduate student at IIT and I was a graduate student at UI in Urbana. We both became active in the SESA (now SEM) as we leapfrogged through the various committee appointments and Society offices together. In the more than two decades that our photoelastic and SESA activities overlapped, he was a great colleague and I considered him to be a good friend. I thought that I knew him fairly well, but learned a lot about his non-birefringent activities from a biography that his wife Helen wrote around 1996. Space does not permit printing the whole biography, but here are some excerpts:

"Besides being named Salutatorian of his high school class, he played clarinet in a small dance band. His musical abilities were further nourished in the band, and by later singing in the Columbia College Men's Glee Club. In Roscoe's studies in the Columbia Engineering School he won the Illig Medal and several other academic awards; and also was voted 'most likely to succeed' by his post graduate classmates.

Upon graduation, his job as Instructor of Civil Engineering at The University of Texas found him driving to Austin in 1940 to work and play for ten years. There he met and dated several Texas damsels and married one of them, Miss Helen Pittman, part-time student and engineering secretary." Written by Helen Guernsey in 1996.

Ros and Helen Guernsey had three children: Kenn has a Law Degree from UCLA; Bill has a Masters Degree in engineering and works at TRW; and Diane earned a Bachelor's Degree from SUNY at Albany and a Masters in piano performance from SUNY at Stonybrook.

The last time I heard from Ros was when he sent the following to include in the SEM Past Presidents Committee Newsletter in 2000:

"Greetings from Black Mountain, NC! After retiring from GE way back in 1982 we moved to Asheville, NC where we lived for 15 years. During this time we divided our time between working for our local Unitarian Church, of which I was President for two years, and following the activities of our six grandchildren, 4 girls and 2 boys now spread out from 12 to 4 years old. We'll get them all together for a family reunion in September.

Almost three years ago we moved to Highland Farms, a retirement community in Black Mountain, where we now occupy an apartment and appreciate all of the services provided. I just finished two years as Treasurer of the resident's association. Facility with numbers is appreciated in this

community of retired ministers, artists, musicians, teachers and writers... I hope SEM has a successful meeting and continues to flourish. Ros Guernsey”

His son Bill reported that, “Until his last few days Ros possess-ed remarkable overall health, strength and physical/mental vitality. It is not a stretch to say he could easily have passed for a very healthy person in his mid sixties”. In September 2002 Roscoe Guernsey, Jr. suffered a stroke and died soon thereafter on Sept 27 at the age of 85. He is survived by his wife Helen, three children, and eight grandchildren. We will miss him.n

— CET