

# SEM History

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## Clarence R. Smith

*by C. E. Taylor, SEM Historian*

Clarence R. Smith was a very popular and active SESA member in the 1950s and 1960s. He worked for Convair in San Diego and was an expert on stress concentrations and fatigue in aluminum structures. Clarence served on the SESA Executive Committee 1953-55 and worked tirelessly for the Society to promote membership, form new local sections, and generally do anything that was asked of him. The Tatnall Award was created to recognize outstanding service to the Society. In 1968 Frank Tatnall was the first recipient of the award and in 1969 Clarence Smith was the second (the third, fourth, and fifth recipients were Ferdi Stern, Hans Meier, and Milt Leven - - what an elite group!). Further evidence of the high esteem in which he was held is the fact that Clarence was in the first group to be elected as Fellows in the SESA.

Clarence had a fine baritone voice and sang professionally on the West coast. On at least two occasions, Frank Tatnall (the perennial toastmaster) twisted Clarence's arm enough so that he sang at SESA banquets.

Unfortunately, very little personal information was written about SESA members in the 1950s. I thank Pete Stein for sending me a copy of the Proceedings of the Western Regional Strain Gage Committee, June 1988, Portland, OR, edited by Richard Hannah. The following entry appeared on page 164:

### **Clarence Smith Memories by Fran Cook** *Consolidated Aircraft Corp., San Diego, CA*

Clarence was an early user of polarized light through translucent plastics to study strain patterns. This technique is particularly useful in determining stress concentrations due to notches, corner fillets, and holes in materials.

Clarence was innovative and used soft plastic sheet materials for lecture illustration models. This allowed him to achieve easily visible effects with simple hand loading. This technique was particularly useful in the early 1940-1950 aircraft industry in studying riveted skin lap joints. Clarence did a lot of research in load distribution among the rivets, stress concentrations due to rivet patterns, and the effect of edge spacing could be evaluated. Clarence was an enthusiastic member of SESA (Society for Experimental Stress Analysis). He was an avid recruiter and talked me into joining SESA in the 40's. I became a 'Life Member.' He will always be remembered as a person very interested in his profession, and in innovative ways of new techniques, at work and at home."

We all remember Clarence Smith fondly, and deeply appreciate all of the good things that he did for the Society.- CET