

GETTING INVOLVED

In recognition of Clarkson Pinkham's more than 50 years of involvement with steel design and structural engineering, AISC has awarded him a Lifetime Achievement Award

By JILL BRUSS

EVEN WITH A CAREER SPANNING MORE THAN HALF-A-CENTURY, Clarkson Pinkham remains an active and vital contributor to the steel design and structural engineering community. Since he landed his first job in 1947 at the same Los Angeles firm where he is now president, Pinky, as he is affectionately known "from coast to coast," has consulted on projects nationwide and gained a well-deserved reputation as one of the West Coast's leading authorities.

"The easiest way to learn things is to get involved," Pinkham said.

For Pinkham, getting involved means being president of S.B. Barnes Associates in Los Angeles, a member of the American Institute of Steel Construction's Committee on Specifications and its Task Committee on Seismic Design, and a past president of the Structural Engineers Association of Southern California (SEASC).

These positions, matched with innumerable chairmanships and memberships on both professional and civic organizations, satisfy Pinkham's desire to keep busy and "get the job done." At 80 years old, Pinkham has no intention of slowing down. He plans to use his skills and all his time to the industry's advantage.

"Retire? What's to retire?" Pinkham said with confidence. "My dad looked at retirement as getting to do something that you like. If you like what you're doing, what's to retire?"

In recognition of his continu-

ing efforts, Pinkham received AISC's Lifetime Achievement Award in May.

This is no surprise. Pinkham's well-rounded engineering knowledge of steel (as well as concrete, masonry and wood) puts his skills in demand. He has worked on projects ranging from high-rises in New York



City to the total reconstruction of the Los Angeles International Airport in 1959. Ongoing committee work and leadership positions for American Society of Civil Engineers (ASCE), Building Seismic Safety Council (BSSC), American Concrete Institute, American Welding Society, The Masonry Society and others, blended with various publications for U.S. government departments and design handbooks, have made Pinkham a remarkable asset.

"Pinky is active across the board," said Nestor Iwankiw, vice president of engineering and

research at AISC. "He's been valuable to us because he is so versatile."

A Bachelor of Science degree in Civil Engineering from the University of California at Berkeley in 1947 laid the foundation for Pinkham's broad experience. But he came across structural engineering by "quite a bit of happenstance."

"My main goal when I was at Berkeley was in sanitary engineering, not in structural. You have to know all the building characteristics in sanitary that you do in the other areas," he said. "It offered an array of things to learn."

Pinkham gained another skill during World War II, when he served in the U.S. Navy. While stationed on the Pacific Ocean for nearly four years, Pinkham did surveying, making charts for the Pacific fleets, running them on the on-board printing press and dispersing them.

After the war, he started looking for a job knowing only that he did not want to limit himself to the specialized area of sanitary engineering. He began to build upwards with steel when he joined Steve Barnes' firm without even first learning his salary.

Barnes' impact on Pinkham's career lingers, even now.

"He would get to a certain point and you would ask him a question, and if he thought you should figure it out, he would just walk away," Pinkham told the Los Angeles Tall Building Structural Design Council, USA. "He wouldn't tell you the answer so you had to stop and figure it out yourself."

Analysis is not the total concept of design....

When he started with the firm, Pinkham participated in a variety of projects and still does. He laughs when he cannot remember his first project, but said diaphragm testing was a big part of it then and remains important. Pinkham worked with fellow AISC committee member William LeMessurier on the CitiCorp Building in New York City.

During the construction, LeMessurier requested information concerning the strength of a particular arrangement of steel decks. Pinkham visited the site to conduct diaphragm testing to assure LeMessurier that the diaphragm had met the building's requirements. There are very few engineers, if any, who still do the type of testing that the CitiCorp project required. More frequently, Pinkham's clients request analysis of products they intend to produce for engineers. Pinkham becomes involved in organizing an array of tests to assure code approval, supervising their administration and then analyzing the data to put it in a form useful for engineers.

Currently he is working on determining values for cold-formed steel decks. Certain analysis techniques have endured over the years with little alteration; however, the introduction of computers has altered them. Pinkham is confident that technology has improved the industry, but he's skeptical to blindly rely on computer functions.

"You can do things now with the computer that you guessed at before," Pinkham said. Computers are used to efficiently collect and analyze data, which previously could only be gathered over time. "There were approximations that we would have to make about methods of

design," he said. "You could handle a more sophisticated design now."

Pinkham is hesitant; however, to blindly rely on technology.

"But a lot of the computer work that you do may not be necessary. A computer is not the solution. It is only a tool," he added. "An awful lot of pretty tall steel buildings were built prior to computers. They'd still be the same now."

Stanley Lindsey, structural engineer and founder of Stanley D. Lindsey and Associates, Ltd., agrees that buildings could still be constructed without the use of computers. But Lindsey highly values the ability to explore building alternatives much faster. "In the time you could do two [analyses] by hand you can do 50 by computer," he said. Lindsey also emphasized the value of trial-and-error education because with computers engineers can test the limits of their ideas prior to putting them in practice. Pinkham recognizes the affect of technology but emphasizes that numerical analysis is only part of the design. "The analysis is not design," he said. "It permits you to do a greater variety, but analysis is not the total concept of design and that's true no matter what."

Even with the advanced technology now available, the steel industry still faces the uncontrollable and unpredictable effects of earthquakes. Pinkham, a California native, sees earthquakes as a big problem for the industry, especially since the Los Angeles earthquake in 1994.

"They're finally beginning now to pull it back together. They need a better understanding of the products," he said emphasizing the progress of SAC. The five-year program focusing on

Special Moment Frames and connections has already released a set of guidelines with revisions still to come, likely next year.

"There are quite a number of things that they have found," Pinkham said, "such as the method of quality control and the choice of welding rods. Also the configuration of the joints themselves, the design of them."

"They will provide criteria as to how to actually come out with a moment joint that would be useable for the high seismic areas," Pinkham added.

To help combat the destruction caused by earthquakes, Pinkham serves on the AISC Seismic Task Committee. This group is part of the AISC Committee on Specifications that Pinkham has also served on for many years. Pinkham said he is not directly involved with SAC but will rely on its conclusions for the AISC Seismic Task Committee guidelines.

"We're sort of waiting for them to complete their investigations before we make a final revision," Pinkham said. "We'll try to follow up closely with the final edition of their guidelines."

It would seem challenging to pick an element of his work that Pinkham is most proud of but he settled on his earthquake efforts.

"It's primarily that I've been able to work on earthquake problems and help to solve some of the problems they're causing," he said. Besides concentrating on codes and specifications for future building regulations, Pinkham has been on an earthquake board. This group sponsored seminars, sent help to destroyed sites and encouraged research on earthquake matters. But, Pinkham said funding research has been problematic for years.

"There's not enough dollars to perform all the things you'd want to do," he said. "You have to prioritize. You never have enough money for research."

Pinkham recognizes progress in the seismic regions, but is concerned about the concept of seis-

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mic strengthening by just making buildings stiffer. "I think we need more attention to the detail of what you are doing, and not so much attention necessarily to beefing up in general," he told interviewers Lauren Carpenter, Barry Schindler and Don Strand. "In some areas I think strengthening is needed. But I think it is the concept of the whole structure that has been lacking."

Roger Ferch, vice president of AISC-member The Herrick Corporation in California, also worked on the AISC Seismic task committee. He said Pinkham made "tireless efforts" in his contributions.

"Before the day of word processors and PCs he was willing to take on the editing process," Ferch said. "He combined everyday English with the technology of the specifications to end up with a document with one meaning." The committee is responsible for composing the stand-alone document, "Seismic Provisions for Structural Steel Buildings." Pinkham also plays an active role on the Specifications Committee, which creates the "Associated Design Manual and Specifications for Buildings," a broader document.

"I'd say he's exemplary. He rises above the norm," Ferch said.

These sentiments are common among Pinkham's colleagues, and his reputation within and around the steel industry surpasses any of the high-rises he has worked on. "Because of his knowledge and exposure to other material design and committees, he broadens the experience and liaisons with the other industries," Iwankiw said. "How they're dealing with similar technical issues or how they're changing their design in a global

sense. He brings that perspective outside of steel which is very important to us."

Pinkham enjoys working in various industries and has collected a broad knowledge from consulting projects and committee memberships. As part of the American Society of Civil Engineers' Standards Committee, Pinkham has had to follow many areas such as the steel, concrete, masonry and wood industries. Pinkham values these kinds of opportunities to learn new skills and information. "We need to understand steel, masonry and wood," Pinkham said. "We need to understand how to put them together and make drawings to actually use and build buildings."

"It can be a matter of economy, the way things look or the way things are built," Pinkham said. "You try to take advantage of every building material you can."

Pinkham's practical attitude about materials applies to his work ethic as well, but when discussing his contributions his humble character surfaces. "I just do what I can do to help someone with a puzzle," he said.

While his wife, Emmalu, creates rubber-stamped cards and jingles for their friends, Pinkham dabbles with genealogy, another puzzling industry. During his travels for work, Pinkham challenges himself to locate his family's history. Turns out, he said proudly, that he and Emmalu almost met 300 years ago through a common relative.

"It's kind of fun, but it's very monotonous and it's a long time between finding information," he said accepting his dwindling drive to continue his search for

personal roots. Fortunately, "the office still keeps me busy." Even after 52 years, Pinkham's commitment to his business remains as solid as the steel beams he evaluates.

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