A conversation with James M. Tucker Jr., TAPPI's 1993 Distinguished Service Awardee

SUSAN M. CLITES

Whoever first uttered "like father, like son," in all likelihood could just as easily have been referring to James M. Tucker Jr., for it's a fitting description for the son of a paper mill maintenance supervisor.

Born on Valentine's Day in 1923 in Chattanooga, TN, Jim Tucker Jr. extracted his personal philosophy from the lean times of the 1930s. "The Depression taught me that if I was going to achieve anything, I had to do it myself. It gave me an appreciation for work." That value of work is the foundation on which Jim Tucker built his life.

Tappi Journal recently visited the recipient of TAPPI's 1993 Distinguished Service Award at his home in Stone Mountain, GA.



TJ: When did you first realize that you wanted to be an engineer?

Tucker: My dad wanted me to be a minister or lawyer. I didn't want to be either one of those. I did work one summer in a lawyer's office, but that proved to me that I didn't want to do that the rest of my life.

Dad worked for Brunswick Pulp and Paper as a supervisor in the maintenance department. At a very young age, I decided that I would go to Georgia Tech. I attended the first year on a scholarship, but I really needed some income thereafter, and it was through my father's aid that a friend and I started co-op work at the Brunswick Pulp Mill. We were the very first co-op students at the mill.

TJ: You majored in chemical engineering, but you pursued a career in pulp and paper. Is that what you expected to do?

Tucker: Yes. In fact, when I started my degree, I expected to finish Tech on co-op, then go to the Institute of Paper Chemistry. That was considered the thing to do. I was, of course, influenced by friends at the mill. But I had a little interruption that delayed my school years, so it took eight years instead of five.

TJ: Was that World War II?

Tucker: Yes. When I came back from overseas I decided not to go into the paper industry at all.

TJ: Why was that?

Tucker: Well, I figured it wouldn't be worthwhile. I thought that in order to be successful, I really needed to go to the paper institute, and that was going to take more time than I felt that I had. I'm a very pragmatic individual.

TJ: So what did you plan to do?

Tucker: I considered the petroleum industry, but decided to join Proctor & Gamble in Cincinnati to provide liaison between P&G's corporate engineering and their cotton linters pulp plant in Tennessee and their protein operations in Kentucky.

I went to Memphis first to get acquainted with the dissolving pulp operation. They asked for me to stay there, and I never got out of the pulp and paper business.

TJ: Did you have any mentors?

Tucker: I expect everyone hopes to have mentors. I had mentors in my early years, particularly during my co-op tours at Brunswick, but I learned from a lot of people in the industry, people I met through TAPPI. I found that people in the industry were so open and helpful that all I had to do was ask, and if I was willing to listen, I could learn.

1944: Serving as a bomb disposal officer in World War II, **James M. Tucker Jr.** rose to the rank of captain.



A very good friend, Bill Metcalf, who was with Midland Ross and then established AER, aided me a lot. Countless people who have since retired, helped me when I asked them.

TJ: When did you discover that management was something that really interested you?

Tucker: When I was an officer in the service during World War II. I expected eventually to be in some management position during my career, but I didn't know what industry.

At Proctor & Gamble they were investigating the feasibility of producing dissolving pulp from wood, but very few people in the entire organization had any experience in wood pulp. Since I had some, although very limited, I was automatically included in the project team.

That was in 1951, the same year that I attended my first TAPPI Engineering Conference. I didn't actually become an official TAPPI member until 1954. Since then I think I only missed one or two engineering conferences until I retired in 1991.

I left Proctor & Gamble when we had a disagreement on whether I had management capabilities or not. I had a great technical career with them, but they decided that I did not have the requisite management traits for their company. Since I disagreed with their assessment, I resigned and joined another firm.

TJ: That was a good move for you?

Tucker: Oh, yes! One of the better decisions that I ever made.

TJ: When did you find the right company fit for your management skills?

Tucker: As a consultant first at Brown & Root and later with Simons-Eastern.

TJ: What are some of the characteristics of good engineering managers?

Tucker: Technical managers need to know what they are managing; know the subject. I think that's particularly true in engineering.

I know engineering, and I don't ask people to do something that I don't know how to do. I may not have the best solution, but I know what will work and how it should be done.

And I delegate. I always have. But I never abdicate and forget it. I followed up on all assignments.

I always told people who worked for me: "If you need help I'm always here; however, if you ask for my advice, either follow it or tell me why you won't follow it. Don't ever ask for my advice and then ignore it, because if you do, you'll have a problem."

I don't think that's unfair. It's pretty straightforward. I've been embarrassed with a client when something was handled a different way than I had told him it was going to be done.

Engineers also need to deal with the outside world. They've got to read. And they need to expand their universe of reading beyond the technical to be a good manager.

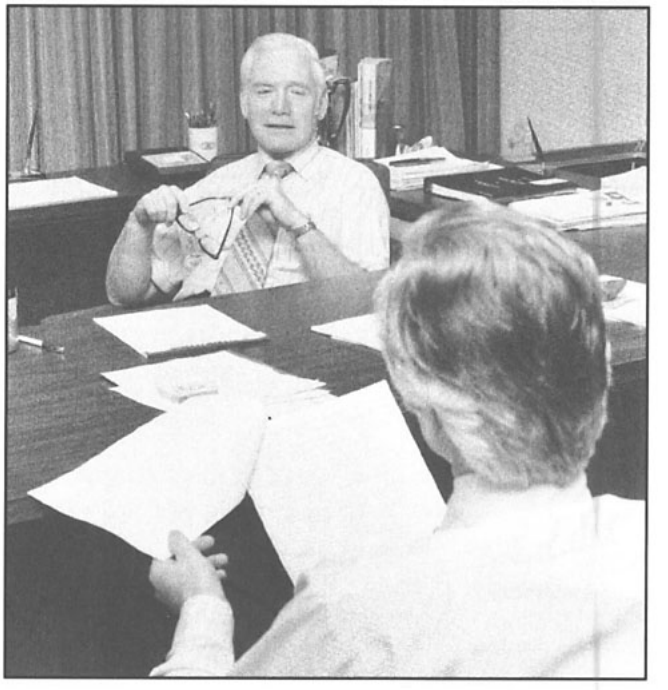
They need to learn how to write. It's not enough to be verbally articulate. Actually, written communication is probably more important than the spoken, and you learn it by reading, by studying, and by listening.

Most engineers who become managers fail at management not because they're introverted, but because they don't know how to communicate. My son learned to write well because I insisted that English was important. I also advised him to take a course in public speaking in high school, which he didn't want to do, but it has already paid off in his young career.

TJ: What does he do for a living?

Tucker: He's an engineer. He took the same course I did at Georgia Tech: chemical engineering on the co-op plan. He works for International Paper. They recently transferred him from Design Engineering to Process Technology, and he's currently a manager for Power Process Services and responsible for operations development and improvements in the power area.

1973: Tucker with **E.I. Hurlimann** at Brown & Root



1986: Outgoing Engineering Division Chairman Tucker with TAPPI President (1985-86) William H. Griggs



TJ: Who taught you how to manage?

Tucker: I don't know, probably my parents. I grew up doing it.

My boss at Gulf States told me a story once where Montgomery asked one of his generals how the general was going to approach a certain situation. The general told Montgomery that he was gathering information and from that information, he planned to draw some conclusions about how to handle the situation. To this Montgomery said: "We don't need conclusions; we need a decision."

That's basically it. A manager has to make decisions. I never based decisions solely on conclusions; I based them on available facts and opinions. If you don't have the ability to do inductive reasoning, I don't see how you can be an effective manager.

TJ: What's your secret to motivating people, or did you just have the luck of being with motivated people?

Tucker: No, people are not always motivated. They have to believe that what you're asking them to do is something that they either need to do or want to do.

They have to believe in it. If they don't believe, then they're not going to do it.

It depends on the individual, and not everybody's alike. Some people will do what you say because they have trust and faith in you. If you say it's the thing to do, they believe it. Others buy into an assignment because they've been consulted in the process and become "joint owners."

TJ: What would you say is your greatest success?

Tucker: I don't know. Greatest...I don't put one event above another.

I take one day at a time. There are always new challenges. I can go back and think of little things that happened and say "that was great." At the time it was.

I can't remember ever being any prouder than when I was with Buckeye in Memphis, and we put in some tumbling digesters, and I thought the design was atrocious, but I was overruled. I was a chemical engineer, not a mechanical engineer, and I wasn't the manager. I maintained that, because of the way the digesters were supported, it would be very difficult and expensive to drive them and have the gears hold up. When we started testing the pilot unit during startup, the worm gear was cutting about 0.03125 in. off the ring gear with every revolution. I reported this to my boss who was responsible for the project, and he said, "It's going to wear in. Keep going."

The ring gear had teeth about 2 in. wide. When the teeth were reduced to about 0.625 in., I shut the unit down, and said to my boss, "If *you* want to keep the unit running, fine, but I think I need to clear the area because it might collapse."

On the same project, I decided to discharge the cooling water to the sewer, and the production manager wanted to collect it for reuse. I told him that it was only 25 gal/min. When he disagreed with the amount I had calculated would be discharged, I told him to go check it himself.

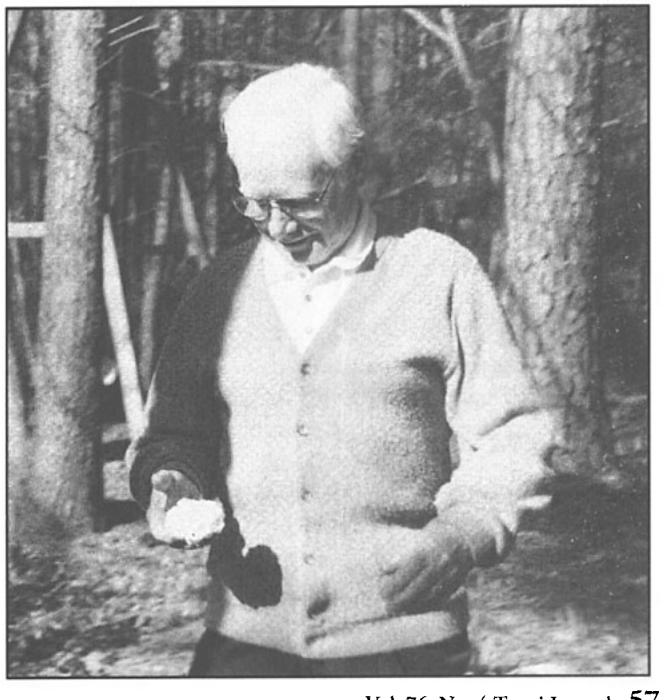
He returned after checking and sheepishly said the amount was within a half of a gallon of what I had calculated. It was the only time I was ever able to use differential calculus in my 43 years of work. For a fairly young fellow, it was significant that I was proved right in both cases.

TJ: How old were you?

Tucker: I was 26.

When I was at Brown & Root, we were awarded our first turnkey grass roots paper mill project, the Ashdown mill for the

1993: Tucker raises violets, camellias, and other flowers outside his Stone Mountain, GA, home.



Nekoosa-Edwards company. When that started up ahead of schedule and below budget, and everything ran like a top, that was a very proud moment.

Building Simons-Eastern into a first-class engineering organization and leading them into CAD and CAE was also tremendously satisfying.

And some things at TAPPI have also been very satisfying. Work with the Engineering Division—which I've done all of my work life—and seeing that they have continued some of the things I've done and improved them really makes me happy.

The division leaders who followed me not only participated when I was active, but they paid attention and emulated my activist approach, and that's very satisfying.

What my son has done is probably the greatest compliment I have ever received, however, because he followed my steps. He went to the same school, took the same courses, went to work for a paper company, and strived to become part of management. What greater compliment is there than to have one of your children try to emulate you?

TJ: What does it mean to you to receive TAPPI's Distinguished Service Award?

Tucker: It's certainly a great honor. I can't express how much. It really seems overdone because I had so much fun and so many other people were involved. I certainly didn't do it for the award, but hardly anything compares to being appreciated by your peers.

TJ: You've spent nearly 39 years with TAPPI. What would you say TAPPI has done for you?

Tucker: TAPPI enabled me to do much of what I did in my career. In my early years, each successive assignment involved something new to me and frequently, new to my employer. I gained the knowledge I needed to handle the assignment either through TAPPI or through members of TAPPI.

TAPPI members invited me into their mills, and I used my TAPPI contacts to get into the mills. We would have been a dismal failure or we would have spent a lot more money if we had to find some other source for information.

I attended the TAPPI conference technical programs, sat through numerous sessions, and gave a number of papers, but mainly, I went to the conferences to talk to people and exchange information and ideas.

Most people join an organization, at least initially, because of perceived personal benefits they believe are available. Later on, you become more altruistic and develop a feeling of respect or gratitude for the organization. You want to do more things for others.

TJ: What do you believe you've brought to TAPPI?

Tucker: I tried in later years to respond in kind, to be helpful to others in the industry. Even when I was at Gulf States, I was invited in and showed them how we did things.

TJ: Many of the things that you accomplished in your career and at TAPPI had never been done before. Did you ever sense that you were pioneering in new territory?

Tucker: Yes, sometimes, but the one thing that I've never lacked was confidence. If I put a proposal together, I believe it's going to work. I don't advocate things just to be advocating them. I've given some thought to them and, generally, if I can't sell an idea, then it's probably not good enough to fly.

Many of the ideas weren't mine, I just implemented them. I didn't come up with the idea of the Engineering Division scholarships; I just thought Dave Williams' idea was good, and I pushed it. I'm an implementer.

TJ: Would you say you're a perfectionist?

Tucker: Yes, I would. In fact, a former TAPPI administrator said it was easy to get along with me. She said, "All you have to do is do what he says."

Things can always be improved; however, improvement won't happen if you just sit and say nothing or merely complain. You have to speak out, identify what needs to be done, and be willing to accept responsibility for doing it. And when something is important to you, you want it to be perfect. I guess that's why I've always spoken out very quickly at TAPPI. I have a reputation for that.

TJ: Did you speak out when you were young?

Tucker: No, I basically started out as an introvert.

TJ: Where, along the way, did you turn into being a more vocal person?

Tucker: I really don't know. Quite possibly in the service.

TJ: Are you optimistic?

Tucker: Yes. I used to be the in-house optimist at Simons. The in-house pessimist was the fellow who ran the project management group.

TJ: What's the best piece of advice you would give to a young engineer who is entering the industry?

Tucker: Join TAPPI and become an active committee member. TAPPI is the greatest source of help and information you can find for both your technical and management aspirations. The maximum benefits are available, however, only if you participate! In that regard, always interpret an assignment in the broadest possible way. It is much better to have your hand slapped because you reached too far than to fail because you were too tentative.

***Clites is associate editor of* Tappi Journal.**

TAPPI Distinguished Service Award to be given to accomplished industry professional

James Tucker Jr.

James M. Tucker Jr., retired vice president of Strategic Planning Services at Simons-Eastern Consultants Inc., in Atlanta, GA, is being honored with the TAPPI Distinguished Service Award. The Award, accompanied by a US$ 25,000 honorarium, is the highest honor that the Association can bestow upon an individual for exemplary service that has significantly contributed to the advancement of the Association. The Distinguished Service Award will be presented to Tucker at the awards ceremony during the 1993 TAPPI Annual Meeting in Atlanta, GA, April 19.

Tucker was elected to the Association's Board of Directors in 1987. During his term, he chaired the Technical Operations Council (TOC), guiding TAPPI's 11 technical divisions and spearheading the development of a long range plan for TOC. He also was a member of the Coordinating, Executive, Marketing, and former Human Resource Development Committees. While on the Human Resource Development Committee, he chaired the Career Development Task Force and spearheaded the development of the TAPPI Career Planning Manual and Personal Workbook. Additionally, Tucker served a number of years on the Board of Directors' Finance Committee, Goals and Planning Committee, and Exhibits and Meetings Committee. As chairman of a special task force of the Board's Honors Committee, he oversaw revision of the TAPPI Honors Manual and awards program to provide a more comprehensive recognition system. Before becoming a Board member, he served on the TOC Structure and Performance Committee, Meetings Committee, and Ad Hoc Opportunities Committee. Upon completion of his term as a Board member, he was named a TAPPI Fellow.

Since joining TAPPI in 1954, Tucker has been very active in the Engineering Division, where he has served in all the chairs and as chairman of the Goals and Planning Committee. In these positions, he developed a long-range plan for the Division, a newsletter, and a comprehensive guidance manual. He also was instrumental in developing the Division Leadership and Service Award and the Division Scholarship Program and securing a funding program for both.

Through his leadership, he fostered innovative thinking which led to numerous improvements in the Division leadership structure and annual conference format. He also has chaired the Division's Engineering Economics and Management (now Engineering Management) Committee and has participated in the Maintenance Engineering Subcommittee, Pressing and Drying (now Water Removal) Committee, and the Process Engineering Committee. For his tireless efforts and valuable contributions, Tucker was awarded the Engineering Division Leadership and Service Award in 1989.

Respected for his 40 years of work in design, engineering, and project management, Tucker has provided technical expertise on mill appraisals, feasibility studies for major mill projects, and strategic planning. He is an internationally recognized authority on pulp and paper processes and engineering techniques, including computer-aided design and engineering. He earned a B.Ch.E. (Co-op) degree from the Georgia Institute of Technology and did postgraduate work at the University of Tennessee. He began his career in 1948 as a project engineer for Buckeye Cellulose Corporation, where he spent eight years and was a key participant in the design of their first wood pulp mill. He joined Gulf States Paper Company as chief engineer at their pioneering Demopolis, AL, mill and was responsible for the first closed loop computer controlled process (Kamyr continuous digester) in the paper industry. He entered the engineering consulting field with Brown & Root where he spent 13 years as manager of pulp and paper engineering and completed numerous domestic and international projects. Tucker spent 14 years as a principal at Simons-Eastern consultants, first as vice president and chief engineer for 11 years and then as vice president for strategic planning and other special services before retiring in 1991.

He has authored more than 15 publications and has spoken at numerous conferences of TAPPI and other associations. He is a registered Professional Engineer and maintained registration in 34 states.

In addition to his TAPPI activities, Tucker has been a member of the National Society of Professional Engineers, the Canadian Pulp and Paper Association/Technical Section, and the Mexican Pulp and Paper Technical Association. He also has been a guest lecturer at the University of Wisconsin and the University of Maine.

—Jennifer A. Huetter,
TAPPI public relations coordinator