Back to the Drawing Board

Steve Sisney

In aeronautical circles, Betty Jackson is an architect with few equals — so her clients keep coming back for more . . .

By LAURE J. VAUGHT and SHAWN McBRIDE

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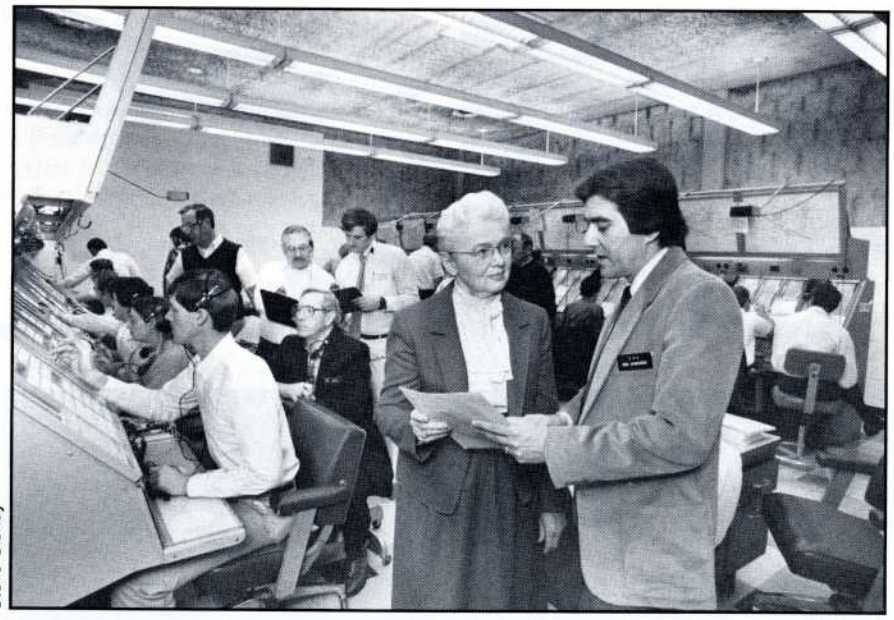

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Architect Betty Jackson talks with FAA trainer Rich Sangiorgio in one of the radar laboratories of the air traffic controller school at the Mike Monroney Aeronautical Center, an early project she currently is redesigning for HTB Inc.

"Any personal nostalgia Jackson may feel . . . is overshadowed by her professional recognition of needed modernization. Although the basic designs are as sound today as they were in the '50s, both materials and technology have come a long way in the intervening years. But for that matter, so has Betty Jackson."

Three decades ago Sooner alumna Betty Jackson designed one of the world's best and most modern industrial/learning complexes — the Mike Monroney Aeronautical Center, home of the Federal Aviation Administration in Oklahoma City. Gleaming with aluminum, it adorned the prairie like a '56 Chevy on Main Street, U.S.A.

Today the center resembles a vintage piece of Americana, a piece out of time, a throwback to the type of design that might have been described in popular language as "very classy." The decor suggests a modern nostalgia restaurant seeking a return to the Bogie days.

Only a good architect gets the opportunity to renovate and refurbish an earlier project, and Betty Jackson is doing just that. As deputy director of architecture for HTB Inc., one of the nation's largest architectural and engineering firms, Jackson will oversee the renewal of the aviation center, the FAA's crown jewel. The complete renovation and relocations will be a three-year undertaking.

Having designed several of the main buildings as well as the site work for the 28-year-old FAA complex, Jackson is on intimate terms with the structures. She remembers the challenges of the center's many specialized requirements — a huge depot and warehouse complex for worldwide inventory control and logistics, the hangars and air traffic control towers, the radar facilities, the specialized buildings for the academy where the nation's air traffic controllers are trained, the structures that house the Civil Aeromedical Institute, the registry facility where every airman and airplane in the United States is recorded, the buildings of the National Transportation Safety Institute.

Jackson marvels today at the speed with which construction of the facility followed design. "The project started out of the ground, even as mechanical and engineering documents were being completed," she recalls. "The FAA's people occupied the center only two years after the plans were begun."

Any personal nostalgia Jackson may feel as she visits the center today is overshadowed by her professional recognition of needed modernization and improvement. Although the basic designs are as sound today as they were in the '50s, both materials and technology have come a long way in the intervening years. But for that matter, so has Betty Jackson.

Jackson grew up in the house she still occupies just eight blocks east of the University of Oklahoma. By the time she attained freshman status, she had already attended six years of junior high and high school on the campus at the old University School, then located in the Carnegie Building. With a love of art and mathematics dating from childhood, it was only natural that she would choose to pursue architecture and engineering.

"When I look back on my experiences as a student at OU," Jackson says, "many fond memories stand out: the encouragement from all the 'profs,' who not only taught us but who took that extra special interest in each student; the long hours in the design lab; the football games and dances; the 'no-car' rule.

"Architecture classes were always a new and challenging experience as well, and our professors didn't let us slide by. I remember one experiment where we had to measure dimensions on a slope. The closest thing to a slope in Oklahoma is the football stadium, so each of us had to climb and measure that stadium three consecutive times—all the while under the watchful eye of our professor, who made sure we got it right."

Jackson is accustomed to doing the unusual and succeeding. She came out of college with her architectural degree in 1949, when only four percent of the nation's 12,000 architects were women. One year later, she earned her master's degree in civil engineering.

Academic credentials notwithstanding, her friends worried that she would

never be given the opportunity to work in her profession. Jackson promptly landed a job at HTB Inc., then known as Hudgins, Thompson, Ball & Associates. Beginning as a draftsperson, she quickly moved up to junior engineer and architect, then project engineer and architect, then project manager and finally deputy director of architecture for the company's Oklahoma office. She also became HTB's first female corporate vice president.

"I look back and feel very fortunate to have found the job I did and to be able to do so many different things," Jackson says. "Many of my classmates weren't as lucky."

She is particularly grateful to have found her opportunities so close to home. One of her first projects at HTB brought her right back to the University, where the firm was involved with the development of the Van Vleet (South) Oval through such buildings as Kaufman and Gittinger halls.

"When I first started to work, I was back on campus doing surveying work for some fire escapes," she recalls with a smile. "I bumped into a professor of mine who asked, "My gosh, Betty, are you still in school?' "

Jackson's favorite projects over the years have been those with highly complicated functions and specialized demands. Perhaps that love of challenge explains her propensity for designing aeronautical facilities. Her list of successful undertakings includes a host of special-purpose buildings in three states for the U.S. Air Force and Army, as well as several municipal projects.

Until recently she was architectural project manager for HTB's largest single airport contract to date—a series of new terminals at the San Jose International Airport in California. This $100 million project presented just the sort of challenge Jackson likes best. A congested airport in the heart of Silicon Valley, the facility's expansion had to fit a long, narrow strip of very valuable land bounded by runway clearance on one side and a river on the other. Although the San Jose airport is now primarily a commuter airport with little interchange, a change of status in the future had to be considered.

After a number of other studies had been done to determine a feasible expansion configuration, HTB did a concept study. The resulting modular design resembles a Saturnian structure from "2010."

In any responsible approach to airport design, Jackson says, the first consideration is how airplanes can be parked. Next comes the question of vehicle access from the land side. "Then in between," she explains, "you fit in the terminal, in response to those two elements."

In the case of San Jose's airport, the only way to park aircraft is in a long line, wing-to-wing, with a few curving around the sides. This constraint seemed to call for a long, linear terminal. But a continuous structure would be, in Jackson's words, "too much building." The solution was to group a number of aircraft positions, then service each group with a unit terminal, creating a series of modules in the mile-long space.

Closer to home, Jackson has been dealing for the past several years with the expansion and renovation of Oklahoma City's Will Rogers World Airport—another "second chance" at a project she helped develop with HTB 20 years ago.

First there was a transformation of the airport's east side, then a similar one completed recently on the west side. Visitors who note a time warp between the interior design of the expansion area and the interior look of the original center section should be advised that the difference is intentional. When renovation of the center section is complete, Jackson promises that the whole will be compatible once more, but with updated, 1987 styling.

Since deregulation, many new airlines have appeared on the Oklahoma

Beginning as a draftsperson, Jackson moved quickly up the ladder to become HTB's first female vice president.

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As work progresses on modernization of Will Rogers World Airport, Oklahoma City director of airports Leroy Hansen has become one of Jackson's biggest fans.

Redesigning Will Rogers Airport to accommodate present needs while also anticipating requirements of the future is a task uniquely suited to Betty Jackson's dual expertise in architecture and engineering and a love affair with aeronautics.

City scene, creating congestion in the 20-year-old ticketing area. The ever-growing number of deplanements has created a similar pressure upon the baggage claim area. Not only will the expansion provide a fashionable solution to these problems, but it also will be adaptable to future possibilities.

According to Jackson, the excellent airfield and protective zoning of surrounding land make the Oklahoma City terminal a good candidate for evolution into a "hub" location, like Dallas or Denver, rather than just a port of enplanement and deplanement. Such a transformation would require, among other things, additional amenities for transient passengers—more food service outlets, gift shops, cocktail lounges and other activities commonly found in large terminals.

Such "second chances" to redesign may not come to everyone in the architectural business, but repeat clients seem to be the rule with Jackson's projects. Rex Ball, HTB's chairman and chief executive officer, claims that she has brought a number of former clients back to the firm for additional work.

Clients obviously enjoy working with Jackson. As Leroy Hansen, Oklahoma City's director of airports, explains: "Betty has one of the most highly developed listening skills I've ever encountered, and her dual expertise in architecture and engineering gives her a technical superiority. In the nine years that I've worked personally with her, I've seen her think her way through some very difficult and complex problems.

"It says a great deal for her that her basic design of this (Oklahoma City) terminal has remained fresh and flexible for over 20 years. Betty really is an extraordinary person."

Jackson's professional associates have equally high regard for her accomplishments, as attested by her election as president of the Consulting Engineers Council of Oklahoma. The CECO is one of 51 member organizations of the American Consulting Engineers Council. The national council membership of 12,000 professional engineers includes fewer than 100 women, and Jackson was the first woman president of a member organization in the council's 27-year history.

A member of the American Institute of Architects, she presently serves on the board of directors of the Oklahoma City chapter of the Society of American Military Engineers. The Journal Record Publishing Company named Jackson Oklahoma City's 1985 "Corporate Woman of the Year," and the University of Oklahoma chapter of Phi Beta Kappa elected her to honorary membership this year. Currently she is a vice governor for the four-state District Eight of Altrusa Club, a professional women's civic organization patterned after the Rotary Club.

An Altrusa colleague and longtime friend, Jane Bryant, managing editor of *The Norman Transcript,* calls Jackson a bright lady, placing equal emphasis on the two words. "Betty has made a lot of headway for the rest of us women in the workplace," Bryant says. "And she's done it by not worrying about being a woman—by just concentrating on doing a good job."

Jackson is always willing to share the insights her career has given her in the arena where it all began—the University of Oklahoma. She is a member of the College of Engineering Board of Visitors, a group of distinguished OU graduates and corporate representatives which serves as an advisory link between the academic programs and industry. An adjunct professor in the College of Architecture, she helped establish the preceptorship program, which enables qualified students to supplement their studies with professional experience outside the classroom.

If any of these students have the good fortune to work with Betty Jackson, they will come away with a heightened appreciation for a mind that approaches every experience as an opportunity for growth. Jackson has welcomed the changes that come with time. Just ask all those clients who keep coming back for more.