



Non-traditional paths to becoming a golf-course designer

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Early golf-course architects didn't have a standard path to follow to enter the profession. In fact, the term wasn't coined until 1901. The field became a second career for some of the greats—Alister Mackenzie was a doctor, Walter Travis a machinery merchant, Perry Maxwell a banker and Pete Dye an insurance salesman. Today, many golf-course architects get their start with a degree in landscape architecture and internships with golf-course builders or design firms, or maintenance experience on the course.

I did not take the traditional route. At the age of eight, I drew putting courses for my father that intricately wove around our apartment and I later caddied during my high school years at Maplewood Country Club in New Jersey. I took a hiatus from golf and

earned an aerospace engineering degree from Boston University, worked at the world's largest aerospace company and became a lead engineer designing, integrating and testing huge deployable antennas for geosynchronous global telecommunications satellites. I then decided to take a risk by leaving my career and pursuing my dream of designing courses.

I had my first glimmer of hope for breaking into the industry while reading *Golf Course Architecture: Design, Construction & Restoration* (1996) by Dr Michael Hurdzan, specifically the pages on CAD (Computer Aided Design). My eyes lit up, Eureka! Having had extensive experience with CAD when working in the aerospace industry, I knew immediately that it would be my best

approach with an architect. For six months, I spoke frequently with Baxter Spann of Finger Dye Spann, Inc. (FDS) in Houston. During my first visit to his office, I got a glimpse of a stunning routing tacked up on his wall. I was definitely in the right place. After a casual round of golf, I got my first opportunity to demonstrate my abilities by modelling a green complex. I learned a lot about construction plans and taught myself a new CAD system that had the capability to create renderings. This exercise soon became a need, as a rendered view was required to help finalise the clubhouse location.

Seth Raynor also had an engineering background. His entrance into the golf world was as a surveyor. At the age of thirty-three, he was hired by Charles Blair Macdonald to

OPPOSITE: Black Mesa Golf Club, La Mesilla, New Mexico, USA. A view of the 389-yard, par-4 fourteenth hole. Course architect: Baxter Spann. (Photo by Mike Nuzzo.)



Beaumont Country Club, Beaumont, Texas, USA. Course architect: Alex Findlay (1906); master plan renovation by Baxter Spann of Finger Dye Spann, Inc. (2004). (Courtesy of Mike Nuzzo.)

survey a large property in Southampton, New York, which became the National Golf Links of America. A stroke of luck made it possible for surveying to further my own goal. I hadn't surveyed before, but how hard could using Global Positioning Satellites (GPS) be since I

had actually helped design one before? An acquaintance of mine from a Golf Course Superintendents Association of America (GCSAA) trade show sent two people to town to survey for a local architect. Because the city's rental cars were unavailable due to

hurricane Allison, I was asked to drive the team to the site and assist. Staking green locations, tees and turning points in the middle of nowhere, under dense tree coverage with spiders the size of my hand, was near impossible, enabling us to locate no more



Bull Creek Golf Club: plan of the 376-yard conceptual opener of a proposed course in Arkansas, USA. (Plan by Mike Nuzzo.)

than a few key points. This left a lot of time for me to learn how to use the system and map. My fee was the use of the equipment and support for a future project.

Extreme difficulties on a thickly vegetated site lead me to wonder how architects create courses if they have no idea where they are. How do they create plans? What if they don't even use plans? While playing golf across the Canadian Rockies, I had the good fortune to have lunch with Rod Whitman at his

glorious Blackhawk course near Edmonton. To create the course, the only plan used was the routing study. Whitman attended Sam Houston State University in Huntsville, Texas, with no intentions of becoming a golf-course designer. He earned a psychology degree and played on the golf team. As a student, he played locally at Waterwood National and eventually found a job and a friend working for superintendent Bill Coore. At Waterwood, he assisted with the

completion of the Roy and Pete Dye designed course. With a recommendation from Coore, Pete later hired Whitman for other projects. Whitman has since designed on his own, his first solo project coming from an old friend, and has also collaborated with Coore and Ben Crenshaw.

For other architects, plans, either created by hand or using a CAD program, are integral to the process of designing a course. FDS's construction plans are extremely

detailed and allow for cost-conscious construction, a product of Joe Finger's disciplined practices and the firm's experience with creating low-cost municipal gems, such as, Pinon Hills in New Mexico and a renovation to Memorial Park in Houston. Finger was a four-year letterman on the golf team, under coach Jimmy Demaret, at Rice University in Houston and later earned a masters in chemical engineering from Massachusetts Institute of Technology (MIT). A member and former champion of the city's Westwood Country Club, Finger left his successful fifteen-year career and the company he founded to pursue his childhood dream of designing courses. In 1957, the club commissioned Ralph Plummer to redesign its original nine holes and add a new nine. To get his start, Finger served as the course's unpaid 'superintendent' and did all of the engineering work, using the training and discipline learned in his previous career. Plummer later suggested that Finger apply for the course design contract at Randolph Air Force Base in San Antonio. Finger got that job and many more, includ-

ing a collaboration with his former coach, Demaret, at The Monster course at The Concord Resort in Kiamesha Lake, New York. Byron Nelson's request of Finger to help rebuild the eighth green at Augusta National was a career highlight, and they later worked together again on the design of Riverhill Country Club near Kerrville, Texas. Finger was fortunate getting into the business, but the initial transition from orderly and regimented engineering to what he viewed as nonconforming practices in golf-course design, construction and maintenance was a shock to his system. He wrote about his strong beliefs in a series of magazine columns, which in 1973 was published as *The Business End of Building or Rebuilding a Golf Course*.

I consider drawing by hand to be time-consuming and repetitive, and I found that a precise CAD model is more effective in the aerospace industry, not in golf. With CAD, I can design a bunker down to a single grain of sand, but it won't help the contractors because they don't use the data in the same way. Besides, the constructed bunker can

take years to mature into its intended form. For me, having freedom is the essential foundation for being creative, so I developed a middle-ground process with user-friendly software and hardware. It allows for the flexibility and the freedom of drawing by hand, and it has the same rote number-crunching abilities to easily compute feature areas and cut and fill volumes. It also prepares a bill of materials.

Plans are great for technical purposes, but photos are useful tools for architects to market themselves. In fact, photography was partially what helped pique Pete Dye's interest sufficiently to hire Tom Doak. Many architects do not have suitable photographic records that showcase their work. While helping Spann improve the FDS website, I went on a photo scavenger hunt locating the best pictures of the firm's work. I found some good ones, and Spann received some other professional images that did not thrill him. I offered to take photos for him the next time he needed some. Periodically, I had been taking pictures of courses I visited whenever I travelled. On a trip through the

Midwest, I produced a wealth of images, which were well composed but wouldn't make a great coffee table book. I wanted to take better pictures, so I dusted off my father-in-law's old Nikkormat and great wide-angled lens, and off I went to practise shooting my home course. I spent time helping a professional golf photographer to learn what he did best, read landscape photography books, experimented with different films and conditions and took hundreds of pictures to become proficient. As luck would have it, Spann's next need for photos was at Black Mesa Golf Club in New Mexico. What a delight to visit, photograph and support construction. I'm proud to say that those images were published in several national publications.

Learning new skills of generating plans, surveying and photography, has helped me become more involved in the industry, and I have also been lucky enough to meet some special people along the way who have helped me further that same goal. While meeting with a local golf-course builder, the firm mentioned a need for surveying. Sure I

can survey; that's old hat for me now. The assignment was 'as-built'—plans that show what has been constructed on the ground from the architect's 'plans'. I initially measured greens, tees and bunkers for cost estimates and ultimately created comprehensive and user-friendly plans for the club. The course was the renovated Jack Rabbit at Champions in Houston. I have since become close with superintendent Charles Joachim and fortunate to glean a wealth of knowledge from his twenty years at the club. What a great friend and mentor he has been. I have expanded our working relationship to include a renovation of the club's range and practice facilities, as well as master plan improvements to the Plummer-designed Cypress course. I have also been fortunate to learn from former US Masters champion Jackie Burke Jr—the club's co-founder with Demaret and owner. Listening to Burke's ideas about how a club should be run has been invaluable, as well as his take on business, members, playing and life.

My experiences did not make me a golf course designer; they introduced me to the



field. As an engineer, it wasn't until I learned the manufacturing process by studying technicians and machinists that I could design most effectively. It's the same with golf-course design. Mastery of the details can lead to success, as can some luck—just like the game I love and its most treasured grounds.

A conducive environment with natural surroundings and access to the game's history helps to foster design creativity. (Courtesy of Mike Nuzzo.)