Ever wonder why that little bucking bronco symbol is on the back of your Wizardry manual, encircled with the words “Frederic Remington Country?”

Frederic Remington was a loner who dedicated his life to depicting the solitary existence of the cowboy and the vanishing lifestyle of the American Indian; he painted the wild mustangs of the prairies and the lonely, majestic beauty of the Great Plains and the Rockies. His works embody the spirit of the western wilderness. By the time he finished his travels around the American frontier, it had become a part of him; the life was in his blood. He chose Ogdensburg, New York, as his permanent place of residence.

Nestled on the banks of the Saint Lawrence River, Ogdensburg today is miles from any major highway. You have to look closely at the road map to wend your way north from the uppermost reaches of Route 81 in upstate New York. (Robert Woodhead: “You’ve heard of the Great White North? It’s south of here.”)

It’s no mean trick concentrating on the map when such natural beauty abounds just outside the car windows. The road makers must have had similar sentiments—there are ample roadside overlooks provided so you may stop and soak it in.

It certainly seems a long way from dragon’s treasures and dripping dungeons wherein if you couldn’t follow a map, you’d stand to lose more than your way, and if you stopped to soak up any scenery you’d probably get soaked by a ninth level ninja. But this is where Wizardry was born.

Cast of Characters. Fred Sirotek, president of Sir-tech Software in Ogdensburg, is not new to business. It’s in his blood and has been passed on to his offspring. For close to thirty-five years, Sirotek has been involved in the construction business, both in his native Canada and in the United States. Diversifying his business holdings, he bought pieces of companies as investments and for the challenge at management. For eighteen years he has been involved in the manufacture of souvenir spoons. But it was his partnership involvement with Resin Sands industrial foundry supplies in the mid-seventies that led directly—if incongruously—to his present fraternalization with wizards, gnomes, and ninjas.

Janice Woodhead, a corporate officer of Sir-tech and president of Resin Sands, is not new to business either. A native of England, her marriage to a research chemist brought a son in 1959 and relocation to Canada in 1966. Then came a 1973 move to the States, where she and her husband built a plant to manufacture resinated sand for industrial mold-making applications. “After my husband’s death in 1975, I continued the business,” Janice explains. “Fred Sirotek was one of my business partners.”
It was a partnership that would ultimately lead to the formation of a new business and an exciting career for her son Robert as well as for Sirrotek's sons Norman and Robert.

"It all started with Resin Sands," Fred Sirrotek recalls. "The sand is coated with five different chemicals during the manufacturing process. About two or three years ago, not a week would go by without suppliers changing raw material prices. It invariably took Mrs. Woodhead about two weeks to recalculate our cost and pricing.

"Not knowing anything about computers at all, I said, 'We should have some kind of crummy computer that could do all this at the push of a button.' At that point I learned that Mrs. Woodhead's son was taking computer science at Cornell. So I said, 'Fine, next time he comes up for Christmas or whenever, let's talk to him.' The long and short of it is that about four days later, while Robert was still on his winter holiday, we had bought an Apple computer. He proceeded to produce the programs for my husband at Resin Sands as well as for my company."

"I'm still using my son's programs at Resin Sands," Janice notes with a bit of parental pride. "His programs solved our costing problems, so we thought others might find the programs useful. Fred began advising Robert on initial plans to market the programs."

The first plan for Robert Woodhead's infant business called for him to attend a computer show in Trenton, New Jersey, but Fred Sirrotek was afraid to send the computer as airline baggage.

"So I asked Norman if he would drive Robert to the show," Sirrotek explains. "I think Norman thought he would run over to Atlantic City for some fun while waiting to come home."

An Even Trade. The Boardwalk was to be bereft of Norman Sirrotek's presence that year. "Little did I know what I was getting into," he remembers. He was fascinated by the computers at the show and promptly suggested to Woodhead that they work together on the business. Woodhead agreed, and the two returned to Ogdensburg as business partners.

Norman Sirrotek, now Sir-tech's director of finance and administration, has an affinity for independent business activity. "At the time of the Trenton trip, I had been in Clarkson College for two years in a management program and had just decided to switch into engineering." But Clarkson lacked adequate drafting courses. Sirrotek left Clarkson and went to work in construction with his father in Canada, taking drafting courses on the side. Then came the Trenton trip. "For a year after that, I worked construction and went to school while doing Sir-tech as a weekend hobby. It was something fun."

By the end of the year, the weekend hobby had become priority for Norman Sirrotek. "I detested having someone tell me what to do and think. I quit school, stopped working construction, and put all my energies into the company, keeping Bob in touch with the business while he was finishing school."

Ivy League Computing. Woodhead's initial familiarity with the industry began with a part-time job at the Computerland of Ithaca while he was attending Cornell. He was able to work with most of the systems on the market, primarily programming business applications on North Star and Cromemco computers. That's when he set his sights on owning an Apple, "the best personal computer I could expect to afford."

"That was when they were 4K. I remember a customer who had 12K in his machine and we all thought he was nuts. He could actually run hi-res graphics. We looked at them and said, 'Eh, so what, good grief, lo-res is much better; more colors.' We couldn't see what you could do with hi-res. We weren't ready for the potential of the machine."

"Though I wanted an Apple, my first computer was a TRS-80 that I bought at a bargain basement price from the Ogdenburg Radio Shack. I got a really great price because nobody here knew what to do with a computer. I went back to school and was fired from Computerland because my boss found out I owned a TRS-80. He said it was like a Chevy dealer driving a Ford."

Computerland Ithaca's loss was the Cornell School of Hotel Administration's gain. Woodhead programmed a restaurant menu display graphics system still in use today. A year off from school followed, and Woodhead became involved in a variety of programming ventures, including a budding partnership with an acquaintance from school, Andrew Greenberg.

Going with Your Big Guns. Sir-tech's initial product line in the spring of 1981 consisted of a database program, Info-Tree, and an arcade-type space game, Galactic Attack. Mail order sales were generated through magazine advertising. Weaknesses in the database documentation and the gaming preference of magazine readers focused Sir-tech's early efforts on Galactic Attack.

"It was a good start for the boys, learning from the ground up," Fred Sirrotek observes. "Neither Robert Woodhead nor Norman had too much business experience. I guess they both had some credits from the university on the subject, but in terms of hands-on experience they didn't have any. So Norman would come to me for help—you know, 'What do I do with this, Dad?' I'd either produce a suggestion or direct him to what he needed. Although I am technically the president of Sir-tech, the boys have always run the company on a day-to-day basis. I'm there when they need me."

"By not being involved in day-to-day activities, my father brings a clearer perspective to our broader planning efforts," elaborates Sir-tech marketing director, Robert Sirrotek. "We sometimes lose our objectivity down there in the trenches."

To the Barricades. Robert Sirrotek volunteered for trench duty after being disillusioned with career opportunities in a small minicomputer company. "I had completed a business degree at Clarkson College and was working as a programmer. I got tired of the bureaucracy, saw what was going on here, and quit the job. I wanted to throw my full efforts in with Robert and my brother."

Because Galactic Attack sales were picking up, Norman was steeped in administrative work. To market our products, I had to get to know them, including any under development.

What was under development was Wizardry.

"I had an idea for a Dungeons and Dragons type game," Woodhead explains, "and, just on an off chance, had an opportunity to talk to Andrew about it at school. It turned out he was thinking of doing a similar game. He had much better ideas than I had about the actual internal structure of how the game would work. I had some ideas about how I wanted the game to look and interact with the player. So we got together and collaborated on the development."

"I did the majority of the programming on the game. Andrew concerned himself with the data structures, the design of the scenario, the very tricky criteria in terms of how things work inside the game. It was a situation where we each did what we were best at."

Rob Sirrotek played some early versions of it and thought it was fantastic. But Norman wasn't interested.

"I guess I was guilty of some conventional thinking," Norman chuckles. "I remember late one evening telling Bob Woodhead to forget the new game and put his efforts into something worthwhile, like a business package. I said nobody wants or needs the game. Bob looked straight at me and said I was wrong and went back to work."

Woodhead and Greenberg worked a total of two and one-half man-years over a sixteen-month period: about fifteen hundred lines of code a month, fifty lines a day, one line every nine minutes. They had the program actually running in November 1980, showed it at a computer show, and got an order.

"Two months after Wizardry came out, I was ready to eat my hat! I'm glad I wasn't more convincing with my argument," Norman says.

"The closer we got to release," adds Robert Sirrotek, "the more excited we became. But my father wasn't yet convinced."

"The boys thought that it was a great game," Sir-tech's top
Two promising alumni of Cornell University, Andrew Greenberg (left) and Robert Woodhead.

advisor confirms. "But as far as I was concerned, computers were business machines. They weren't fun machines. You do things with them that you need. I certainly did not realize that there is such a relatively large segment of the population that has the computer only or mostly for pleasure. One of the questions on the registration cards was, 'How many games do you own?' I started seeing 'fifty games,' 'one hundred games,' 'too many to count' on the replies... It's convincing. Somebody with that many games isn't doing too much business work on the computer."

"Though he didn't really understand computer gaming," Norman Sirotek says, "my father did make a valuable contribution to the product. He insisted that the program could not be released until the instruction manual was readable by people without computer backgrounds."

Manual Labor. "Although we had made substantial improvements on the manual," Robert Sirotek reflects, "we still weren't prepared for the volume of player questions. A few days after the release, the phone calls started coming in. Many were technical things that the manual addresses but some people don't understand until they hear it. But an equally large amount of calls had to do with solving the game. You know, 'I am on the ninth level with my eleventh level characters and can't for the life of me find the entrance to the tenth level! Where is it?'"

"At that time the company name was a pretty bad pun, Sir-tech," Robert Woodhead smiles. "After about the fourth phone call at the Sirotek home around four in the morning, we dropped the 'o' to become 'Sir-tech' and made sure the company phone number was in prominent places on the manual and packaging."

The volume of orders and the number of phone calls caused significant changes in Sir-tech's operations, "making us work long hours every day of the week," Robert Sirotek adds.

Once the orders built up, they just kept coming. That's when the company added Peter Bresett and Lynn Dupree in production and expanded a single machine to a multiple machine disk copying system. The daily production went from less than one hundred disks a day to more than five hundred a day.

By the end of its second month of distribution, Wizardry was threatening VisiCalc for the number one bestseller spot.

Help from Above. "They rarely lose production time due to machine failure. Bresett had lost his job as an air traffic controller during the strike; he brought with him a strong ability to attend to details and cope with the stresses of production. And Dupree "seems to have a sixth sense about which of the machines is getting ready to act up."

"Keeping the disk duplication system fine-tuned is critical to our production process," Woodhead says. "We have 128K RAM boards in each of the copy machines. This allows us to hold an entire disk side in memory for writing to the production disk. This full disk write must be done to both sides of the disk. Each disk is then encoded with a disk serial number in a separate operation. Then the disk must be fully booted to ensure that the copy is good. If one of the machines isn't working, it messes up the whole process."

"And the duplication system has to double for customer service uses too," Norman adds. "Industry experts warn software publishers about the overhead involved in supporting business applications compared to game programs. They should visit here for a day. People take Wizardry very seriously. Every day we get letters with disks enclosed requesting help from Above. They rarely lose production time due to machine failure. Bresett had lost his job as an air traffic controller during the strike; he brought with him a strong ability to attend to details and cope with the stresses of production. And Dupree "seems to have a sixth sense about which of the machines is getting ready to act up."

"Keeping the disk duplication system fine-tuned is critical to our production process," Woodhead says. "We have 128K RAM boards in each of the copy machines. This allows us to hold an entire disk side in memory for writing to the production disk. This full disk write must be done to both sides of the disk. Each disk is then encoded with a disk serial number in a separate operation. Then the disk must be fully booted to ensure that the copy is good. If one of the machines isn't working, it messes up the whole process."

"And the duplication system has to double for customer service uses too," Norman adds. "Industry experts warn software publishers about the overhead involved in supporting business applications compared to game programs. They should visit here for a day. People take Wizardry very seriously. Every day we get letters with disks enclosed requesting that we raise favorite dead characters, find lost parties, you name it. We even had to include waivers of liability in case we aren't able to recover a character."

Sequel Success. In what is traditionally the slowest period of sales in the software industry, Knight of Diamonds entered the July Softalk Top Thirty in the number two position, the highest rating earned by any Apple software publication in its first month of release. Such staggering sales growth has forced
Sir-tech to continue its keep-it-simpele approach to management organization.

"With the first scenario under our belts," Norman Sirotek recalls, "we knew better what to expect when we learned that Andrew, Robert, and WARG were closing in on completion of the second scenario."

WARG is the Wizardry Advanced Research Group, a bunch of D & D enthusiasts at Cornell, where Greenberg is finishing a doctorate in computer science. "They work out the details of the scenario and Andrew and I make it work," says Woodhead.

"With Knight of Diamonds, we had much of the control program complete from the first scenario. We simply had to change parts of the code that handle the way new things and situations work. Of course, those changes brought out thirty bugs; we'd fix those, and thirty new ones would show up. It was frustrating, but not as difficult as writing the first."

"Since my brother was able to estimate closely the flow of orders for KOD," says Norman, "my administrative responsibilities were clear-cut." Sir-tech hired Lisa Carpenter to help on the production end and bought a shrink-wrap machine that produces professional packaging totally in-house.

The Importance of Being Earnest. "We like to think that everyone here works with us, not just for us, so keeping interpersonal relations good is very important," Norman Sirotek says. "I enjoy the people aspect of administration, which is probably one of the few management skills I brought from construction that's helping me out here."

"Keeping everyone happy and working well together is becoming increasingly important," Robert Sirotek adds. "Just as production personnel has expanded, we've added office personnel to assist in the marketing and sales efforts. Jean Bromley handles secretarial and telephone reception duties. Our sister, Linda, is working with us this summer to help out in the office. Together, we are able to keep a healthy flow of orders into the production room."

"With the Wizardry scenarios the way it is, it is clear that Sir-tech is becoming a powerful software marketing company," Robert Woodhead remarks. "I am our chief connection with Andrew and the WARG group as far as developing new scenarios. We can sell them as fast as we can develop them, but there's a limit, so we have to look for other means of product development."

"In this respect, I see my job developing away from actual programming toward managing programmers," Bob continues. "For example, I'm working with a Canadian programmer, Gordon Eastman, who has written Star Maze, our next release. He's a fantastic programmer, but he needed a good idea. So I designed the game and he programmed it. I like to work that way. I have loads of arcade game ideas but lack the patience to do the actual coding. I'm sort of a big-project person. I like the challenge of a program like Wizardry."

Business School—the Wizardry Way. All the staff has seen their jobs change since the release of Wizardry. The demands of the market required them to learn quickly.

"That's why I love working in our own business," Norman Sirotek reflects. "I've learned six times what I would have if I'd stayed in school. Of course, I've had to work ten times harder. But the rewards are there. Like when we hear that a child psychiatrist, Dr. Ron Levy in New York, is using Wizardry in the diagnosis of emotionally disturbed children. That our game is being used to help kids is amazing to me. I have a much deeper appreciation for what Andrew and Robert have accomplished."

"There is even a course at the University of Pennsylvania where Wizardry is used to teach decision making and systematizing information," Robert Sirotek says. "My job is as big as I make it, not like at the minicomputer company where everything was spelled out. We have to keep learning and growing. It's what makes the 120 percent effort we put in here worthwhile."

Fred Sirotek rejoins the conversation. "The boys are so right; over the last year I have seen them go through substantial changes. It has been valuable experience because if any young man steps into an organization—to exaggerate, say General Motors—and gets a segment of the operation under his wing, then he learns that segment inside and out. But there are ninety-nine thousand other segments he will never get to see in that organization. The kid just doesn't have a chance to see the full spectrum, from dealing with banks to working with suppliers, to handling credit, and so on. You just can't step into an organization and find out very quickly for yourself what's important. If you start up the business, it sort of grows on you and you grow and learn in the process. I don't think the boys realize how much they have learned."

New Spells for Old Wizards. Packing a year of experience under their belts, Sir-tech management is looking toward the future.

"We have realistic growth plans based mostly on the near future," Robert Sirotek says. "Over the next few months, we have our work cut out for us simply keeping up with the demand for the first and second Wizardry scenarios. Between production and customer service, we'll be extremely busy."

Star Maze Is Sir-tech's entry into strategy-oriented home-arcade gaming, the first of what is hoped will be more third-party programmed software for Sir-tech to market. They are also searching for good programmers to work directly with them in an internal development group.

"I believe we will investigate the business application side of the market in the not-too-distant future," Norman adds, "although I'll never again suggest that we drop Wizardry for it."

"And, of course, more Wizardry scenarios," Robert Sirotek emphasizes. "You stick with a winner."

"As long as the boys continue to build better mousetraps," concludes Fred, "they'll be able to sell them. What lies ahead? We shall see . . . we shall see."

Judging by initial performance, building better mousetraps is a native quality, inherent in the Sirotek-Woodhead alliance.

It's in the blood.