

## Introduction

It was the first week of 1980. Twelve months before, the University of Colorado Interdisciplinary Telecommunications Program (ITP) had suspended me for letting my grade point average drop below a 3.0. The ITP had admitted me with a provision that my grade point average not fall below a 3.0. If not for a 750 score on the Graduate Record Exam and solid references from my sales manager, some of my previous customers, and the training manager of Belden Corporation, the electronic cable manufacturing company that employed me, my application in 1977 to enter graduate school in the ITP probably wouldn't even have been accepted.

I'd previously been a factory sales representative for Belden in New York City in the 1970s. My sales territory predominantly served the national headquarters offices of broadcasters ABC, NBC, and CBS, the national headquarters offices of cable television industry multiple system operators (MSOs) Teleprompter Corporation and Warner Cable Corporation, and the two local cable television systems on

Manhattan Island, Manhattan Cable Company (owned by Time Life Corporation) and Teleprompter Manhattan Corporation (owned by Teleprompter Corporation). In November 1975, I originated and arranged a meeting between Belden's Vice President of Marketing, Jack McCarthy, and the President of Teleprompter Corporation's Cable-TV Division, William Bresnan, to discuss a partnership to deploy light-wave technology via fiber-optic glass strands in cable television. On July 9, 1976, the *New York Times* reported, "TV Begins to Use Fiber Technology,"<sup>1</sup> and the *Wall Street Journal* reported, "Teleprompter Adds Light-Wave System to Cable-TV Unit."<sup>2</sup> The cable television industry obtained rights to pole attachment in public right-of-way from the FCC in 1978.<sup>3</sup>

After a summer session and the fall term in 1978 my grade point average slipped below a 3.0 due to a statistics class. An average grade on the eight-hundred-point final landed me a C, just enough to send me packing. The ITP program director advised that if I waited at least one year and got an A at another school in a qualifying class, that might get my master's degree back on track.

A week later my neighbor recruited me for oil field work in Red Desert, Wyoming. The weekend I left for a camp job, thirty-five miles north of Wamsutter, Wyoming, a news report on the radio announced that the astrologer and self-proclaimed psychic Jeane Dixon predicted it would get to forty degrees below zero in Wyoming and one of every four people would die.

There was a solar eclipse that month, February 1979, in the middle of the day on the 26th while I was working on an elevated platform. I realized that four years before I'd had a dream about working on a machine that made mud. I had never heard of such a thing. It was so obvious to me how weird it sounded to the girl I was dating at the time when she heard about my mud-machine dream.

In fact, it was just as the shuttle bus arrived on the remote drilling rig site that the drill bit broke off the drill pipe and was lost about 9,200 feet below ground. For the next two weeks, my entire first tour on that rig, all I did was pour dirt powder into a mixer that added water to create mud. The mud was circulated continuously through the entire

depth of the drill pipe to keep the natural gas well from exploding while efforts were made to find and retrieve the lost drill bit.

After spending the winter of '79 as a roughneck on oil drilling derrick platforms, providence brought me home to Chicago (where my parents lived) for my dad's fiftieth birthday celebration. That July, MCI Communications hired me as a long-distance sales representative in downtown Chicago. That year also saw me work as an extra in the movie *The Blues Brothers* in uniform the same weekend the US Air Force thought I might report. My sales were respectable and included signing Second City to MCI's phone service. By the end of 1979, MCI planned to lay off half the sales force because all daytime system capacity had been sold. MCI would soon be concentrating on television advertising to increase residential calling on the network in the evening hours. The layoff might have included me but did not.

One day in December 1979 I was prompted to ask Tom Wynne, the vice president of sales in Chicago, for a promotion. Days later Tom Leming, the Vice President of Transmission Systems Engineering, was in town regarding the antitrust hearings against AT&T. We met and chatted during a cab ride from the John Hancock Building to MCI's lawyers' offices next to the Sun-Times Building. During the cab ride he offered me the opportunity to work in the network engineering department.

Of the choices offered to me, communications tower site acquisition sounded the most interesting. My dad had performed real estate development and construction for gas stations in the Chicago area and beyond from the 1950s to the 1970s.

So, there I was. My first site acquisition assignment the first week of 1980 was to acquire a site for a microwave communications repeater station in Streetsboro, Ohio. After one week in the Streetsboro area I returned to the office in Washington, DC, with an acceptable lease signed by the property owner for the target location. Three more search areas were assigned to me in upstate New York. After the next three weeks traversing the hills between High Point, New Jersey, and Cooperstown, New York, three more acceptable signed leases were acquired. After obtaining ten signed leases in the first ten weeks of

1980, my company asked me to start processing zoning and building permits for these sites. That year I completed site acquisition and local permitting for a twenty-site microwave route from West Orange, New Jersey, through upstate New York to North Royalton, Ohio. This was critical for MCI as it was the final leg completing a figure-eight network route of redundant long-distance telecommunications transmission capacity between New York and Chicago.

The next year MCI made me a supervisor and awarded me the company's Excellence in Service Award, which was given to 2 percent of the employees for having made exceptional contributions to the company and its customers. By the end of 1982, I had hired and trained thirty-two others to do the same work, based in four offices across the country, and MCI made me a manager.

In 1983, MCI was applying for cellular radio licenses and acquiring cross-country fiber-optic routes. I finished my master's degree requirements and graduated from the ITP in Boulder, Colorado, while working for MCI in Washington, DC. This book is a sequel to my master's thesis, "The Process of Developing Specialized Common Carrier Telecommunications Routes: A Handbook for Land Agents." Since 1984 I have done freelance work to develop many antenna site applications throughout the United States.