

Introduction

“Uphill All the Way” might well have been an apt title for one of the earlier chapters in John Nelson’s book. John studied the Sun, in particular sunspots, as did other scientists. While all were trying to determine how and why sunspots occurred, Nelson was also trying to relate sunspot activity to severe disturbances in RCA’s high-frequency radio circuit, in time developing a “Radio Weather” prediction system that was over 85 percent accurate.

To many a Scientist is one who proves mathematically that a given event can only occur in a certain way, under certain conditions and yield predictable results. Failing that, he hasn’t much — not even a scientific theory. Nelson was not a scientist, and to many of his colleagues his discoveries held little meaning. Listening to him seemed a waste of time. Many would have found their attitudes discouraging. If John Nelson was discouraged, he endured that discouragement better than anyone I know. It’s more likely that he wouldn’t allow himself to be discouraged, dedicated worker that he was and still is.

But about twenty five years or so ago there occurred a breakthrough. One scientist said, “Nelson has something that works — but he doesn’t know why.” Recognition — a tremendous advance! As Coordinator Radio Facilities and later Manager of Radio Operations for RCA Global Communications, Nelson’s work was of great importance to me. As his prediction service became more and more accurate it became a bigger and better selling point to some of RCA’s important customers. As the number of channels per circuit grew, improved circuit reliability became increasingly vital. Overcoming adverse radio conditions became a big

factor in bringing that needed improvement about. Nelson’s predictions helped to provide the necessary facilities, especially adequate frequencies on each of RCA’s many circuits. Nelson’s research in analyzing data from RCA’s radio receiving stations aided greatly in determining what these frequency complements should be.

It is my hope that this book brings John Nelson more of the recognition he so richly deserves. John Nelson — an original thinker, and a prophet who will be honored in his own country.

Anthony W. Gray