

Community

TAKING CHARGE

INVENTING A SMARTER CO-OP

BY BILL MORRIS

NAT POLISH GREW up in the Normandy, a masterwork of Art Deco architecture overlooking Riverside Park and the Hudson River, where his father was president of the co-op board. Today, Polish is president of the co-op board at the Rockfall, a 132-unit brick fortress built in 1909 at the corner of Broadway and West 111th Street in Morningside Heights, about a mile north of the Normandy.

Community



"Serving on a co-op board is the family business," Polish says with a laugh.

But he's only half-joking. Growing up in the 1960s and '70s, before New York City had sanded away some of its very rough edges, Polish became aware that his family's home, like the city itself, was riven by conflict. "At the Normandy there were two factions," Polish recalls. "My father was head of one, and they fought all the time. There were some kids in the building I couldn't play with because their families were in the other faction! When I got on the board here at the Rockfall in 2006, there was some conflict, but I've tried to get rid of it. Everything we do, we do by consensus. We listen, then we vote. Some people want a fight, but if you don't give them a fight, they go away."

That equable approach to co-op board service had a long incubation period. It started way back in the Normandy, where Polish, now 57, was an unabashed geek as a kid. "I was always tinkering," he says. He was into ham radio. His bedroom doubled as a darkroom. He spent his summers in the bowels of the Hayden Planetarium grinding lenses for telescopes and learning to run a lathe and other machines. Inevitably he was drawn to computers, and in



1977 he got his first Apple II and was soon learning to write programs. Through it all, his fellow students at prestigious Collegiate School made him feel it was cool to be a little weird.

Polish also had an entrepreneurial streak, and he started writing software for businesses, including an inventory system for a sheet-metal company. The work wasn't always terribly sexy, but it paid his tuition at Columbia University as he worked toward a double major in physics and math.

After earning a doctorate in computer science from Columbia, Polish embarked on a career of inventing things, starting businesses, working on the first talking computers and becoming a sought-after expert witness in patent litigation. During the dot-com bubble, he had a staff of 25 cranking out computer software, which he likens to selling shovels during a gold rush. "I got to make a living doing

things I would do for fun," he says. "That's a pretty cool gift."

A Useful Invention

Back in 1981, while still an undergrad, Polish moved into the Rockfall, which was then a rental building full of students and elderly people and not in the best of shape. After its co-op conversion in 1989, Polish kept renting. In 1996 he married the writer Ellen Schorr, and the couple started a family. Isadora is now 16 and a junior at the Bronx High School of Science, while Annie, 20, is studying physics at Yale. Before the girls were born, Polish spent three Novembers in Antarctica using technology he had invented to track the feeding patterns



of penguins, part of a National Science Foundation research project.

Nat and Ellen bought their apartment in 2000, and he joined the Rockfall's co-op board in 2006, assuming the presidency two years later. By then he had realized that his inventive streak could be put to good use in a century-old apartment building.

Which led to a creation he calls SuperAlert, a patent-pending sensor that measures temperature, vibration and light in the building's rooms and equipment – then notifies the super's smartphone of any irregularities that require attention. The sensors are sprinkled throughout the building. In the gym, which Polish persuaded shareholders to build by combining a basement apartment and the staff locker room, a SuperAlert affixed to the air-conditioner lets the super know if lights are burning unnecessarily, if the room is too cold or too hot, or if the air-conditioner is malfunctioning.

There are five SuperAlerts in the boiler room, monitoring the four small dual-fuel boilers and two dual-fuel water heaters that replaced a massive oil-burning boiler. These upgrades led to an immediate \$200,000 yearly savings in fuel costs.

Polish and the current board have also completed projects started by earlier boards – updating both elevator cabs, uncovering a skylight in the lobby, polishing the granite floor, and matching marble panels with a faux finish. The lobby sparkles.

"I wanted to make some improvements," Polish says of his decision to

join the board. "I was aware that the building wasn't so beautiful anymore. Gradually, new people came in who expected something better."

They got it – and then some. "The main impetus behind the SuperAlert comes from the fact that building systems have gotten so complicated, and supers have so much to keep track of," Polish says. "The idea was to lighten their load."

According to the building's super, Hector Sonera, it's working. "I check my app every morning before I check my boilers and water heaters," he says. "If I get an alert, I can usually tell if it's something I can fix or if I need to call in an outside company. We're ahead of the game. If I go away for the weekend, I can still check in. That gives me peace of mind."

This board's philosophy has been to improve the building – while remaining sensitive to shareholders' needs. "You have to be mindful of people's concerns," Polish says, "and the fact that some people are on a fixed income and someone just bought an apartment for \$3 million and did half a million dollars' worth of renovations. I think we've done a good job of threading that needle."

Walk through the lobby, ride the elevators to the expansive roof deck, go down into the basement to see the spotless gym and state-of-the-art boiler room – and you'll find it hard to disagree with Polish's claim. And that's before you realize the building is dotted with smart little gizmos called SuperAlerts.