



CASE STUDY SERIES

TOM JAVINS – FORMER ASSOCIATE DIRECTOR – ENGINEERING AND UTILITIES
UNIVERSITY OF MONTANA, MISSOULA, MONTANA

OCCUPANT COMFORT AND THE SILENT COMPLIMENT

THE UNIVERSITY OF MONTANA KEEPS STUDENTS AND FACULTY HAPPY AND PRODUCTIVE

Across the 220-acre campus of the University of Montana there are hundreds of buildings. They range in age from well into triple digits to nearly brand new. And there's always a project to do.

Tom Javins, who oversees both energy production and energy use at UM, has seen just about everything. The library at the school has state-of-the-art systems in place to control heating and cooling, while other buildings are still heated by steam, with no control more advanced than a hundred-year-old on-off valve.

In these many and widely varied places, though, one goal stands above all others. "Making sure that people are comfortable is the primary goal of doing any work in a building on the HVAC system," Tom says.

Brian Dougherty, who works with Tom in the Technical Service Department and also earned BOC Level I Certification, echoes Tom's philosophy. "The most valuable thing I learned at the BOC training was what is the most important thing for the building," Brian says. "And that's occupant comfort."

This guiding principle of the department's operations at UM was stressed in Tom and Brian's BOC training, which took place in Spring

**"HEARING NOTHING IS A
HIGH COMPLIMENT. BECAUSE
YOU TYPICALLY ONLY HEAR
THE COMPLAINTS—'I'M TOO
HOT'; 'I'M TOO COLD'—AND
WHEN YOU HEAR NOTHING,
THAT IS AN EXTREMELY NICE
COMPLIMENT TO HAVE."**

- Tom Javins

2014. High-level analysis of building systems and long-term planning were important parts of the curriculum.

"Over the life of a building," Tom points out, "the energy cost is about an order of magnitude less than the cost of personnel. Energy conservation is also a goal, but if you do that to the detriment of comfort, you're not saving money. It's not just about saving money."



**“YOU’VE GOT TO LEARN CONTINUOUSLY,”
TOM SAYS. “IN OUR INDUSTRY, IF YOU’RE
NOT LEARNING, YOU’RE FALLING BEHIND.”**

Listening to the people, not the gauges

Maintaining comfort is not without its challenges. In addition to having the broad disparity between building technologies across campus, UM sits in a place that sees, on average, 45 days a year when the temperature does not rise above freezing. In summer, an average of 24 days see temperatures above 90° F (32° C).

Complicating matters is that, as Tom admits, there will always be some people who aren’t quite comfortable. “You can have two people sitting side by side, and one person will be too hot and the other person will be too cold,” he says. “But when you’ve satisfied 80% of the people—which is a hard thing to do—you’re successful.”

Brian notes that the stressing of comfort in his BOC training has reshaped his approach to his job. “Before that,” he says, “I just looked at the numbers. I’d look and say, ‘Hey, it’s 72. You’re fine.’” Now, though, he makes it a point to listen to occupants closely and take their concerns to heart. “I want to check in with them and get them dialed in,” he says, “Once they’re dialed in, I know they’re working efficiently and they’re doing their job.”

Of course, temperature is just one factor to consider in maintaining comfort. Tom and Brian both study and work regularly to improve other elements of indoor environmental quality, including ventilation, lighting and acoustical measures. As their BOC training emphasized, it’s all important. “Our goal here at the University of Montana, in facilities, is to provide a space that allows the best learning possible,” Tom says. “That’s our mission: to support academics.”

As they continue in that mission, Tom and Brian are both thankful for the guidance and insights they received as part of their BOC training, and they speak highly of its value in expanding their perspectives on their day-to-day projects.

About BOC™

Building Operator Certification (BOC) is a nationally recognized, competency-based training program for building operators. The program teaches participants how to make a building more comfortable and efficient by making its systems work better together.

Note: Tom is no longer at the university system, but was so impressed with the BOC training that he is now a BOC instructor.

Learn more at www.theboc.info