



Michael Abraham

Wing Ng: “The work ethic and the conditions under which an entrepreneur functions are better here, at least from my standpoint, than anywhere I’ve been.”

Finding a home >

Executive Summary:

Wing Ng wasn’t supposed to be here for more than a couple of years, but he found what he wanted and stayed.

By Michael Abraham

When Hong Kong native Wing Ng arrived in Blacksburg to teach Mechanical Engineering at Virginia Tech 28 years ago, he thought it would be a short-term stepping stone. He’s still there, with no plans to leave.

The 56-year-old Ng’s specialty is gas turbine engines, used primarily in aircraft and power generation applications. From his research work, he spun off a company 15 years ago called Techsburg, now Techsburg, housed in The Threshold Center

in the Christiansburg Industrial Park.

He finished high school in Hong Kong, then earned a mechanical engineering degree at Northeastern University in Boston, and a master’s and Ph.D. at M.I.T. His first teaching job was at Virginia Tech in 1984.

Ng says that a big chunk of the gas turbine market these days is for power generation. Gas turbine engines are flexible in terms of the fuels they can use. People typically think of gas turbine engines powering jet aircraft, in which case they use jet fuel—essentially kerosene. But they can burn natural gas or any of a number of fuels, mostly petroleum distillates.

“At the outset of the formation of the company, we got some government funding through the Small Business Innovation Research Program,” says Ng. “We are essentially two companies in one. The first is engineering services, again primarily in the gas turbine area. We work for GE, Siemens, Rolls-Royce, Honeywell, Northrop Grumman, United Technologies, Caterpillar, and other multinational corporations.

“We do design engineering and testing of components, such as turbine blades. For example, if they have developed a new turbine compressor blade, we can test its performance, but in addition, we can lend our expertise in making it even better.

“We can do fluid dynamics modeling on computers, but we also have a wind tunnel where we can test actual parts. We provide timely and cost-effective services that are not easily duplicated by our competitors. We can do this because the second part of our company is a state-of-the-art CNC (computer numerical control) machine shop and manufacturing center. Having our own machine shop really helps us expedite our customer’s project.

“What sets us apart is two things. First is our strong engineering staff. Second is our level of automation that makes us efficient and productive. Our customers



Wing Ng (center) with Gary Dudding (left) and Greg Whittaker of his team at Techsburg in Blacksburg

often get better parts, and get them faster, than what they’d envisioned in the first place.”

“I have been all over the world,” Ng says. “It would be difficult to duplicate what we have at Techsburg due to the infrastructure, the education, the work ethic, and the regulatory climate [in this region].”

Ng says his move here was initially temporary. “Southwest Virginia was supposed to be

a transitional place, where my wife and I thought we’d stay for two years and move on. We love it here. I speak with a funny Chinese, Bostonian, Southwest Virginian accent, all combined together.

“Many of my employees are true Appalachian people, with deep roots in the area. The more I work with them, the more impressed I am. The work ethic and the conditions under which an entrepreneur functions are better here, at least from my standpoint, than anywhere I’ve been.”



Published in
September 2012 Edition
Article reprint by permission
vbFRONT.com

Valley Business
FRONT