



Measurement Guru Waxes Philosophically Over Flow Meters

A *Pipeline & Gas Journal* Staff Report

Well-known throughout the flow measurement industry, Jesse Yoder is founder and CEO of Flow Research, Wakefield, MA. Since 2000, he has focused principally on world markets for flow, pressure and temperature devices as they are employed in the energy business. He excels in his chosen pursuit by the force of his intelligence, his enthusiasm and his research and writing aptitude.

Obviously, there is more to the man when the market research is done for the day. What is the more rounded picture of Jesse Yoder? In a discussion with P&GJ he allowed a glimpse at other facets of his life.

P&GJ: Where did you grow up and what were your interests?

Yoder: I grew up in Harrisonburg, a small town in the western part of Virginia. I moved to Maryland just before I started college, and went to the University of Maryland in College Park, not too far from Washington, DC.

Growing up I was interested in politics, math and science. Early in college, my interests included history, drama and philosophy. However, deeper into my freshman year, I developed a strong interest in philosophy, and that pretty much took over for me as my main interest in college and graduate school.

P&GJ: What led to your career in energy measurement?

Yoder: I came at this career indirectly. I started doing technical writing in 1980 at Wang Labs. In 1987, I got a job writing technical and training manuals for Siemens in Peabody, MA. This was my first introduction to the world of process control. The job ended when the Peabody division of Siemens closed and was consolidated into the main headquarters in Alpharetta, GA in 1990. At that point I was bored with technical writing and switched to market research.

I began working for a California company named MIRC that was later absorbed by Frost & Sullivan. After writing reports on a variety of topics for several years, I came to appreciate the importance of having some in-depth knowledge of the subjects being reported on. At this point, I settled on instrumentation,

and in 1993 I began researching the flow meter market. I have been mainly focused on flow meters since then, although I have also done work on the pressure and temperature markets.

My interest in sensors and flow meters was also influenced by my philosophical interests. I wrote my Ph.D. dissertation on the relationship between mind and body. I saw a relationship between electronic and mechanical sensors and the mind as a sensory system that perceives the world through the prism of the five senses. I thought that studying sensors might shed some light on the nature of the mind. I finally will get to explore this idea in a book I am writing with Dick Morley called *The Tao of Measurement: A Philosophical View of Flow and Sensors* (www.taofflow.com). This book discusses a variety of sensors and measurement tools, and attempts to develop a general theory of sensors. It then applies this theory to artificial intelligence and the mind as a sensory system. The book will be published by ISA.

P&GJ: How did your career path lead to your present position? Tell us about Flow Research and how it was established?

Yoder: In the early 1990s, I worked for a variety of market research companies, including Frost & Sullivan and Find/SVP. In 1996, I began working for Automation Research Corporation (ARC), mainly concentrating on flow and instrumentation topics. While I had been successful working for other companies over the years, I decided I would be happier working for myself. In 1998, I left ARC to start Flow Research. By coincidence, I was able to find an office on Water Street in Wakefield, MA where Flow Research is still today. For the first four years, I partnered with Ducker Research of Bloomfield Hills, MI. I began by writing several reports on temperature sensors and transmitters, and then began researching flow meters. Since 2000, most of my focus has been on the flow, pressure, and temperature markets.

P&GJ: What interested you about the energy industry?

Yoder: Probably my most direct involvement in the energy industry came about as a result of our starting up the Energy Monitor. In 2002, Flow Research initiated a quarterly

report service called the Worldflow Monitoring Service. This included the Market Barometer, a quarterly report on the flowmeter industry, and the Process Industry Monitor, a quarterly report on the process industries.

In 2005, we narrowed the focus of the Process Industry Monitor to the energy industries, and renamed it the Energy Monitor. The Energy Monitor covers the oil and gas, refining and power industries. Both the Market Barometer and the Energy Monitor are still being published today, as part of the Worldflow Monitoring Service.

Part of my interest in the energy industry comes from a fascination with the measurement tools used in this industry. It is also very interesting to chronicle the slow but inevitable switch of the industry from a reliance on oil and natural gas to new sources of energy, including wind, solar, biomass, geothermal and other sources of renewable energy. The recent run-up in the price of oil means that this transition is likely to occur a lot faster than many people thought.

P&GJ: How have you seen new technology affect this part of the business?

Yoder: I see new technology in the energy business mainly in terms of measurement and instrumentation. One change we have been able to document is the changeover from traditional flow meters, such as differential pressure, turbine, and positive displacement, to new-technology flow meters, especially ultrasonic and Coriolis. Increases in the price of oil and natural gas have made people willing to pay more for measurement and also put a premium on accuracy and reliability in measurement. The market is moving toward new-technology flow meters, which were introduced after 1950, at the rate of about 1% per year.

P&GJ: How have you seen the importance of energy measurement evolve in recent years?

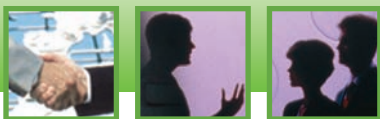
Yoder: The rise in the price of crude oil and the resulting increase in the price of gasoline has put the topic of the cost of energy front and center for anyone who drives a car or truck, especially in the United States. This is also having an impact internationally, although

Q&A

...continued on page 80

Q&A

Executive Profile



Yoder: I really enjoy going away for weekends and staying in hotels. I have been interested in following the weather most of my life and trying to understand the causes of different weather patterns. From time to time, I dabble in coin collecting. I still enjoy politics, and used to be very active in it, but haven't been for a number of years. This is mainly due to lack of time.

I still love philosophy, and love writing and reading philosophy. I love to write and find that writing is often a pathway to personal integration. One of my biggest challenges is to integrate the different aspects of my life, especially integrating my philosophical life with my market research life. The book I am writing gives me a real chance to do this.

I got married in 1992, but, in 2000, my wife Vicki and I went our separate ways. Being "single" again has its advantages, but has probably caused me to focus too much on my career and not enough on my personal life. My father passed away three years ago, but I am fortunate to still have my mother, who lives in Harrisonburg, VA. I have an older brother Stanley in Maryland and an older sister Judy in Indiana. We all try to get together several times a year. I also have a lot of talented relatives on my mother's side (Peachey) and also on my father's side of the family (Yoder).

P&GJ: During your travels, have you had any experiences that especially stand out?

Yoder: I have had many interesting expe-

riences during travel. In April 2003, I took a trip to Europe to visit many clients I had only known by phone for several years. After visiting Endress+Hauser in Reinach, Switzerland, I took the train to Rota Yokogawa in Germany. My next destination was Krohne in Dordrecht, The Netherlands. I enjoyed a nice lunch there, but stayed too long to catch the last train to Dordrecht at 3:30 pm. I found that flying to Amsterdam would cost 900 euros, and it didn't look like I'd be able to make the flight anyhow. So I took an all-night train. What I didn't count on was that the train would pull into a town near Dusseldorf at 1:30 am and stop. There would be no more train service till 5:45 am, and I had nowhere to stay. So I spent 135 euros on a cab to Dordrecht, arriving at my hotel (after being dropped off at the wrong hotel) a little after 5 a.m. I managed to wake up at 8:30 a.m. and was able to make it to Krohne an hour later. The rest of the trip was very interesting, but, fortunately, less dramatic.

I have taken many trips throughout the United States, mainly to visit clients and tour flowmeter facilities. I have done some pretty ill-advised things, like driving all night from Boston to Pennsylvania with no sleep to make a morning appointment, missing my flight to Europe, and spending 30 hours driving home from the Houston ISA show to Boston after being stranded in Houston on 9/11/2001. All in all, though, if I had a chance to live my life over, I'd probably do these things again — a boring life is barely worth living. And my life has been far from boring. *P&GJ*

CUSTOM Pipeline & REPRINTS Gas Journal

Use reprints to maximize your marketing initiatives and strengthen your brand's value.



Open Your Editorial Exposure

Being featured in Pipeline & Gas Journal offers your business the credibility of the Industry Authority.

For additional information please contact Foster Printing Service

at 866.879.9144

or sales@fosterprinting.com.

F O S T E R

PRINTING SERVICE



Find solutions that significantly reduce operating costs

Share ideas to increase productivity and safety.

See all the newest technology and the most effective products and services.

Earn CEUs.

MEA Member Rate: \$350
Non-Member Rate: \$625

Register before June 12 and receive a \$25 discount.
Contact: Stephanie Menning (651) 289-9600 x114

The 86th Annual Gas Operations Conference & the return of Fire School!

August 4 - 7, 2009 :: Iowa State University :: Ames, IA
www.midwestenergy.org



Pipeline & Gas Journal is the official publication of MEA's Annual Gas Operations Conference.