Vollum winners both have Aussie roots

Graeme Boyle and Val Garuts now have one more thing in commom: Both are winners of the Howard Vollum Award. The announcement and presentation was made by Jean Vollum at Tuesday's recognition dinner for Tek inventors.

The award continues Howard's ideals and legacy by recognizing individuals at Tek whose contributions clearly exemplify engineering excellence in Howard's traditon. The award consists of a commemorative sculpture, a check for $5,000, and a $25,000 capital equipment grant for Tek-owned equipment to be selected by the recipient.

Other similarities? Both came to Tek by way of Australia. Both got hooked on electronics at an early age. Both have developed technology for a broad range of current products. Both are Tek chief engineers. And both can give a strong argument as to why analog isn't dead, and why digital is usually the preferred choice when it will do the job.

Graeme was born in Australia. Val spent some years there after leaving his native Latvia for West Germany and before coming to Canada and the U.S. Both earned college degrees in Australia.

At age 12, Graeme assembled a crystal radio set that his mother bought him to occupy his time. Val, at age 13 in Australia, put together an oscilloscope from surplus parts. It worked, and he's still building scopes that work.

Both get ideas for their Tek projects away from the job: Val in his urban Beaverton environment; and Graeme on his rural acres near Yamhill, an area he finds fertile for both growing vegetables and stimulating ideas to bring back to his "drawing board" at Tek.

Graeme is considered one of the top people internationally in the field of electronic circuit simulation with computers, and is the force behind Tekspice, a circuit simulation program used within Tek (including Val).

Circuit simulation enables integrated circuit designers to know what a circuit will do before it's translated into an itsy-bitsy integrated circuit difficult to work with.

His nominator wrote: "The breadth of knowledge required for (what Graeme does) is enormous, and is beyond all but a few handfuls of people in the nation. . . . His work is primarily one level removed from product development, yet his work finds its way into almost every IC developed within the company. . . . Graeme is also a very patient teacher and spends as much time as is needed to make sure a concept is grasped. . . . Because of his work, models can be developed and simulated in hours instead of months."

Val works in the Solid State Research Lab where his specialty is high speed analog to digital conversion. He's currently working on device models and advanced circuit design for a new integrated circuit process. He says all the "fun" is in analog circuitry. He points out that in an IC with both analog and digital circuitry, 3/4 of the chip might be digital, but 80-90% of the design effort is likely to be in the analog portion.

His nominator wrote: "Val is recognized as the most talented analog circuit designer in the company, and he's routinely sought out by less experienced engineers for advice on difficult design problems. . . . He is sought out by our most influential customers . . . He responded with a major contribution to help another Tek organization meet the delivery needs of a major customer. . . I value his mentoring and leadership."

Some of Val's technical contributions:

- Developed concepts leading to the world's first general purpose waveform processing oscilloscioe (7854).
- Defined IC and display technologies for two performance flagship scopes (7904 and 7104).
- First demonstration of CRT readout, high efficiency power supplies and peak-to-peak auto triggering (5030).

Previous Vollum Award winners were Art Metz, Rod Bristol, Gene Andrews and Jack Sterett.

Bites from the Tektronix Recognition Dinner

March 19

Tom Long: Tek inventors have been granted 1,160 patents in the past 17 years, and 3/4 of those were issued in the past 6 years.

193 inventors were recognized at the dinner; of those, 78 were first time patent recipients.

Jerry Meyer: I knew Tek to be a technology-rich company. What has surprised and impressed me is the depth of that technology—more impressive than that of some companies 10 times Tek's size. A representative of AT&T Bell Labs, for example, told me they look up to Tek's technology. That technology is an asset we're relying on for our future.

New chief: Tad Yamaguchi (ICO) was announced as Tek's 13th chief engineer.

Special guests: Six students and a teacher from Grant High School's Science & Math Institute.

Offshore drilling risks: Underwater landslides, earthquakes, volcanic activity, waves over 100 feet high, and environmental impact (on flora and fauna) all need to be figured into the risk equation for determining advisability for oil drilling in a given site off Alaska. And then there's the human factor, which remains very elusive. That summation is from guest speaker Dwight Sangrey (president of the Oregon Graduate Institute of Science and Technology), who donned his old civil engineering hat for the occasion.