

Meadowlark Optics

Industry Entrepreneur Experience

Tom Baur



Prior Experience

- ◆ Farming and ranching
- ◆ Teaching 1 year
- ◆ Solar physicist – 13 years
- ◆ No Experience in a for profit manufacturing company

Founding

- ◆ 1979
- ◆ One product – Pockels cell
- ◆ Location – Spare bedroom
- ◆ Part time activity

Early Growth

- ◆ Full time – 1981
- ◆ Funding of \$100,000
- ◆ Moved to barn and chicken coop –1983
- ◆ No pay for 3 years
- ◆ 80 to 100 hours per week for me.

Filter Concept

Early Product Line

- ◆ Pockels cells
- ◆ Dichroic polarizers
- ◆ True zero order retarders
- ◆ Achromatic retarders

Product Line Growth

- ◆ Liquid crystal variable retarders
- ◆ Spatial light modulators
- ◆ Tunable bandpass and notch filters
- ◆ Polarimeters

Markets Served

- ◆ Research
- ◆ Semiconductor
- ◆ Telecom
- ◆ Medical diagnostic
- ◆ Military and Aerospace
- ◆ Displays

SBIR's

- ◆ 10 grants
- ◆ Total value of almost \$3 million
- ◆ Key supplement to internal funding for new product development

Application Examples

- ◆ Glaucoma detection
- ◆ Top Gun – F14
- ◆ Memory chip correction
- ◆ Submarine communication
- ◆ National Ignition Facility

The Technology Bubble

- ◆ Heavy order load for telecom
- ◆ Order backlog disappeared almost overnight
- ◆ Contraction from 45 to 25 people

Picture Today

- ◆ 20 employees
- ◆ Annual sales above \$2 million and growing
- ◆ Increased dependence on public sector orders
- ◆ 10% to 20% of orders for export
- ◆ Crushing paperwork burden

What I've Learned

- ◆ Niche product companies can bootstrap their way to success.
- ◆ It's exciting and a bunch of work!
- ◆ Hiring good people is everything.
- ◆ Growing and employing people is very satisfying.

Advice

- ◆ Decide if you have the drive and energy to do this.
- ◆ Respect the disciplines of business.
- ◆ Select an appropriate funding model but always be a penny pincher.
- ◆ Use SBIR's sparingly.