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.