

Appendix F

Companies Formed by SRI Alumni— with or without SRI Involvement

The listing below is intended simply to illustrate the propensity of SRI alumni to start companies, in some cases multiple times. The assertion is that SRI often becomes a good training ground for entrepreneurs. Since SRI has kept no account of such initiatives at SRI, the list is compiled from casual knowledge. The compilation, therefore, woefully underestimates the true number of companies created. To appear on the list an SRI person or alumnus has to be a principal in the founding of the company. In the preponderance of the more than 80 cases listed, SRI was not directly involved.

Often a person leaving SRI will form a one-person consulting arrangement. Because of the

Electro-Optical Systems (Abe Zarem, Emo Parro, James McCarthy) (~1955) (electrooptical shutter, aerial cameras, ion propulsion) (became **Xerox Electro-Optical** before 1967 and then sold to **Loral**)

Granger Associates (John Granger et al.) (1956) (communications, antennas, electrostatic dischargers for aircraft) (acquired by **Digital Switch Corporation**)

Fair, Isaac, and Co. (William Fair and Earl Isaac) (1956) (helps companies win new customers and new markets) (today, a worldwide company whose adaptive control software manages 85% of the world's credit cards and three-fourths of all U.S. mortgages; perhaps 1,000 employees)

Raychem (Paul Cook) (1957) (electrical insulation products, including ultimately shrink-wrap wire insulation) (purchased by **TYCO** in 1999 for \$2.9 billion)

Economic Research Associates or ERA (Harrison Price) (1958) (tourism and recreational market analysis, including Disney World and many other theme parks) (sold in 1969 to **Planning Research Corp.**)

Ridge Vineyards (Dave Bennion, Charlie Rosen, Hewitt Crane, Howie Zeidler) (1959)

sheer volume and difficulty in verifying such adventures, those cases are not included below. A number of companies have been started by SRI without SRI staff specifically joining the new company in the process. Among these are companies like Polyfuel, Artificial Muscle, Discern, and Cyance. That type of company formation is also not covered here.

As much as the sometimes-approximate dates will allow, the list is in chronological order. The format of each listing is:

Company Name (SRI staff member(s) involved) (founding date) (company purpose or product) (other information or ownership transfer if known)

(World-class cabernets and zinfandels by 1970s) (Sold to Japanese pharmaceutical owner A. Otsuka in 1986)

Explosives Technology Co. (Frank Burkdall, Ben Huber, Norm Zabel, Don Moore) (explosive products, including the guillotine cutters that separated the ascent from the descent vehicle in the first lunar departure) (sold to **Ducommun, Inc.** in 1971)

Telecommunications International or TCI (Bob Tanner and E.M.T. (Ted) Jones) (1961) (antennas)

Develco (Bud Rorden, Len Orsak) (~early 1960s) (general electronics systems)

Scientific Products, Inc. (Reid Anderson) (about 1964) (electronic products including a metronome)

Applied Communications Inc. (Bob Weitbrecht) (~1965) (early modems for the deaf community) (Bob received honorary doctorate of science from Gallaudet University in 1974; company now known as **Weitbrecht Communications**)

American Microsystems Inc. (Warren Wheeler, who left for Philco in 1959) (1966) (integrated circuit and semiconductor design and manufacture) (bought by **Gould** in 1982)

and exists today as AMI Semiconductor in Pocatello, ID)

Anderson-Jacobson (Reid Anderson, and John Van Geen as a consultant) (1967) (first major producer of acoustically coupled modems) (acquired by **CXR Telecom** in 1988, which is now called **Microtel International**)

Failure Analysis Associates (Bernard Ross, research physicist in NWRC) (1967) (scientific and technical analysis of failure modes and causes) (changed name to **Exponent** 1998 with broader consulting charter and now has 20 offices and 675 experts)

Finnigan Instruments (Robert Finnigan and William Fries) (1967) (smaller, cheaper gas chromatograph mass spectrometers) (now worldwide billion dollar company as **Thermo Finnigan** and **Thermo Electronics** building analytical equipment for drug testing, food production, and telecommunications)

Horner Associates (J. Kenneth Horner) (~1967) (computer-aided chemical design)

Systems Control Inc. or SCI (Phil Merritt, Jean Peschon, Robert Larson) (1968) (engineering systems)

Institute for the Future (Roy Amara and Andy Lipinsky) (1968) (futuring)

Computer Synectics, Inc. (David Jorgensen) (1969) (product unknown) (sold in 1973)

Verbatim (Reid Anderson) (1969) (data recording media, diskettes) (now subsidiary of **Mitsubishi Chemical**)

Center for Continuing Study of the California Economy (Robert Arnold and Stephen Levy) (1969) (long-term studies and forecasts of the California economy for the public and private sector) (a vital concern for over 30 years)

Telesensory Systems (Jim Bliss) (1970) (aids for the handicapped)

DataQuest (David Norman and Bill Coggshall) (1971) (market surveys/intelligence in technical field) (bought by **ACNielsen** in 1978 and later by **Gartner Group** in 1995)

Electroprint Corp. (Gerry Pressman) (~1971) (electronically controlled stencil screening system for placing images on cloth) (financed by Sun Chemical)

Tragon Corp. (Herb Stone and Joel Sidel) (1974) (started as sensory evaluation, including

taste testing; now expanded into broad business consulting for the food industry)

Decision Focus Inc. (Edward Cazalet and Warner North) (1976) (decision analysis-based planning and market analysis) (in 1997 merged with **Aeronomics**)

Systar (David Retz) (1977) (software applications for computer networking that served thousands of IBM mini- and mid-range computers)

Evergreen Engineering (Steve Johnson and George Eilers) (~1977) (product development, including medical instrumentation)

Katun Corporation (David Jorgensen) (1978) (office products, copier aftermarket) world's largest supplier of after-market copier parts with revenue of \$360 million in 2001; sold to **Banc of America Investors** and **Svoboda Collins Inc.** in 2002)

Harrison Price Co. (Harrison Price) (1978) ("dean of recreation economic consultants")

Machine Intelligence Corp. or MIC (Charlie Rosen, Earl Sacerdoti, and others) (~1978) (AI application to assembly-line work)

Symantec (Gary Hendrix) (1979) (started as an AI-based database query language/system called QandA. Now a large producer and distributor of utility software)

August Systems (Bob Wing, John Wensley, Maury Mills) (~1979) (fault-tolerant software)

Strategic Decisions Group (Carl Spetzler, Paul Skov, and James Matheson) (~1980) (decision analysis-based planning) (bought by **Navigent** then in 2000 returned to **SDG** via a management buyout)

Litigation Risk Analysis (Marc Victor) (~1980) (decision analysis application to risk estimation)

Communications Intelligence Corp. (Hew Crane, Earle Jones, John Ostrem, and Peter Edberg) (1981) (handwritten input to computers including Japanese and Chinese; led to Jot and e-signature verification)

Strategic Economic Decisions (Horace "Woody" Brock) (1981) (decision analysis and innovation strategies)

Kestrel Institute (Cordell Green) (1981) (logic programming and AI software)

BusinessLand (David Norman) (1982) (PC sales/service to enterprises) (one of the first companies in PC sales and in 6 years rose to the

world's largest supplier of computers with over \$1 billion sales/year)

E*TRADE (William Porter) (1982) (online, discount equity trading)

Mirage Systems (Phil Fialer, Larry Sweeney, and others) (~1982) (military stealth technology)

Microbot (John Hill) (~1982) (miniature robots for teaching) (sold to **UMI** about 1991)

Etak (Stan Honey, Walt Zavoli, Larry Sweeney, and others) (1983) (digital maps for car and other navigation systems) (now worldwide offices and called **Tele Atlas**)

Syntelligence (Peter Hart and Richard Duda) (~1983) (AI software applications)

Vista Research (Harold Guthart and others) (1984) (remote sensing and signal processing including leak detection and location)

Metapath (Bruce Hunt, Tom Lunzer, Harry Chesley, and Marilyn Pullen) (1984) (local area networking equipment)

Digideck (Connie T. Chittenden and Charles S. Weaver) (1986) (digital data compression for high fidelity recording and transmission) (dissolved in 1994)

CCS Associates (Caroline Sigman) (1985) (started in analysis and risk assessment of chemicals to the environment and now in drug development and toxicology)

The Beron Group (Bruce Beron) (1985) (decision analysis methodology and tools)

Kimball Resources (Dennis Rohan) (1985) (energy management and trading services)

ANSA Software (Rob Shostak and Richard Schwartz) (1985) (built **Paradox** ("2 SRI PhDs") commercial relational database software) (bought by **Borland Software Corp.** in 1989 who licensed it to **Corel** in 1996 where it is still part of their office suite)

Comware Int'l (David Retz) (1986) (Built gateways for IBM systems into the Internet. Now in sensing storage, and display systems)

Interop (Dan Lynch) (1986) (conference on Internet communications and enterprise equipment) (formed after Lynch had been at USC for nine years)

Australian Artificial Intelligence Institute or AAIL (Mike Georgeff and Graham Smith) (1987) (contract AI research in Australia)

Global Business Network (Peter Schwartz, Pierre Wack, and Jay Ogilvy) (1987) (futuring)

Global Internet Access Services (Dennis Rohan) (1987) (Internet service provider) (sold to **Verio** who sold it to **Nippon Telephone and Telegraph** in about 1996)

Litigation Risk Management Institute (Bruce Beron) (1988) (risk management and analysis)

TGV (Dave Kashstan and Ken Adelman) (~1988) (communications software and UNIX simulation software for VAX computers) (TGV stood for Two Guys and a Vax; Kashstan hired Craig Conway (former CEO of PeopleSoft) to head TGV and who sold it to **Cisco Systems** in 1996)

Teleos Research (Stan Rosenschein, Leslie Kaebbling, Marietta Elliott, and others) (~1989) (robotic systems and devices)

FX Development Group (Dennis Rohan) (1989) (terminals for foreign-exchange, bond, and energy trading; used in ~800 trading companies worldwide) (acquired by **Dow Jones and Company** in about 1991)

Innovation Research of California (Josh C. Abend and later Richard T. Knock) (1991) (software that helps organize and facilitate the creative and innovation process in organizations) (became **Innovation Engines** in 2000)

Health Industries Research Company (Tom Mader and Terry Maccarone) (1991) (market research for healthcare, pharmaceutical, and managed care industries with offices in CA, PA, NJ, and AZ)

Menlo Biomedical (John George, Frank von Richter, George von Haunalter, and later Horst Wolf) (1991) (global pharmaceutical and healthcare research and consulting with profiles on 450,000 public and private companies) (parts purchased by London-based **Isis Research** in 2000 and then by **Synovate Healthcare** in 2003)

Health Strategies Group (Tom Mader, Dee Miller Prince, and Jeff Larson) (1992) (research and consulting to the healthcare products industry with offices in CA and NJ)

Nuance Communications (Ron Croen, Hy Murveit, Peter Monaco, Mike Cohen, and others) (1994) (automatic speech recognition)

Cybercash (Dan Lynch) (1994) (online financial transactions) (acquired by **Verisign**)

Genetrace Systems (Chris Becker, others) (1994) (drug leads via genetic profiling)

Neural Systems Corp. (Connie T. Chittenden and Charles S. Weaver) (1994) (“trainable” digital logic slated to increase digital recording density and communications rates)

enVia (Mark Cummings) (1994) (a “meta-company” or venture capital-like firm that launches companies in the wireless world)

GWcom (Frank Kuo and Jeng-Sheng Huang) (1994) (two-way pagers, and cell-phone data services in China) (now two companies, **GWtech** and **Byair**, with 3 million customers and growing at 25% per year)

Global Internet Software (Dennis Rohan) (1995) (Windows NT network security software) (purchased in 1997 by **Cisco Systems** for \$40 million; product became basis for Cisco’s PIX firewall system)

Intuitive Surgical Devices (Gary Guthart, now vice president) (1995) (surgical telepresence)

Rooftop Communications (Dave Beyer, John Hight, Bic Nguyen, Thane Frivold, Darren Lancaster, and Jose Garcia-Luna Aceves, with Ed Kozel on the Board of directors) (1995) (fixed site wireless internet access a la packet radio) (sold to **Nokia** in 1999 for \$57 million)

Netiva Software (Rob Shostak) (1996) (scalable intranet database systems)

Cohesive Network Services (Dennis Rohan) (1996) (professional network engineering services) (bought by **Exodus Communications** in 1999 for \$100 million)

Ordinate (Jared Bernstein) (1996) (product for automatic measurement of quality of spoken language)

4C Technology (Yigal Blum, Sylvia Johnson, and Paul Hart) (1996) (silicon-based preceramic polymers) (failed in 1999)

SynVax (Armit Judd) (1996) (synthesis and testing of biologically active peptides and their analogs; based on patents obtained while at SRI; targets are antivirals for flu)

SecureSoft (Mark Moriconi, Olga Korobkov, others) (1997) (secure database access) (became **Crosslogix** in 1997, secured \$22 million in venture funding in 2000, purchased by **BEA Systems** in February 2003)

Pangene (David Zarleng) (1997) (anticancer and antiviral enzyme inhibitors, radio sensitizers)

AgIndustries (Sally Landels) (1998) (market, competitive, and strategic analyses for the crop

protection, agricultural biotechnology, and specialty fertilizer industries)

SportVision (Stan Honey) (1998) (television sport enhancements, including the glowing hockey puck and the virtual yellow first-down line in NFL games)

MobileSoft Technology (John Ostrem) (~1998) (China-based production of Linux-embedded operating systems in small and mobile devices)

DenseNet Corp. (Ravinder Kachru) (1998) (optical signal processing and switching)

SmartOrg (James Matheson and Don Creswell) (~1999 after a time at SDG above) (business development, R&D, and futuring)

DaVinci Healthcare Partners (Peter W. Davis, Roger Halualani, Pam Gutman, and Martha McDaniels) (1999) (healthcare markets, with focus on cancer care and related therapeutic areas)

Reactive Network Solutions (Livio Ricculi and Jagan Jagannathan) (2000) (security against network denial-of-service attacks)

Vocera Communications (Rob Shostak) (2000) (wireless communications systems)

Skypilot Network (Mark Rich, Bernie Yetso, and others) (2000) (wireless network Internet access)

China Mobilesoft (John Ostrem) (2000) (software for the mobile telephone and wireless device manufacturers for use in China) (successful products in telephones and wireless devices from 20 different vendors)

CONSULT it (members of SRI’s Zürich office) (2001) (consulting in biotechnology, healthcare, pharmaceuticals, and chemicals, as well as venture capital)

Wireless Security Corp. (Dennis Rohan) (2001) (WiFi security systems)

Alterego (Saurav Chatterjee) (2001) (software engine tailoring Web page content to mall network terminals and devices) (acquired by Macromedia in 2002)

Packethop (Ambatipudi Sastri and Michael Brown) (2003) (packet routing systems for wireless networks)

Firetide, Inc. (Keith Klemba) (2003) (Network gear for low cost, rapidly deployable Wi-Fi service, used rights purchased from SRI)