

James R. Olsen
(406) 360-1915
Detailed Resumé

S U M M A R Y

Jim has a wide range of interests and skills. He has characterized by the director of the local development authority as a serial entrepreneur. He is one of the few people that can say he has led a defense program with substantial software content, delivered on-time, on-budget, as originally bid. He also brings a passion for community service.

BUSINESS OWNER AND ENTREPRENEUR.

Jim Olsen owns and manages Breaking Wave Enterprises, dba Breaking Wave Publishing. Wrote and published *I Ching of a Thousand Doors*.

Jim Olsen owned and managed Human Interactive Products, dedicated to both profit and social good.

- Program Management and System Engineering for large engineering systems. This included training Bitterrooters in proposal and data management to deploy to sites nationwide.
- Native Plant Restoration and Nursery (Trade Name: Great Bear Restoration),
- Commercial Real Estate and Management,
- Business Planning and Market Research Consulting,
- Consumer Software and Electronics for license,
- Competitive Strategy and Proposal Manager of pursuits large and small.

The company has created or been instrumental in development of projects for social good.

- Emma's House, a home setting for interviews with Child Victims of Crime,
- Hamilton Performing Arts Series.
- Community Based Mental Health Crisis Center.
- Bison Internet Café, a place for people with mental illness to integrate with the community.

DEFENSE PROGRAMS. Over thirty years of leading large engineering development programs for defense, air traffic control, and homeland defense, beginning as a military officer in the US Air Force, followed by a career at Raytheon Company. He was considered one of the best program managers.

- Programs ranged from ground, ground-mobile, sea, air, and space platforms.
- Mission systems ranged from radar, remote imaging, multi-int, communication, command and control, integrated fleet defense, and precision landing.
- The programs involved multi-company and multiple division teams with Jim developing strategic relationships, contract relationships, and management relationships.

SOCIAL AND ENVIRONMENTAL ADVOCATE. Jim has been engaged in environmental and social advocacy, helping build organizations, been a spokesperson, and built coalitions.

- Effective Response to Domestic and Child Abuse.
- Community Based Response to Mental Health Crises.
- Farmers Market and local food systems
- Forest and Wildlands • Highways and Community Planning • Biosafety.

CURRENT ACTIVITIES – BREAKING WAVE PUBLISHING

Jim has written two popular books.

Jim laid out and published *I Ching of the Thousand Doors*, after his literary agent suffered a near miss landing a contract with a major publisher who “loved” the book but could not justify a contract with a new author. The book involves a correlative discussion of the *I Ching* (also known by the pinyin title: *Yijing - The Book of Changes*) including its relationship with major religions, language and translation, Chinese history, religious history, language, psychology, and science.

The other, working with a coauthor, was *Pearl Harbor’s Final Warning*. The book is a well-researched creative non-fiction history of the events leading up to the attack on Pearl Harbor and the Pacific War, with real American and Japanese civilians and military experiencing Total War – this is in a major revision based on a review from the Naval Institute Press.

P R O F E S S I O N A L E X P E R I E N C E

Human Interactive Products, Inc.

Jan 2000 – Jan 2018

Jim organized the company around Profit Centers within the company, each with a manager and with the bookkeeping system organizes costs and income that can be allocated to each Profit Center. The company grew to a \$5 million a year company while engaged in Consulting Services.

Certifications, Licenses, and Selected Standards

*United State Classified Facilities Clearance DOD, Defense Counterintelligence and Security Agency
(Submit applicants for security clearances and send clearance certification to other facilities for our staff)*

United Kingdom Official Secrets Act –Restricted Data Storage and Handling Facility

Munitions Export License – US Dept of State, Defense Trade Controls (security intellectual property export to UK)

Department of Health and Human Services Accounting Standards • HIPAA – (Bison Café)

Certified Kitchen • Caterers License

Agriculture Nursery License • DOT Vehicle and Driver Certification (Great Bear Restoration)

REAL VENTURES

2006-2017

Three properties were purchased and two upgraded – they have all been sold in the last few years.

- Hamilton Carriage House is a historic building that the company renovated and updated for use by the company and tenants. Was the first venue for the Bitterroot College before they outgrew the space.
- Emma’s House is a home setting for forensic interviews with child victims of crime and is leased to Emma’s House Childrens Advocacy Center. Jim worked with the organization that would become Emma’s House to find a suitable property. He found an investor to share the costs and build to suit. They have since bought the Hamilton Carriage House.
- Residential Rental. Was purchased for rental to a residential tenant.

Great Bear Restoration and Great Bear Natives

2006-2018

Great Bear Restoration was formed as a native plant wholesale nursery and restoration service Profit Center in 2006 and serves a geographic area in the intermountain West from the Canadian border to Northern Arizona. The Profit Center expanded to create and expand native plants sales in retail nurseries in Montana, Idaho, and Utah. After a major staff change in 2011, Jim took over as Operations Manager, making the business more cost-effective as the industry contracted through 2014. The operation was sold in early 2018.

CONSULTING SERVICES

DEFENSE SYSTEMS – ENGINEERING, PROGRAM, AND PROPOSAL MANAGEMENT

2001-2010

Jim developed a team of engineers from around the country and non-engineers from the Bitterroot Valley to participate in defense programs — a training program for proposal management, proposal writing, and data management for local recruits — those who passed muster were deployed on jobs throughout the country integrated into a multi-company team — pay ranged from \$35 to \$65 per hour for non-engineers and over \$100 for engineering positions — and deployed to the programs below.

The company developed a fast-response deployment system — deploy staff to a customer site within 48 hours, including apartment and condo rentals for longer deployments — setting up a proposal center in the customer’s location if needed — at locations throughout the United States and the United Kingdom.

Foreign Sales. Jim led teams deployed to support foreign sales of airborne Intelligence, Surveillance, and Reconnaissance (ISR) systems to foreign countries including countries in North Africa, India, and Jamaica.

Airborne Standoff-Off Radar (ASTOR)/Sentinel R1 Aircraft - This system includes five Bombardier aircraft fitted with a synthetic aperture radar, on-board intelligence analysis and operations center, and line of site and sat-com, along with defensive aides. ASTOR also includes a ground segment of ground mobile operations centers, a realistic training center, and all required logistics, documentation, and certifications (a complete system which is common for the systems discussed below). “One of the aircraft can fly over Kalispell and watch us drive on the streets of Hamilton in real time as well as create image streets and buildings.” It contains one million lines of software. The United Kingdom has operated the system in Afghanistan, Iraq, and Libya.

Jim was recruited by a Raytheon Segment President who opened the conversation with “I have a \$6 billion job for a \$4.5 billion fixed priced contract. Ratified by the CEO, Jim got to work figuring out how to fix the failing program that was in the midst of system integration — a multi-company, multi-division team with operations in Texas, California, Arizona, and the United Kingdom.

He worked with the Raytheon Program Manager to reorganize the program. He reworked the schedule and Integrated Management Plan to create the roadmap for completing the program. Acting as Raytheon’s agent, Jim renegotiated the major subcontracts so that their terms and conditions were aligned with the needs of the job. He participated and helped develop strategies for United Kingdom Ministry of Defence (MoD) renegotiations, sometimes acting as Raytheon’s agent.

Jim also worked to fix engineering management. He organized a requirements management process and served as the interim Raytheon System Engineering Integration and Test Manager while they were looking for an internal candidate for the job.

Jim fixed the software management, repairing broken company-to-company and Raytheon-to-UK MoD relationships.

As the system neared deployment Jim was put in charge of production of a sales video for the Farnborough Air Show.

Airborne Standoff-Off Radar (ASTOR) Security and Accreditation Subcontract

Jim negotiated a fixed-priced multimillion-dollar subcontract with Raytheon for his company to perform the Security Accreditation in accordance with MoD requirements. It was implemented with profit sharing arrangement with the staff and executed under budget. He used the metrics based Earned Value Management to good effect.

Mobile User Objective System (MUOS) Concept Definition contract and Development Pursuit - Jim was both the Proposal Manager and Demonstration Manager during the concept definition contract and follow-on proposal for the development program. Raytheon was in a “come from behind” position never having been prime contractor for a satellite system, although the company had been a payload subcontractor. Jim helped drive the Integrated Management Plan and key system architecture issues as well as strategies to drive down technical risk.

He proposed a multimedia hardware-in-the-loop demonstration to Raytheon and led the effort. He developed a story-telling approach of presenting the hardware demonstration in the context of multimedia vignettes. One of the customer’s called it, “The best demo I’ve ever seen.”

Aegis Combat System Target Data Fusion – Jim led a proposal for the development of advanced target data fusion from multiple sensors on multiple platforms.

MILSTAR Terminal Upgrades – Jim provided senior strategy support and authorship for both an Air Force and Navy upgrade of MILSTAR terminals. The Navy upgrade was won and is complete. Also, consulted on a B-2 upgrade of its satcom radome.

Cobra Judy Upgrade – Jim provided win strategy support and integration strategy for the Cobra Judy Upgrade Program. This was ordered sole source and was deployed in 2014.

Army Mobile Command Center – Jim supported the strategy and planning for a mobile command center.

Joint Tactical Radio System (JTRS) – Ground – Jim provided win strategy support and integration strategy for a JTRS proposal as well as the Executive Summary and other parts of the proposal.

LOCAL – “DOUBLE BOTTOM LINE”

2004-2017

Lightfoot Cycles – Worked with owners to develop product strategy, sales strategy. Provided microloan.

Ravalli County Economic Development Authority – Contracted to write the business plan of the Ravalli County Entrepreneurship Center. As part of the contract, attended a conference on Entrepreneurship Center development. The business plan included an economic survey using demographic data and interviews.

Bitterroot Star – Worked with the owners to expand coverage, go to a free newspaper. Provided addition reporter and support, microloan and investment.

Trapper Peak Forge – Worked with owners to develop a sales plan. Provided small investment.

Mississippi Home Again – Provided funding for an effective on-the-ground group that provided community-to-community Katrina Relief from the Bitterroot to Biloxi, Mississippi.

West House Mental Health Crisis Center – Worked with a Clinical Social Worker. Jim worked on behalf of the Sheriff and the people Jim met at peer meetings of people recovering from mental illness. He engaged in research and conversations to understand the police, justice system, mental health therapists, case workers, and people’s experience with mental health and their experience with the justice and mental health systems.

Jim created a business plan for the development and operation of a local crisis center showing both the costs and impact on police and people with mental illness. The plan was based on a model Jim developed for taking the statistics of county attorney mental health crises events to determine the number of beds required. Presented the plan to a joint meeting of the County Commissioners and a representative of the

Montana Dept. of Public Health and Human Services, who said, “You guys get it.” The county got a grant; Jim suggested a committee to develop an inter-agency process for dealing with a mental health crisis and served on the committee; the facility was built.

Hamilton Performing Arts Series

2009

Jim worked with the Hamilton School District to take over production for the Hamilton Performing Arts Series when the district was going to terminate the series because it was losing money. The company underwrote and produced the series for one season and then turned it over to a non-profit. Grammy-award winning performers are still coming to the Bitterroot Valley for a performance as well as sessions with school children.

BISON INTERNET CAFÉ

2010-2011

Teamed with a Mental Health professional and non-profit to implement a place where people recovering from mental illness could safely interact with the community. It was supported by a grant from the Montana Department of Public Health and Human Services – which required by special accounting standards and HIPAA compliance for mental health peers/customers. The model included hiring people recovering from mental illness as staff.

LOCAL FOOD SYSTEMS

2009-2011

Created an informal working group to explore year-round growing systems. Implemented a project to test the feasibility of a locally-sourced coffee/sandwich concession serving the Bitterroot College when it was collocated at the RCEDA building.

Raytheon Company – Engineering, Program Management, Director
Lexington, MA

Jun 1982 to Jan 2000

BUSINESS DEVELOPMENT AND ON-GOING PROGRAM SUPPORT (HALF TIME).

1993 to 2000

Developed win strategies; conducted teaming negotiations; led proposal teams, demonstrations, senior management review teams; and proposal authoring for several new business opportunities. Programs included Joint Precision Approach Landing System (JPALS), National Aerospace Simulation and Modeling (NASM), Joint National Test Facility, Patriot upgrades, Battlefield Adaptive Data Distribution, Air Force worldwide logistics management, PRISM (Command and Control Rapid Prototyping), and the National Missile Defense System.

Consulted on computer architecture SIVAM (Environmental Monitoring and Expert System for Amazon Basin). Developed a movie concept and script for Ballistic Missile Defense for Taiwan.

Led and participated in recovery initiatives for active programs experiencing schedule, cost, and performance problems. These include CAATS (Air Traffic Route Planning) and MK57 (Navy Ship Defense).

Led the development of updated system engineering processes, including Object Oriented System Engineering and Raytheon’s first soft-real-time geographically distributed simulation system, design concepts for embedded instrumentation of real-time software, and the principals of large-scale system integration laboratories and simulators.

Demonstrated internet-based video communication (pre-skype) with a dissertation on how to improve distributed team effectiveness by matching the communications method with the communication purpose (from email to face-to-face).

Ballistic Missile Defense (BMD) Program Manager.

1992 to 1993

Led the BMD Operations Assessment (OA) proposal and the first half of the Concept Definition contract. Led an integrated multi-divisional Raytheon organization teamed with

Loral, Rockwell, and others. Developed Object Oriented processes and tools suitable for Ballistic Missile Defense C4I and a concept for distributed real-time simulation. Other programs in Raytheon adopted many of the processes developed by this program.

DIRECTOR, DATA ACQUISITION DIRECTORATE.

1991 to 1992

Led a \$500 million per year profit center. Programs included Ground Based Radar (GBR), Patriot Antennas, Iridium (a commercial satellite communications net) Antennas, large phased array radars and several technology programs. Guided program managers and resolved performance, cost and schedule issues. Developed business opportunities in military systems integration, Command and Control, and software markets.

Cobra Dane Upgrade PROGRAM MANAGER.

1989 to 1991

Led teaming, proposal, and execution of the Cobra Dane program. Cobra Dane was delivered ahead of schedule and exceeded profit goals. Also served on several red teams and proposals including Ballistic Missile Defense Ground Based Radar, MILSTAR Satellite Communications, Displays Product Line. The Cobra Dane upgrade was the first large real-time Ada program. Developed contract structure, business relationships, and management structure for a closely integrated team from six contractors. The system was delivered to Shemya Island at the end of the Aleutian chain.

RAMP Test Director (Air Traffic Control).

1988 to 1989

Led integration and testing for the Air Traffic Control radar system for Canada. Turned a failing integration and test program into a success.

BMEWS Deputy Program Manager, Test Director, Site Manager.

1986 to 1988

Led the integration and test of the Ballistic Missile Early Warning System (BMEWS) radar and managed the site in Thule, Greenland. Recovered much of the schedule slip caused by delayed software by integrating the system and incremental software releases in parallel software completion. Within 60 days from being assigned to this job, we moved the entire electronics, computers, people, and logistics system to Thule Greenland, installed it and tracked our first live target in ten days from pulling the plug in New England.

This project was caught up in strategic arms negotiations – the job including “to get operational before it is traded away.” Greenland is a home-rule protectorate of Denmark. The surprise came when a Danish Admiral arrived to show me and the commanding officers clippings of large scale protests in Copenhagen and the fall of the Greenland Government due to the controversy of my project – I had no idea. The claim was that it was part of a Anti-ballistic Missile (ABM) system, a violation of a treaty, which it was not.

The Base Commander and Squadron Commander wanted to hide behind a wall of secrecy. Remembering Cobra Judy (see below), I took to the Admiral aside and said I would arrange for representative of the Greenland and Danish governments to tour the site (the unclassified portions). The tour happened – the controversy died a quietly.

Relocatable Over The Horizon Radar (ROTHR) Data Processing Mng. *1984 to 1986*

Led the Data Processor and software development effort for ROTHR. ROTHR advanced Over The Horizon algorithms to a reliable operational capability. ROTHR now provides coverage for the entire Caribbean and northern South America for drug interdiction.

National Missile Defense (SENTRY and GPALS) Data Processing Mng. *1982 to 1984*

Responsible for \$40 million software subcontract and oversight of militarized computer development.

United States Air Force, Captain

Jan 1970 to May 1982

Wishing to continue my career as a Program Manager, I resigned my commission when selected for Major along with a Pentagon assignment. Accepted one of several offers from industry.

*Meritorious Service Medal • Air Force Commendation Medal • National Defense Service Medal
Air Force Outstanding Unit Award w/Oak Leaf Cluster • Air Force Excellence Award
Air Force Systems Command Program of the Year Award
Small Arms Expert Marksmanship*

Air Force Systems Command

Cobra Judy DEPUTY PROGRAM MANAGER (SHIPBORNE INTEL. DATA COLLECTION) 1977 to 1982

This strategic technical intelligence data gathering program included a tracking and imaging radar aboard a ship which had been decommissioned, the *USS Observation Island*. Developed software acquisition strategy, coordinated system requirements between the intelligence community and Army Ballistic Missile Defense Command. Also put in charge of the ship overhaul program and leading the test program. Cost of change orders was under 2%; went operational ahead of schedule.

This program occurred while the public was questioning the impact of radio waves on human health — the book, *The Zapping of America*, was making the rounds. The Pave Paws radar being at Cape Cod was already the subject of controversy, with frequent press. After finishing the overhaul in Baltimore and completing sea trials, we sailed her to the shipyard in Boston Harbor — within sight of downtown Boston. The *Boston Globe* dubbed it a “spy ship” the next day.

When we had prepared the Environmental Impact Statement (EIS) for Cobra Judy, we committed to only testing the radar at sea — which greatly mitigated the public hazard. However, as I was in the midst of coordinating the test program with the various intelligence agency customers, negotiating ship work requests, and planning operational test and initial deployment to Kwajalein and the North Pacific, my boss added the task of helping with public interactions. I gave several tours a week to various public groups when the ship was in port — forestalling a controversy.

During this assignment I had the additional duty of leading the startup of an Airborne Telemetry program as Source Selection Evaluation Board Chair and Acting Program Manager. Also, developed software acquisition strategies for assuring software stability and reuse that were adopted throughout the command; served on several source selection panels for other programs.

FOURTEENTH AIR FORCE (NOW PART OF SPACE COMMAND)

Cobra Dane 14TH AIR FORCE TEST TEAM (INTELLIGENCE LONG RANGE SENSOR) 1975 to 1976

Member of the user test and operational transition team for Cobra Dane. Wrote some of the post-processing software and designed and conducted live operational tests. When a contract to rewrite the software fell severely behind, Jim organized a schedule review, the results of which was presented and accepted. The program went operational in accordance with the schedule.

AN/FPS-85 SOFTWARE AND SYSTEMS (SPACETRACK, MISSILE EARLY WARNING) 1970 to 1975

Maintained operational real-time software and performed operational readiness and systems level hardware and software diagnostic analysis. Work included programming, software design, system engineering and modeling, test design, and designing and collecting metrics that help pinpoint sophisticated problems and failure modes. Work included a queuing model of new waveforms and test design that used satellites to simulate the behavior of ballistic missiles.

When a contract to rewrite the software fell severely behind, Jim organized a schedule review which was presented up the chain of command and accepted. The program went operational in accordance with the schedule.

Non Professional Work

1963 to 1969

Paid for College and lived on the economy, while taking a full engineering load at college

KIRBY COMPANY – Full time

1969

Door to door sales. Promoted to Field Supervisor of five salesman.

VALLEY LUMBER– Full time.

1968-1969

Truck driver, forklift, retail and wholesale sales, and minor woodshop work.

RESIDENTIAL FENCES AND HOUSE PAINTING – ¾ time.

1967-1968

Partnership with a retired Navy Chief Petty Officer. Planned, estimated, and built residential fences. Also, one painting contract. Had one part time employee.

UNION 67 GAS STATION ATTENDANT

1968

Also, worked briefly as a painter's helper. Later contracted to paint a store.

LIPKIN'S LUMBER– ¾ - full time.

1966-1969

Truck driver, forklift, retail and wholesale sales, lumber grading, and woodshop.

NAVAL AIR STATION COMMISSARY – ½- ¾ time.

1963-1965

Grocery bagger.

Also worked as fry cook and server in a Dairy Queen and hiring-hall day-labor.

C O M M E R C I A L P R O D U C T D E V E L O P M E N T

Help Yourself To Natural Health

1995 to 1997

Organized 20 authors and professionals to create a multi-media, comprehensive reference, focused on naturopathic medical practices, but including orthodox medicine. This was not licensed due to the market shifting to the Internet.

Letter Drop

1990 to 1995

Developed a word game. Licensed to Centron Software and on the consumer market for three years.

Bridge (the card game) Scoring Calculator (Patent 4130871)

1977 to 1984

Developed a microprocessor based calculator that keeps score for bridge. Endorsed by Charles Goren (a leading bridge expert) and licensed to Tri Sigma. It was on the consumer market for five years.

C O M M U N I T Y S E R V I C E

President, Board of Directors, Bitterroot School of Music (2015 - 2018)

Governing support for organization founded by Jenn Adams.

Member, Board of Directors, Hamilton Farmers Market (2009-2012, 2017 to present)

A farmers and artist cooperative. Key contributions were to help stabilize governance issues and dealing with conflicts at the market.

Vice Chair, Board of Directors, Supporters of an Abuse Free Environment (S.A.F.E.) (1996-2000)

Was the first male to be asked to be on the Board of Directors, which at the time, was a significant step for the organization. Key contribution was organizational development and staff, initial personnel policies, and financial processes. Initiated the idea that services target direct to child abuse was needed, which the staff carried forward with grants for what is now Emma's House. Also, helped develop community outreach concepts. SAFE has grown in both staff and

effectiveness in community outreach, interaction with all parts of the local justice systems, and conflict resolution education in the schools.

President, Friends of the Bitterroot (1994-1999)

Friends of the Bitterroot is a grass roots conservation organization. The group is one of the most successful forest watch and wilderness advocate grass roots groups in the country.

Jim helped sustain this effort and moved the group into broader community involvement in weed control, toxins, transportation and land use. Also, worked to increase the level of collaboration and joint projects with other groups and press-work to move the perception of the group from being perceived by too many as “radical” to, at least in the words of one local Republican legislator, to “part of the community.”

Board of Directors, Citizens for a Safe Lab

This included extensive organizing, building a collation of three advocacy groups, press work, and research into Biolab Safety regarding a planned expansion of Rocky Mountain Laboratories (RML). The expansion was for the highest level, Biosafety Level 4 (BSL-4). The project was initiated and controlled by their parent organization, the National Institute for Allergies and Infectious Diseases (NIAID), headed by Dr. Fauci, located in Bethesda, Maryland.

The advocacy campaign had a successful outcome — an agreement that included several biosafety improvements and contingency facilities, that created a formal relationship between the lab and community health boards and the medical community, and provided visibility into biosafety. The agreement included appointment of a citizen advocate from the advocacy groups to membership in the biosafety committee.

Board of Directors, Highway 93 Citizens Coalition for Responsible Planning (1999-2000)

Was involved in, and was often the spokesman for, a grassroots group that advocated alternatives to the expansion of Highway 93 in Ravalli County to a four-lane highway and improve the safety of the planned expansion. While the four-lane highway was built, the groups’ efforts led to empowered citizens groups who had a significance influence on the design of the highway in Lolo, Florence, Stevensville-Y, and Victor, increasing safety and aesthetics. It also lead to the expansion of the project to include a north valley bike path.

Member, Executive Committee, Montana CHEER (1998-1999)

Helped develop organization that successfully improved the pollution controls related to Stone Container in Missoula and deals with other toxins issues and regulations.

Boy Scouts of America, Eagle Scout, Adult Leader

Taught *Computer Science*, Orange College and *Effective Grass Roots Activism*, Bitterroot College.

Served briefly on Boards of Bitterroot Ecological Awareness Resource, Bitterrooters for Planning, and Big Brothers Big Sisters of Ravalli Country (which was trying unsuccessfully to get a local chapter) for brief periods to help get the organizations through a transition period.

G O V E R N M E N T A P P I O N T M E N T S

Highway 93 Citizen’s Advisory Committee (No longer active – project complete)
Rocky Mountain Laboratories Advisory Committee (No longer active)
City of Hamilton Impact Fee Advisory Committee (No longer active – project complete)
City of Hamilton Equal Opportunity Advisor (No longer active)
Mental Health Crisis Center Advisory Committee (No longer active – Project Complete)

P O L I T I C A L A C T I V I T I E S

Member, Democratic Central Committee – Late 1990s to 2002, 2015-2016
Local Legislative Candidate 2000 and 2017
Delegate to Montana State Convention 2001 and 2015
State Democratic Executive Committee (elected by convention) 2001-2002
Kicking Mule Political Action Committee (PAC) including cofounding the “Yellow T-Shirt” campaign for Senator Tester first run for U.S. Senate. (No longer active)

E D U C A T I O N

University of Florida

GAINSVILLE, FL. MS INDUSTRIAL AND SYSTEMS ENGINEERING 1975

This degree incorporated Operations Research. A focus in my curriculum was modeling systems that included human activities and the schedule theory.

University of California at Berkeley

BERKELEY, CA. BS ELECTRICAL ENGINEERING AND COMPUTER SCIENCE 1969

Other Education

CONSERVATION ACTIVIST TRAINING (BY INITIATION, SPONSORED BY PATAGONIA) 1996

Included press and investigative journalism and board development.

ADVANCED MANAGEMENT PROGRAM, HARBIDGE HOUSE (RAYTHEON SPONSORED) 1988

This course included seminars on finance, union relations, project management. Students selected for this course were candidates for upper management.

PROGRAM MANAGEMENT & TOTAL QUALITY MANAGEMENT (RAYTHEON SPONSORED) 1983

US AIR FORCE – SQUADRON OFFICERS SCHOOL – 3 MONTH COURSE) 1975

Besides military science, the military is one of the few institutions which teaches leadership (as opposed to management) as a subject. Course work included practical leadership exercises, including Project X, the empowerment leadership model and informal leadership.

SPACE OPERATIONS OFFICER & SYSTEM MAINTENANCE ANALYST 1970

SELF EDUCATED USING COLLEGE LEVEL TEXTBOOKS:

Federal Acquisition Regulations (FARs), Uniform Commercial Code, Contract law, Human and Artificial Perception, Theory and History of Non-Violent Activism, Comparative Religion and Religious History, Social/Economic Organization and Propaganda for Total War associated with WW II for Japan, the United States, and Germany.