

Joel D. Silverstein

3081 Star Drive
Lake Havasu City, AZ 86406
Voice 928-230-3680 Fax 928-266-9360
joel@joelsilverstein.com

PERSONAL PROFILE

Age 61 in excellent health, with valid U.S. Passport. For more than three decades has owned and operated multiple companies as well as consulted with others. A multifaceted individual, capable of engagement for strategic projects within various industries, undersea, technology, and public, and corporate education.

AREAS OF EXPERTISE

- Education Design • Interactive Learning Development • E-Learning • Scientific Research
- Lesson Plan and Development • Collaborative Team Building • Project Management
- Strategic Planning • Expedition Planning • Research • Client Relations • Concept Development
- Dive Operations • Social Media • Training • Film Production • Photography • Equipment Design
 - Decompression Analysis • Accident Analysis • Subject Matter Expert
 - Forensic Analysis & Opinion • Market Analysis • Marine Coordination
 - Water Safety Management • Feature Film and Documentary Support

TEACHING CAREER

2016-present High School Teacher / Instructor – Lake Havasu High School Lake Havasu Unified School District – Lake Havasu City, AZ

A dedicated High School Science teacher who brings three decades of undersea exploration and diving sciences, and decades of publishing and public speaking experience to the classroom by encouraging creativity and exploration in each student. Adept in relaying complicated scientific theories and engaging students in scientific discussions while developing strong trusting bonds with both students and parents. Specializing in biology, chemistry, and physical science. Proficient in educational design and lesson planning, for direct, and synchronous / asynchronous teaching methodology. Familiar with Arizona Education Standards and Next Generation Science Standards.

- Exceptional presentation and communication skills in and out of the classroom.
- Able to create important bonds of trust with students.
- Dedicated teacher who invests time with students both before and after school.
- Coordination with administration and counselors to develop positive trusting relationships with students who have special needs under 504/IEP programs.

- Responsible for creating engaging lesson plans based upon approved curriculum. Coordination with other science teachers to develop comprehensive testing and evaluation materials and methods.
- Coordination with other department disciplines for cross curricular integration.
- Fully integrated with multiple software systems including:
 - Microsoft, Google Suites, Adobe, Synergy, Galileo
- Exceptional utilization of Learning Management Systems for in-classroom sessions and distance learning pedagogy by ensuring the use of technology for students is:
 - Routine and transparent
 - Synchronous and Asynchronous
 - Accessible and readily available for the task at hand
 - Supports curricular goals to help students effectively reach their goals

• EDUCATION

- 2013-2016 **Communication, BA** Arizona State University, Summa Cum Laude, Deans List, New College of Interdisciplinary Arts and Sciences – Emphasis on the application of communication theories and concepts to social media, critical analysis reports, position papers, and crisis/conflict resolutions. Other areas include crafting and shaping messages for effective communication for interpersonal, cultural, public, educational and business situations.
- 1976-1978 **Fine Arts, A.S.** City University of New York, Kingsborough Concentration in Photography with emphasis on advertising, commercial, industrial, and portrait image making.

DIVING – EXPEDITION AND EDUCATION CAREER ACTIVITIES

2012-present **Vice President - Sea Wonders LLC**

Research and Development company concentrating on dive and marine / boating safety, analysis, and development of educational materials. Responsible for creation of concepts and production of educational solutions to industry specific issues. Technology includes learning management systems utilizing adaptive eLearning environments. Video learning systems and script development.

2003-present **Vice President - Scuba Training and Technology Inc. with Tech Diving Limited / Movie Divers**

Responsibilities include corporate operations, product development, evaluation, authoring of sales and marketing materials, training programs and texts. Other responsibilities include management and selection of equipment wholesale, retail, and on-line sales channels. Responsible for operations of underwater projects including motion pictures, television, documentaries, research and private expeditions. Marine and Water Safety coordination.

- 2003-2005** **Regional Manager-** International Training Inc. Topsham, ME
 Scuba Diving International & Tech Diving International
 Responsibilities include Sales and Training of fifty Southwest and Western regional dive centers and over 600 instructors. Coordinate and implement instructor training seminars, develop learning management systems and educational materials.
- 2000–2003** **Vice President Sales & Marketing, Abyss Dive Systems, Boulder, CO**
 Responsibilities include sales and marketing of high-technology diving equipment to over 550 retail outlets in the USA. Responsibilities include product development, evaluation, authoring of sales and marketing materials. Responsible for capital acquisitions and growing company from a \$300k annual revenue to revenue of \$2.2million with 1,050 products serving customers worldwide. Implemented a direct to the consumer e-commerce distribution system.
- 1996-Present** **Key Note Educator – International Society of Aquatic Medicine – Wilmington, NC**
 Responsible for CME (Continuing Medical Education) of the society’s physicians in diving medicine, aquatic injury, decompression illness, physics and physiology as it applies to diving medicine. More than 2,200 hours of didactic instruction.
- 1997- 2000** **Vice President Operations, Scuba Training & Technology Co. Bridgeport, CT.** Responsibilities include designing, presenting, and marketing technical diving education programs.
- 1994-1997** **Executive Director, Extended Range Diving Organization, Inc. 501(c3) a/d/b/a City Island Hyperbaric Chamber. City, Island, NY.**
 Created and operated a 24/7 diver emergency multi-place hyperbaric chamber. Coordinate staff of 24 technicians, nurses, EMTs, DMTs, and physicians.
- 1991-1997** **Publisher, Editor, SUB AQUA magazine.** 25,000 circulation publication focusing on international diving technology, undersea technology, science and shipwreck exploration.

Feature Films

- 2010** **Dive Operations Supervisor** - Shark Night 3D motion picture. Incentive Filmed Entertainment. Shreveport, LA. (David Ellis, Director)
 Supervised diving operations. Responsibilities included budgeting operations, production management, marine coordination, safety protocols, and equipment management. Hiring and retention of crews. Coordination with union, state, and local authorities. Supervised over 600 production dives.
- 2009** **Dive Operations Coordinator** - Piranha 3D Motion Picture. Weinstein Co. (Alexander Aja, Director) Supervised diving operations including a crew of twenty-four divers. Responsibilities included budgeting operations, production management, marine coordination, safety protocols, and equipment management. Hiring and retention of crews. Coordination with union, state, and local authorities. Supervised over 1,800 production dives, trained talent and stunt crews.

EXPERT WITNESS / SUBJECT MATTER EXPERT

Investigate and produce expert opinion reports on scuba and compressed gas diving accidents and fatalities and marine fatalities. Areas of expertise involve evaluating training standards violations, accident analysis, equipment analysis, including open and closed circuit scuba, and surface supplied systems. Equipment and process evaluation of compressed gas cylinder handling and gas mixing systems and conducts assessment and validation of decompression computers and decompression software. Work is nearly evenly divided between plaintiff and defense litigation.

EQUIPMENT DESIGN AND FABRICATION

Design life support equipment for manufacturing and distribution with specific focus on technical diving applications. Design buoyancy compensation, lift system, breathing regulators, dive computers, valve and gas management systems, and mixed gas breathing systems. Also designs and fabricates specialized diving equipment for use as props in movie making.

PUBLICATIONS – BOOKS, CHAPTERS, PAPERS, ARTICLES, AWARDS

Authored books, chapters, publications, education programs, scripts, and hundreds of articles and photographs in regional and national publications on diving science, technology, and marine biology exploration: Sub Aqua, Aqua Corps, Sources, Florida Scuba News, Dive Training Magazine, NACD, Alert Diver, Diver, X-Ray, and Northwest Dive News.

- 2016 Emmy Award – Underwater Cinematography – Lake Mead B-29 -- FOX
- *Advanced Nitrox and Decompression Diving Text*, 2007, Silverstein, Tech Diving Limited
- *DAN On-Board*, E-Learning Educational System / Boating Safety, 2015, Silverstein & Weydig
- *Gas Analysis for Oxygen Nitrogen Breathing Mixtures*, 2003, Silverstein & Hamilton
- *NAUI Nitrox: A Guide to Diving with Oxygen Enriched Air*. 1998, 2000 Silverstein & Hamilton
- *NAUTILUS Decompression Planning Software*, 2005, Silverstein & Nafe
- *NOAA Diving Manual 4th Edition* 1999, Hamilton & Silverstein
- *Oxygen and Helium Breathing Gas Analysis: TekCheck Product Manual*, 2003, 2004
- *Scuba Diving with Mixed Gases*, 2001, Silverstein & Hamilton
- *U.S Navy Survey of Air and Oxygen Breathing Mixtures*, 2000, Hamilton & Silverstein
- *Using Technical Diving Techniques for Short Dives in the 80-100msw Range*, Silverstein & Hamilton, NATO
- *YMCA Nitrox Divers Guide*, 2005, Silverstein & Hamilton

AFFILIATIONS – ASSOCIATIONS – SOCIETIES

- Explorers Club – Fellow National '95
- Golden Key International Honor Society (2014)
- IATSE Local 336 (485) Union Member (2009)
- IMDB International Movie Data Base
- International Society of Aquatic Medicine Keynote Speaker (since 1994)
- Platinum Pro 5000 Honor – Scuba Schools International (1994)
- Professional Association of Diving Instructors, Master Scuba Diver Trainer (1990)
- Scuba Diving International –(since 1995)
- Technical Diving International (since 1994)

DIVING HISTORY

Since 1988, Joel has completed over 6,600 dives. More than 3,900 have been on shipwrecks all over the world. He has extensive experience with un-tethered mixed-gas diving in the open ocean. Most notable of expedition and research locations are the USS Monitor, USS Wilkes-Barre, USS San Diego, SS Oregon, RMS Rhone, the Andrea Doria, and the SS Republic. Continued permit holder for exploration dives on the B-29 Supers-fortress in Lake Mead. Technical Dive Operations Manager for DPAA excavation of TBY-Avenger Palau.

Joel is one of the leading educators, expedition leaders, and technical diving instructor trainers in the world specializing in underwater and marine safety operations, education and training divers and instructors in mixed-gas diving procedures, techniques and technology.

CERTIFICATIONS

SCUBA DIVING INTERNATIONAL (SDI) & TECHNICAL DIVING INTERNATIONAL (TDI) # 0125

TECHNICAL DIVING INSTRUCTOR TRAINER

- Advanced Trimix
- Advanced Wreck Diver
- Extended Range Diver
- Decompression Procedures
- Advanced Nitrox Diver
- Nitrox Diver
- Advanced Mixed Gas Blender
- Nitrox Gas Blender

RECREATIONAL DIVING INSTRUCTOR TRAINER

- Open Water Scuba Diver
- Dive Master
- Assistant Instructor
- Rescue Diver
- Surface Supplied Diver
- Full Face Mask
- Deep Diver
- Advanced Wreck Diver

- Certified and active user of rebreathers including, KISS, AP Diving, ISC, MK-15, Drager, REVO and other mixed gas and oxygen rebreather units. Instructor for KISS Rebreather, Air Diluent and Decompression.
- Project specialist in supervising and conducting dive operations using open circuit, closed circuit, and surface supplied systems including decompression and recompression chambers.

PROFESSIONAL ASSOCIATION OF DIVING INSTRUCTORS (PADI) # 41733

MASTER SCUBA DIVER TRAINER

- | | |
|-------------------------------|-----------------------------|
| • Open Water Scuba Instructor | • Wreck Diver |
| • Dive Master | • Nitrox Diver |
| • Assistant Instructor | • Advanced Open Water Diver |
| • Rescue Diver | • Computer Assisted Diver |

UNDERWATER RESEARCH & EXPEDITIONS

Conducts research and exploration of shipwrecks accessible by free-swimming divers in the 30-100-meter depth range. Documentation with photographic and video graphic methods.

2019 – Technical Dive Operations Manager – AlphaX Subsea Research and Recovery – DPAA excavation and remains recovery for Department of Defense – Koror Palau. Supervise and conduct 500 man-hours of underwater archeological excavation using closed circuit mixed gas rebreathers.

2014-2020 – Investigator – **Marrone Bio Innovations Inc.** – ongoing principal investigator of sampling Colorado River for quagga mussel infestation. (Commercial contract)

2017-2020 Permit Holder – **USS Monitor** Exploration and examination of the historical wreck site utilizing VR360 photogrammetry and collection of biological organisms for evaluation of Lion Fish and toredo worm infestation. Project scheduled for completion summer 2020

2015-2017 Permit Holder - **B-29 Bomber** - Granted special Commercial Use Authorization permit by National Parks Service for access to B-29 bomber in Lake Mead, Nevada – During permit period conducted over 150 dives examining and documenting the site while also supervising another 200 dives on a civilian level.

2011 Expedition Leader **Andrea Doria Project**. Exploration and examination of the current state of deterioration of the wreck site.

2010 Expedition Leader **Andrea Doria Project**. Exploration and survey of the present state of deterioration of the wreck site. Discovered and recovered Bridge Bell.

2010 Expedition Leader – **Key West Wrecks** Exploration and documentation of deep shipwrecks including the USS Wilkes-Barre, USS Curb, and USAF Vandenberg.

2008-2009 Permit Holder - **B-29 Bomber** - Granted special permit by National Parks Service for access to B-29 bomber in Lake Mead

2008 Expedition Leader **Return to the USS Monitor Project**. Exploration and examination of the historical wreck site. Executive Producer “Return to the Monitor” DVD series

2006 Expedition Leader **Return to the USS Monitor Project**. Exploration and examination of the historical wreck site. Preparation for excavation of bow section in 2007.

2006 Expedition Leader **Andrea Doria Project**. Exploration and survey of the current state of deterioration of the wreck site.

2006 Expedition Leader **California Shipwrecks Project** Exploration and survey of deep water shipwrecks between Catalina Island and San Diego

2005 Expedition Leader **Andrea Doria Project**. Exploration and survey of the present state of deterioration of the wreck site in anticipation of the 50th anniversary in 2006.

2004 Expedition Leader **USS Monitor Project**. Exploration and examination of the historical wreck site. Discovered how three hurricanes have affected the site over two years.

2004 Expedition Leader **B-36 Discovery**. Located and identified a B-36 Bomber lost in 1956 off Mission Bay, San Diego, California. The B-36 was the largest military plane ever built.

2000 Expedition Leader – **Andrea Doria** *Associazione Soprav Vissuti Andrea Doria Expedition* Photograph and document the wreck site.

1998-2001 Operations Manager - **Lexington Project**. Exploration and identification of the steamship Lexington, which sank in Long Island Sound 1851. Documentary Film (not released)

1997 Operations Manager and Lead Diver on **Farb Monitor Expedition** for NOAA. Participated in a survey of this historical and protected shipwreck. U/W photography and digital video, measurements and mapping and artifact collection

1993 Expedition Leader on **SS Republic** (275 fsw) first untethered mixed gas diving expedition on the famed wreck searching for lost payroll from 1909.