# SANTA BARBARA CITY COLLEGE

29th Annual Faculty Lecture

presented by

# Don Barthelmess

selected by his peers to speak on -

# AN EVOLUTION OF UNDERWATER TECHNOLOGY

Wednesday, April 9, 2008, 2:30 p.m. The James R. Garvin Memorial Theatre Santa Barbara City College Reception to follow.



DIVER BOB CHRISTENSEN 1963 - PHOTO BY BEV MORGAN

## SANTA BARBARA CITY COLLEGE

# Annual Faculty Lectures

This is the 29th in a series of lectures wherein a distinguished Santa Barbara City College faculty member is chosen by colleagues to deliver an address on a scholarly subject of general interest.

### THE CRITERIA FOR SELECTION

Dr. Robert J. Cummings 1992-93

- Outstanding classroom teaching, counseling, or librarianship
- Unselfish, dedicated faculty service to Santa Barbara City College

### PREVIOUS FACULTY LECTURE HONOREES

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Dr. Robert Casier 1979-80	Mr. John C. Eggler 1993-94
Mr. Henry H. Bagish 1980-81	Mr. Michel Masson 1994-95
Dr. Charles R. Courtney 1981-82	Dr. Gary L. Carroll 1995-96
Dr. Harold M. Dunn 1982-83	Mr. David N. Lawyer, Jr. 1996-97
Dr. John Kay 1983-84	Mr. Joseph P. White 1997-98
Mr. Raymond O'Connor 1984-85	Dr. Manoutchehr Eskandari-Qajar 1998-99
Dr. Barbara S. Lindemann 1985-86	Dr. Jeannette Webber 1999-00
Dr. Elwood Schapansky 1986-87	Dr. Peter Haslund 2000-01
Dr. George E. Frakes 1987-88	Ms. Genevieve B. Anderson 2001-02
Dr. Elizabeth Hodes 1988-89	Mr. Carl W. Sundbeck 2002-03
Dr. Jack R. Ullom 1989-90	Dr. Janet Shapiro 2003-04
Dr. Curtis B. Solberg 1990-91	Dr. Peter Georgakis 2004-05
Ms. Diane Johnson Handloser 1991-92	Mr. James Chesher 2005-06

Dr. John Clark 2006-07

### ABOUT THE LECTURE

Santa Barbara is widely regarded as a hub for diving technology. The discipline of Marine Technology is a public necessity. It is extremely broad, yet often outside the public eye. Santa Barbara has many unique and diverse relationships with the marine environment. At the very core of it is commercial diving, an entire industry with its roots embedded in the local community.

Don's lecture will focus on the progression of early diving techniques, equipment and an American entrepreneurial spirit that emerged in Santa Barbara with the advent of the 1960s "Santa Barbara Heliox Rush", as he terms it. His topic reflects his pride and respect for Santa Barbara's diving heritage. The subject is presented through the perspective of several local diving pioneers, historians and community members who each played a role in the evolution of commercial diving.

As a technologist, Don believes that, in order for us to know where we are going, it is instructive to reflect on where we have been. He hopes the audience will add to their individual perspective regarding Santa Barbara as a historical focal point for diving.

### ABOUT THE LECTURER

Don Barthelmess was born and raised in Long Island, New York, son of Doris and Donald Barthelmess, Sr., growing up in the coastal town of Patchogue, his family members were avid boaters and baymen. Don spent his youth on the waters surrounding Long Island, gaining an early appreciation for the ocean and those who made their living through it.

In 1973, at age thirteen, Don made his first SCUBA dive while visiting the Florida Keys. This experience influenced his decision to learn more about diving and make a career of it. Don attended Florida Institute of Technology in 1978, after graduation from high school. He received an Associate in Science Degree in Underwater Technology, with distinction, from FIT.

After college, Don worked for Taylor Diving and Salvage of Belle Chasse, Louisiana, and Solus Ocean Systems of Houston, Texas. He later joined International Underwater Contractors, Inc. of City Island, N.Y. At the time, IUC was expanding services in deep water using advanced diving technology and manned submersibles. IUC sent Don to Great Yarmouth, England, where he was trained and certified as a pilot for their new Mantis class advanced diving systems (ADS).

With IUC, Don worked in the Gulf of Mexico and off Santa Barbara, using submersibles and surface-supplied diving. In 1983, IUC established a U.S. depth record for working dives with an ADS, by diving Mantis 010 to 1,979 feet aboard the drilling rig Penrod 75. IUC and Jet Research Corp. later successfully placed and detonated the deepest shaped explosive charge, in 1,650 feet of water, to sever a wellhead. Don was the sub pilot during both these record-setting dives. Later that year, he established another record in the Santa Barbara Channel by piloting Mantis 011 to 1,450 feet during a live-boat environmental survey for the California State Lands Commission.

IUC provided Don with tremendous opportunities to travel world-wide and advance in his career, as the firm ventured into ROVs, hyperbarics, diver training and deep-sea filming for the National Geographic Society. In 1986, he was promoted to Manager of IUC's Pacific Division in Ventura. Don left the firm in 1989, exchanging the rigors and demands of the offshore industry to settle down and start a family. Don accepted a full-time tenure-track position with the highly-

acclaimed Marine Technology Program at Santa Barbara City College. He served SBCC as Program Director from 1994 to 2003, and as an Academic Senator and member of the College Planning Council.

In 1996, Don was tasked with redesigning the traditional academic structure of the Marine Technology Program to meet the rapid technological changes taking place in higher education. In 1998, the newly restructured program received the Exemplary Program Award from The Chancellor of the California Community Colleges.

Don has remained active in industry throughout his career. Since 1994, he has served on the Board of Directors of the Association of Commercial Diving Educators. He was Vice Chairman of the Marine Technology Society's Los Angeles section. Don served on the Board of Directors of the Historical Diving Society USA and is a Past President of the organization. He was a member of the West Coast Chapter Committee of the Association of Diving Contractors. Don was a co-author of the certification scheme for the American National Standard-Commercial Diver Training Minimum Standard, ANSI/ACDE-01-1998. Additionally, he serves on the Technical Diving Advisory Board for the National Association of Underwater Instructors (NAUI).

In 2003, Don completed an undergraduate degree in Occupational Studies at California State University, Long Beach. He stepped down as Director of the Marine Technology Program to return to the classroom and complete a graduate degree in Educational Technology from Pepperdine University. Don continues his passion for learning, technology and education by training and diving with his students in local waters.

Don's educational philosophy embraces constructionism. He believes that knowledge is not transferred from teacher to student, but built collaboratively in phases, through rich and meaningful experiences. He believes long-term learning is embedded in social contexts supported by a dynamic community of practice.

Don has been happily married to his wonderful wife Carol Kallman for 19 years. Don and Carol live on the Santa Barbara Mesa with son Robby, 18, and daughter DeeDee, 16.

### DEDICATION

I am dedicating this lecture to Santa Barbara's own Bob Christensen, in recognition of his lifetime of service to diving and education. Bob was one of the early pioneers of deep mixed-gas commercial diving that evolved in Santa Barbara in the early 1960s. In 1969, he left a booming commercial diving field to help establish the Marine Technology Program here at SBCC as one of the original instructors. He succeeded the late Ramsey Parks as Program Director from 1980 to 1985 and then retired. Bob later returned to work at Kirby Morgan Dive Systems of Santa Barbara, where he still works in research and development.

Bob has always been a friend and mentor to me throughout my teaching career. Widely regarded by commercial, recreational and military divers, alike, Bob has always shared his knowledge and expertise for the benefit of others. Additionally, Bob is a father, husband and true gentleman.

I have never met a more humble, yet accomplished man. After graduating from Santa Barbara High School, Bob received his undergraduate degree from USC, and then served in the U.S. Navy, where he added to his diving experience by attending Navy Dive School. He was a member of the elite Underwater Demolition Team 11 which is now the U.S. Navy SEAL Team.

SBCC graduates will tell you that Bob was a master teacher. He would always create opportunities to guide them to answers, enabling them to structure their knowledge and skills that made sense to them.

On behalf of the college and the community, thank you, Bob, for all you have done — and continue to do for diving and education.

### ACKNOWLEDGEMENTS

I am thankful for many things in my life. Numerous friends, family, colleagues and students have collectively contributed to my life experiences. Historian David McCullough said, "Real success is finding your lifework in the work that you love." This accurately summarizes my journey with diving and Santa Barbara City College.

The most important person in my life is my wife, Carol. She has always been my best friend and adviser. Carol is an eternal optimist, with an outlook on life that is both infectious and inspiring. People love being around her, but none more than me. Her patience and understanding cannot be over stated.

I am grateful to my first and favorite teachers, my parents — Cookie and Doris Barthelmess. Thank you for lifelong love, support and a wonderful childhood growing up in Long Island. My son Robby motivates me to keep learning, while my daughter DeeDee reminds me to have fun and be happy while doing so. I am immensely proud of both of them. My in-laws, Bob and Ruth Kallman, have always inspired me to be active in the Santa Barbara community. Their personal integrity and altruism have always been an example.

Booker T. Washington was my operations manager at International Underwater Contractors, who trained me as a submarine pilot. I learned from him that, no matter how insurmountable a task, there is always a solution if you try. He led by example, treating everyone with respect, and remains a good friend.

Sean Durkin is the brother I never had. He has always been my "topside support", whether it was during a deep diving operation or introducing me to my wife. Ed Stetson, without a doubt, is one of the best diving instructors in the world. He enabled me to broaden my personal and professional horizons in diving and education. Ed is the glue that holds the Santa Barbara diving community together.

Dr. Paul Sparks and Pepperdine University helped me to view education and learning through a new set of lenses. My colleagues here at the college and the Marine Technology Department have always been supportive professionals and great friends on top of that. Never satisfied with the status quo, they always plan and look ahead to advance the mission of this institution. They are not afraid of change and embrace new ideas. When I was a new faculty member, Mike Von Alvensleben took me under his wing, mentored me as an instructor, and helped me form a teaching identity. My early years working with him rank among my most cherished memories. Over the years, so many friends in the marine industry and community have provided support to the college and me personally. Thank you.

I have had the pleasure of working with two great SBCC Presidents and a dedicated Board of Trustees in my tenure. Dr. Peter MacDougall and John Romo have been steadfast supporters of technical-vocational



education and the Santa Barbara community. John Romo is retiring at the end of this academic year. We thank him for his many years of service and, most importantly, his sincerity and friendship.

Our students are what make our institution a true community college. They bring the campus a unique perspective and backgrounds, while collectively improving society and the disciplines they study.

Lastly, I want to acknowledge my colleagues who have gone before me in presenting the Annual Faculty Lecture over the last 28 years. I am deeply honored by this award.