

The Explorers Club

Northern California Chapter

April 2016

In color at our web site: <http://www.explorersnorca.org>

LOCATIONS

Note venues and dates with care
In San Francisco, CA.

Thursday, April 21, 2016
The AutoDesk Gallery
1 Market Street, Floor 2
San Francisco, CA 94105

NEW TECHNOLOGY IN EXPLORATION

A very special evening at The Autodesk Gallery One Market Street, Floor 2, San Francisco 94105

DEADLINE FOR RESERVATIONS - APRIL 15, 2016.

Our meeting will take place at software maker Autodesk's corporate headquarters in San Francisco, in the Autodesk Gallery, an exciting showcase for innovation. Named a top destination by Wired magazine and the San Francisco Chronicle, the gallery features exhibits including original works by Lego, Mercedes-Benz, Nike, and more.

Enjoy drinks of your choice from an open hosted bar and lavish platters of abundant appetizers. During this time, we will be free to explore the fascinating displays in the Autodesk Gallery that celebrate the creative process and demonstrate how people are using new technology to imagine, design, and create a better world. And of particular interest to us, develop new methodologies to explore our world — about which we'll hear from those doing just this during our program.

Our program for the evening has been organized for us by Chapter member Jonathan Knowles, an employee of Autodesk, who serves as Autodesk's "Explorer in Residence." We will hear from Jonathan, Eric Stackpole, and Jason Dunn about how new technology is being used to explore, respectively, the surface of the earth, the oceans, and space. The Chapter appreciates being able to use the Autodesk facility for our regular meeting. Drinks and food will continue to be available until the end of the event.



Jonathan Knowles — As "Explorer in Residence," Jonathan's charter for Autodesk is to explore what's next for the company, with a view into the 10 to 100 year time frame. One of his central interests is developing insight on the evolving role of design-driven applied innovation and participating in fieldwork to help solve some of the world's most complex challenges. Jonathan describes himself as a futurist and innovator with a focus on ocean science, climate change, space systems, robotics, biotechnology, archaeology, and paleoanthropology. Jonathan was a Saturday panelist during the 2016 ECAD weekend, speaking about matters that he'll be telling us about at this meeting. Jonathan serves as an advisor to OpenROV and Made In Space, the organizations founded by our other two speakers.



Eric Stackpole — Eric is a co-founder of OpenROV, an organization that has created a series of low cost, underwater remotely operated vehicles which have been operated throughout the world. Eric's expertise is in robotics and mechatronics systems and he has worked as an ROV pilot and technician in various capacities throughout the last decade. His experience includes numerous domestic deployments with professional researchers as well as serving as pilot and mechanical engineer for a sub-ice ROV during a three month-long expedition in Antarctica. Before starting OpenROV, Eric also worked on spacecraft mechanisms at NASA Ames Research center. Eric hopes to use his work to popularize telerobotics as a means of exploration.



Jason Dunn — Jason founded Made In Space in 2010 as a result of analyzing the best possible approaches to enabling a fully sustainable form of space colonization. With a core focus on space manufacturing, the company has since built, flown, and operated the first 3D printer in space. Installed on the International Space Station, the Made In Space Zero-Gravity 3D printer began space manufacturing in November, 2014. Jason serves as the Chief Technology Officer, overseeing the technical program management on projects and development of the technology roadmap for the company.

IN MEMORIAM

It is with sadness that we report the passing of long time Explorers Club Fellow Dr. Edward S. Ross, FE'79, who died recently at the age of 100.. His extensive career in exploration will be documented in an obituary to be prepared. Ed and his wife, Sandy, have been active in our Northern California chapter for many years. We express our deepest condolences to our friend Sandy on her loss.

AROUND THE WORLD IN HAWAIIAN VOYAGING CANOE HOKULE'A Navigated by Ancient Traditional Methods A Review of the Friday, March 25, 2016, talk by Daniel Lin FN'14

Daniel Lin began his presentation with a traditional Hawaiian prayer before introduced the Polynesian Voyaging Society (PVS). After Thor Heyerdahl's Kon Tiki expedition was used as an argument in support of the theory that Polynesia was settled from the east by rafts drifting on the ocean currents. PVS was begun to support the argument that Polynesia was settled from the west and northwest, from Asia. Such a development would require that the Polynesians knew how to navigate on the ocean. Daniel, 28, who has studied navigation with Polynesian elders, stated that such real skills were in the older Hawaiians who had worked to revive the ancient techniques. The PVS set out to prove that such knowledge was inherent in the ancient Polynesian lore and passed down from generation to generation and that oceanic travel did exist between the islands.

To prove that it could be done, the first navigational trips were designed in 1976, sailing from Oahu to New Zealand using only the traditional methods - not by just drifting, but 'with intentionality'. Ancient navigation sites (cleared flat areas) were



believed to have been used to teach navigation methods. Such sites have been found on several Polynesian islands. These methods included use of a sidereal compass which is based on the stars, specifically from where they rise from the horizon in the evening, depending on the time of year. Another factor included an understanding of the directions from

which the different ocean swells originated. When the New Zealand trip showed that the method worked, the plan to circumnavigate the world was introduced.



The round-the-world plan was to demonstrate this basic method of navigation to the world, not so much to promote that type of navigation as to support a dialog about the need for sustainability as part of the effort to stop climate change. So far, three of the four planned legs have been completed.

The crew for each leg of the trip is made up of unpaid, adventuresome, volunteers who undergo extensive training and preparation for the practical day-to-day life on the Hokulea while at sea, and also in taking care of the earth - sustainability - 'sailing for the earth'.



The first year took the Hokulea from Hawaii back to New Zealand. The second year they went on to Australia and across the Indian Ocean to South Africa. In year 3 they proceeded across the South Atlantic to South America, and then on to the Caribbean and Key West. The fourth leg is planned to go through the Panama Canal and back to Hawaii.



The motives of the trip are to connect with other cultures; several of the talk's slides were of Zulu and Brazilian dances, others showed encounters with the Dalai Lama, the secretary general Ban Ki-moon of the United Nations and Archbishop Tutu.

The possible risks on the trip included piracy, rogue waves, difficult currents, unpredictable weather and antarctic storms.

Some final comments. Questions were raised about the navigation techniques - use of the stars, currents and different swells. The craft is able to sail at 65 degrees into the wind. Towards the end of the talk, a picture showed the Hokulea being towed into the Durbin harbor. This right after a picture of the crew wading ashore just the way it used to be. Another picture showed a modern sail boat which is accompanying the Hokulea in a safety support role. Clearly there are places where modern technology is still useful.

AJ.

PHOTO AND STORY OF THE MONTH

Got a favorite picture from your explorations? How about an interesting explorer's personal story? Please submit them to the Newsletter editor (ajviking@aol.com) so the rest of the club can enjoy them - picture, story or both..

HONOR ROLL OF PAID UP DUES FOR 2016

Members

Jim Alexander
James Allen
Julia Amaral
Susan Anderson
Reginald Barrett
George Belcher
Bonnie Bibas
Rick Blake
Peter Bogardus
Kendra Bolt
Joan Boothe
Keith Chase
Doug Cheeseman
Ted Cheeseman
Alan Cooper
Thomas Cromwell
Don Dana
Peggy Day
Mike Diggles
Thomas Dolan
Louise Downe
Thomas Durbin
Donald Dvorak
Elaine Dvorak
Scott Ellis
Sue Estey
Robert Eustace
Art Ford
Susan Fox
Paul Freitas
Ron Glantz
Arjun Gupta
Tom Hall
Peter Hemming
Michael Herz
William Heydom
Don Heyneman
Robert Higgins
Jim Hurson
Von Hurson
Alan Hutchison
Anders Jepsen
Steven King
Ronald Klein
Suzanne Klotz
Bill Kruse
Keith Kvenvolden
William Lidicker
Peter Overmire
James Prigoff
Edward Ross
Sandra Ross
Rick Saber
Bob Schmeider
Sara Shoemaker Lind
Richard Tenaza
Ed Von der Porten
Don Walsh
James Weil
Gordon Wiltsie
Sherry Wren

Sirdars

Linda Alexander
Caryn Anderson
Marion Blumberg
Barry Boothe
Karoli Clever
Sandra Cook
Wendy Crowder
Joy Durighello
Dafne Engstrom
Mats Engstrom
Eric Follestad
Anna Freitas
Louise Geraci
Gina Glantz
Louise Heyneman
David Hirzel
Nancy Isaac
Kathy Jepsen
Kathy Judd
Margot Komarmy
Ellen Lapham
Iyana Christine Leveque
Tim Loew
Bonny O'Keefe
Ingrid Peterson
Laura Phelps
Aldeana Saber
John Schlagheck
Robert Van Austen
Judy Van Austem
Andrew Wegst
Mark Weiman
Thomas Yohannan
Robin Ziegler

FROM THE CHAIR

Joan Boothe MN'07

As I write this, the spring equinox is just a few days behind us. The camellias are blooming enthusiastically in my back yard, and every now and then dropping massive blooms with great thuds. Spring has definitely sprung, and that means that our Chapter year is winding down. We have only two meetings left until our summer break.

Our April meeting continues a Chapter practice in which, for the past several years, we've had one very special Chapter meeting/event. Last year, it was our May, year-ending, gala at the California Academy of Sciences at which we celebrated Rick Saber and thanked him as he concluded his term as Chapter Chair. This year, we're jumping the gun by one month and holding our extra special meeting in April. There are no officer changes, but there will be a lot of fun when we gather at the Autodesk Gallery in downtown San Francisco. Not only is this a fascinating place to wander, explore, and learn, it's also a

great opportunity for those of you who were not at ECAD to get a small taste of the weekend. Jonathan Knowles was one of the speakers at an ECAD Saturday panel, and he'll be our lead speaker at Autodesk.

And that brings me to ECAD. What a great weekend it was. But let me say, from my perspective, it was a wonderful time, with an outstanding representation from our Chapter. We had more participants there than any other TEC chapter, 40 of them at four tables in the balcony arranged for us by Lee Langan, with others scattered about the Waldorf Astoria ballroom. For me, though, one of the highlights was attending the Chapter Chairs annual workshop. I learned much about what other chapters are doing and came away with a number of ideas for our chapter. I'll be looking into these with our Chapter officers and board in the coming months, and you'll be hearing from us about these.

Finally, we're still looking for a new treasurer to replace Kendra Bolt. If you are interested please let me know!

Joan

A DISPATCH FROM THE HEARD ISLAND EXPEDITION



“March 21, 2016. At sea on MV Braveheart. Imagine traveling a distance equivalent to all the way across the United States in a boat going 10 mph with waves (at times) up to 20'. That's what its like to get to Heard Island and why its so hard and expensive to get to. This is also why, when you plan to go there, you try to stay as long as you can, and to do that, you need to make sure your living quarters are going to stay up in constant and changing winds. Hats off to the Expedition Team for taking the time (and expense) out from their “normal lives” (and to their families) for making this all possible. And thanks to the skillful Braveheart Crew for supporting so many top notch amateur radio DXpeditions like this one!



“Currently we expect to arrive evening Heard Island time. On the US West Coast it's exactly 12 hours ahead – and on the other side of the International Date Line. So we should start setting up at daybreak our Wednesday morning, the 23rd, which is nightfall PST the evening before. We will no doubt work all day to get camp and stations set up – so we could be on the air Wednesday morning PST. Exact details of our landing are completely dependent on a SAFE landing and setup. So – what kind of weather can we expect upon landing?

“The weather map so far shows a nice blue area predicted for our landing, but with a storm to the north. The weather changes so much and so fast in the southern oceans that one pretty much has to just wait and see – but if this holds out – then it could actually be about as good as it can be for landing.

Fingers crossed!” (They made it. ed.)

The above dispatch was received from Dr. Bob Schmeider's expedition to Heard Island. The photos were taken from the expedition website, www.heardisland.org, and show Captain Bob (second from right) and his 13 cohorts prior to departure from Cape Town. More more recent information may be found on www.heardisland.org. AJ

From the National Board: It was revealed at ECAD that our own Maya Khosla and Sandra Cook are among the latest class of accepted applicants for membership by The Explorers Club. Public announcement of this latest group is expected to be made by The Club within 30 days. AJ

EC AD 2016 THE EXPLORERS CLUB ANNUAL DINNER

A Note by our past Chapter Chair and Past National President Alan Nichols

” The explorers club celebrated ”Oceans: Current of life” at our 112th annual dinner held on Saturday, March 12, 2016 at the Waldorf Astoria ballroom in New York City. It was an elegant, well-run, exciting event

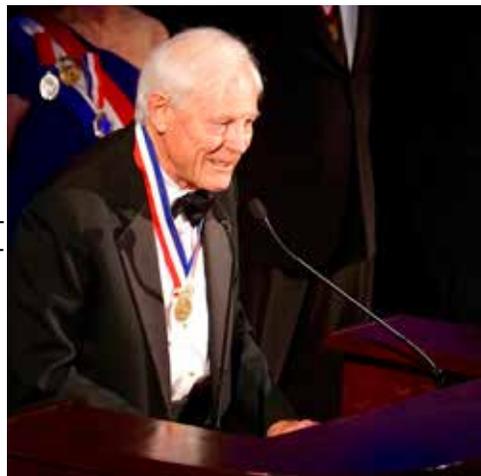
The program was opened by our president Ted Janulis. As the Master of Ceremonies, Ann Curry directed the presentation of special awards to Dr. Joseph MacInnis (the William Beebe Award), Constance Difede (the Sweeney Medal), Edmundo R. Edwards (A Citation of Merit) and the Explorers Club Medal to Dr. Frederick Roots and to me. All the medalists gave appropriate responses and comments to an enthusiastic audience. Introduced by National Geographic Explorer-in-Residence Dr. Sylvia Earle, Keynote Speaker Dr. David Gruber received an ovation for his inspiring review of current Oceanographic activities.

Our most important benefactor and

Polar Explorer, Frederik Paulsen Paulson, returned his expedition flag amid loud cheers for his accomplishments and for his support of ECAD and of scores of student expedition grantees.

The evening event was very successful, thanks especially to the three co chairs Emily Driscoll, Nancy Rosenthal, and Gaelin Rosenwaks and our executive director Will Roseman. I’m sure it was successful financially particularly thanks to our returning star volunteer Auctioneer Hugh Hildesley.

The real stars of the evening were our Chapter members who attended. We led the rest of the world in our support for this event with 4 full tables and our true western spirit together on the upper balcony! Congratulations to all of us and especially to our Chapter Chair Joan Boothe who herded us through the weekend and the dinner.



P.S. I still prefer the American Museum of Natural History for our Annual Dinner...so we’re lucky I’ve retired. AN

SOME IMPRESSIONS FROM ECAD 2016

by Keith Kvenvolden FE’80

The Explorers Club Annual Dinner (ECAD 2016) was a very special event for me. At the age of 85, and after being a member of The Club for 36 years, I decided to attend this event and go in style by taking the train across the country from coast to coast--a lifelong dream.

The events of the ECAD weekend were all remarkable and impressive, but the events that moved me most were two panel discussions held at the Waldorf Astoria Hotel on Saturday morning and afternoon, preceding the ECAD dinner that evening. Each panel had four panelists and a moderator who, in each panel, was outstanding. The panel general themes were Art in Exploration and Technology in Exploration.

In the first, the panel discussed the artistic impact of fashion, film, writing and photography on exploration and discovery. Panelists were a multi-media artist, a best-selling author and entrepreneurial scientist, an editorial director of National Geographic Adventure, and a freelance conservation photographer.



In the second panel, the discussion involved innovative technologies that are bringing exploration of the deep oceans, the brain, and space to new levels. For this panel the panelists were a founder of an early stage media company that is blending exploration (often at extremes) and technology, a commercial diver who is now developing a range of yacht-based manned submersibles, a biochemist who is working on product development using deep sea bioluminescence for a variety of technologies, including medical diagnostics, and a co-founder of a company involved in space suit design and manufacture with an eye on future exploration of Mars.

Both panels were brilliantly structured and the discussion was intellectually rewarding. The first panel discussion challenged the soul; the second challenged the mind! TEC should be highly commended for organizing this remarkable event. KL

Photos by Keith Kvenvolden.





Harry Hicks and Dede Whiteside; Exotics party; Director David Dolan, retiring Director Lee Langan, retiring Director Don Morley, Past President Alan Nichols. Aldeana and Past Chair Rick Saber, and Kevin Callaghan; Diann Callaghan and Suzy Dehmel. Susan Fox; Barry and Chapter Chair Joan Boothe; Awards and Introductions on stage at the Waldorf Astor Anna and Paul Freitas; Paul Freitas, Keith Kvenvolden and Sandra Cook; Sandra Cook in Afghan native dress.. Photos by NorCa Chapter members at ECAD

OTHER EVENTS, EXPEDITIONS, etc.

April 2016 Issue

Northern California Chapter
Established 1973



Chair: Joan Boothe MN'07
415-346-5934
hoodooskr@aol.com
Vice Chair: Stephen E. Smith FN'96
925-934-1051
ecnca@oceaneearth.org
Secretary: Von Hurson MN'10
Trekking@sonic.net
Webmaster: Mike Diggles FN'92
Newsletter: Anders Jepsen FN'03
ajviking@aol.com
925-322-8893

Chapter Calendar of Events (Venues are identified as soon as known.)

Upcoming Events (2016) 2016

April 21 (Thursday)Autodesk
Technology in exploration. Gallery, 1 Market, SF
May 27 Ann Sanquini
Surviving the 2015 Earthquake in Nepal GLChurch
June 18, 2016 . . . Chapter Picnic at Crissy Field

Earlier Chapter Events 2015

March 27 Dr. T. Mark Harrison
Earth's Geochronology. Pomeroy
April 24 Dr. David Ainley
Last Ocean (& NorCA election) Pomeroy
May 21 (Thursday) Meg Lowman
Underground Tour, CA Academy of Sciences
June 13 Chapter Picnic
. Angel Island
September 25 Tom Dolan
Studying Tornadoes. .Covenant Presbyterian Ch
October 23. David Imus
Art of Cartography. . Covenant Presbyterian Ch
November 7-8 Lowell Thomas Meeting
November 20. Arjun Gupta
Third Pole Initiative. Covenant Presbyterian Ch
December 13. Holiday Party
. Home of Joan Boothe

2016

January 22 Ted Cheeseman
Modern Ocean Exploration . . Grace Lutheran Ch
February 26 Rosemarie Twinam
Game Counting in Africa . . . Grace Lutheran Ch
March 11-13. ECAD New York
March 25 Daniel Lin
Navigation on Polynesian Voyages Grace Luth Ch

March, 2016: Dr. Bob Schmieder reports that the Heard Island expedition is on track and on budget to depart Cape Town in early March. See dispatch on page 3.
For more information, email him at schmieder@cordell.org

March 30, 2016; Dan Ackerman AN'14 and his expedition to climb Mount Everest sets off from Kathmandu. Everest summit window: May 6 - 28, 2016.
Follow his progress at <http://www.absolutedeverest.com/>

April 28, 2016: Harry Hicks and Dede Whiteside leave for the Middleon on a project of exploration of an ancient library. A follow-up program is also planned.

May 1-11, 2016: Explore Easter Island with 2 World Class Experts
Explore the hidden maps of the Cosmos on Easter Island
For more info, contact Lynn Danaher; 4islandexplorer@gmail.com; 360-472-1050

Summer 2016: Easter Island Endemic Insect Expedition
What's left on Rapa Nui? The Search for Native Insects
Participant spaces available
If interested contact jut.wynne@nau.edu for full info

June 18, 2016: Annual picnic at Crissy Field.

AV HELP WANTED

Join the Chapter AV team to help with video and audio equipment set-up at Chapter meetings. You don't have to attend every meeting, but if you are interested in doing this from time to time, let Joan Boothe know, and she'll get you set up for a meeting where you can be trained in what needs to be done.

CHAPTER MEETING Thursday, April 21, 2016

The AutoDesk Gallery
One Market Street, Floor 2, San Francisco, 94105

Date Thursday 21 April, 2016

Place: The AutoDesk Gallery
One Market Street, Floor 2
San Francisco, CA 94105

Time: 6:30: Social hour and time to explore the AutoDesk Gallery
7:30 - 8:30: Program
8:30 - 9:45: Social hour and exploration time resumes

Cost: \$75 in advance, must be made by April 15th; Students: \$49.
(2016 dues: Members \$25, Sirdars \$50)

Please mail reservations, checks & dues to Joan Boothe
email: hoodooskr@aol.com Call 415-346-5934 or
mail to 2435 Divisadero Street, San Francisco, CA 94115

We have an established a PayPal account.

There you can remit your event payment, dues, etc., to the NorCa Chapter
Go to our chapter website, www.explorersnorca.org. Easy to use!

Send address changes and
corrections by email to Steve Smith
ecnca@oceaneearth.org