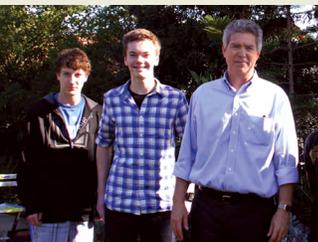




Richard Linnehan, D.V.M., Astronaut, NASA
Life as an Astronaut and The Future of Human Spaceflight



Eric Belle, Systems Engineer,
Raytheon Company / International Council
on Systems Engineering
Space-Based Remote Sensing Systems



Derek Dunn-Rankin, Ph.D., Professor,
Department of Mechanical and
Aerospace Engineering, UC Irvine
Microgravity Combustion Science



Kristy Johnson, Astronomy Instructor,
Department of Earth and
Planetary Sciences, SBCC
Ancient Astronomy



Michael Johnson, Graduate Student,
Department of Physics, UCSB
Pulsars and the Search for Little Green Men



Philip Lubin, Ph.D., Professor,
Department of Physics, UCSB
*The Origin, Evolution, and
Fate of Our Universe - Current Status*



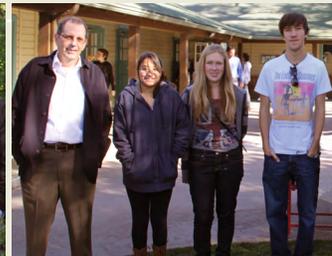
Larry Hill, Chief,
Community Relations, 30th Space Wing,
Vandenberg Air Force Base
Field Trip: Vandenberg Air Force Base



Anacapa Near Space Exploration Club
(ANSEC)
*Contacting the International
Space Station with Ham Radio*



Jack Stuster, Ph.D.,
Principal Scientist, Anacapa Sciences
*Getting Along in Space:
Results of the Journals Flight Experiment*



Michael McGee,
Surveying Engineer and Consultant,
McGee Surveying Consulting
Mapping the Earth from Space

2012-2013 Synthesis Unit Thanks to All of Our Speakers! Space: Where Are We Going?

The development of critical thinking skills is an essential part of the philosophy of Anacapa School. Critical thinking is emphasized not only in our classes but also in our annual Synthesis Unit.

Synthesis Units are designed to provide students with unique opportunities to explore in depth a topic outside the regular curriculum. During these annual units, as many as eighteen expert speakers make individual 45-minute presentations on different aspects of the chosen topic, and students are encouraged to ask questions to further their understanding of the topic. After each Synthesis Unit, students produce "products" designed to "synthesize" the information learned during the presentations.

The topic for the 2012-2013 Synthesis Unit was *Space: Where Are We Going?* We heard from experts in the fields of astronomy, astrophysics, space technology, and space exploration, including NASA astronaut Richard Linnehan, who captivated us with stories about his various missions in space. A veteran of four Space Shuttle flights, Astronaut Linnehan has spent more than 58 days in orbit, including six "spacewalks," one of which involved a servicing mission to the Hubble Space Telescope. In addition to our private, on-campus session with him, Anacapa also hosted an evening public appearance by Dr. Linnehan at the Santa Barbara Public Library.

To provide students with an interactive complement to the lectures, Anacapa had its

own stargazing party presented by Chuck McPartlin, Outreach Officer of the Santa Barbara Astronomical Unit. The school also toured Vandenberg Air Force Base to see the facilities there.

Later in the spring, Anacapa students and faculty had the rare opportunity of making contact via amateur radio with an astronaut aboard the International Space Station (ISS). Anacapa was chosen by NASA to participate in the Amateur Radio on the International Space Station (ARISS) program, a cooperative venture between NASA and other international space agencies that coordinates scheduled radio contacts between astronauts aboard the ISS and schools. The 10-minute live forum bounced between Anacapa students and astronauts as the space station's orbit passed over Southern California on the morning of May 22.

The final Synthesis Unit-related activity took place during the school's End-of-the-Year Trip to Los Angeles in June when we saw the Space Shuttle *Endeavor* at the California Science Center.

Special thanks to all of our presenters on campus and during our field trips for their extraordinary contributions as we considered this fascinating topic. Congratulations on making *Space: Where Are We Going?* such a successful educational experience.

Gordon Sichi
Gordon Sichi, Headmaster

LOWER SCHOOL:
GRADES 7-8

Anacapa School
FOUNDED IN 1981

UPPER SCHOOL:
GRADES 9-12

Anacapa School is an independent, co-ed college preparatory school for grades 7-12.
814 Santa Barbara Street • 965-0228 • www.anacapaschool.org



Levi Maaia, Anacapa Teacher
and Synthesis Unit Coordinator
*Space: Where Have We Been—A Brief
History of the 20th Century Space Race*



Santa Barbara Astronomical Unit,
Community Outreach
*Stargazing Party:
A Tour Through the Night Sky*



Matteo Cantelli, Ph.D., Research Fellow,
Kavli Institute for Theoretical Physics, UCSB
*Stars: Life, Death, and the
Origin of Elements*



Nathan Walker, Design Engineer,
ATK Space
How to Power Your Spaceship