

Participants in the NEO Media/Risk Working Group November 14-15, 2011 Boulder, Colorado





Robert Arentz works for Ball Aerospace and Technologies Corp. in Boulder, Colorado, where he's leading a team of engineers and scientists to develop a mission architecture capable of meeting the space-survey requirements set forth in 2005 by Representative Dana Rohrabacher (R-CA), and named for his friend and NEO mentor, Congressman George E. Brown, Jr.



Kelly Beatty is *Sky and Telescope*'s Senior Contributing Editor, writing many of the feature articles and news items found in *Sky & Telescope* magazine and on its website. He served as the editor of *Night Sky*, a magazine for beginning stargazers, in 2004-2007. Specializing in planetary science and space exploration, Kelly conceived and edited *The New Solar System*. Beatty is on the science faculty at the Dexter and Southfield Schools in Brookline, Massachusetts.



Linda Billings is a research professor at the George Washington University School of Media and Public Affairs in Washington, D.C., and a Principal Investigator with NASA's astrobiology program, doing communication research. Among her research interests are the social construction of scientific authority, analysis of the discourse and rhetoric of science, and science policy and politics.



Mark Boslough is a physicist at Sandia National Laboratory who has been concerned about the future of the Earth for most of his life. He has collaborated with scientists and engineers on aspects of impact physics and analyzing satellite observations of fireballs. His current impact research is focused on computational modeling of low-altitude airbursts and their effects as well as trekking to airburst sites in the Sahara Desert and in remote Siberia.



Alan Boyle, Science Editor for MSNBC runs a virtual curiosity shop of the physical sciences and space exploration, plus paleontology, archaeology and other "ologies" that strike his fancy. He joined MSNBC.com in 1996 and is author of the book, *The Case for Pluto*. During his 34 years of daily journalism in Cincinnati, Spokane and Seattle, he's survived a hurricane, a volcanic eruption, a total solar eclipse and an earthquake. He has faith he'll survive the Internet as well.



Dave Brody, Executive Producer, writes, directs, produces and manages all online video and multimedia for TechMediaNetwork's sixteen websites including SPACE.com. As an on-air talent, Dave has presented space stories on NBC's Today Show, Fox News, Discovery Science Channel, MSNBC, CNN, CNBC, BBC, G4TV, and others. He's a longtime space science documentarian and former television producer for SYFY, where he ran the weekly half-hour aerospace news-feature show "Inside Space."



Nina Burleigh is a journalist and author. Three of her five books deal with science, or the history of science. She covered the Clinton White House for *Time* and reported and wrote human interest stories at *People Magazine* from New York. She is an adjunct professor at Columbia Graduate School of Journalism and is now working on an asteroid story for *Discover Magazine*.



Sergio Camacho is Chair of Action Team 14 for the United Nations Committee on the Peaceful uses of Outer Space (COPUOS) that deals with issues related to Near-Earth Objects. He is also Chairman of the Working Group on NEOs of the Scientific and Technical Subcommittee of COPUOS. He is the Secretary General of the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean, affiliated with the United Nations, and a former Director of the United Nations Office for Outer Space Affairs (OOSA), a post that he held from 2002 to 2007.



Michael Carroll is a talented astronomical artist and science journalist, with hundreds of articles and 23 books in print. His newest book is <u>Drifting on Alien Winds – Exploring the Skies and Weather of Other Worlds</u>. Carroll is a Fellow of the International Association of Astronomical Artists, and has a painting on the surface of Mars--in digital form--aboard the deck of the Phoenix lander.



Clark Chapman is the Senior Scientist of Southwest Research Institute (Boulder Space Studies Office) and an internationally recognized expert on NEOs. He served as a team member of the Near Earth Asteroid Rendezvous (NEAR Shoemaker) mission to Eros. Chapman is a member of the Science Team of the Messenger mission to Mercury. He is a past Chairman of the Division for Planetary Sciences and past President of Commission 15 (Physical Properties of Asteroids and Comets) of the International Astronomical Union (IAU).



Paul Chodas has worked at the Jet Propulsion Laboratory (JPL) for almost 30 years, initially with the International Halley Watch and later with the NEO Program Office from its inception. His work focuses on developing the techniques and software for computing comet and asteroid orbits, analyzing orbit uncertainties, computing impact probabilities and predicting impact times and locations. He has been involved in many of the "possible NEO impact" news stories over the years, starting with the infamous 1997 XF11. In 1999 he coined the term "keyhole" to describe the potential gateway that leads from one close approach to a later impact.



Steve Cole is the public affairs officer for the Earth Science Division at NASA Headquarters in Washington, D.C. He has worked in science journalism since 1985 as managing editor of Astronomy Magazine, Environmental Science & Technology (American Chemical Society), and Eos (American Geophysical Union) and as a freelance writer with articles appearing in The Washington Post, Scientific American, and New Scientist.



Tony DeTora currently serves as Legislative Assistant for Science, Space & Technology issues to Congressman Dana Rohrabacher, a senior member of the House Science Committee, former Chairman of the Space Subcommittee, and longtime leader on NEO-related issues. His other positions have included Finance Director for a number of political campaigns; Executive Director of the Space Frontier Foundation; and Vice President of ProSpace America.



Daniel Durda of the Southwest Research Institute has over 20 years of experience researching the collisional and dynamical evolution of main-belt and near-Earth asteroids, vulcanoids, Kuiper belt comets, and interplanetary dust. He has published dozens of articles popularizing planetary science and human exploration of space and his space art has appeared in many magazines and books and has been internationally exhibited.



Steve Heard is the founder and CEO of The Futures Channel, an online video producer and publisher serving the education market. Teachers screen Futures Channel movies for their students to show them exciting careers and bring real world applications of Science, Technology, Engineering and Math (STEM) into their classrooms.



Lindley Johnson is NASA's executive manager for both the Discovery Program of Solar System exploration missions, and the Near Earth Object Observations Program. Previously he served 23 years in the Air Force with many national security space systems and in joining NASA became the Program Executive for NASA's Deep Impact mission to comet Tempel 1. NASA's NEO program has discovered over 6,000 objects since Lindley became manager, 70% of the total known.



Jeff Kanipe is a science writer and editor with over 30 years experience. He is the author of several books, including <u>Cosmic Connection: How Astronomical Events</u> <u>Impact Life on Earth</u>, which contains a chapter on asteroid impacts and proposed mitigation techniques. He has also written numerous articles on the subject of past asteroid impacts.



Jocelyne Landeau-Constantin is Head of the Communication Office at the European Space Agency's Space Operations Centre (ESOC) in Darmstadt, Germany. She deals regularly with all European media when it comes to space debris and NEOs. The Communication Office is also actively involved in development of the Preparatory Program Space Surveillance Awareness, which will deal with NEOs, space weather and the tracking of space debris.



Tariq Malik joined TechMediaNetwork's SPACE.com team in 2001 as a staff writer, and later editor, covering human spaceflight, exploration and space science. He became SPACE.com's Managing Editor in 2009. Before joining SPACE.com, Tariq was a staff reporter for *The Los Angeles Times*. He has journalism degrees from the University of Southern California and New York University.



Dennis Mileti is a retired professor from the University of Colorado at Boulder where he directed the Natural Hazards Center—our nation's clearinghouse for social science research on hazards and disasters. His book <u>Disasters by Design</u> summarized natural hazards knowledge in all fields of science and engineering, and made recommendations for shifts in national policies and programs.



David Morrison is the Director of the Carl Sagan Center for the Study of Life in the Universe, at the SETI Institute in Mountain View, California. He is Past Director of the NASA Lunar Science Institute and a senior scientist in astrobiology at NASA Ames Research Center. He also served at NASA Ames as Director of Space and as the Chief of the Space Science Division. David is a leading authority and public communicator regarding the hazards to Earth from asteroids and comets.



Guy Norris is Senior Editor for Aviation Week and Space Technology magazine. He was previously with Flight International, first as technical editor based in the U.K. and most recently as U.S. West Coast editor. Amongst other works Guy has authored the aerospace section of a science encyclopedia and co-authored, and produced an educational aviation CD-ROM.



Carolyn Collins Petersen is vice-president of Loch Ness Productions. She is an accomplished science writer, focusing on astronomy and space science through media products that include fulldome and "flat screen" video documentaries, books, articles, and museum exhibitions. Carolyn is also a segment producer for Astrocast.TV, an online news digest about astronomy and space science.



Mark Petersen is president and founder of Loch Ness Productions. He is a producer of fulldome video and classic planetarium shows, broadcast and online science outreach videos, with more than 70 productions to his credit. He also has over three decades of experience as a soundtrack producer and space music composer, with eleven albums released under the nom-de-plume Geodesium.



Harold Reitsema is a planetary astronomer who has specialized in designing space science missions that probe the solar system and beyond. As an astronomer at the University of Arizona, he discovered satellites of Saturn and Neptune. Recently retiring from Ball Aerospace, he led space mission design teams for the company. He is now a consultant to NASA and the aerospace industry, and is pursuing his passion to initiate a mission to identify a million unknown Near Earth Objects.



David Ropeik is an author, award-winning television reporter, teacher, consultant, and public speaker. His work is directed toward the same goal: to develop in-depth knowledge about an area of public interest, to synthesize that knowledge, and to provide that synthesis in a clear, entertaining, relevant way so people can benefit from that information. Ropeik is an Instructor at Harvard University, author, and consultant on risk perception, risk communication, and risk management.



Jim Russell is a Systems Engineer at Lockheed Martin with a focus on Human-Robotic exploration, Payloads, and thermal control. Jim has experience with developing human and robotic missions to asteroids (e.g. Plymouth Rock and OSIRIS-REx), and he currently works on Osiris-REX, a robotic asteroid mission to the asteroid RQ36.



Daniel Scheeres is with the Department of Aerospace Engineering Sciences within the Colorado Center for Astrodynamics Research at the University of Colorado at Boulder. He has published extensively in the fields of astrodynamics, dynamical astronomy and celestial mechanics. He is the radio science team lead for the recently selected NASA mission, OSIRIS-REx – a mission that will return an asteroid sample to Earth.



Russell Schweickart served as the NASA Apollo 9 Lunar Module Pilot in March 1969, logging 241 hours in space. Schweickart served as backup commander for the first Skylab mission which flew in the Spring of 1973. He is co-founder and Chairman of the B612 Foundation (2001-2011) as well as founder and Chairman of the Association of Space Explorers Near Earth Object Committee, 2005-2010.



Daniel Scuka has worked as web editor and content producer at the European Space Agency's (ESA) Space Operations Centre, in Darmstadt, Germany, since 2004. He supports many of the Agency's new social media efforts and also coordinates Agency communications on behalf of the Space Situational Awareness program - its space weather, surveillance and tracking and near-Earth-object activities.



Pete Spotts is the science reporter for the *Christian Science Monitor* and has been reporting on science and technology more or less full time since 1987. He covers topics ranging from astronomy, space exploration, and climate to genetics. Spotts has worked for *The Monitor* since September 1976.

Secure World Foundation



Cynda Collins Arsenault is President and Co-Founder of Secure World Foundation and has 40 years of experience in non-profit work including peace and justice, prison, mental health, disability rights and environmental issues. In additional to co-founding Secure World Foundation, she also co-founded the Arsenault Family Foundation.



Carol Carnett is an attorney and advocacy/library resources consultant for the Legal Aid Bureau of Maryland. She holds a graduate level certification in Teaching English as a second language (TESOL) with a concentration in teaching English to adult non-native English speakers. She is a trained mediator and facilitator, and provides training for legal staff and agency professionals in a variety of service areas. She has been involved with the ISU/SSP for many years as a language instructor and resource to the editing teams.



Barbara David has been working on Secure World Foundation public outreach projects as a part-time consultant for the last three years. Over the last 22 years, Barbara has earned a reputation in the space, astronomy and Earth sciences community as a respected science education curriculum developer and as a science journalist.



Leonard David is Research Associate for Secure World Foundation, has been writing about global space activities for some 50 years. He is an award-winning journalist and is SPACE.com's Space Insider Columnist, a correspondent for Space News newspaper, a contributing writer for the American Institute of Aeronautics and Astronautics (AIAA) Aerospace America magazine.



Wendy Gordon is the Administrative Assistant/Office Manager for Secure World Foundation in Broomfield, Colorado where she provides support for the Operations Manager and other staff as needed. Wendy's 25 years of non-profit experience brings to SWF a broad range of administrative as well as fundraising skills.



Jenna Martin is the Marketing and Communications Manager at Secure World Foundation where she steers the internal and external marketing and communications strategy on a global scale. She has 15 years of on- and off-line strategic marketing and communications experience with a professional background in journalism. A successful entrepreneur and founder of Bloom Communications, Jenna has consulted with organizations including NYU, The Epilepsy Project, The National Parkinson Foundation, Live Strong, Cisco Systems and The Michael J. Fox Foundation.



Ray A. Williamson has served as Executive Director of the Secure World Foundation since June 2007. Previously, he was Research Professor of Space Policy and International Affairs in the Space Policy Institute, The George Washington University. From 1979 to 1995, he served first as Senior Analyst and later as Senior Associate for the U.S. Congress, Office of Technology Assessment. He has authored more than 130 articles on space policy, space security, and remote sensing.