

Biographical Information on Presenters and Panelists

Bretton Alexander, Vice President - Government Relations, Transformation Space

Brett joined t/Space in January 2005 following five years as the Senior Policy Analyst for space issues in the White House Office of Science and Technology Policy where he served both Presidents Bush and Clinton. While at the White House, Brett played a central role in development of President Bush's Vision for Space Exploration. Brett also led a review of national space policies with the National Security Council staff resulting in new Presidential policies on space transportation, GPS, and remote sensing. Prior to the White House, Brett held positions in the Federal Aviation Administration's Office of Commercial Space Transportation, the Aerospace Corporation, and ANSER Corporation. In the mid-1990s, Brett spent more than a year in Moscow, Russia, facilitating space cooperation.

Brett holds Master and Bachelor of Science degrees in aerospace engineering from the University of Virginia in Charlottesville, Virginia.

Patrick Bahn, Chief Executive Officer, Founder TGV

Mr. Bahn has worked most of his career in the computer industry. Starting in 1970 in data entry, he worked in operations and support eventually moving into programming. Mr. Bahn was involved in communications systems development, including Internet development. Mr. Bahn has worked in small business and consulting since 1970. Mr. Bahn received a BS in Engineering Management from Clarkson College in 1984 and a MBA/MPA from Southeastern University in 1991.

Steven Bennett, CEO, Starchaser Commercial Space Access

The cult television series "Thunderbirds" and NASA's Apollo moon landings were what inspired Steve Bennett as a boy. By the time he was 13 he had opened an account with a local chemical supply firm and had built his chemistry set into a model rocket testing laboratory. He would put together small rockets and launch them for friends and relatives.

After leaving school in 1980 Steve was employed as a laboratory technician before joining the Army in 1983. He worked his way up to Lance Corporal and was trained as a petroleum operator; his postings included West Germany and the Falkland Islands. After a three year tour of duty he left the Army and went back to work as a lab technician. He met wife Adrienne in 1986 and they were married the following year. Their honeymoon was at Cape Canaveral, Florida.

Steve continued to dabble in rocketry and by the early 90's his rockets had grown from small fireworks into devices measuring several feet in length. His rockets were becoming increasingly complex and also very expensive. In 1992 Steve told Adrienne that he wanted to take his passion for rockets as far as he could, he wanted to build a rocket that would one day carry people into space. Adrienne promised to back him all the way. After winning sponsorship from sugar giants Tate & Lyle Steve built a six metre (21 foot) tall rocket called Starchaser 2 which in 1996 qualified as the largest privately built rocket ever flown in Europe. The project gradually became a team effort due to the sheer size of the rockets. Further sponsorship enabled Steve to give up his day job so that he could now focus on building rockets full time. Soon after this he was invited to relocate to the Physics Department of Salford University where he still lectures in space science.

Steve incorporated Starchaser as a Limited Company in 1998 and moved the rocket manufacturing side of the business to its first factory in January 2001. The Company currently employees 12 permanent members of staff and enjoys the support of a further two dozen part time volunteers. On 22nd November 2001 Starchaser Industries successfully launched Nova, the first privately built rocket in the world that is capable of carrying people into space. Current R & D projects include the development of a reusable 15 tonne thrust rocket engine, a semi-reusable micro-satellite launch system and a sub-orbital spaceship for space tourism applications.

In 2003 Steve created the Starchaser Rocket Roadshow, an educational initiative that is taking the excitement of space exploration to hundreds of thousands of schoolchildren across the length and breadth of the United Kingdom. Starchaser are currently partnering with the Merseyside Spaceport, a brand new £8 million spaced themed attraction that will play host to over 100,000 visitors per year.

Steve recently became President of Starchaser's US based Company Starchaser Industries Inc. which has been established in the State of New Mexico.

Starchaser US will launch out of the up and coming Southwest Regional Spaceport and will represent the State of New Mexico in the X PRIZE Cup competition.

Priscilla Bloomquist, Associate Professor, NMSU

Priscilla Bloomquist is an Associate Professor of Hotel, Restaurant and Tourism Management at New Mexico State University. She earned a B.A. in Economics, and an M.S. in Hospitality and Tourism from the University of Wisconsin and her Ph.D. in Educational Management from New Mexico State University. In 1988, she moved to Las Cruces to assist in starting what is now the School of Hotel, Restaurant & Tourism Management. Since that time, the program has grown to over 330 majors, and was ranked in an academic journal among the top 25 programs in the country. She has been the recipient of numerous teaching awards and has been responsible for generating contract work and grants through the New Mexico Tourism Department, the U.S. Forest Service, the New Mexico Department of Economic Development, the New Mexico State Parks & Recreation Division, the Southwest Center for Environmental Research and Policy, the U.S. Department of Agriculture and the J. Willard and Alice S. Marriott Foundation. She has published a number of articles and technical reports, and has presented her research at statewide, regional, national and international conferences.

Senator Gilmer N. Capps, Oklahoma Senate

Gilmer Capps was born in Tipton, Oklahoma and currently resides in Snyder, Oklahoma and is a lifelong Oklahoman. He was tested early in life when he took over his family farm at age 19. Thanks to his hard work and dedication, the farm has remained productive with Capps becoming the third generation to raise Black Angus cattle, cotton, wheat, and alfalfa hay on land that was homesteaded by his grandparents in 1902.

He attended Oklahoma State University and Cameron University. Capps was in banking from 1966-1973 working as Agriculture Representative and in Public Relations

In 1971, Capps turned his attention to the State Capitol, winning a seat in the Oklahoma Senate that he has retained for the past 33 years. After serving for 13 years as Majority Whip of the Oklahoma State Senate, he was appointed to Assistant Majority Leader in the 2001 Legislative Session. He is past president of the Chamber of Commerce; past member of the Agriculture Committee for the Oklahoma Bankers Association; and a member of the Soil Conservation Society of America. He also is a Mason, a Rotarian, and is listed in Who's Who in American Politics.

Sen. Capps received the distinguished Hall of Fame Award for 1997 from The Oklahoma Association Conservation District. This honor is traditionally awarded to champions of land, water, and wildlife conservation. In 1997, Sen. Capps was honored to be Chairman of the 16-state organization, Southern Legislative Conference, and is the first Oklahoman to lead this prestigious legislative organization. In 2002 Sen. Capps received the American Space Legislator of the Year Award for his support of a commercial space industry in the state. Senator Capps and his wife, Wanda, are very proud of their children, Cynda Capps Ottaway and Gilmer John Capps, and their 4 grandchildren.

As a "Plainspoken Plainsman," that good feeling from helping people is what keeps him going after many years of service. His clear blue eyes brighten as he tells how he "dogs" the bureaucracy to assist his 72,000 constituents. "I like to assist people." Capps say, "Personal service is what I really enjoy about the government". State Government News, February 1994.

Samuel Coniglio, Vice President of the Space Tourism Society

Samuel Coniglio is a writer/photographer researching the potential of private space travel. As part of the Ansari X PRIZE film crew in 2005, he photographed the historic flights of Space Ship One, the world's first private spaceship. Currently he is writing a science fiction novel about an average guy who wins the lottery to vacation onboard an orbiting luxury cruise ship, and deals with eccentric passengers, celebrities, solar flares, and the mysteries of the universe.

Samuel is Vice President of the Space Tourism Society, which promotes the nascent space tourism industry, and a member of the Space Frontier Foundation, which promotes free trade in orbit. Since 1997, he has presented papers, run conferences and conducted seminars on space tourism in the USA, Great Britain, and Germany.

Samuel worked for McDonnell Douglas at the NASA Kennedy Space Center in Florida from 1991-1996. As a technical writer, he documented payload-processing systems for the Space Shuttle and Space Station programs. His favorite project was working on the Department of Defense Delta Clipper

Experimental project, better known as the DC-X. Between 1993 and 1996, the DC-X flew a dozen times, proving that reusable rocket ships are feasible, which inspired the creation of several space rocket businesses in the late 1990's.

Peter H. Diamandis, Chairman, X Prize Foundation

Dr. Peter H. Diamandis is the Chairman of the X Prize Foundation (www.xprize.org), a non-profit organization promoting the formation of a space-tourism industry through a \$10,000,000 prize. Diamandis also serves as the Chairman of Zero Gravity Corporation a commercial space company developing private, FAA-certified parabolic flight utilizing Boeing 727-200 aircraft. Diamandis was a co-founder of Space Adventures (www.spaceadventures.com).

In 1987, Diamandis co-Founded the International Space University (ISU) (www.isunet.edu) where he served as the University's first Program Director and Trustee. Prior to ISU, Diamandis served as Chairman of Students for the Exploration and Development of Space (SEDS) an organization he founded at MIT in 1980. SEDS is the world's largest student pro-space organization.

Dr. Diamandis received his undergraduate and graduate degrees in aerospace engineering from the Massachusetts Institute of Technology (MIT) and his M.D. from Harvard Medical School. He has conducted research in a number of fields, including molecular genetics, space medicine, and launch vehicle design.

Dr. Diamandis has received a number of awards including MIT's Kresge Award, the 1986 Space Industrialization Fellowship, the 1988 Aviation Week & Space Technology Laurel, the 1993 Space Frontier Pioneer Award, and the Russian 1995 K. E. Tsiolkovsky Award.

Brian Feeney, President, da Vinci Aerospace

Brian is Team Leader of the Toronto based Golden Palace.com Space Program. Powered by the da Vinci Project, Canada's first entry in the international X Prize Competition and is also the founding shareholder of its parent company, ORVA Space Corp. Brian founded the da Vinci Project in 1996. He has a strong background in large project management and 3D CAD industrial design. Specific design and analytical skills are in liquid rocket propulsion engines and systems, aero structure layouts and design, RCS, flight profile and trajectory analysis. His own business background is in closed loop life support systems specializing in the development of advanced life support solutions for aerospace, military and commercial applications. Detailed specific knowledge has been developed on the current space suit, its operation - closed loop methodologies, liquid cooling garment as well as regenerative CO2 technology and the study of various soft and hard suit concepts. Brian is also a founding member of the Canadian Space Chamber of Commerce.

Jeff Greason Co-Founded XCOR

Jeff Greason co-founded XCOR in September 1999 and serves as President. XCOR is a privately held small business located in Mojave, California which provides rocket engines and rocket vehicles cost-sensitive government and private markets. XCOR has developed several generations of long-life, highly reusable rocket engines, a low cost piston pump for rocket propellants, and a manned reusable rocket aircraft, the EZ-Rocket, which has flown nineteen times without mishap. Mr. Greason was cited by Time magazine in 2001 as one of the "Inventors of the Year" for his work on the EZ-Rocket. Previously, he spent two years managing the propulsion team at the Rotary Rocket Company. There he built up the rocket engine development team, and led technical efforts in rocket engines. Prior to joining Rotary Rocket, Mr. Greason served as a technical manager at Intel Corporation. In 1992, he received the Intel Achievement Award for his work developing a less expensive BiCMOS technology than competitors, which became the basis for the Pentium product line. Mr. Greason was responsible for the first chip design on each technology generation, and shortened the design cycle so those new chips were ready three months in advance. Mr. Greason holds 18 U.S. patents and has a BS degree in electrical engineering from the California Institute of Technology.

Mr. Greason has been involved with FAA/AST since the Notice of Proposed Rulemaking on RLV licensing in 1998. He commented extensively on the NPRM prior to it becoming a final rule and has commented on most AST rulemakings since that time. He has been an active participant in the COMSTAC RLV Working Group since October 1999. Mr. Greason was the sole point of contact for XCOR Aerospace licensing efforts until early 2003 and remains deeply involved in XCOR licensing efforts. XCOR flights of the EZ-Rocket starting in the summer of 2001 and especially the exhibition flights in the summer of 2002 accelerated efforts within the FAA to define the transition from aircraft regulation to launch vehicle regulation for suborbital vehicles; Mr. Greason has worked closely with the FAA on this issue. More

recently, Mr. Greason supervised an RLV launch license application for XCOR which was the first "sufficiently complete" application for an RLV, and the second granted in April 2004. Mr. Greason has also supported the Mojave Airport on their successful application to be the first inland commercial launch site for reusable launch vehicles.

In July 2003, Mr. Greason testified before joint House/Senate subcommittee hearings on "Commercial Human Spaceflight". He stayed involved in the legislative process subsequent to those hearings, which culminated in the passage of the Commercial Space Launch Amendments Act of 2004, signed into law December 23, 2004. This new law creates a legal foundation for commercial human spaceflight in the United States.

Following the January 2003 announcement by President Bush of the new exploration initiative, Mr. Greason has been among those championing stronger private sector involvement in U.S. exploration efforts. He testified before the President's Commission on Implementation of United States Space Exploration Policy (the Aldridge Commission), in March 2004. XCOR has subsequently been competitively selected for contract award under the NASA Human and Robotic Technology program supporting this exploration effort.

David Gump is President and Co-Founder of the Transformational Space Corporation, LLC

In 1989, David co-founded LunaCorp, an entrepreneurial space company dedicated to commercial exploration and development on the Moon. While at LunaCorp, David arranged the filming of the first television commercial on the International Space Station. The advertisement, for electronics retailer RadioShack, showed the Space Station's crew receiving Father's Day gifts from their daughters. David also arranged for the crew to throw the ceremonial First Pitch for the 2002 World Series, on behalf of Fox Sports and Major League Baseball. LunaCorp also set up the sponsorships that provided Lance Bass of *NSYNC with all of his initial funding for his effort to visit the space station.

As co-founder of Pasha Publications in 1978, David created several newsletters such as Space Business News, Military Space and SDI Monitor. David also authored Space Enterprise: Beyond NASA, a book published in 1990 by Praeger Publishers.

David holds a Bachelor's degree in economics from Macalester College in St. Paul, Minnesota, and a Master's degree in journalism from Northwestern University, in Evanston, Illinois.

Rick Homans, Cabinet Secretary

As cabinet secretary, Rick Homans is the leader of the New Mexico Economic Development Department. EDD is one of 30 departments and agencies in the executive branch, and Homans was appointed by Governor Richardson in late 2002. Richardson's 2005 state of the state address began by singling out economic development as a top priority, which in turn shines the spotlight on Homans and his work.

Homans' mission is to create an environment where 21st Century businesses can thrive, creating high-wage jobs in fields like aerospace, biotechnology, technology, and film.

Since Homans took the helm, the Economic Development Department has made several landmark accomplishments.

Among them:

- New Mexico will host the annual X-Prize Cup public spaceflight exhibition beginning in October 2005.
- Maverick aerospace manufacturer Eclipse Aviation chose Albuquerque for its home base.
- Icelandic pharmaceutical firm deCODE joined the New Mexico Health Sciences Center and Santa Fe's National Center for Genome Resources in a \$24 million research contract.
- The Job Training Incentive Program helped finance 2,737 new jobs statewide.
- 25 films have been shot in New Mexico since Homans took office, pumping nearly \$2 million into the economy.
- Homans established a business-recruitment agency, the New Mexico Economic Development Partnership.
- Local communities can now empower themselves to attract new business through the Certified Communities Initiative.

Michael Kelly, X PRIZE Foundation is Vice President of Operations, X Prize Cup

He founded Kelly Space & Technology, Inc. and co-founded TRW Space Launch Services Organization where he invented and patented the TRW Family of Low-Cost Expendable Launch Vehicles (basis for Lockheed Martin Athena) and served as Director of Engineering. Kelly was appointed to the Commercial Space Transportation Advisory Committee (COMSTAC) in 1998, and led successful efforts at assisting FAA/AST in establishing a regulatory framework for Reusable Launch Vehicles (RLVs), that will allow the new industry to grow with the least impediment consistent with public safety. Kelly has a BS and MS in Mechanical Engineering from Purdue University.

Chuck Lauer, Vice President Business Development, Rocketplane, Inc

Charles Lauer is a partner in SpaceVision, LLC, a partner in Orbital Properties, LLC, as well as a co-founder of Pioneer Rocketplane. He is also a successful real estate developer and President of Peregrine Properties in Ann Arbor, Michigan. In that capacity, Mr. Lauer has been responsible for negotiating, obtaining regulatory approvals, and arranging financing for more than \$250 million in successful real estate development projects. While earning his income from Earth-based business deals, he has spent more than a decade researching potential business opportunities in space and was an adviser and contributor in this area to the 1994 NASA / aerospace industry Commercial Space Transportation Study. Mr. Lauer has been a consultant to Boeing and NASA on commercial space station development, a participant in the NASA New Space Industries Workshops, and a member of the NASA / KPMG Commercial Space Ventures Advisory Team.

Pablo de León, President Pablo de León and Associates, Buenos Aires, Argentina.

Pablo de León has almost two decades as an aerospace engineer with experience in space project management. In the past Pablo worked with the Space Shuttle as payload manager and general designer of the Project PADE (G-761) science experiments package.

These experiments completed all NASA certifications and flew on mission STS-108 to the International Space Station in December 2001. This project carried seven experiments and performed flawlessly during the 12 day space flight bringing scientific results to U.S. and Argentine universities.

His prior experience was as chief designer and fabrications manager for several, underwater-simulation, (EVA) analog, pressure suit systems. Pablo has flown, as payload specialist, in the NASA KC-135 aircraft more than 80 weightless parabolas carrying four Zero-G fluid dynamics experiments.

As writer, Pablo has published several books and reports about space, with a special interest in manned space flight. One of these books entitled "108 Minutes in Space" documents the first flight of a human in space. He founded a magazine of space exploration, and is currently editor in chief of the "Latin-American Journal of Space Science and Technology". Pablo has written more than 35 technical papers on space engineering and life support systems presented at international congresses. He belongs to a number of professional aerospace engineering societies. He was selected Regent of the United Societies in Space (USIS) in 2000. During 2000 he was co-founder of the Latin American Space Association (Asociacion Espacial Latinoamericana www.alespacio.org). Pablo was elected as Regional Representative (South America) of the Space Generation Advisory Council in Support of the United Nations Program on Space Applications. He completed training as member of the Community Emergency Response Team (CERT), a training program administered by the Federal Emergency Management Agency (City of Cape Canaveral, Florida). He was recently appointed as reviewer of the Collection of Preferred Space-Related Standards (CPSRS) being organized by the American Institute of Aeronautics and Astronautics (AIAA).

Pablo is one of the original competitors in the X Prize ([link to www.pablodeleon.com](http://www.pablodeleon.com)) and is working actively in the X Prize Cup to be held every year in New Mexico ([link to www.xprize.org](http://www.xprize.org))

He is also a Research Associate in the area of extravehicular activities and space suit design at the Department of Space Studies, University of North Dakota, in Grand Forks. He is also preparing a new course on Human Spaceflight for UND, and working as project manager of a NASA-funded program on planetary space suit design. Pablo holds sports scuba-diving certification, professional scuba certification and is a private pilot.

Erik Lindbergh

Erik Lindbergh, a commercial pilot and certified flight instructor, is the grandson of Charles and Anne Morrow Lindbergh. To mark the 75th anniversary of his grandfather's Spirit of St. Louis transatlantic flight, Erik Lindbergh recreated this 1927 milestone, illustrating the human spirit's ability to dream, innovate and achieve goals against many odds.

Though he leads an active lifestyle, Erik was diagnosed at the age of 21 with rheumatoid arthritis (RA), a progressive autoimmune disease that caused him to give up his passion for aviation when he was 28 years old. He now serves as a spokesperson for the Arthritis Foundation, working to educate others about RA.

A graduate of Emery Aviation College where he received his Aeronautical Science degree, Erik serves as a Trustee and Vice President of the X PRIZE Foundation, a non-profit organization that stimulates the creation of a new generation of launch vehicles designed to carry passengers into space. The X PRIZE is fashioned after the Orteig Prize, the aviation incentive prize won by Charles Lindbergh's transatlantic flight in 1927.

Erik is also a Director of the Lindbergh Foundation, a non-profit organization dedicated to furthering his grandparents' vision of balance between technological advancement and environmental preservation. The Foundation gives grants, does educational programs and gives the Lindbergh Award each year for work dedicated to the "Balance" concept.

An artist, Erik is the owner of Lindbergh Gallery, where he creates unique furniture and wood sculptures. He is known for his sculptures of rustic planets, spacecraft and aircraft.

Clayton Mowry is President of Arianespace, Inc.,

Clayton Mowry is President of Arianespace, Inc., with responsibility for managing Arianespace's customer, industry and governmental relations at the company's U.S. affiliate.

The Washington, D.C.-based Arianespace, Inc. was established in 1982, and is a key element of Arianespace's international presence. Approximately one-fourth of the more than 240 launch services contracts signed by Arianespace since its creation in 1980 are with U.S. organizations, and at least half involve U.S.-built spacecraft.

Mowry joined Arianespace, Inc. from the Satellite Industry Association (SIA), where he was executive director of the nonprofit alliance that represents leading U.S. satellite manufacturers, service providers and equipment suppliers.

Prior to the SIA, he worked as a satellite industry analyst and senior international trade specialist for the U.S. Department of Commerce's Office of Telecommunications, and was a Presidential Management Intern and trade policy analyst covering the space launch industry for the Department of Commerce.

Mowry holds degrees in political science and economics from Ohio Wesleyan University and a MBA from Georgetown University

Anhtuan Ngo, Project Manager, Air Force Research Laboratory

Anhtuan D. Ngo received his B.S degree from Texas A&M University in 1992 and M.S. and Ph.D. degrees from University of Washington in 1995 and 2000 respectively. In the past three years, he worked as a control research engineer at the Air Force Research Laboratory / Air Vehicles Directorate, Dayton, Ohio. His research interests and publications were in analysis and design of nonlinear adaptive control system for aerospace vehicles, system identification and control allocation. In 2004, he joined the Operationally Responsive Spacelift Technology Office as the technology manager responsible for the planning and coordinating of technology roadmaps.

J. Roderick O'Connor, President, X PRIZE Foundation

Rod O'Connor comes to the X PRIZE Foundation from The ROC Group, a grassroots, communications and event marketing consulting practice he founded, with clients in the business, non-profit, and political sectors. Previously, he served as the Chief Executive Officer for the 2004 Democratic National Convention Corporation in Boston. As CEO of the Convention, he built an organization from the ground up, ultimately managing 300 employees and consultants and a budget in excess of \$55 million and served as the principal liaison with government, party, and local leaders, and worked successfully with the leadership of the Department of Homeland Security and state and local security officials to provide for the safety of the nearly 50,000 participants. Prior to the convention, O'Connor was Vice President for Corporate

Affairs at Citynet Telecommunications. In this role he directed all state and local government outreach efforts and negotiated the company's access to fourteen new markets in major U.S. cities.

In 2000, O'Connor was a senior aide to Vice President Al Gore and the COO for that year's Democratic Convention in Los Angeles. At the convention he managed all day-to-day operations and was the chief spokesperson, working directly with national and international media. He also worked with the private sector to design and implement innovative corporate sponsorships that generated over \$10 million in resources for the convention. Following the convention, he managed the debate camp for the Gore/Lieberman campaign. O'Connor also served as chief of staff for the Democratic National Committee. In this position, he worked directly with the chairman to supervise all aspects of the organization and served as the chief liaison to the Office of the Vice President at the White House. Additionally, O'Connor traveled throughout the country speaking on behalf of the committee to senior elected officials, supporters and the media. O'Connor spent three years as a White House and Senate aide to Vice President Gore. During this time, he handled government affairs issues in the Senate and managed the Vice President's daily schedule and national political relationships at the White House. He also worked extensively with the diplomatic community organizing numerous international visits for both President Clinton and Vice President Gore to Asia, Africa, Europe, and South America. In the private sector, Rod O'Connor worked as an account supervisor for Edelman Public Relations Worldwide where he designed and implemented a multi-state telecommunications reform effort for a major U.S. telecomm company, advised the leading national information services company during federal agency hearings, and mounted a national drug education campaign for a leading pharmaceutical firm. Rod O'Connor holds a MPA from Harvard University and a BA from Hampden-Sydney College.

Tim Pickens, President, Orion Propulsion, Inc.

Tim Pickens, Orion Propulsion, Inc. is President and also served as Project Manager/Team Leader of the Liberator for the High Altitude Research Corp for the X-PRIZE competition. He has 8 years of design experience with liquid and hybrid rocket motors including the testing and handling of solid rocket motors. He has designed and built rocket motor test facilities and implemented motor testing programs. He has worked as Propulsion Engineer, Systems Engineer, and Test Engineer for various aerospace companies. Most recently he has worked for Burt Rutan as Chief Propulsion Engineer/Developer for the Spaceship One project, which represents the world's first private sub-orbital manned space plane. Currently Mr. Pickens leads the HARC X Prize team as Project Manager/Team Leader. "Like every worthwhile adventure this one has risks; the potential rewards of commercially developing the space frontier inspires us to manage those risks. Whether we win or another team wins the X PRIZE Competition, the purpose of the X PRIZE will be achieved. Space will again be an inspirational focus, something for our youth and youthful thinkers to dream about and to work toward. The final frontier is a fantastic resource for medical research, weather prediction, and a large variety of other things including many of which we have not yet dreamed. Commercialization of space will happen. I say the sooner we truly commercialize space, the better off we will all be."

Tony Popp, Economics and International Business, NMSU

Dr. Anthony 'Tony' Popp is a Professor of Economics in the Department of Economics and International Business at New Mexico State University (NMSU). He received a B.A. in Economics from Coe College, an M.A. in Economics from the University of Iowa and a Ph.D. in Economics from Northern Illinois University. He has been with NMSU since 1981 and his specialties are in the areas of Public Finance and Public Policy. He has worked with numerous NM state agencies and organizations. He is a co-director of the Policy Analysis Office of the Arrowhead Center.

Dumitru Popescu, President, Aeronautics & Cosmonautics Romanian Assoc.

Graduated from the Physics and Mathematics high school in Brasov, 1971; degree in aerospace engineering from the Polytechnica University in Bucharest, 1976; degree of aeronautical engineering; airforce pilot; hobby: photography; he is fluent in English, Russian and French; since 1990 Director of the civil aviation program of Romania; 1998 President of ROSA (Romanian Space Agency); 2003 Major General; 2004 Ambassador on Romania in Russia.

Don Robinson, Vices-President, High Altitude Research Corporation

Don Robinson, High Altitude Research Corporation is the HARC Vice-President, Business Development Lead, X Prize Planner, Investor Relations Contact. He has over 3 years of experience with New

Business development in the area of Space Programs and Systems. He also co-wrote a business plan for an optical system which the President of the Teledyne company for which he was working described as "the most detailed, highly analyzed, and well put together business plan I have ever seen at this company". His two B.S. degrees are in Physics and Astronomy. Mr. Robinson has 7 years of experience with NASA Space Shuttle Spacelab Mission Planning. This included the coordination and provision of the Principal Investigating scientists' needs and wants within the framework of the available systems and resources of the Space Shuttle and the Spacelab Modules and Pallets. He provided significant pre-mission and mission support to the science of 7 Space Shuttle missions. This included console support and Replanning during each of the missions. In 2002 Mr. Robinson completed a Systems Engineering Certificate program at the University of Alabama in Huntsville (UAH). Current ongoing training includes the Olin B. King Excellence in Entrepreneurship Seminar Series being provided through UAH and Biztech (a local Huntsville business incubator). In addition, he has led and/or worked various missile and satellite related software simulation and development projects. Mr. Robinson also has experience and training in Optics, Sensors, and Optical Signatures. He is the co-inventor of numerous Launch Systems components and has multiple patents pending. He is the Lead Partner for Valley Investment Partners, a member of the National Association of Investors Corporation is President of the company. HARC's goal is to develop a cost-effective, safe and expandable launch platform for flight, atmospheric and microgravity research. Their first priority is passenger safety followed closely by passenger comfort. HARC believes that only through the privatization and commercialization of space will the "final frontier" become a usable resource for research, exploration and even all out fun.

Richard A. Searfoss (COLONEL, USAF, RET.)

NASA Astronaut (FORMER)

EDUCATION: Graduated from Portsmouth Senior High School, Portsmouth, New Hampshire in 1974; received a bachelor of science degree in aeronautical engineering from the USAF Academy in 1978, and a master of science degree in aeronautics from the California Institute of Technology on a National Science Foundation Fellowship in 1979. USAF Squadron Officer School, Air Command and Staff College, and Air War College.

ORGANIZATIONS: Association of Space Explorers, National Eagle Scout Association, Air Force Association, Academy of Model Aeronautics.

SPECIAL HONORS: Awarded the Harmon, Fairchild, Price and Tober Awards (top overall, academic, engineering, and aeronautical engineering graduate), United States Air Force Academy Class of 1978. Air Force Aero Propulsion Laboratory Excellence in Turbine Engine Design award. USAF Squadron Officer's School Commandant's Trophy as top graduate. Distinguished graduate, USAF Fighter Weapons School. Named the Tactical Air Command F-111 Instructor Pilot of the Year, 1985. Selected for Outstanding Young Men of America, 1987. Recipient of the Air Force Commendation Medal, Air Force Meritorious Service Medal, Defense Meritorious Service Medal, Defense Superior Service Medal, NASA Spaceflight Medal (3), NASA Exceptional Service Medal, NASA Outstanding Leadership Medal, and Air Force Distinguished Flying Cross.

EXPERIENCE: Searfoss graduated in 1980 from Undergraduate Pilot Training at Williams Air Force Base, Arizona. From 1981-1984, he flew the F-111F operationally at RAF Lakenheath, England, followed by a tour at Mountain Home AFB, Idaho, where he was an F-111A instructor pilot and weapons officer until 1987. In 1988 he attended the U.S. Naval Test Pilot School, Patuxent River, Maryland, as a USAF exchange officer. He was a flight instructor at the U.S. Air Force Test Pilot School at Edwards AFB, California, when selected for the astronaut program.

He has logged over 5,000 hours flying time in 56 different types of aircraft and over 939 hours in space. He also holds FAA Airline Transport Pilot, glider, and flight instructor ratings.

NASA EXPERIENCE: Selected by NASA in January 1990, Searfoss became an astronaut in July 1991.

Initially assigned to the Astronaut Office Mission Support Branch, Searfoss was part of a team responsible for crew ingress/strap-in prior to launch and crew egress after landing. He was subsequently assigned to flight software verification in the Shuttle Avionics Integration Laboratory (SAIL). Additionally, he served as the Astronaut Office representative for both flight crew procedures and Shuttle computer software development. He also served as the Astronaut Office Vehicle System and Operations Branch Chief, leading a team of several astronauts and support engineers working on Shuttle and International Space Station systems development, rendezvous and landing/rollout operations, and advanced projects initiatives. A veteran of three space flights, Searfoss has logged over 39 days in space. He served as pilot on STS-58

(October 18 to November 1, 1993) and STS-76 (March 22-31, 1996), and was the mission commander on STS-90 (April 17, to May 3, 1998). Searfoss retired from the Air Force and left NASA in 1998. For the next few years he worked in private industry and, more recently, was a research test pilot at NASA's Dryden Flight Research Center. In February 2003, Searfoss left Dryden to pursue private business interests.

SPACE FLIGHT EXPERIENCE: Searfoss served as STS-58 pilot on the seven-person life science research mission aboard the Space Shuttle Columbia, launching from the Kennedy Space Center on October 18, 1993, and landing at Edwards Air Force Base on November 1, 1993. The crew performed neurovestibular, cardiovascular, cardiopulmonary, metabolic, and musculoskeletal medical experiments on themselves and 48 rats, expanding our knowledge of human and animal physiology both on earth and in space flight. In addition, the crew performed 16 engineering tests aboard the Orbiter Columbia and 20 Extended Duration Orbiter Medical Project experiments. The mission was accomplished in 225 orbits of the Earth.

Launching March 22, 1996, Searfoss flew his second mission as pilot of STS-76 aboard the Space Shuttle Atlantis. During this 9-day mission the STS-76 crew performed the third docking of an American spacecraft with the Russian space station Mir. In support of a joint U.S./Russian program, the crew transported to Mir nearly two tons of water, food, supplies, and scientific equipment, as well as U.S. Astronaut Shannon Lucid to begin her six-month stay in space. STS-76 included the first ever spacewalk on a combined Space Shuttle-Space Station complex. The flight crew also conducted scientific investigations, including European Space Agency sponsored biology experiments, the Kidsat earth observations project, and several engineering flight tests. Completed in 145 orbits, STS-76 landed at Edwards Air Force Base, California, on March 31, 1996. Searfoss commanded a seven person crew on the STS-90 Neurolab mission which launched on April 17, 1998. During the 16-day Spacelab flight the crew served as both experiment subjects and operators for 26 individual life science experiments focusing on the effects of microgravity on the brain and nervous system. STS-90 was the last and most complex of the twenty-five Spacelab missions NASA has flown. Neurolab's scientific results will have broad applicability both in preparing for future long duration human space missions and in clinical applications on Earth. Completed in 256 orbits, STS-90 landed at Kennedy Space Center, Florida, on May 3, 1998.

Lonnie Sumpter, President, Kinematics

Lonnie Sumpter is an aerospace professional with 33 years of experience as an engineer, program manager and corporate executive and officer in both the government and private sectors. He is the co-founder and CEO of General Kinematics Corporation, a rapidly growing and highly diversified international corporation with offices and in both North and South America. GKC business lines include aerospace engineering, natural resources, technology development, and business consulting. Prior to forming GKC, Mr. Sumpter was Vice President and General Manager for Coleman Research Corporation's (CRC) Southwest Division.

The first 16 years of Mr. Sumpter's career were spent at White Sands Missile Range (WSMR) in the fields of engineering development and flight test of missile systems. He was directly involved in over 200 rocket and missile launches.

Mr. Sumpter serves on the Boards of Directors of several organizations including the New Mexico Space Alliance (of which he is a past Chairman), the Southern New Mexico High Tech Consortium, and the Technology Industries Association. He also serves on New Mexico's steering committee for the National Science Foundation's EPSCoR (Experimental Program to Stimulate Competitive Research) program and on New Mexico's Military Base Planning Commission.

Mr. Sumpter holds a Bachelor of Science degree in Mechanical Engineering from Oklahoma State University. Additional formal training includes the Army Material Command Intern Program, and a Master of Science equivalent from the Armed Forces Staff College.

Alex Tai, Vice President, Operations, Virgin Galactic

Trained as a pilot in the Royal Air force I started at Virgin as an airline pilot for Virgin Atlantic before embarking on special projects for Richard Branson. I have been working on the Galactic project from its conception, standing next to Paul Allen and Burt Rutan in mission control at the first X prize flight, I plan to fly the first commercial flight as one of the pilots, among my current tasks is to oversee the design and build of the new Spacecraft the SS2.

Paula Trimble, Associate Administrator for Commercial Space Transportation, FAA

Paula Trimble is a Space Transportation Industry Analyst in the Office of Commercial Space Transportation at the Federal Aviation Administration. She prepares AST's Quarterly Launch Reports and the annual Commercial Space Transportation Developments and Concepts report, and covers a number of policy and topical areas of interest to AST, including spaceports and launch site security, orbital debris, the Global Positioning System, and interagency activities on the peaceful use of outer space. She also publishes a report on the Economic Impact of Commercial Space Transportation on the U.S. Economy, which analyzes the direct and indirect impacts of commercial space launch and related activities.

Ms. Trimble came to AST from the Office of Space Commercialization at the U.S. Department of Commerce, where she participated in interagency space policy formulation, provided support to the Interagency GPS Executive Board, developed GPS outreach and education activities, and helped prepare studies on space economic data, near-term market opportunities in space, and suborbital reusable launch vehicles and applicable markets.

Prior to that, Ms. Trimble was a senior reporter at Federal Computer Week magazine, where she reported on programs at NASA, the National Science Foundation, and the Department of Transportation, as well as GPS, telecommunications and the information technology industry. In 1998 and 1999, Ms. Trimble was a staff writer at Space News, a weekly trade publication for space industry executives. At Space News, Ms. Trimble reported on the satellite ground systems industry, information technology, GPS policy, and military and civilian space issues.

Ms. Trimble holds a B.A. degree in Journalism with honors in Media Studies from the Pennsylvania State University. She minored in Art History and Science, Technology and Society. In October 2004, the night before SpaceShipOne won the X Prize, Paula and her husband launched the second stage of their family with the birth of their daughter, Soren.