

BIOGRAPHIC SKETCH

Jay S Pearlman
FourBridges

Education

California Institute of Technology, Pasadena, CA	Engineering (with honors) BS	1966
University of Colorado, Boulder CO	Aerospace	MS 1967
University of Washington, Seattle, WA	Aeronautics	PhD 1974

Professional Experiences & Positions

Director, Fourbridges (a non-profit Corporation)	2016 - Present
Co-Owner, Technical director, J&F Enterprise	2000 – Present
Professor, adjunct , University of Colorado, Boulder	2012 – Present
Chief Scientist/Fellow, Boeing Network Centric Operations	2002 - 2008
Senior Scientist, TRW Advanced Systems, PI Hyperion Program	1985 - 2002
R&D manager, Maxwell Laboratories	1978 – 1985

Biographical Summary

Dr. Pearlman has a Ph.D. from the University of Washington and a B.S. from the California Institute of Technology. His background includes sensors, remote sensing and information systems. He has been Deputy Program Manager and PI for the first science grade space-based imaging spectrometer, Hyperion, and was a leader of the international Science Team during his tenure at TRW. At Boeing, Jay was a Boeing Fellow and Chief Scientist on the Boeing Landsat Data Continuity Mission and Chief Architect on the Boeing GOES-R architecture study. He continued work in large-scale system of systems with a focus on Integrated Ocean Observing Systems and the Global Earth Observation System of Systems. Jay has participated in dissemination and outreach for European projects such as EuroGEOSS (multi-disciplinary information systems) and EGIDA (building a community of scientists in Europe for GEO) and is PI on an NSF Ocean Research Coordination Network and the recent NASA workshops on socio-economic benefits.

Jay is a Fellow of the IEEE. He was Chair (2007-09) of the IEEE-wide Committee on Earth Observation and the GEO Principal for IEEE. In this role, he addressed information systems, standards and capacity building in Earth observation applications, societal impacts and outreach. For the “EuroGEOSS” Framework 7 program, Jay was co-lead of the outreach work package, focused on international conferences, online symposia and tutorials for the program’s forestry, biodiversity and drought, societal impacts and interoperability themes. Dr Pearlman has organized activities and five international workshops on socio-economic benefits for Earth Science applications.

Dr. Pearlman is active in systems of systems architecture and information systems. He is Co-PI on an NSF EarthCube for advanced information system research. He is PI on an NSF Ocean Research Coordination Grant. In ocean research, Jay was a member of the UNESCO GOOS Science Steering Committee, a member of IOC JCOMM panel on Industry and recently

completed serving as a member of the US national committee of the Scientific Committee on Ocean Research (SCOR). Dr. Pearlman was also on the National Academies Ocean Studies Board and the Board of International Science Organizations (BISO). He originated a GEOSS workshop series that includes more than 40 international workshops on GEOSS architecture and benefits and applications of Earth observation. He is serving as co-organizer of a series of workshops on socioeconomic benefits (2011-2016).

Dr. Pearlman has more than 80 publications and 25 US and international patents. He was co-editor of a special issue of the peer-reviewed IEEE Systems Journal. He has given keynote addresses at international conferences on Ocean Engineering and Systems Engineering.

Recent Publications

1. Pearlman, Françoise, Pearlman, Jay, Bernknopf, Richard, Coote, Andrew, Craglia, Massimo, Friedl, Lawrence, Gallo, Jason, Hertzfeld, Henry, Jolly, Claire, Macauley, Molly, Shapiro, Carl, and Smart, Alan, 2016, Assessing the socioeconomic impact and value of open geospatial information: U.S. Geological Survey Report 2016–1036, 36 p., <http://dx.doi.org/10.3133/ofr20161036>.
2. Exploring Methodologies and Indicators for Cross-disciplinary Applications; Richard Bernknopf, University of New Mexico Main Campus, Albuquerque, NM, United States and Jay Pearlman J&FE, Chief Scientist, Seattle; poster AGU 2 2015 PA51C-2218
3. Pearlman, F, Bernknopf, R, Stewart M.A., and Pearlman, J, “Impacts of Geospatial Information for Decision Making” Chapter 10 in New Trends in Earth-Science Outreach and Engagement, J.L. Drake and Y. Kontar, editors, Springer, 2014
4. Pearlman, J, et al, “Value and Benefits of Earth Information for Societal Development” Geospatial World, Jan 2013, Vol. 3, Issue 6.
5. S.J. Khalsa, S. Nativi, R. Duerr and J. Pearlman, “BCube: Building a Geoscience Brokering Framework”, Paper EGU2014-4392, European Geophysical Union Meeting.
6. J. Pearlman, J. Yoder, J. Gallagher, A. Williams 3rd, A Research Coordination Network for Ocean Observations, Proceedings of the Oceans2014 Conference, St. John’s Newfoundland Canada, September 2014
7. S. Nativi, M. Craglia and J. Pearlman, 2013 Earth Science Infrastructures Interoperability: the Brokering Approach” Journal of Selected Topics in Applied Earth Observation and Remote Sensing, vol 6 pp 1118-1129.
8. S. Khalsa, J. Pearlman, S. Nativi, R. Duerr, F. Pearlman, M. Parsons, S. Browdy, 2012 “EarthCube Brokering Roadmap – Advancing Interdisciplinary Geoscience Research” available at https://docs.google.com/file/d/0BwH__5Stec3aTWprUHdaYkplMzg/edit.
9. J. Pearlman, M. Craglia, F. Bertrand, S. Nativi, G. Gaigalas, G. Dubois, S. Niemeyer, S. Fritz, “EuroGEOSS: an Interdisciplinary Approach to Research and Applications for Forestry, Biodiversity and Drought” Proceedings of the ISRSE 2011, Sydney, Australia, April 2011
10. Book Chapter – “System-of-Systems Engineering (SoSE) of GEOSS” J. Pearlman and R. Shibasaki, System of Systems Engineering, Editor, M. Jamshidi, Wiley, pp 551-572, (2009)