

Director's Research and Administrative Activities

David R. Criswell

DR. DAVID R. CRISWELL DIRECTS THE INSTITUTE FOR SPACE Systems Operations at the University of Houston and the University of Houston-Clear Lake. His primary research interests are in industrial development of the Moon and the economic benefits on Earth of a sustainable global electric economy. He is also an associate director of the Texas Space Grant Consortium. He regularly attends the fall and spring monthly meetings of the Houston Chapter of the International Association of Energy Economists, the annual international Lunar and Planetary Science Conference, and the meeting of the Board of Directors of the Texas Space Grant Consortium and participates in national and international conferences related to economic development of the Moon.

Dr. Criswell works extensively with Dr. Helen Lane (Director of University Programs at the Johnson Space Center), Dr. Kamlesh P. Lulla (University Program Officer), and Dr. Donn Sickorez (University Affairs Officer) coordinating the ISSO research program with primary program goals of NASA-JSC. Since April 2005, he has provided scientific articles and interviews to members of the general and aerospace press.

Presentations, Interviews, and Conferences/Workshops

Wang, J. Interview with science reporter for *Newsweek*, April 17, 2005.

Criswell, D. R. "Energy Support: Lunar Bases and Earth," (Invited presentation, 13 pp.) International Conference: Moon Base—A Challenge for Humanity, International Academy of Environmental Sciences, S. Elena, Venezia, Italy, May 24–28, 2005 <<http://www.moonbase-italia.org/>>.

Criswell, D. R. Participant in "Lunar Commerce Business Roundtable I," Southern Methodist University, Dallas, TX, June 24, 2005 <<http://www.lunarcommerceroundtable.com/>>.

Flintoff, J.-P. Telephone interview with science reporter of the *Sunday Times* (London), June 30, 2005.

Skytland, N. "Live interview with Dr. Criswell," Space Alumni.com, July 21, 2005 <http://www.spacealumni.com/index.php?option=com_content&task=view&id=209&Itemid=9&date=2005-08-01>.

The History Channel. Two hour special, "Beyond the Moon," Described Lunar Solar Power (LSP) System in closing section and gave technical credits to D. Criswell, Aug. 28, 2005.

Greeb, M. Interview on LSP System for *Wired News*, Oct. 13, 2005. Available in archives for week of Oct. 17, 2005 at <<http://www.wired.com/>>.

Criswell, D. R. "Return on Investment (ROI) from 'New Worlds & Lunar Solar Power,' (7pp.) International Conference: Moon Base—A Challenge for Humanity," Washington Workshop: Jamestown on the Moon, Washington Academy of Sciences, Washington, D.C., Oct. 12, 2005. Presentations and program available at <<http://www.moonbase-italia.org/>>.

Livingston, D. Interviewed D. Criswell concerning the LSP System on "The Space Show," Oct. 23, 2005. Available as podcast or download from <<http://www.thespaceshow.com/>>.

Criswell, D. R. "Sustainable Human Prosperity: Earth, Moon, Sun, and Beyond," Poster No. 2001 and Panel Member: Solar Power Breakout Group. Lunar Exploration Working Group Conference, League City, TX and the Lunar Commerce Roundtable II, Oct. 26–27, 2005. Available online at <<http://www.lunarcommerceroundtable.com/>>.

Ghenu, M. "Promising the Moon," *The Varsity*, Feb. 28, 2006. Interview on the LSP System with science editor for *The Varsity* of the University of Toronto, Canada, Oct. 28, 2005 <<http://www.thevarsity.ca/media/paper285/news/2006/02/28/Science/Promising.The.Moon-1641254.shtml?noreferrer&source=www.thevarsity.ca>>.

Pappalardo, J. Science writer for Smithsonian *Air and Space* magazine interview of D. Criswell on topic of techniques for disassembly of the sun and motivations as described in: Criswell, D. R. "Solar System Industrialization: Implications for Interstellar Migration," in *Interstellar Migration and the Human Experience*. Eds. B. R. Finney and E. M. Jones, U. Calif. Press, 1985. 50-87. Noted in "Book Reviews," by P. Morrison. *Scientific American* (June 1986): 28-29. Noted in "Mother Sun," by Ed Regis, *Omni* (Dec. 1983): 125-27.

Sjöström, M. TV science producer, program on terrestrial and lunar-based solar power (in Swedish), extensive interviews with D. Criswell, Swedish Educational Broadcasting Company, Stockholm Sweden, Dec. 2005:

A. Thirty-minute program available at <http://www.ur.se/wma_redirect.php?mapp=mediebiblioteket/tv/300&filnamn=9990000511_300_320x240.asf>.

B. Complete D. Criswell interview available at <<http://www.ur.se/vetenskap/447>>.

Spudis, P. "Why We're Going Back to the Moon," *Washington Post* op-ed article, Dec. 2, 2005, that specifies the LSP System as a major reason for the United States to return to the Moon <<http://www.washingtonpost.com/wp-dyn/content/article/2005/12/26/AR2005122600648.html>>.

Bell, T. E. "Warning: Dust Ahead," *Astronomy* (March 2006): 46-51, interviewed D. Criswell for 1970s work on Surveyor observations of lunar dust motion associated with local sunset. Criswell provided a false-color image of several Surveyor horizon-glow photographs to the Astronomy technical editor F. Reddy (listed source as "Doug" Criswell), in Rennilson, J. J. and D. R. Criswell. "Surveyor's Observations of Lunar Horizon-Glow," *The Moon* 10 (1974): 121-42.

ISSO Program Documents

Criswell, D. R. (Director), I. N. Rothman (Editor), and D. V. Bush (Associate Editor). Y2004 *Annual Report* of the Institute for Space Systems Operations of the University of Houston and the University of Houston-Clear Lake, 162pp., Houston, TX, 2005–2006.

Criswell D. R. (director) and H. Lane (JSC). Peer Review of proposals (29) submitted by University of Houston and University of Houston-Clear Lake faculty to ISSO for seed-grants by faculty and research staff from UH, UHCL, and NASA-Johnson Space Center, Feb. 28, 2006.

Criswell, D. R. Worked with UH System Office of the General Counsel and NASA-JSC to renew the existing Memorandum of Understanding for the UH/UHCL-JSC Post-Doctoral Aerospace Fellowship Program and then (Jan. 2006 to date) convert it to a Space Act Agreement, Aug. to Dec. 2005.

Criswell, D. R. Provided two discussion documents to the UH Office of the Vice Provost for Research for a possible funds request to the U.S. Federal Government, Sept. 7, 2005:

- A. Systems-Based Gulf-Coast Emergency Responses & Mitigation Program
- B. Graduate Level Program for Sustainable Development of the Solar System

Criswell, D. R. At the request of the UH Office of the Vice Provost of Research, ISSO stated the metrics to be used in evaluation of the ISSO program, Oct. 3, 2005. The metrics are those reported each year in the Director's Message of the ISSO Annual Report and the technical reports of all investigators.

Criswell, D. R. At the request of the UH Office of the Vice Provost of Research, ISSO established a new ISSO Advisory Group of professors from University of Houston, University of Houston-Clear Lake, Rice University, a NASA-JSC program scientist/manager, and a recently retired senior staff member of the Texas Higher Education Coordinating Board, Oct. 3, 2005.



COMET HALE-BOPP—Comet Hale-Bopp in the constellation Andromeda was photographed by George Shelton, photographer for the Bionetics Corp., at 8:14 p.m. on March 31, 1997, from Merritt Island, Florida, close to the Kennedy Space Center. During that 24-hour period, Comet Hale-Bopp made its closest approach to the Sun.