

Onsite Insights

Engineer's dreams live on in reality

By John Ira Petty

When Bill Schneider was a 10-year-old growing up in Louisiana, he had a dream. He knew then, as the 1950s began, that humans would go into space and eventually to other planets. He wanted to be a part of it.

Some of that dream is still alive. The rest of it has become reality.

Schneider, 58, recently was promoted to the position of JSC senior engineer, space systems, in the center's Engineering Directorate. The promotion came under a special ST (Science and Technical) category.

The ST category, he said, "allows you to stay focused on technical issues, as opposed to budgets and other matters—to keep your technical expertise up and to lead technically in achieving excellence in the things that we do." Before the promotion, he was the assistant director for Engineering.

Schneider's 35 years at NASA have been marked by hands-on contributions to resolving major issues of the space program and leading special design teams. He has been driven by three self-imposed principles—technical excellence, cost-effective simplicity and practicality, and the development of young engineers.

"When I see young people and see a sparkle in their eyes, it kind of brings me back to my younger days," he said. "I love to see that sparkle keep increasing through the years."

It took longer than his father would have liked for him to develop an academic sparkle in his own eyes.

The dream occupied attention that might better have been focused elsewhere. "I didn't study as much as I should have," he says now. As Schneider grew up he made and launched small solid-fuel rockets. His parents put a stop to the rocket launches after a series of explosions, but the dream persisted.

At Louisiana State University serious study began. He was at the top of his class in mechanical



Bill Schneider explains the concept of the inflatable TransHab module being developed for potential use in long-duration space flight missions.

engineering and attracted the attention of Manned Spacecraft Center officials. Others offered more money, but he wanted to work for NASA.

Schneider realized he was strong in mathematics and design, but that he needed some hands-on manufacturing experience. He found after-hours work—for no pay—at a machine shop on Telephone Road.

That lasted until he started graduate school at the University of Houston, where he got a master's in mechanical engineering in 1968. He went on to earn a mechanical engineering Ph.D. at Rice in 1972, excelling academically while working full-time at JSC.

His accomplishments parallel the history of JSC. Among them:

- A leading role in the design, manufacture and testing of the 32,000-pound payload that flew in place of the lunar module on Apollo 8.
- The critical elasticity analysis for the mobile equipment transporter (the lunar rickshaw) used extensively on the moon by Alan Shepard.
- Resolution of a number of problems relating to the space shuttle's thermal protection tiles.
- The concept for the new "joint interference fit" for the shuttle's solid rocket motor redesign after the *Challenger* accident.
- Responsibility for structural

design, assembly techniques and test of the "Option C" International Space Station.

• Modifications that salvaged the Russian shuttle docking mechanism after a failure just before shipment to the United States.

• Direction of the TransHab design study team.

"Now we're doing a lightweight Mars lander design," he said.

He has garnered honors along the way, including the NASA Exceptional Engineering Achievement Medal, two NASA Exceptional Service Medals, the STS-1 Special Achievement Award, the Shuttle Orbiter Project Special Engineering Achievement Award, and the Aerospace Mechanism Symposia Award. He also holds seven U.S. patents and two others are pending.

Schneider is married and the father of two daughters and a son. His hobbies include woodworking, wood carving and air brush art. He also plays tennis and enjoys hiking.

But most of his thoughts during his waking hours are devoted to space flight, and to the future.

"We'll certainly go to Mars, and later other planets," Schneider said. So the dream is still there. "It hasn't changed a bit. It's exciting. It's a true adventure."

Williams heads Space, Life Sciences

Astronaut Dafydd "Dave" Rhys Williams is designated as the new director of Space and Life Sciences at JSC.

Williams, who holds a master's in physiology and a doctorate in medicine from McGill University in Montreal, served as a mission specialist on the STS-90 Neurolab mission earlier this year.

He completed his residency in family practice medicine at University of Ottawa in 1985, and obtained a fellowship in emergency medicine from the Royal College of Physicians and Surgeons of Canada after completing a residency in emergency medicine at the University of Toronto in 1988.

He then became an emergency physician with the Department of Emergency Services at Sunnybrook Health Science Centre and a lecturer with the Department of Surgery, University of Toronto.



Williams

He later became acting director of the Department of Emergency Services at Sunnybrook and assistant professor of surgery and medicine at the University of Toronto.

Williams joined NASA in 1995 as a member of that year's astronaut class. Before joining NASA, he had been manager of the Missions and Space Medicine Group within the Canadian Space Agency's Astronaut Program.

People on the Move

Human Resources reports the following personnel changes as of July 25, 1998:

Key Management Assignments

Jack Knight was selected as chief, Simulator Operations and Technology Division, Mission Operations Directorate.

Fred Spross was named manager, Science Payloads Management Office, Space and Life Sciences Directorate.

Milt Heflin was named deputy manager, Flight Director's Office, Mission Operations Directorate.

Bob Maraia was selected as chief, Thermal Branch, Structures and Mechanics Division, Engineering Directorate.

Bill Paloski was selected as chief, Life Sciences Research Laboratories, Medical Sciences Division, Space and Life Sciences Directorate.

Travis Brown was selected as chief, Project Development Office, Science Payloads Management Office, Space and Life Sciences Directorate.

Earl Tiedt was selected as deputy manager, Science Payloads Management Office, Space and Life Sciences Directorate.

Ron Wade was named chief, Security Branch, Center Operations Directorate.

Additions to the Workforce

Rad Sinyak joins the Public Affairs office as a communications specialist.

Tomas Gonzalez-Torres joins the EVA and Robotics Systems Branch in the Mission Operations Directorate as a flight controller.

Mike Interbartolo joins the Guidance and Propulsion Systems Branch in the Mission Operations Directorate as a flight controller.

Joe Voor joins the Environmental Systems Branch in the Mission Operations Directorate as a flight controller.

K.C. Chhipwadia joins the Crew and Thermal Systems Division in the Engineering Directorate as an environmental control systems engineer.

Karen Nyberg joins the Thermal Systems and Engineering Support Branch in the Engineering Directorate as an environmental control systems engineer.

Barney Corbin joins the Logistics and Maintenance Office in the International Space Station Program Office as an imagery analyst.

Christie Nance joins the Advanced Development Office in the Engineering Directorate as a flight systems engineer.

Promotions

Mary Thomas was selected as a contract specialist in the Institutional Business Management Office in the Business Management Directorate.

Glenda Lancon was selected as a supply management specialist in the Supply and Materials Branch in the Center Operations Directorate.

Nancy Capra was selected as a secretary in the Flight Crew Operations Directorate.

Debra Yockov was selected as the division secretary in the Operations Technology Division in the Mission Operations Directorate.

Reassignments Between Directorates

Bob Savely moves from the Information Systems Directorate to the Engineering Directorate.

Larry Gana moves from the EVA Project Office to the International Space Station Program Office.

Tony Sang moves from the Mission Operations Directorate to the International Space Station Program Office.

Ben Sellari moves from the Mission Operations Directorate to the International Space Station Program Office.

Reassignments Between Centers

Steve Miley of the Business Management Directorate moves to NASA Headquarters.

Maryland Edwards of the Engineering Directorate moves to Ames Research Center.

Leslie Hartz of the Engineering Directorate moves to Goddard Space Flight Center.

Mike Gaunce of the Space and Life Sciences Directorate moves to Ames Research Center.

James Sturm of the Engineering Directorate moves to Goddard Space Flight Center.

LaTonya Alexander of the Business Management Directorate moves to Langley Research Center.

Jeff Cullen of the Business Management Directorate moves to NASA Headquarters.

Michelle Munk of the Engineering Directorate moves to Langley Research Center.

Retirements

Ken Hill of the Mission Operations Directorate.

Dates & Data

Aug. 11

Aero club meets: The Bay Area Aero Club will meet at 7 p.m. Aug. 11 at the Houston Gulf Airport clubhouse at 2750 FM 1266 in League City. For more information call Larry Hendrickson at x32050.

NPMA meets: The National Property Management Association will meet at 5 p.m. Aug. 11 at Robinette and Doyle Caterers, 216 Kirby in Seabrook. Dinner costs \$14. For details call Sina Hawsey at x36582.

Aug. 12

PSI meets: The Clear Lake/NASA Chapter of Professional Secretaries International will meet at 5:30 p.m. Aug. 12. For more information, call Elaine Kemp at x30556.

Astronomy seminar: The JSC Astronomy Seminar will meet at noon Aug. 12, 19 and 26 in Bldg. 31, Rm. 129. For more information, call Al Jackson at x35037.

Communicators meet: The Clear Lake Communicators will meet at 11:30 a.m. Aug. 12, 19 and 26. For information and location, contact Henry Duke at 281-280-4403 or Melissa Sommers at 281-332-0698.

Spaceland Toastmasters meet: The Spaceland Toastmasters will meet at 7 a.m. Aug. 12, 19 and 26 at the House of Prayer Lutheran Church. For more information call George Salazar at X30162.

Spaceteam Toastmasters meet:

The Spaceteam Toastmasters will meet at 11:30 a.m. Aug. 12, 19 and 26 at United Space Alliance, 600 Gemini. For details, call Patricia Blackwell at 281-282-4302 or Brian Collins at x35190.

Aug. 13

MAES meets: The Society of Mexican American Engineers and Scientists will meet at 5 p.m. Aug. 13 at Mario's Pizza in Webster. For details, call George Salazar at x30162.

SSQ meets: The Society for Software Quality will meet at 6:45 p.m. Aug. 13 at the Holiday Inn. To make a reservation, call Earl Lee at 281-282-4331 or Herb Babineaux at x34263.

TSU alumni meet: The Texas Southern University, Clear Lake/Galveston Alumni Chapter will meet at 6:30 p.m. Aug. 13 on the TSU campus in Hannah Hall Room 217. For more information call 281-481-0950 or Janell Ellison at 713-731-0949.

Aug. 14

Space Society meets: The Clear Lake Area chapter of the National Space Society will meet at 6:30 p.m. Aug. 14 at the Radisson Hotel, 9100 Gulf Fwy. in the Deer Park room. The group meets the second Friday of every month. For more information, call Murray Clark at 281-367-2227.

Astronomers meet: The JSC

Astronomical Society will meet at 7:30 p.m. Aug. 14 at the Center for Advanced Space Studies, 3600 Bay Area Blvd. For more information, call Chuck Shaw at x35416.

Aug. 19

Scuba club meets: The Lunarflin will meet at 7:30 p.m. Aug. 19 at the Redfish Restaurant under the Kemah/Seabrook bridge, Seabrook side. For more information, call Mike Manering at x32618.

Aug. 20

Directors meet: The Space Family Education board of directors will meet at 11:30 a.m. Aug. 20 in Bldg. 45, Rm. 712D. For more information on this open meeting, call Gretchen Thomas at x37664.

Aug. 27

Radio Club meets: The JSC Amateur Radio Club will meet at 6:30 p.m. Aug. 27 at the Piccadilly, 2465 Bay Area Blvd. For more information, call Larry Dietrich at x39198.

Sept. 3

NCMA meets: The National Contract Management Association will meet at 11:30 a.m. July 23 at the Gilruth Center. Members should register through their key contacts. Non-member registration and payment in advance should be made through Julie Sarafolean, 212-6005.