

## 2007 Engineer of Distinction



### Teresa Vanhooser

B.S. Industrial Engineering, TTU, 1980

M.S. Administrative Science/Project Mgt, University of Alabama-Huntsville, 1986

Deputy Director, Engineering Directorate  
Marshall Space Flight Center

### Citation

From Johnson City, Tennessee, Teresa Vanhooser enrolled in industrial engineering at Tennessee Tech at a time when few women majored in engineering. Today she serves as co-deputy director of the Marshall Space Flight Center's Engineering Directorate, one of the Marshall Center's largest organizations, consisting of over 2000 civil service and contractor employees with an annual budget in excess of \$135M. The Engineering Directorate is responsible for the design, test, evaluation, and operation of hardware and software associated with space transportation, spacecraft systems and science instruments, along with payloads under development at Marshall Space Flight Center (MSFC). The directorate also manages Marshall's Payload Operations Center, which is the command post for scientific research experiments aboard the International Space Station – the orbiting research complex being built some 200 miles above Earth by the United States and 15 other nations.

Accomplishment and advancement characterize Teresa's career with NASA. Her first position after graduation from Tennessee Tech in 1980 was as a grounds operations engineer, where she developed requirements for the integration and testing of payloads. While in this position, she earned a Master of Administrative Science degree from the University of Alabama in Huntsville. In 1993, she completed her first stint as mission manager for the Second Atmospheric Laboratory for Applications and Science Mission (ATLAS-2). She was not only the first woman ever to serve in that position but was also the youngest person to serve. She received the NASA Exceptional Achievement Medal for her accomplishments in this mission. In 1997 she served as mission manager for the first Microgravity Science Laboratory on the Columbia shuttle mission and was responsible for the integration and operation of all the experiments on board the shuttle. From 1997 to 1999, she was the manager responsible for planning and directing the multi-million dollar Space Station Utilization efforts for the International Space Station payload operations and utilization projects. In addition, she managed the design and development of integration hardware and software used to support Expediting the Process of Experiments to Space Station (EXPRESS) payload integration.

As supervisor of the Multi-use Payload Group in 1999, she implemented a new organization; managed the development and integration of the EXPRESS rack hardware and software systems; and provided oversight

for the EXPRESS pallet hardware and software being developed by the Brazilians. In 2000, she was named to the Senior Executive Service as manager of the Payload Operations and Integration Department. Under her leadership multiple racks were successfully delivered to orbit and 24/7/365 payload support was provided to the International Space Station. Promoted in 2004 to Deputy Director for Flight Projects, she was responsible for all aspects of the design, development, integration, testing, and operations of ground and flight systems for the International Space Station Program Office (over 10 projects) and other customers. She was appointed to her current position, Deputy Director of the Engineering Directorate, in 2004.

Teresa's career has been marked with numerous awards. In 2006, she was recognized by President Bush with the Presidential Rank Award for Meritorious Executive for outstanding leadership and service in federal government. This award is given to executives who have consistently demonstrated strength, integrity, and commitment to public service in their careers. She also received the 2006 Federal Women's Program Outstanding Woman Achiever Award for outstanding performance, dedication, and innovation in carrying out her duties as a supervisor. Other awards include the Silver Snoopy Award (1992), Outstanding Performance Awards (multiple), NASA Certificate of Appreciation Awards (multiple), NASA Group Achievement Awards (multiple), and Special Service Awards (multiple). These awards speak for her dedication to engineering, as well as her character and citizenship.

Teresa and her husband Mike, also a Tennessee Tech graduate (BSIE 1980), have two daughters and reside in Madison, Alabama.



2007 EOD Teresa Vanhooser is congratulated by Dean Glen Johnson