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# SPACE CENTER Roundup

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## Season's Greetings

**A**s the holiday season approaches, we can all take pride in the Center's progress this year, setting the stage for what promises to be a productive and challenging year in 2000. While we flew fewer space flights than anticipated, this year was one of accomplishment: a very successful logistics flight to Zarya and Unity, the deployment of an outstanding X-Ray Observatory, and we will soon proceed to restore the capabilities to a unique and history-making astronomical observatory, the Hubble Space Telescope.

This year was not without its problems. They reminded us of the need to pay attention to detail. The shuttle is indeed a wonderful spacecraft, but one that requires our attention and tender loving care. Our emphasis on wiring during these past few months will make the shuttle a much more dependable and effective vehicle for future missions. The increased emphasis on safety from the Administrator down to the worker on the floor has also brought a greater recognition of the need for shuttle upgrades and an investment in this critical activity on the part of the Congress. These upgrades will make the space shuttle an even more reliable and safer vehicle that will fly well into the next century. On the ground, our focus on safety continues to be of paramount importance. From an outstanding Safety and Total Health Day, to JSC's recognition as a Voluntary Protection Program Star site, your attention to quality and safety is commendable.

Many of you have been involved in critically important advanced technology efforts. These have ranged from advances in materials such as carbon nanotubes, to medical breakthroughs including a promising new drug delivery system, to advances in spacesuit and life support system design for future human space exploration, to advances in spacecraft design and testing including the X-38 and the TransHab. If we are to set the stage for an eventual return to the moon and for the human exploration of Mars, these great strides in research and development must continue.

Our research efforts in the physical and life sciences at JSC have also been impressive this year. A team of JSC scientists reported finding liquid water in a meteorite, the first discovery of its kind and a potential indication that life may exist outside our planet. And the National Space Biomedical Research Institute investigators continue to pursue and evaluate techniques to control the physiological problems associated with long-duration space flight.

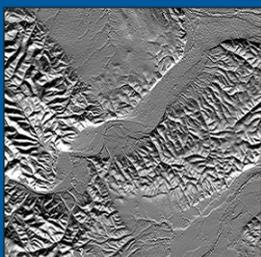
The White Sands Test Facility continues to demonstrate world-class expertise with an outstanding year of performance, providing a wide variety of test and laboratory research and development support to all NASA centers, the Department of Defense, other government agencies and private industry.

The efforts of individuals working abroad – and in Russia, in particular – have contributed greatly to our successes in 1999. I would like to extend my best wishes to all those individuals and their families for helping to make a difference.

Equally important, we have continued to share our story with more and more people through venues such as Open House and Inspection99, as well as through a variety of education programs. From student co-op programs and KC-135 outreach efforts to tutoring in local schools and collaborating with local and regional efforts to improve education, we could not have accomplished outreach of this magnitude without your unwavering volunteer efforts – and for that, I thank you.

As part of the nation's space program, we are faced with challenges from every direction. With your passion and commitment to fulfilling the nation's goals, however, we can continue to build on the legacy and legend of NASA. Our experience during past years demonstrates we can overcome the obstacles ahead of us. I thank all of you – the civil servant/contractor workforce team and our supporters in the community – for your hard work and your outstanding contributions to furthering the exploration of space. My heartfelt wishes to you and your families for a joyous holiday season. ■

*George W. S. Abbey*



STS-99 to demonstrate new 3-D mapping.

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Preparing for extended space flight.

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JSC employees share the spirit of giving.

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