


Space Day Austin

February 22, 2007

Space Day Goals

- Inform Texas Legislature of JSC's role in exploration and economic impact in the State
- Inform Legislators on the Texas Aerospace Scholars Program and Space Alliance Technology Outreach Program
- Receive recognition from the State for NASA's work in Texas



Space Day
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Who are we?
Several partners are participating in Space Day including:

- NASA Johnson Space Center (JSC)
- Bay Area Houston Economic Partnership
- Aerospace contractors
- Houston Livestock Show and Rodeo
- Rotary National Award for Space Achievement (RNASA)
- Texas schools and universities

Why are we here?
The Texas Aerospace Community is here to:

- Raise awareness of JSC's role in space exploration
- Share how this work affects districts all across Texas
- Inform Legislators on the partnerships between the State of Texas and NASA including Texas Aerospace Scholars (TAS) and Space Alliance Technology Outreach Program (SATOP)

What is JSC's Role in Space Exploration?
As the premier NASA center for human space flight and related scientific and medical research efforts, we play a pivotal role in the success of NASA's mission.

We manage the development, testing, training, production and delivery of all U. S. human spacecraft as well as the Program Offices for Space Shuttle, International Space Station and Constellation, NASA's next generation of exploration. JSC is also the home of Mission Control and the Astronaut Corps.

What are the Texas Aerospace Scholars and Space Alliance Technology Outreach Programs?
TAS inspires the next generation of explorers to study science, technology, engineering and mathematics – planting the seeds for Texas' future workforce.

- Legislators nominate students to participate in a one-year program including rigorous on-line lessons highlighted by an experience at JSC. With successful completion of the summer experience, students may request a science elective credit towards graduation based on the Scientific Research and Design course developed by the Texas Education Agency.
- Teachers begin their one-year program with a week of professional development at JSC where they learn to integrate NASA instructional materials into their classrooms with NASA via distance-learning, Web-casts and down links.
- Over 5,600 students and teachers have participated in TAS since the start of the program.



National Aeronautics and Space Administration

What is Texas Aerospace Scholars (TAS)?
TAS encourages Texas students to explore the unlimited career possibilities in science, technology, engineering and mathematics (STEM) with space exploration as its central theme. Since beginning in 1999, more than 5,600 Texas residents have participated in TAS. Students complete online curriculum and teachers develop "action plans" for integrating NASA-related materials into their classrooms.

By collaborating with state, federal, and private entities, we've leveraged our resources to impact a greater number of Texas students. Additionally, all participants attend a summer residential experience at the Johnson Space Center. TAS consists of programs developed for middle school teachers and high school juniors.

What has TAS accomplished?

Texas High School Aerospace Scholars (1999-2007)

- More than 4,000 students nominated by their legislators to participate
- 99% of the state's legislative districts represented in the nominations
- 86% of respondents* indicated HAS had an impact on their post-college graduation plans
- 70% of respondents* majored or are currently majoring in STEM degrees
- Beginning 2006 students are eligible to receive one year science elective credit (with approval)

Texas Middle School Aerospace Scholars (2002-2006)

- Over 400 teachers representing 165 schools have participated (potential to reach 47,800 students)
- 100% of the Education Service Centers have been represented

Texas Community College Aerospace Scholars (2002-2006)

- 1200 plus community college students have participated
- 74% of respondents* majored or are currently majoring in STEM degrees
- 60% of respondents* are working or intend to work in STEM careers
- Fall 2006 Survey

What is next for TAS?
Texas Aerospace Scholars Internship
TAS is evolving to strengthen the Texas STEM workforce. Our latest advancement is to provide a one semester technical internship to a few high potential TAS student alumni at the Johnson Space Center. By bridging the gap between the initial TAS experience and future career opportunities, this new pipeline program provides an opportunity for the best and brightest students to continue to give Texas a competitive edge! For more information please visit: <http://aerospacescholars.jsc.nasa.gov>

www.nasa.gov



S A T O P
SPACE ALLIANCE - TECHNOLOGY OUTREACH PROGRAM

What is the Technology Outreach Program (TOP)?
The Technology Outreach Program provides a unique and revolutionary service to small businesses by providing FREE engineering assistance from some of the most highly qualified engineers in the world, rocket scientists. TOP is administered by the Bay Area Houston Economic Partnership and has assembled a unique network of engineers and scientists from NASA field centers, aerospace contractors, colleges and universities together with Economic Development Organizations (EDOs) from across the State.

What has TOP accomplished?

Leveraging TOP Funding

- TOP leverages state funds 15:1 with free engineering support from an alliance of 21 aerospace contractors donating over 10,000 hours to the program.
- State funding is leveraged with federal funding to increase program availability.
- 29 Economic Development Organizations network with TOP to promote the program to small businesses throughout the State.

Helping Texas' Small Businesses

- Since 1999, TOP has helped over 500 small businesses across the state with technical solutions that business owners themselves could not afford on their own.
- Many of these businesses have reported "success" from the assistance they received, in the form of increased sales, revenue, employment and capital investment.

Supporting Economic Growth

- TOP provides significant economic growth from assistance provided in many fields including safety in the petrochemical field, corrosion protection of oilfield equipment, medical equipment advancement, water purification, flood control, security devices, sports equipment and power alternatives (just to name a few).

What is next for TOP?
TOP will continue to increase its network of Alliance Partners and EDOs, allowing for expansion of the program to even more small businesses across the region and state. With new technological advances expected in the aerospace industry as NASA returns to the moon, Mars and beyond, the rapid incorporation of this technology into Texas businesses will be a huge boost to the Texas economy for years to come.

<http://www.spacealliancehouston.com>

Exhibits in the Capitol Rotunda

- **Purpose: To inform Legislators and the public about the JSC's Role in Exploration and work in the State of Texas**
- **1,500 - 2,000 visitors through the Rotunda**



House Resolution

- Received recognition from the State in the form of House Resolution 475
- Recognized attendees were: Bob Mitchell, Rick Hieb, Eileen Hawley, Antjia Chambers, Mike Fossum, Colonel Bob Cabana



Legislative Luncheon

- Inform Legislators and staff about TAS/SATOP
- 250 Attendees, 25 Elected Officials
- Presentation of Senate Resolution 268 from Senator to Colonel Bob Cabana



Legislative Visits



- **Five teams made 71 Office Visits (scheduled & drop-off)**
- **Many are aware of NASA's mission but not on specifics of current activities in the State**
- **Many aware of TAS; not as many SATOP**
- **Very strong support for both programs once discussed**
- **Key visits included Governor's Office, Lt. Governors Office, Secretary of State Roger Williams, Chairman of the House Appropriations, Senate Finance, Higher Education Committees.**
- **Bob Mitchell and Linda Smith traveled the day before to meet with all members of the House Appropriations Subcommittee on Higher Education.**

The image features a graphic of the Texas state flag on the left side, consisting of a dark blue vertical stripe with a white five-pointed star, and a red horizontal stripe at the bottom. The rest of the image is white.

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Thank You!