

Inside Wallops

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NASA Technology Supports Virgin Atlantic GlobalFlyer Wallops Contributes to Success of Flight

NASA technology contributed to the safety and success of the GlobalFlyer mission by enhancing communications between pilot Steve Fossett and his ground control team.

NASA's real-time video hookup allowed aviation enthusiasts around the globe to follow the landmark flight.

GlobalFlyer landed safely March 3 in Salina, Kan. after the first solo, non-stop, non-refueled around-the-world airplane trip.

The flight tested NASA's advanced experimental Tracking and Data Relay Satellite System (TDRSS) transceiver called the Low Power Transceiver (LPT).

As a side benefit, the NASA device allowed GlobalFlyer's mission control to communicate with Fossett for almost three days of flight through a live video connection.

"We at NASA applaud private sector record-setting achievements like this one. NASA is committed to increasing

its engagement with entrepreneurs and industry alike in pursuit of the Vision for Space Exploration," said NASA's Associate Administrator for Space Operations William Readdy. "We're proud of our very talented, dedicated people and cutting-edge technologies and look forward to even more partnering in the future."

NASA researchers believe the LPT holds promise as a flexible and less expensive

option for relaying information to and from spacecraft. TDRSS already supports space operations by providing uninterrupted data relay and communications between orbiting spacecraft and the ground.

In testing the LPT on GlobalFlyer, NASA hopes to learn more about how the device operates during flight, especially when transmitting video.

Four NASA facilities, Goddard Space Flight Center, (GSFC); Dryden Flight Research Center; Kennedy Space Center, (KSC); and the White Sands Test Facility contributed technology to the video project and monitored the GlobalFlyer mission.

Steve Bundick, NASA Wallops Flight Facility, Electrical Engineering Branch, along with support personnel from KSC and GSFC made several trips to Salina to install and test the TDRSS hardware used on the GlobalFlyer aircraft.



Steve Bundick with the GlobalFlyer

S. Bundick Photo

Wallops Shorts.....

In the News

Sun Star – Alaska

"Poker Flat Trio Ready to Launch"

Fairbanks Daily News-Miner

"Aurora Rocket Malfunctions, Crashes North of Fairbanks"

Launch

A NASA Black Brant XII sounding rocket was launched from the Poker Flat Research Range, Alaska, on March 6. It carried a science payload called CASCADES (Changing Aurora: in Situ

and Camera Analyses of Dynamic Electron Precipitation Structures).

Dr. Kristina Lynch of Dartmouth College is the principal investigator. Jay Scott, NASA Sounding Rocket Operations Contract, (NSROC), is the mission manager.

Preliminary indications are that the third stage Brant motor of the four stage rocket failed to ignite. All debris fell within the range. An anomaly review board is being convened.

March is Women's History Month

March 9
Mary Pratt – Guest Speaker
Baseball Hall of Fame Inductee

March 23
Pioneering Women
Panel Discussion

The graphic features a decorative border with a diamond pattern and a stylized tulip flower on the left side.

Just an Average Blustery February

by Bob Steiner, Meteorologist

February 2005 was slightly warmer (+0.9 degrees) than normal having an average temperature of 38.6 degrees. The highest temperature for the month occurred on the 16th with a reading of 64 degrees. The coldest reading was 19 degrees recorded on the morning of February 19. No record temperatures were set or tied in February.

February was a fairly dry month with measurable precipitation falling on only 7 days verses the normal 10 days with a liquid equivalent of 2.26 inches being recorded. This is 0.76 inches below normal. The greatest 24-hour total was 0.85 inches on the 14th. One inch of snow fell during the month, on February 24. Normally we will have measurable snow fall on two days in February.

Wind was a factor in making it feel colder than it actually was. We had six days with winds of 30 mph or greater. The strongest gust was the 44 mph reading at 3:27 p.m. on the February 28.



April showers are said to bring "May Flowers". April usually averages 2.83 inches of rain falling on 10 days. The wettest April on record at Wallops was in 1983 when we recorded 5.43 inches. The driest April on the books is 1985 when a measly 0.4 inches was recorded. The most rain to fall in 24 hours during the month occurred on April 26, 1978, when 2.19 inches was recorded.

Temperatures start the month with highs of 58 degrees and lows of 40 degrees. These climb to above 65 degrees and 48 degrees respectively, by months end. The record high for April is 93 degrees recorded on the 26th in 1990. The extreme low for the month was a reading of 24 degrees on April 1, 1969.

Freezing temperatures are rare but have been seen as late as the April 25. Spring officially arrives on March 20!

Celebrate St. Patrick's Day

The "Unplugged Group" will play in the Cafeteria at lunchtime on March 17. At 4:35 p.m., head over to the Rocket Club for green beer, Irish music and free food.

On March 18, the "Unplugged Group" will play in the Club after 4:30 p.m. - more green beer and free food.

Your Backyard News

by Bonnie Crawford, Environmental Office

Environmental protection plays a critical part of life in the area around Wallops. We are privileged to work and live in such a pristine environment and want to ensure that missions conducted at Wallops do not prevent us from enjoying the Eastern Shore for many years to come. Compliance with environmental regulations, protection of our local habitats and species, and conservation of natural resources is essential.

The Wallops Environmental Office is implementing an environmental management system (EMS), to help manage any impact on the local environment.

The GSFC Environmental Policy is online at: <http://www.nasa-wallops-ems.org>

All employees are urged to get involved. - Find out more about the environmental policy and ways you can help protect our environment by taking Wallops environmental awareness training that will soon be available on-line.

- Participate in a program stressing continual environmental improvement - employee involvement and suggestions are welcome.

- Attend an environmental outreach event and discover how our missions provide key knowledge that is furthering environmental protection around the world.

Contact the Environmental Office at x1718 if you have any comments or ideas.

And remember....."it's your backyard!"

In Celebration of Women's History Month

The Federal Women's Program, Women of Wallops welcomes

Mary Pratt

Baseball Hall of Fame Inductee

"A League of Their Own" -- Pratt pitched five seasons in the All American Girl's Baseball League from 1943-1947. Come join Pratt while she shares insights from her career in the league and discusses what it meant to play professional baseball during the 1940s and 1950s.

Wednesday, March 9

11:30 a.m. - 12:30 p.m.

Williamsburg Room, Bldg. E-2

For further information, call Kim Crockett at x1803.

Easter Egg Hunt

At the Pavilion

Saturday, March 19

11 a.m. to 1 p.m.

Ages 0-11

Hot dogs, chips, sodas available at no charge.

The Easter Bunny asks that you bring your own baskets to collect the eggs.

In order to give the Easter Bunny (and Security) an idea of how many egg hunters to expect, please email the Lead Bunny Helper, Tracy.Bohboj.1@gsfc.nasa.gov, and tell her the number of children, names, ages, and how many adults will accompany them.

All security rules will be in place, so plan ahead. You will have to sign in guests at Security. Persons 7 years and older require visitor badges.



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www.wff.nasa.gov

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