NASA Sounding Rocket Winter Campaign Taking Place in Alaska

NASA Wallops Flight Facility will be conducting a series of sounding rocket launches from Poker Flat Research Range, Alaska, during January and February. A total of 10 sounding rockets are scheduled to be launched when weather and aurora conditions are favorable.

“When we have the aurora displays, it produces magnetic currents,” said Dr. Miguel Larsen, chief scientist and principal investigator. “Those currents, just like the currents in a heating element, will heat the atmosphere it goes through.”

Larsen and his team from Clemson University in South Carolina will have payloads on four of the rockets. The mission, JOULE 2, will study heating in the upper atmosphere associated with the aurora and the change in wind patterns because of that heating.

The heating of upper atmospheric winds can affect satellite and radio communications as well as the trajectories of low-orbiting spacecraft. Larsen and his team are interested in determining how much the winds change when heated.

The first scenario of four rockets will be launched in pairs, with each pair launching 15 to 20 minutes apart. One rocket in each pair will carry a payload of instruments to measure electricity and temperature in the atmosphere.

The second rocket will release a small amount of chemical tracer into the atmosphere from approximately 60 miles above the ground.

The chemical tracer glows and is visible from Earth. Researchers will be able to track the tracer from the ground as it is carried by the upper atmosphere winds.

“An aurora over Fairbanks” Geophysical Institute Photo

“It’s sort of a milky white, while the aurora has more green color” Larsen said. “It’s sort of a gentle glow, and it’s just enough to see.”

Conditions have to be right for the launches to take place. The aurora has to be active, the sky has to be clear and the moon has to be below the horizon.

The fifth rocket scheduled for launch in the January window will carry an experiment to study pulsating aurora for a team of researchers from the University of New Hampshire, Durham.

Pulsating auroras do not move across the sky as typical aurora displays. They tend to blink on and off in patches and are often difficult to see from Earth.

Five additional sounding rockets are scheduled during the February window for researchers from the University of Alaska, Fairbanks, and Dartmouth College, Hanover, N.H.

The rocket range, located about 30 miles north of Fairbanks, is operated by the University of Alaska Geophysical Institute.

TacSat-2 Launch Made the News In a Big Way

The Wallops Public Affairs Office received numerous calls reporting sightings of the TacSat2 launch on December 16. Locations included: West Virginia, Ohio, New York, Pennsylvania, Maine, Georgia, North Carolina and Western Maryland. Numerous photos also were received from people in these areas.

The farthest sightings were from Dawsonville, Ga., Detroit and Ontario.

The Internet received the following links:
* Google News: 647
* Google Blog: 291
* Google Web: About 76,000
* Yahoo! News: 223
* Yahoo! Web: About 47,800

The live webcast peaked at 893 viewers at the time of the countdown and launch.

There were 20,000 downloads of the launch video in the first 48 hours post launch.

The video saw 40,237 hits in December 2006. As of January 8, the video had received 1,297 hits in January.

The Wallops TacSat-2 website received the following numbers in terms of hits:
* November 2006: 2,498
* December 2006: 40,890
* January 2007 (as of 01/08/07): 770

The Wallops web site (wff.nasa.gov) saw an extreme increase in usage in the months approaching the launch.
Federal Employees -- Rules Regarding Acceptance of Gifts from Contractors and other Outside Sources

The following is intended to remind Wallops Federal employees of the rules that restrict Federal employees’ acceptance of meals and other gifts from contractors and other organizations outside the Federal government.

Under the Standards of Ethical Conduct for Employees of the Executive Branch issued by the Office of Government Ethics (OGE), federal employees are prohibited from soliciting or accepting a gift:

(1) From a prohibited source; or
(2) Given because of the employee’s official position.

A gift is defined as “any gratuity, favor, discount, entertainment, hospitality, loan forbearance, or other item having monetary value.” It includes services as well as gifts of meals, training, transportation and lodgings.

A prohibited source is defined as any person or organization who: “(1) is seeking official action by the employee’s agency; (2) does business or seeks to do business with the employee’s agency; (3) conducts activities regulated by the employee’s agency; or (4) has interests that may be substantially affected by performance or non-performance of the employee’s official duties.”

Typical prohibited sources include NASA contractors, NASA grantees, or parties to NASA agreements. Organizations that have procurement or grant proposals pending before the Agency also are prohibited sources. Thus, Goddard employees may not solicit nor accept a gift from any of these entities.

There are limited exceptions to the general prohibitions set forth above.

Some of the exceptions include:

• “$20 Rule” — employees may accept unsolicited gifts from a prohibited source if the gift has a market value of $20 or less as long as the aggregate market value of individual gifts received from any one source does not exceed $50 in a calendar year.

• Widely Attended Gatherings — employees may accept an unsolicited gift of free attendance at an event sponsored by a prohibited source, by the employee’s agency; or they should contact the Goddard Chief Counsel’s Office for a determination of whether the widely attended gathering exception applies.

• Travel expenses accepted by the Agency — the Agency has authority to accept on behalf of an employee unsolicited offers of travel reimbursement from a non-Federal source for the employee to attend a meeting or similar function relating to the employee’s official duties. GPD 9710.2A sets forth the process by which such travel reimbursement may be accepted by Goddard.

Note, notwithstanding the exceptions listed above or otherwise available, an employee may not accept gifts from the same source so frequently “that a reasonable person would be led to believe the employee is using his public office for private gain.”

Be aware that there is no exception to the gift rules that permits an employee to accept a gift from a prohibited source under the theory of “reciprocity.” For example, an employee may not allow a contractor to pay for a meal for the employee on the grounds that the employee intends to or actually does pay for a meal for the contractor at another time.

Any questions concerning the gift rules should be referred to the Office of Chief Counsel at x69181.

Career Navigational Tools

When: January 24, 2007
Time: 11:30 a.m. to 12:45 p.m.
Where: Building E-2 Williamsburg Room
Tickets: $7.00

Catered Luncheon by WW Catering

Menu: Baked cod and crabmeat, vegetables, rolls, beverage and dessert.

Tickets are available in the WEMA Exchange, Bldg. E-2, or by contacting Becky Chew, x6018

Orlando Figueroa, Director of Applied Engineering and Technology (Code 500) for NASA Goddard Space Flight Center, will reflect on his special strengths, characteristics, and values, and share what has personal meaning and value in his life and what inspires or calls him to action.

Wallop's Shorts............

Mission Readiness Reviews have been conducted for Dr. Craven (three Terrier-Orions and a Black Brant X) and Dr. LaBelle’s (Black Brant XII) sounding rocket missions scheduled for February from Poker Flat Research Range, (PFRR), Alaska.

Quite a number of Wallops employees, both NASA and contract are on site at PFRR to support launch operations. The January science window opened on January 10 for Dr. Larsen (a Black Brant VB, a Terrier-Black Brant and two Terrier Orions) and Dr. Lessard’s (a Black Brant XII) missions.

Their teams are making progress towards final launch readiness. The Lessard Black Brant XII is fully staged on the launcher, and final arming remains to be completed. Approval to proceed has been given to the Larsen and Lessard project teams.

Wallops Fitness Club

Anyone employed by NASA, Navy, Coast Guard, NOAA, MARS, USDA, Park Service, Fish and Wildlife, Marine Consortium, or any of the contractor employees can become a member of the Wallops Fitness Club. Fitness Club members had access to a host of exercise equipment, weight room, gymnasium, showers and lockers in Building D-10.

For current members the dues are $20 a year. For new members there is an additional $5 card deposit. Membership dues are now due. The current key card lock will be changed on January 23, 2007.

To pay your dues and receive a new key card contact one of the following:

WEMA Exchange, Bldg. E2, x2020
Robert Tittle, Bldg. N159, x1244
Roland Wescott, Bldg. E107, x1624
Thomas Wilson, Bldg. N161, x1570
John Gerlach, Bldg. N159, x1570
Bill Hoffken, Navy Bldg. V10, x7037
Greg Johnson, NOAA

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of Inside Wallops also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

Editor
Betty Flowers
Asst. Editor
Rebecca Hudson