

The Flint River Observer

Newsletter of the Flint River Astronomy Club

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Please notify **Dawn Knight** if you have a change of address, telephone number and or new e-mail address.

Upcoming Meeting: The agenda for the May 11 club meeting will include a review of the recent GSV star party. Please have some suggestions for improving GSV 2007. We will also have a review of Astronomy Day 2006 and discuss plans for the Fayette county astronomy class.

Last Month's Meeting At the April 13 club meeting we covered some last minute details for GSV 2006, debating whether or not to have a spaghetti dinner as well as the pot luck. Member Charles Anstey & his visiting dad Ron brought in some good astrophotos they had shot with Charles' new camera. Matt McEwen brought in the beautiful 8" scope he built, with exotic wood trim, and did a show & tell about it. In attendance besides the above were members: Steve & Dawn Knight, Jerry Williams, Chuck Sims, Smitty Smith, Curt & Irene Cole, and visitor Steven Hollander, who had heard about the club from a notice that appeared in the March 29 *Fayette Citizen*.

Club Calendar: Astronomy Day – Sat. May 6; Club Meeting - Thurs. May 11; Club Observings Cox Field – May 5, May 26 - 27; Astronomy Class for Fayette Co. Rec. Dept. – Sat. June 3.

Calendar of Events: May 5 – Aquarius, Eta Aquarid meteor shower early morning May 5 (east/southeast); May 8 – Comet 73P comes close to the Ring Nebula early morning.

From Steven (Smitty) Smith: For our March 11 observing with the Girl Scouts, my 11 year old son Josh was there and wrote an article about it that was printed in the Newnan Times-Herald newspaper.

ZOMBIES

By Josh Smitty (Little Smitty)

Postal Workers, Harley Mechanics, Teachers, Doctors and more. All are ordinary people by day; Zombies by night.

I am a member of the Flint River Astronomy Club (FRAC). By day I am a student at Smokey Road Middle School but after the stars come out I too am a Zombie. On March 11th our Astronomy Club went down to Camp Meriwether to host an astronomy observing session. There were 123 girls there from the Girl Scout Chattahoochee Service Unit all spending an evening hanging out and learning about our Universe.

Steve Knight, David O'Keefe and others spent the evening showing the girls the rings of Saturn and the Orion Nebula while Doug Maxwell, Chuck Sims and other astronomers showed off the many craters of the Moon. My dad Smitty put on a cool demonstration on the workings of a reflective telescope as well as showing a view of the moon. Bertha Hughes made her debut in the public observing world bringing out her scope for a tour of the stars. All totaled there were 9 astronomers and 7 telescopes helping broaden the minds of these 123 Girl Scouts and their leaders.

Though the evening was mostly cloudy there were enough breaks to show off the Moon, Saturn, and the Orion Nebula. If you've never had an experience like this but have an interest in the Universe I encourage you to take advantage of public observing for an experience you'll never forget. FRAC has a membership meeting once a month and a monthly observing that coincides with the new moon.

For more information about FRAC you can visit their website at www.flintriverastronomy.org.

Some questions and comments overheard at this event were "This is so cool", "I just did a report on Saturn last week", "Do all of you do this as a career?" and my personal favorite "Are you sure this is real?"

I always learn something more at each observing. My dad is always willing to take the time to come to my school and scouting events to share his knowledge with my fellow students. In recent years he has brought his scope out to show my classmates sunspots (storms on the sun) and talk about astronomy. It's really neat that my dad and I share this interest and that he can teach me so much. FRAC has aided with Boy Scouts Astronomy merit badge, Cub Scouts Astronomy belt loop, home school observing, public observing, and sidewalk observing.

FRAC is also committed to educating the community about light pollution. FRAC

hosts a yearly event called Georgia Sky View. Dozens of astronomers from around the country gather for a weekend of observing, learning, sharing and fellowship. This event continues to bring people from all walks of life together to share their love of astronomy.

So beware when you are walking down the street you never know; the person you meet just might be a Zombie."

Another Successful Georgia Sky View

By Curt Cole

Flint River Astronomy Club's 3rd annual star party, Georgia Sky View 2006, was well attended. It took place, as always, at Camp McIntosh, Indian Springs State Park, near Jackson, Georgia. It began Thursday, April 20 and ended Sunday, the 23rd. Over 60 people attended, with over half arriving Thursday.

The site is a group camp used mostly by youth groups such as Scouts and churches, and consists of 4 dorms with bunks, 3 staff cabins, a craft hall and a large dining hall with full commercial kitchen. Most attendees chose to camp, either in tents or RVs, while some stayed in the men's or women's dorms. The site also has a small beach and a lakeside amphitheater. Program presenters were offered use of the staff cabins.

Some rain hit the camp briefly Thursday evening and clouds interfered some Friday as well, although there were a few breaks. Movies and Xbox games were available to keep people busy when they couldn't observe. Late Friday night, some folks got views of the comet 73P/Schwassman-Wachmann 3. A good lineup of programs kept people busy Friday and Saturday afternoons. The programs were: Mirror Cleaning-Larry Higgins; Astronomical League Programs-Art Zorka; Classical Mythology-Phil Sacco; Photometry-Dr. Richard Schmude; Radio Astronomy-Tom Crowley; and Suburban and Urban Astronomy-Rod Mollise.

The highlight of the party (besides Saturday night's clear skies) was Friday night's space music concert by internationally known musician Jonn Serrie. We nearly had this concert in the amphitheater but feared rain would interrupt it, so the dining hall was the venue. The lights were doused and John gave a great performance. His wife Ann sold CDs and John graciously signed everyone sold. Both the Serries are very likable and interesting to talk to.

Friday night's pot luck dinner was a big hit. Roughly 2/3 of the attendees participated by bringing food. Some was ready to serve and others folks made other folks made for the dinner. FRAC provided the burgers and hot dogs, and the total food covered more than four tables completely over, along with plenty of leftovers. Typical of dinners like this, the camaraderie was so thick it could be felt in the air. Just like the dinners we have out at Cox field, it felt more like a family reunion than a star party, and is something we hope to keep going year after year. Here's to a successful GSV 2006 and looking forward to GSV 2007.

Member Profile: Steven "Smitty" Smith

by Curt Cole

This month, we highlight one of our founding members, Steven "Smitty" Smith, 52, one of the most knowledgeable and experienced members of the club. Currently serving as FRAC's vice-president, he is also a past president of the club. He lives in Grantville with his wife Deborah and five kids.

Originally from Ohio, he joined the US Navy and served aboard the first nuclear-powered surface warship, the cruiser *Long Beach*. Later, he served as an engine room machinist mate aboard the carrier *Saratoga*. Smitty made cruises in the Pacific, Atlantic and Mediterranean. Talk about dark skies! Try picking out constellations from the deck of a combat-darkened ship in the middle of the ocean!

He endured some ferocious storms at sea, including 2 typhoons and 4 hurricanes, with the ship sometimes pitching or rolling 30 degrees or more. He got to visit many exotic ports but his favorite time was when he spent 4 days in Rome, Italy, seeing the sites. He's been in the Atlanta area since about 1978, when he got out of the Navy.

Smitty got his first 'scope when he was about 12. It was a Milben 40mm tabletop refractor. He's had a few since and now has a 16" Meade Dob, a 10" Coulter Dob, and a Coronado PST for solar observing. AL pins earned include Messier, Binocular Messier, Deepsky Binocular, Caldwell and Sunspotter, with the Herschels in the works. Deep sky objects are his favorites.

A Grantville, Georgia resident, he makes his living by using his mechanical talents to repair motorcycles. He doesn't have a lot of time to ride his own bikes these days, but gets to ride customer bikes after he's repaired them.

Don't let the Navy tattoos fool you. Smitty's easy going and a very intelligent guy, and he and his wife Deborah care a lot about people, especially kids. They've been foster parents to at least 50 kids and at one time had 9 kids living in their home at the same time. At public observings, he's always at the forefront to help people of all ages enjoy their views through telescopes, and he never seems to tire of explaining astronomy and the universe to people. He's a great guy to know and an important asset to the club.

Astronomy News:



NASA Space Place Column

Who Wants to be a Daredevil?

By Patrick L. Barry and Dr. Tony Phillips

When exploring space, NASA naturally wants to use all the newest and coolest technologies—artificial intelligence, solar sails, onboard supercomputers, exotic materials.

But “new” also means unproven and risky, and that could be a problem. Remember HAL in the movie “2001: A Space Odyssey”? The rebellious computer clearly needed some pre-flight testing.

Testing advanced technologies in space is the mission of the New Millennium Program (NMP), created by NASA’s Science Mission Directorate in 1995 and run by JPL. Like the daredevil test pilots of the 1950s who would fly the latest jet technology, NMP flies new technologies in space to see if they’re ready for prime time. That way, future missions can use the technologies with much less risk.

Example: In 1999, the program’s Deep Space 1 probe tested a system called “AutoNav,” short for *Autonomous Navigation*. AutoNav used artificial intelligence to steer the spacecraft without human intervention. It worked so well that elements of AutoNav were installed on a real mission, Deep Impact, which famously blasted a crater in Comet Tempel 1 on July 4, 2005. Without AutoNav, the projectile would have completely missed the comet.

Some NMP technologies “allow us to do things that we literally could not do before,” says Jack Stocky, Chief Technologist for NMP. Dozens of innovative technologies tested by NMP will lead to satellites and space probes that are smaller, lighter, more capable and even cheaper than those of today.

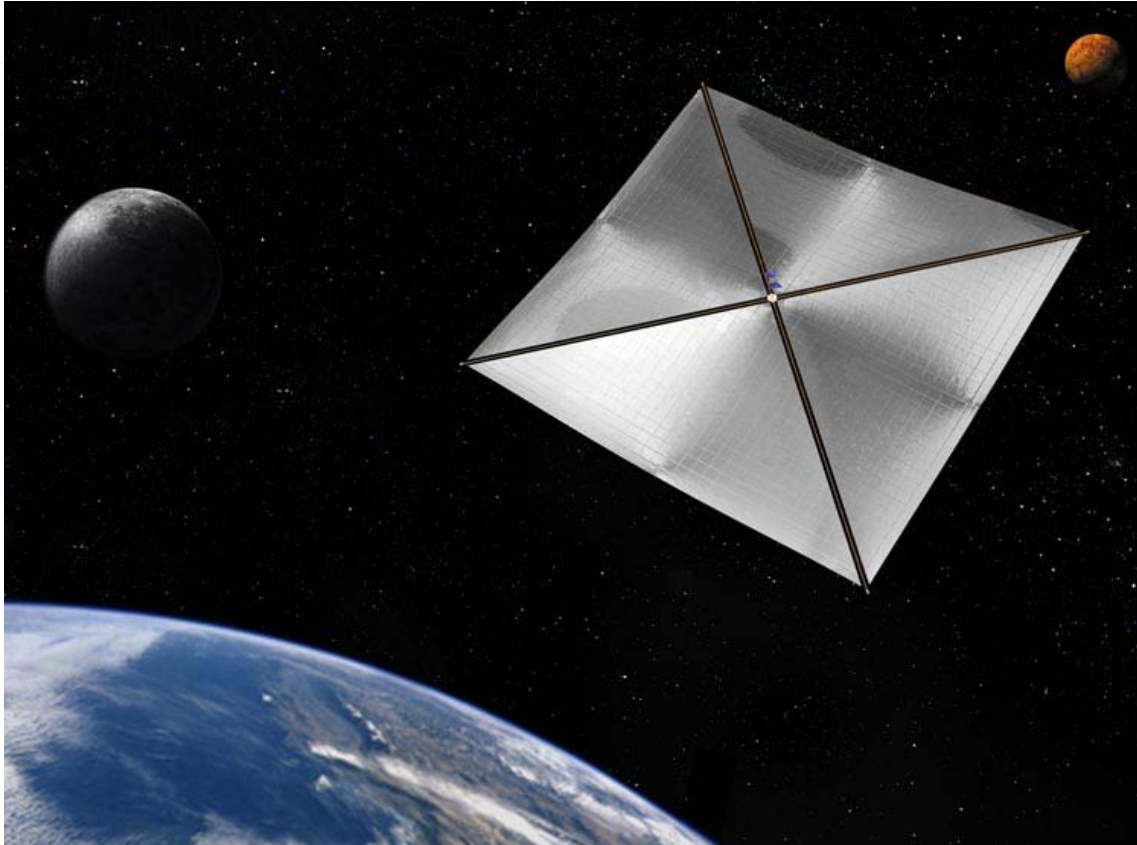
Another example: An NMP test mission called Space Technology 9, which is still in the planning phase, may test-fly a solar sail. Solar sails use the slight pressure of sunlight itself, instead of heavy fuels, to propel a spacecraft. Two proposed NASA missions would be possible only with dependable solar sails—L1 Diamond and Solar Polar Imager—both of which would use solar sails to fly spacecraft that would study the Sun.

“The technologies that we validate have future missions that need them,” Stocky says. “We try to target [missions] that are about 15 to 20 years out.”

A menagerie of other cool NMP technologies include ion thrusters, hyperspectral imagers, and miniaturized electronics for spacecraft navigation and control. NMP focuses on technologies that have been proven in the laboratory but must be tested in the extreme cold, vacuum, and high radiation environment of space, which can’t be fully recreated in the lab.

New NMP missions fly every year and one-half to two years, taking tomorrow’s space technology for a daredevil test drive.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Caption:

Artist's rendering of a four-quadrant solar sail propulsion system, with payload. NASA is designing and developing such concepts, a sub-scale model of which may be tested on a future NMP mission.

Note to editor: this image may be downloaded from http://spaceplace.nasa.gov/news_images/solar_sail_art.jpg .

May

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
	1	2	3	4	5 First Qtr Moon; Eta Aquarid Meteor Shower; Cox Field Observing	6 Astronomy Day
7	8 Comet 73P close to the Ring Nebula – early AM	9	10	11 Club Meeting	12	13 Full Moon
14	15	16	17	18	19	20 Last Qtr Moon
21	22	23	24	25	26 Cox Field Observing	27 New Moon; Cox Field Observing
28	29	30	31 Western skies after sunset – Moon, Saturn			

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