RIVER~BEND * ASTRONOMY * CLUB

NEWSLETTER * May 14, 2003

> NEXT MEETING

The next club meeting will be:

Saturday June 7, 2003 Kronk Observatory Kitchen 7:00 PM

> ASTRONOMY DAY SUCCESS

What a day, what a day. Each of us has fond memories of Saturday, May 10. Compared to our previous public astronomy events, this one was the biggest, because it brought:

The most attendance The most media coverage The most prizes and giveaways The most new members

Attached is a photo of current members with the Hubble image.

- ***memberportraitsmiles.JPG

Additional photos will be posted on the club website along with reminiscences about the event. If you have images or information you'd like to contribute, contact our president and webmaster, Gary.

> ASTRONOMY DAY HEROES

This year's event sparkled like Venus in twilight because of the tireless effort and enthusiasm of Mark Brown. Mark convinced the group about all astronomy day could be, and he worked for months to see that dream become a reality. We are also grateful for the cooperation and support of the museum staff, in particular director Christy Tinney and P.R. director Michelle

Yates. They opened their doors and promoted the event, giving us a classy location to gather a bevy of local enthusiasts of all ages. Everyone's cooperation and involvement enriched the experience. The day's accomplishments are testimony to that. Also, several local and national businesses donated a ton of prizes and giveaways all in the interest of promoting astronomy. Please remember them when you spend your precious astro allowances in the future.

> A NEW TWIST(ER) ON ASTRONOMY DAY -- OR --"THE WEEKLY WHIRLED"

Once or twice a year, River Bend Astronomy Club celebrates all things up-in-the-air with a public astronomy event. But this year's Astronomy Day took the cake, or almost blew it away. Set up at the museum was underway that morning as the sky grew darker. Suddenly the voice of Mark Brown, our storm-chasing astronomer, called out "It's a tornado!" The brief view I got through the museum's doorway was of two ominous white fingers coiling toward the ground like a drill coming out of the sky. Life-preserving measures were called for.

> A NATURAL I.Q. TEST

So what happened next? Jamie hustled his kids downstairs, right after the museum staff and volunteers, and I brought up the rear. Gary, Jace and Mark stayed upstairs. In fact, Gary ran towards the path of the tornado, towards his van to get his camera. Now, we don't need no fancy I.Q. exam to see how this illustrates the relative intelligence, or risktaking abilities, of various club members. No one blew away, however, as the funnel cloud seemed to turn and vanish.

> NEWSWORTHY

Mark Brown called 9-1-1, summoning an Edwardsville Police officer. Later a camera crew from Channel 4 arrived to interview Mark for the 5 pm newscast. How credible was Mark's report? Mark's interview ran just after footage of Missourians driving through floodwater--and everyone who saw the telecast agreed that Mark looked like a freakin' weather genius by comparison.

> SHOW-OFF AWARD

In the "Tour of Telescopes" display, the 80 mm ShortTube and Meade ETX scopes were dwarfed by Jace's new Obsession. Kurt and Eric felt miserably inferior when their puny telescopes were placed next to Jace's light-bucket. Jace made things worse by standing on an egg crate and thumbing his nose at passers-by, muttering "My scope's bigger than yours." Seriously, though, visitor's impressions of Jace's new instrument ranged from google-eyes to gasps of wonder. People were also interested in the computerized go-to capabilities of the Meade. Many questions were answered about all three scopes as well as telescopes in general.

> TEMPUS FUGIT

My sister's family had their eyes on the attendance prizes. My brother-in-law kept track of the hourly hand-outs using the "lawn clock" sundial, which Jamie had set up once the sun came out. Several visitors were heard to remark that the clock was surprisingly accurate. As the old sundial phrase goes, "Count only the sunny hours..." Good advice.

> WELCOME TO THE CLUB

New members received beautiful certificates courtesy of Ed C. Now the rest of us are wondering when we'll ever get a fancy certificate??? Here are some of the new members: Joshua Stover, Zack Lehmen, Tom Schalk, Sam Watts. (Unfortunately, none of the new members gave an e-mail. It's going to be a challenge staying in touch.)

> START 'EM OUT RIGHT

The reflecting telescope donated by Hardin Optical went to Sam Watts. He grinned from ear to ear when he received the prize and his family seemed equally enthusiastic. We wish Sam all the best and remember fondly our first telescopes...

> SURPRISE DONATION

A surprise donation of another reflecting telescope was given to Christy Tinney and the museum to encourage more observing programs at the facility. We greatly appreciate this generous gift from one of our members to promote astronomy in the Metro-East area.

> BEAUTIFUL NEW IMAGE

A new image of the Helix Nebula was unveiled by club president Gary Kronk and museum director Christy Tinney. The colorful shot is a composite of Hubble shots and a ground-based view of the object. We were the only media outlet in the St. Louis area for this announcement. Visit the Space Telescope Science Institute NewsCenter Archive for more information:

http://hubblesite.org/newscenter/archive/2003/11/

> SCOPES FOR SALE

You'd think Jace could never have enough telescopes, but apparently he does. So he's selling some good models at great prices. Contact him for more information.

> OBSERVING NOTES FROM SKY AND TELESCOPE

MAY'S TOTAL LUNAR ECLIPSE

On Thursday night, May 15-16, the full Moon will pass through the Earth's shadow, providing a colorful spectacle for observers throughout the Americas, Europe, and Africa. Learn more about this eclipse (and others) at:

> http://SkyandTelescope.com/observing/objects/eclipses/

MARS IN 2003: WHICH SIDE IS VISIBLE?

To appreciate Mars in the eyepiece, you'll to know which side of the planet you're looking at. Here is an article that includes a handy Mars Profiler, a JavaScript utility for determining the longitude of the red planet's central meridian for any date and time. It also shows a map of Mars so you can identify any bright and dark markings you see. > http://SkyandTelescope.com/observing/objects/planets/article_929_1.asp

JPL NEWS

Eggs in the Air

By Patrick L. Barry

The sky will be filled with flying eggs on May 10, 2003, when a thousand students converge on The Plains, Virginia, for the first-ever national high school rocketry competition.

Called the Team America Rocketry Challenge

(http://www.rocketcontest.org), the competition sets the goal of flying a custom-built, two-stage rocket carrying two raw eggs to a height of exactly 1,500 feet, and then returning the eggs to the ground unbroken. The team that comes closest to 1,500 feet without breaking their eggs will win the national title.

The competition is being organized by the Aerospace Industries Association and the National Association of Rocketry (NAR). NASA administrator Sean O'Keefe will attend the final event.

"The idea is to get kids interested in the world of aerospace," says Trip Barber, director of the competition and vice-president of the NAR. "And they will learn some important lessons about the power of math and science-and cooperation and teamwork-along the way."

To develop their designs, the students first used computer simulator software provided by NAR. Then they had to apply old-fashioned ingenuity and craftsmanship to bring the design to life and flight testing to refine it.

Students constructed rocket bodies using a combination of hobby-store rocket kit parts and custom materials. A typical rocket might consist of cardboard tubes from paper-towel or wrapping-paper rolls, a pre-made nose cone, rocket-kit body segments cut to size, and light-weight, balsa wood fins. But the greatest challenge for many was designing the compartment for the eggs.

Some used plastic Easter eggs as casings, padding the inside with bubble wrap, foam peanuts, or even gelatin. Others decided not to

"reinvent the wheel," making a cradle from the egg-crate material used for shipping eggs. Some chose to make larger, more powerful rockets big enough to carry the eggs inside, while others made smaller, more efficient rockets that have a bulging egg compartment mounted on top.

A hundred unique designs will be put to the test in Virginia. Only one will win. But for the students, the real prize has already been won: Learning an approach to problem-solving that works, whether you're launching eggs over a field or sending astronauts to Mars.

In the end, it's all about the future: Future technologies and the kids who will grow up to create them. Many advanced technologies are being developed now by NASA's New Millenium Program (http://nmp.nasa.gov). Who will do that work in the future? Perhaps some kids who spent their weekends launching eggs in the air.

Are you a kid? Would you like to build your own rocket? Visit NASA's Space Place and learn how to make a bubble-powered rocket! (http://spaceplace.jpl.nasa.gov/rocket.htm.) It won't take you to Mars, but it's a good way to get started.

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

Visit the following link for an image: http://spaceplace.nasa.gov/astro_clubs/DS1_launch.jpg

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