

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

Vol. 14, No. 7 September, 2010

Officers: President, **Bill Warren:** (770)229-6108, warren7804@bellsouth.net; Vice President, **Larry Higgins;** Secretary-Treasurer, **Steve Bentley.**

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Please notify **Bill Warren** if you have a change of home address, telephone no. or e-mail address.

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Club Calendar. Thurs., Sept 9: FRAC meeting (7:30 p.m., Stuckey Bldg. on the UGa-Griffin campus); **Fri.-Sat., Sept. 10-11:** Cox Field observings (at dark); **Thurs., Sept. 16:** UGa-Griffin lunar observing (7:30 p.m.).

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President's Message. A giant of astronomical proportions died recently, and the universe is the poorer for his passing.

On Fri., Aug. 20th, **Jack Horkheimer**, Public TV's famous "Star Gazer," died in Miami, Fla. at age 72 from complications of a congenital respiratory disease that plagued him throughout his life.

During his 30-year span as "Jack Horkheimer: Star Gazer," he inspired untold millions of people to go outside and see for themselves the wonders of the night sky. More than anyone else in history, Horkheimer popularized naked-eye astronomy.

Facing almost impossible odds – a weekly 5-minute TV show that aired between midnight and 2:30 a.m. in most areas – Horkheimer nevertheless managed to attract a huge audience of adoring fans here and abroad who eagerly awaited each new episode. His famous sign-off phrase, "Keep Looking Up – But Watch Where You Step!" – epitomized his approach to educating the public about astronomy: *Get their attention. Keep them interested. Use whatever approach works.*

For Horkheimer, that meant (among other things) using humor whenever possible. For example, he wrote his epitaph many years prior to his death:

"Keep Looking Up" was my life's admonition; I can do little else in my present position."

He also used elaborate costumes (think: **Stephen Ramsden's** Sun suit, which serves the same purpose) and set designs (e.g., swinging gently on a mock-up crescent Moon) to attract and hold his viewers' attention. His delivery was loud and energetic, like a TV car salesman on amphetamines. He regarded himself as both a salesman and a showman. "Science is show biz," he once told the *Miami Herald*.

Because of his entertainment-oriented approach to astronomy outreach, Jack Horkheimer was never taken seriously by professional astronomers, many of whom regarded him as a buffoon, a clown or a cartoon character. But that was their problem, not his. (*Editor's Note: Not all professional astronomers held the "Star Gazer" in such low esteem. When informed of his passing, Dr. Richard Schmude responded, "Hello, Bill. I am sorry to hear of the death of Jack Horkheimer."*) Horkheimer was immensely popular with the public precisely because he never talked down to his viewers. He may have been, like the comedian **Steve Martin**, a "wild and crazy guy" -- but at heart he was just another guy who loved the night

sky and wanted people to know why they should be excited about it, too.

He will be missed.

Elsewhere, I'm sure you'll want to join me in welcoming our newest club members, **Chris & Bagitta Smallwood** of Griffin and **Erik Erikson** of Fayetteville, all of whom joined FRAC at the Aug. meeting. Now that their checks have cleared and they're officially FRAC members, I can tell them: *there hasn't been a clear night at Cox Field in the past 105 years!* (Just kidding, Bagitta & Chris, as Erik knows: he was a club member five years ago and has come back to FRAC.)

-Bill Warren

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Last Month's Meeting/Activities. Our Cox Field observing on Aug. 7th brought out seven members and a guest: **Larry Higgins; yr. editor;** and **Steve & Angela Knight**, their teenagers **Ashley & Joshua**, and their teenage guest, **Shanai Walker**. The observing conditions were somewhat iffy, but Steve showed his entourage some night sky treasures and yr. editor revisited some old, blue friends. (See pp. 4-5.)

Our Aug. meeting attracted nineteen members and visitors. Besides **Erik Erikson** and **Chris & Bagitta Smallwood**, the attendees included: visitors **Charles Smith, Olliff Weldon** and **Joe Auriemma**, and members **Steve & Betty Bentley**, their granddaughter **Brianna Mills, Charles Turner**, the Indians **Moore** and **Danei** (Tom-Tom, get it?), **Doug Maxwell, Steve & Angela Knight, Larry Higgins, Carlos Flores, Jessie Dasher** and **yr. editor**. Carlos provided the videos we watched – thanks, Carlos! -- Jessie set them up – thanks, Jessie! -- and the members present voted unanimously to donate \$50 to Orrs Elementary, our Partner in Education school.

Aug. 19th was a busy evening for FRAC. After talking with parents at a Griffin-Spalding Co. school system function, **Steve Knight** and **yr. editor** joined a dozen frolicking FRACsters at our monthly UGa-Griffin public lunar observing: **Larry Higgins; Charles Turner; Dwight & Laura Harness; Steve & Betty Bentley** and **Brianna & Erin Mills; Jessie**

Dasher; Tom Moore; and **Chris & Bagitta Smallwood**. We had 12-15 visitors, and they went away impressed with what we showed and told them.

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This 'n That. On Aug. 25th, **Betty Bentley** underwent what hubby **Steve** referred to as “complicated” heart surgery. (Is there any other kind?) Betty is recovering nicely, but at writing how long her recuperation will take is open to question. Regardless, she will benefit from your thoughts and prayers for her speedy recovery.

Meanwhile, only a complete and utter waste of humanity such as **yr. editor** would suggest that Betty's surgery has a bright side, i.e., it proves once and for all that she does in fact have a heart.

As one who has undergone heart surgery himself, yr. editor has three bits of advice for Betty: take your pills regularly, follow your doctor's advice, and don't let that 220-lb. bundle of stress that you're living with get you down.

*An “**Update On an Update**”: In the July, 2010 *Observer*, we reported an impact on **Jupiter** that was videorecorded separately by two amateur astronomers on June 3rd of this year. At the time, we wondered why this impact, unlike the earlier Jovian impact of July '09, appeared white rather than dark-colored.

In last month's *Observer*, we reported that the June event wasn't due to an impact after all, but rather the result of a storm on Jupiter that sent methane gas into the upper atmosphere, where it froze into ice crystals that reflected light. (*Hey, we don't make up the news, we just report it. –Ed.*)

Now, courtesy of *Sky & Tel* (Sept. 2010, p. 12) we find that the culprit was in fact a fireball (meteor) that produced a “two-second flare of light on Jupiter.” (No mention of the glow's brief duration was made in earlier reports, just that it couldn't be seen in images taken days later.)

According to the news item in *S&T*, the meteor that produced the fireball “burned up before reaching Jupiter's cloud tops,” whereas the earlier, larger and darker one penetrated deeper and “roasted and dredged up material from below the clouds,” producing a dark impact scar of burnt-up atmosphere.

Will that explanation stand the test of time? Probably. But it just shows to go ya, in the heated aftermath of such events, even the experts don't always agree on what they saw or how it happened. It makes it tough on those of us who report the news, though, when they change their minds or leave out important facts.

***FRAC is back in the news!**

To investigate for yourself, go to www.cloudynights.com and click on the article, "Alcon 2010" by **Thomas Watson**. (Alcon is the A.L.'s annual convention. This year it was held in Tucson, AZ on June 25th-26th.)

The first FRAC connection to Alcon 2010 was **Katie Moore**. Watson writes, "Katie Moore, a past AL award winner and now employed by the National Air and Space Museum, recounted (her) efforts to build an astronomy outreach program, including a small observatory, in perhaps one of the most unlikely locations imaginable – well-lit Washington DC. What she and her colleagues have been able to accomplish under often trying circumstances is admirable."

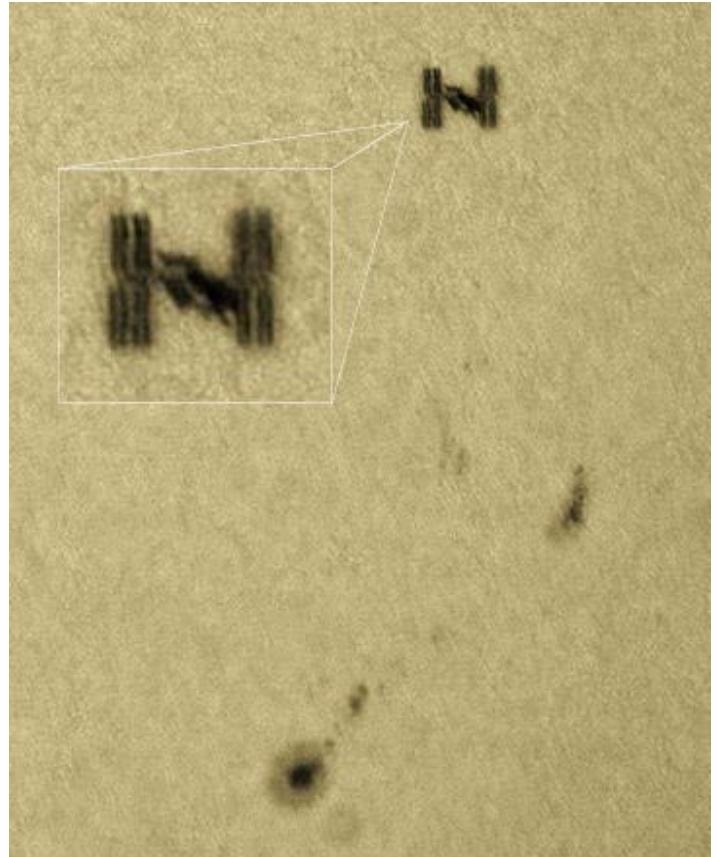
Farther down the page, **Stephen Ramsden** is shown standing with attendees during one of his solar observing sessions. Alas, he wasn't wearing his yellow **Sun** suit. But hey!, this was Arizona, where daytime temperatures outside in summertime feel like you've just wandered onto the surface of **Venus**.

Later on, from Mr. Watson: "Recent events on **Jupiter**...were discussed and explained (with amusing touches and audience participation) by **Dr. Richard Schmude**."

At the end of the article, go to the bottom of the page and click on the lower of two links, the one for dropbox.com/gallery. It has additional photos of Stephen (p. 2, bottom row and p. 4, 3rd and 4th rows).

As **Tom Moore** noted, having three presenters at a national convention ain't bad for a club with only 41 members!

*Take a look at **Stephen Ramsden's** incredible photo of the International Space Station crossing the face of the Sun. The text beneath his photo, which appeared in www.spaceweather.com, reads,



"Moving at 17,000 mph, the ISS flitted across the solar disk in less than half a second. Snap! Stephen W. Ramsden of Madison, GA caught the space station just as it was passing by sunspot 1089. 'I used an Explore Scientific 127mm APO, a Lunt Solar Wedge, and a DMK41 digital camera,' he says."

***A Request from Steve Knight.** "Hello, everyone, for those of you that may not know me my name is **Steve Knight**, former GSV coordinator, club Treasurer and President. Life has been hectic lately but things have worked out so I have time to devote to the club again.

"Recently **Bill** asked me to be the clubs scouting coordinator and I accepted. Since things on that front have been slow recently it'll be like starting from scratch, and here's where I'd like to have your help.

"I'd like to have a few people step up and pre volunteer to help me with the scouts. Working with the scouts is a lot like public observing with a heavier concentration of kids and more direct questions. I'm currently studying up on the current requirements for their merit badges and belt loops and by the next time

you see me I should have info for you to brush up too. It's pretty basic so it's easy for anyone with minimal experience to soak up. Based on past experience we'll go to troop meetings, help them with the requirements which is the bulk, we'll probably go to campouts such as what they hold at Camp Thunder a few times a year. Going to the campouts is an absolute blast, plus they usually have smores! Hopefully we'll even get a few members out of this too!

"Now don't go thinking that you have to be a seasoned veteran or a first year newbie to help me with this. Even if you don't have a scope yet you can be a great help to me and yourself. Just handing out materials and directing traffic during observings is more important than running the telescope. Plus you'll be amazed at how much you can learn just by being involved. This is learning by doing, I've learned more about astronomy this way than I can actually ever describe. So if you would just drop me an email and let me know that you're interested in helping me with the scouts, knowing a rough idea who's interested will hopefully keep me from biting off more than I can chew!

"There's no obligation in this so please don't think that by saying you're interested I'll demand you be there, far from it. I just would like to have an idea of what we're capable of, which in the past has been quite a lot."

(*Editor's Note: You can contact Steve at 706-540-3762 or saknight1@comcast.net .)*

*Okay, so here's a trivia question for you: *What FRAC member's first name rhymes with a constellation?*

Need a hint? The name appears five times in this newsletter. (Answer on p. 6)

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Upcoming Meetings/Activities. Our Sept. meeting will be held at **7:30 p.m.** on **Thurs., Sept. 9th** in the Stuckey Bldg. on the UGa-Griffin campus. Our speaker will be **Anita Westlake**, president and co-founder of the Meteorite Association of Georgia.

Ms. Westlake is a lapidary instructor who teaches folks how to grind and polish gemstones into cabochon jewelry. More to the point, she also collects

meteorites, and after her presentation she'll have examples of various kinds of meteorites for sale.

Think about it: when's the last time you held in your hand something that came to Earth directly from outer space? (And we're not talking about the last time you shook hands with **Dan Pillatzki**.)

Meteorites are rare, not because there aren't many of them on Earth – tiny ones called *micrometeorites* strike the Earth about every 30 seconds – but because, like gold, silver, diamonds, rubies, etc., they're extremely hard to find. Ms. Westlake will tell us how it's done.

Our Sept. meeting will be the first time that we've ever had a program on meteorites. So that's a rarity, too, and we hope you'll do all in your power to attend. It promises to be a very special meeting.

Our Cox Field observing will be held on **Fri.-Sat., Sept. 10th-11th**, and our lunar observing on the UGa-Griffin campus will be at 7:30 p.m. on **Thurs., Sept. 16th**.

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Singing the Blues: A September Observing Project for You. In 1958, rock 'n roll singer **Eddie Cochran** sang that "There ain't no cure for the Summertime Blues!"

Well...maybe not. But there *is* an autumn equivalent that's much nicer. Call it the "Falltime Blues," if you will – a trio of lovely blue planetary nebulas that grace the early autumn sky: **NGC 7009**, "**Saturn Nebula**" in *Aquarius*; **NGC 7662**, the "**Blue Snowball**" in *Andromeda*; and **NGC 6905**, the "**Blue Flash**" in *Delphinus*.

All of them are Herschel 400 objects; two of them – NGCs 7009 and 7662 – are also Caldwell Club objects; and all of them are bluer than the hair of **yr. editor's** h.s. senior English teacher.

***NGC 7009.** (Located 1° W of 4th-mag. **4 Nu Aquarii**.) Okay, so **Saturn Nebula** doesn't have "blue" in its title. But 7009 was named for projections on either side of its major axis that resemble Saturn's rings on edge. Yr. editor didn't see the projections (called *ansae*) in his Herschel 400 observations with a 10" Dob – but he had no trouble seeing the bright, richly blue oval disk, which was about the size of Saturn in his 'scope at 147x. He

described 7009 as “simply lovely, a sapphire on a black velvet background.” Find it at low power, then switch to higher magnification.

***NGC 7662.** (Located 1/2° SW of 5th-mag. **13 Andromedae.**) Only half the size of Saturn Nebula, the “**Blue Snowball**” is more intensely blue throughout and just as bright. It is, therefore, a favorite of planetary nebula fans. At 147x, 7662 appeared to be slightly oval rather than round.

***NGC 6905.** (Located 5.5° – that’s three finger-widths held against the sky – NW of 4th-mag. **Alpha Delphini.**) Although larger than Saturn Nebula, the “**Blue Flash Nebula**” is nearly three magnitudes fainter and pale blue compared to the more vivid hues of the Blue Snowball and Saturn Nebula. The color is best seen at higher magnifications, which also show the nebula to be slightly elongated E-W and brighter on the E side. In a 12” Dob, the W portion of 6905 looks like a bubble.

NGC 6905 is referred to as the “Blue Flash” because the little planetary “flashes,” or blinks in and out of view as you look toward and away from it. (You might want to remember that when you’re looking for it.) When you look directly at it at low power, the nebulosity vanishes. But when you look at the mag. 11 star immediately to the N of 6905, the nebulosity reappears like a vanished quarter in a magician’s hand.

You may or may not see the faint central star when you look directly at the nebula. Give it a try, and let us know if you see it.

To find the Blue Flash manually, first find the constellation *Aquila* (*the Eagle*). Just above it to the N lies the tiny 4-star constellation *Sagitta* (*the Arrow*). Then imagine a line to the E of the Arrow’s “point” (**Gamma Sge**) that’s as long as the arrow itself. Form a flat triangle with Gamma as the northern apex, the two stars that form the arrow’s “nock” as the west end, and the point where your imaginary line ends as the E end. That’s where 6905 is located, 5.5° NW of **Alpha Del**, the brightest of the six stars that form the little constellation *Delphinus*.

PROF. STARGAZER: COSMOLOGIST

interview by ace reporter Bill Warren

(**WARNING:** Put on hip boots or waders before settling down to read this, because **Prof. Stargazer** was in rare form when we interviewed him recently. The fertilizer was flowing like *Elsie the Borden Cow on Maalox*. –Ed.)

Not content with being the world’s greatest authority on astronomy, astrophysics and movies rated with more Xs than a tic-tac-toe game, **Prof. Theophilus Stargazer** also knows a thing or two about cosmology.

For those of you who may not know, cosmology is the scientific study of people named Cosmo. At least, that’s how Prof. Stargazer explained it.

(*Actually, cosmology is the scientific study of the universe, its origins and structure.* –Ed.)

The kindly old professor, who returned our wallet with only a small amount of cash and a few credit cards missing at the end of our conversation, was upset. The object of his displeasure was **Bob Berman**, whose column, “Cool Expressions,” appeared on p. 12 of the Sept. 2010 issue of *Astronomy*.

“Berman has his nerve,” the prof bristled. “How dare he pass off a perfectly good cosmological question as humorous?”

The question Prof. Stargazer was referring to came after a banquet at which Berman spoke: “*If the Sun is a star, why can’t we see it at night?*”

“It’s a legitimate question,” the professor said. “In fact, I wanted to use it as the basis for my dissertation in graduate school. But my professors, like Berman, sneered at it. They considered it unworthy of scholarly research. Because of their short-sightedness, the world may never learn why we can see other stars but not the Sun at night.”

What did you do?, we asked.

“I had to find another topic. So I set out to prove that comets are alive, and –“

Wait a minute!, we said. *Did you just say that comets are alive?*

* * *

The professor smiled at our ignorance. “Of course they are. Comet tails always point away from the Sun, right?”

We nodded.

“Well, if comets aren’t alive, how do they know where the Sun is so they can point their tails away from it?”

“Of course, my professors didn’t see it that way. So I had to look for *another* topic.

“My next topic was **black holes**. I thought, *Surely they’ll accept this*. Black holes and cosmology go together like **Abbott & Costello, Simon & Garfunkel** and **Ken Walburn** & the buffet line at Ryan’s.

“I said, *Black holes are, by definition, black. They are also, by definition, holes. But holes are colorless, or else the center of a doughnut would be colored. So if black holes aren’t black, what color are they?*”

“Nope, they wouldn’t accept it. Back to the drawing board.

“‘How about this?’ I asked them. *‘Since 95% of space is composed of dark matter, shouldn’t we be able to see only 5% of the stars and galaxies?’*

“‘Try again,’ they said.

“I tried several other cosmological topics, all with the same results. Here are some of them:

*“According to physics theory, *matter can neither be created nor destroyed, but merely changed*. So if nothing existed before the Big Bang, where did everything in the universe come from? How do you change nothing into something? (Note: *The professor’s wife says that’s what she’s been trying to do for years. –Ed.*)

*“If, as astronomers agree, the Big Bang occurred everywhere at once and not just at a central point, why do they say that the universe is expanding? If the Big Bang occurred *everywhere*, shouldn’t everything in it be expanding and shrinking at the same time?”

“My professors said, ‘The only thing shrinking is your chances of getting your degree.’”

*“I said, *‘If there was no central point where the Big Bang occurred, how do they know how old the universe is? Don’t birthdays require a starting point in time and space?’*

“The professors may not have heard me. Two of them were asleep, one was reading a newspaper, and

the other one said, ‘I’m sorry, Theo. Were you saying something?’”

“I eventually got my doctorate,” Prof. Stargazer concluded. “But it wasn’t in cosmology. The title of my dissertation was *‘How Much Money Does It Take to Persuade a Committee of University Professors to Look the Other Way and Just Give Me My Degree?’*”

And how much did you pay them?, yr. reporter asked.

The professor smiled again. “I’ll never tell.”

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Answer to Trivia Question on p. 3: Mrs. Smallwood’s surname, Bagitta, rhymes with Sagitta (suh JITT uh) the Arrow.

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When I first got into astronomy, I thought the Big Bang had something to do with my wife’s driving.

-Prof. Stargazer

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