

THE FLINT RIVER OBSERVER



Vol. 3, No. 2

FLINT RIVER ASTRONOMY CLUB

April, 1999

Officers: President, **Steven (Smitty) Smith** (583-2200); Vice President/newsletter editor, **Bill Warren** (229-6108 -- or, if you prefer e-mail: warren1212@mindspring.com); Secretary-Treasurer, **Ken Walburn** (P. O. Box 1179, McDonough, GA 30253 / 954-9442; AICor, **Neal Wellons**, and Web Site Coordinator, **Cody Wellons** (946-5039); Librarians, **Tom and Katie Moore** (228-6447); Telephone/Hospitality Committee Chairman: **Dan Pillatzki** (707-0270). Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. All of these phone numbers have 770 area code prefixes. FRAC web page address: <http://welcome.to/frac>.

Please notify **Bill Warren** promptly if you have a change of address.

Club Calendar. Thurs., Apr. 8: FRAC meeting (Beaverbrook media center, 7:30); **Fri., Apr. 9:** Beaverbrook "First Light"/FRAC joint observing (BB, at dark); **Fri.-Sun., Apr. 15-18:** Peach State Star Gaze (Camp McIntosh, near Indian Springs).

President's Message. I want to extend my warmest greetings to our newest member, **Charles Sykes**, of Brooks. After a few years away from stargazing, Charles has a new 8" SCT to help him become reacquainted with the delights of the night sky. Not a bad way to break in, eh?

You have all read articles I've written for the newsletter before, and I hope that you were entertained by them. If you have learned something or picked up a little tip from my

scribblings, I'm glad. The two main purposes this club was formed for two years ago were (1) to have fun, and (2) to educate ourselves and others about astronomy.

Larry Higgins, our first president and the "founding father" of FRAC, has left me some big shoes to fill. They're even bigger than the 2 sizes larger than my feet, insulated "clown shoes" that I wear for winter observing! I hope I can fill them.

Everyone always asks me, "What's the 'Saratoga' in your nickname for?" Well, I'm an ex-Navy man and served aboard the aircraft carrier *Saratoga*. Like the *Enterprise* and only a handful of other ships' names, there have been many vessels named *Saratoga* going all the way back to the Revolutionary War. This theme was carried on by the writers of *Star Trek*. I am proud to have been part of the crew of a ship with such a rich history, and so I named my telescope -- my starship -- *Saratoga*.

I enjoy watching *Star Trek*, but I am not a Trekkie nut. I do not don pointed ears or carry a tri-corder. As your new president, you need not worry that I will try to get the club to attend a *Trek* convention.

What I *will* do, however, is open your minds. Please remember that the starships in *Star Trek* were not warships -- they were built to explore! What I will continue to do, as Larry Higgins did, is to try to influence you to keep exploring our universe with your own starship, be it a telescope, a pair of binoculars, or just your unaided eyes.

Trying to understand how the universe works is another interesting facet of astronomy called *cosmology*. This will be the topic of our June meeting. *Cosmology* is a subject I find fascinating, and I can't wait to see what **Neal**

Wellons has planned for us. Also, while some say that science and religion cannot mix, let me quote a very famous astronomer: "*O telescope, instrument of much knowledge, more precious than any sceptre, is not he who holds thee in his hand made king and lord of the works of God?*" The writer was Johannes Kepler.

I will try to serve you faithfully as president for the next two years, and I hope that you continue to enjoy and learn all things astronomical.

"Ahead warp factor one, Mr. Warren!"

-Steven (Saratoga Smitty) Smith

* * *

If a man would be alone, let him look at the stars. The rays that come from those heavenly worlds, will separate between him and what he touches... But every night come out these envoys of beauty, and light the universe with their admonishing smile.

-Ralph Waldo Emerson
Nature (1836)

* * *

Last Month's Meetings/Activities. Eighteen members attended **Dr. Richard Schmude's** excellent presentation on variable stars at the March meeting. It was another splendid performance for Richard, who, as a member of AAVSO, has logged and turned in more than 25,000 observations of variable stars. (And **No, Ken Walburn**, a star doesn't qualify as variable if it moves in and out of clouds!)

It was good to see our present and past presidents at the March meeting: **Smitty**, back from Ohio, has settled into his new leadership role, and **Larry Higgins**, back from wherever he's been, has volunteered to head up our Mayfling committee. We had 15 members involved in last year's festivities, and we hope to have equal or greater participation this time around. If we're lucky, **Ken W.** will leave his teeth at home. (If you don't understand that statement, ask Mr. Walburn to give you a real big smile next time you see him.),

Only two members -- **Mike Stuart** and **Tim**

Astin -- showed up for our Cox Field observing on **Fri., Mar. 19th.** Tim found about a dozen Messiers, Mike 2, bringing Mike's total to 98 before clouds rolled in at about 9:30. The Sat. observing session was clouded out.

On **Mon., Mar. 22nd**, **Randy Kanipe, Charles Sykes & yr. sleep-deprived reporter** visited Cox Field for a couple of hours. The sky was slightly hazy after 9:00, and our old friend, the dreaded *dew*, made its first appearance of the year, renewing an old and unhappy acquaintance with my mirror.

* * *

For what could be more beautiful than the heavens which contain all beautiful things?... If the worth of the arts were measured by the matter with which they deal, this art -- which some call astronomy -- would be by far the most outstanding.

-Nicolas Copernicus
On the Revolution of the
Celestial Spheres, Book
One (1543)

* * *

Membership Renewals Due in April: **Joanne, Mark, Kathy, Joey & Daniel Cirincione; Thomas Faber; and Alex & Nelda Langoussis.** Send your \$10 checks to Ken Walburn at the address listed on p. 1.

* * *

Upcoming Meetings/Activities. This month's FRAC meeting will be on **Thurs., Apr. 8th**, and will feature **yr. intrepid reporter** presenting a rather unique view of the spring Messiers. It'll be a must-see for any of you with aspirations toward earning a Messier pin, since between them the five spring constellations *Ursa Major, Canes Venatici, Leo, Coma Berenices* and *Virgo* contain 37 Messiers, 33 of them galaxies. We'll investigate ways to work your way through them in an organized manner.

You didn't win the \$73 million lottery -- but

maybe you'll get lucky and win one of our three door prizes this month. Like, say, **Dan Pillatzki** or yr. intrepid reporter, they aren't worth much -- but they aren't entirely useless, either.

At the meeting, we'll also discuss plans for participating in this year's **Griffin Mayfling** festival at City Park. **Larry Higgins** has volunteered to head our Mayfling committee.

Our BB/FRAC joint observing will be held at Beaverbrook on **Fri., Apr. 9th.**

Since the Peach State Star Gaze, scheduled for the weekend of **Thurs.-Sun., Apr. 15th-18th**, is taking up our prime new Moon observing time this month, *we will not have a scheduled Cox Field observing in April.* Of course, you're welcome to go anyway if, for whatever reason, you can't make it to the PSSG that weekend.

Our May meeting will feature **Smitty** talking about solar observing. **Neal Wellons** is slated to enlighten us regarding cosmology in June, and in July **Smitty** will discuss the work of the International Dark Sky Association in attempting to curb light pollution.

* * *

*You that so wisely studious are,
To measure and to trace each star,
How swiftly they travel, and how far,
Now number your celestial store,
Planets, or lesser lights, and try
If in the face of all the sky
You count so many as before..*

*-Sir William Davenant
1639*

The Sky in April. As part of yr. peerless reporter's ongoing campaign to stay on top of things and keep you abreast of late-breaking news, we've changed the heading of this section so it no longer reads, "The Sky in January."

Saturn, like morality in the Oval Office, is sinking lower with each passing day. Look for it -- Saturn, that is, not morality -- below **Venus** in the W sky during the early part of April. **Jupiter** will be long gone by then, to return next month as a morning star in the east.

Mercury will be a nice target if you're

anywhere near Rio de Janeiro in April. **Pluto** will be 1° ENE of the star *Zeta Ophiuchi* -- and No, I didn't say *Zeta Orionis*, **Katie Moore** -- but at mag. 13.7 Pluto may as well be in Rio de Janeiro for all the luck you'll have in identifying it.

Incidentally, as of **Feb. 11, 1999**, Pluto surpassed Neptune as the farthest planet from the Sun in our solar system, and will remain so for the next 114 years. Sort of like **Tom Moore** and his search for lunar features. Apparently, Tom has trouble finding the Moon because it moves around so much, but "I can usually find it pretty easy in photographs." Hey, Tom, we'll give you a photo of a Lunar Club pin.

Speaking of **Neptune** (mag. 7.9), it will be a morning star in April, lying about 1° E of the star *Sigma Capricorni*. **Uranus** (mag. 5.8) will also be a morning star, detectable in binoculars about 2° E of 4th-mag. *Theta Capricorni*.

Venus will shine brightly this month: on **Apr. 11th**, it will be less than 3° S of the *Pleiades* open cluster (M45). Still, the star of this month's planetary hit parade will be **Mars** (mag. -1.1). Although still low in the E at sunset, Mars will be up all night by the end of the month. This month's *Astronomy* has a nice article on Mars ("Red Planet at Night, Observer's Delight," pp. 89-91) by **Phil Harrington**, who just happens to be a featured Saturday speaker at next month's PSSG.

Beyond all that, there's the **Lyrids meteor shower** (see **Phil Sacco's** article, p. 4), expected to peak in the early morning hours of **April 22nd**. Big deal. **Dan Pillatzki** peaked years ago.

* * *

For those of you who might be looking for a cheap way to expand your star atlas holdings without forking over megabucks in the process, p. 11 of this month's *S&T* has an ad and reply card from the Astronomy Book Club: as an introductory offer, you can buy the *Cambridge Star Atlas* (\$19.95) and *The Hatfield Photographic Lunar Atlas* (\$44.95) for only \$5.97. (Or, since the latter counts as 2 books

in a "3-books-for-\$1.99-each" offer, you could buy, say, the *Cambridge*, Terence Dickinson's wonderful best-seller, *Night Watch*, and Fred Schaaf's excellent *40 Nights to Knowing the Sky*, at the same rock-bottom rate. After that, all you have to do is buy 3 more books from them within the next 12 months. I've joined the club twice -- once, to get the 3-volume *Burnham's Celestial Handbook* (\$44.95) for \$5.97 -- bought my quota of books (including a neat little star atlas for \$8.95), and dropped out. I'll probably join it again when they offer some more books I need, and I do not hesitate to recommend your doing likewise. It's a nice way to expand your personal library without breaking the bank. I'll bring the magazine to the April meeting.

* * *

The Peach State Star Gaze. There's still time for you to register for the PSSG, to be held at Camp McIntosh near Indian Springs State Park near Jackson on **Thurs.-Sun., Apr. 15th-18th**. If you missed our meeting and didn't get a registration form, I have a few left. Or, you can pay when you get there.

We won't have a Cox Field observing this month; rather, we hope you'll come to the PSSG because that's where you'll find the *real* action -- stargazers galore, guest speakers, the annual "Peach Fuzzies" observers' challenge, and lots of fabulous telescopes. We look forward to seeing you there.

* * *

We have next to speak of the stars, as they are called, of their composition, shape, and movements.

*-Aristotle
On the Heavens,
Book II, Ch. 7*

* * *

Mr. Messier, Meet Mr. Barlow. Here's a challenge you'll probably never see the likes of again, courtesy of **yr. benevolently philanthropic reporter:** The next member

who earns his or her Messier pin through FRAC will receive, not just an AL Messier pin and certificate, but also a used (but highly usable) Meade Model 140 2X Barlow telenegative amplifier. **Mike Stuart** is, to my knowledge, presently closest to completion with 98 Messiers under his belt -- but since Mike can't make it to the PSSG, here's your chance to slip past him and get that Barlow for yourself.

* * *

The Lyrids Meteor Shower

article by **Philip Sacco**

With the coming of the Lyrids on **April 21-23**, I thought this would be pertinent info:

Meteors are small, solid particles in orbit around the sun; in many cases, they are believed to be debris left by passing comets. Thus, meteors tend to be grouped together in comet-like orbits and often have been linked to known comets. When the Earth passes through one of these streams, a meteor shower occurs as the particles burn up in our atmosphere.

On any given night, the average observer should be able to see about five stray meteors per hour. The typical shower will generally triple that rate, while the best ones (such as the **Perseids** of August and **Geminids** of December) may have 50 or more per hour.

The distribution of meteors along their orbits is not uniform. Therefore, what may have been a bland shower one year might be a memorable event the next. The most notable of this sort of meteor shower is the **Leonids** of November. Usually, the Leonids produce about 15-20 streaks per hour, but early one morning in November, 1966, along the western coast of the U. S. rates approaching 150,000 per hour were reported. This was a repeat of the famous 1833 shower that prompted one 19th-century writer to exclaim: "Never did rain fall much thicker than the meteors fell to earth!..."

Occasionally meteors the size of small rocks will join the fray, producing what is called a *fireball*. Some of the bigger ones may even be

seen breaking apart and forming two or more fiery trails. The biggest of these might survive their entry and strike the Earth. These meteors are then called *meteorites*. The 4,000-ft. wide Barringer Crater in Arizona is a dramatic example of such an impact.

The names of the meteor showers are derived from the area of the sky from which the meteors appear to radiate -- hence, the term *radiant* -- like spokes in a wheel. Thus, the **Lyrids** meteors would appear to be coming from *Lyra*, a summer constellation that is low in the east at the time of the Lyrids shower.

The best time to observe a shower is from about 2:00 a.m. until dawn. Since meteors can appear in any part of the sky, using a telescope or binoculars is likely to hinder your viewing.

The date of the peak will fluctuate a day or so, so you may want to call up the astronomy department of your local college and find out the best time for observing. A moonless night is also recommended, since a bright Moon will both destroy your night vision and wash out the dimmer meteors.

So if you care to watch the Lyrids, find yourself a comfortable place to lie down: a backyard with a lounge chair, perhaps -- or better yet, a Jacuzzi. Turn on some music, munch some popcorn and watch as the stars slowly wheel above your head. And with a little luck you just might see some bits of interplanetary dust that just happened to encounter the third planet from the Sun, and just happened to meet its fiery demise after billions of years of peaceful existence somewhere over your neighborhood.

* * *

The Lunatix Challenge Series: #2

by Philip Sacco (Lunatic #82)

(Editor's Note: This is the 2nd in a series of 12 monthly "Challenges" devised by AAC's Phil Sacco to make your Lunar Club award quest more interesting. Remember: if you miss a given feature one month, you can always look for it next month.)

Naked-Eye Targets. 1. *Woman in the Moon* (Hint: Hare). 2. *Sinus Iridium*: What is its English name? 3. Crater *Tycho*: What is Tycho's most prominent feature? 4. *Mare Tranquillitatis* (Sea of _____): What historic event occurred in this Mare? 5. (Challenge) *Sinus Asperitatis* (Bay of Asperity): Why is it so named?

Binocular Targets. 1. Crater *Grimaldi*: Is it really a crater? (Hint: One of the darkest Moon features); 2. Crater *Archimedes* (Hint: smooth, lava-filled floor); 3. Crater *Petavius* (Hint: rays!); 4. (Challenge) Crater *Theophilus*: What Bay is it near? What Sea?

Telescopic Targets. 1. *Rima Ariadaeus*: What does *rima*, or *rille*, mean? 2. *Messier/Messier A*: How are they believed to have been created? 3. *Vallis Alpes* (*Alpine Valley*): Why is it so named? 4. (Challenge) *Mons Hadley*: What historical event took place near Mt. Hadley? 5. Locate and identify the feature at 82.5 S by 85.5 E.

##