

THE FLINT RIVER OBSERVER

Newsletter of the FLINT RIVER ASTRONOMY
CLUB, an Astronomical League affiliate

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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. Fri.-Sat., Aug. 6-7: Cox Field observings (at dark); **Thurs., Aug. 12:** FRAC meeting (7:30 p.m., Stuckey Bldg. on the UGa-Griffin campus); **Fri.-Sat., Aug. 13-14:** Cox Field observings (at dark); **Thurs., Aug. 19:** UGa-Griffin lunar observing (7:00 p.m.).

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President's Message. Starting in September, we'll be cutting back to one Cox Field observing weekend per month, due in part to the monthly UGa-Griffin lunar observing we've added.

Several years ago, we switched from one Cox Field weekend to two in order to double our chances of getting at least one clear night for observing every month. But while the new system worked nicely in that respect, it had its downside, too. It reduced by half your chances of seeing whoever chose, for whatever reason, to stay home on the night you were able to visit Cox Field.

Beyond that, a FRAC month loaded up with activities tends to put pressure on regular participants due to decreased family time. Wives like **Vicky Pryor** and **Betty Bentley** solve the problem by going with their husbands, but not every spouse or family wants to do that. And with one weeknight per month reserved for meetings, two weekends reserved for observing, a UGa-Griffin observing and other occasional public observings (usually on weeknights) accounting for one-fifth or more of your monthly schedule, it's easy to envision conflicts arising regarding FRAC time vs. family time.

So starting in September, we'll go back to our original format of one observing weekend per month, with the UGa-Griffin public observing substituting for the other weekend.

And why aren't we switching to that format in August? Because, while the first Cox Field weekend (Aug. 6th-7th) will be very good for deep-sky observing, the second one (Aug. 13th-14th) should be excellent for anyone who wants to kick back and watch a good meteor shower (the **Perseids**).

-Bill Warren

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Last Month's Meeting/Activities. FRAC's solar observing dynamo, **Stephen Ramsden**, was red-hot – literally – in 96° heat during his observing at the Fortson Public Library in Hampton on June 23rd. The **Sun** cooperated nicely, offering a couple of small sunspots and several mostly small prominences. Stephen was assisted – as if he needed help – by **Larry Higgins**, **Dan Pillatzki** and yr. editor.

Next day, our first monthly UGa-Griffin lunar observing was successful in one respect if not another. Only three visitors showed up (two of them, **Yan &**

Olga Giserman, were guests of **Carlos & Olga Flores**), because the *Griffin Daily News* failed to print the article we submitted a week before the observing. Our other visitor, Griffin ex-mayor and radio station WKEU program host **Dick Morrow**, said he'd be sure to remind his listeners of next month's UGa lunar observing.

Other FRACsters at UGa-Griffin that evening included: **Tom Moore; Dan Pillatzki; Larry Higgins; Charles Turner; Dwight & Laura Harness; Betty & Steve Bentley** and their grandkids **Brianna & Erin; Tim Cunard; Cynthia Armstrong;** and **yr. editor**. We had such a great time enjoying each other's company that you'd have thought it was a reunion of some kind— which it was, come to think of it. A FRAC family reunion.

On July 3rd, seven members – **Alan & Vicky Pryor, Dwight Harness, Tim Cunard, Larry Higgins, Felix Luciano** and **Charles Turner** – enjoyed what Alan described as “the clearest skies I've seen in about two years” at Cox Field. Alan and Felix stayed out there until 1:20 a.m.

“After such a clear night,” Alan went on, “on the way home I kept thinking of that old song from the 1960s, ‘*Oh, What a Night!*’”

We had eleven members in attendance at our July meeting. In addition to speaker **Jessie Dasher**, there was **Larry Higgins, Dwight & Laura Harness, Steve & Betty Bentley, Tom Danei, Mike Stuart, Brianna Mills, Charles Turner** and **Felix Luciano**. Jessie delivered an absolutely splendid presentation on the two tiny moons of **Mars (Deimos and Phobos)**, and Felix received his **Zombie Award** certificate for having pulled an all-nighter at **Ga. Sky View 2010**. **Tim Cunard** wasn't at the meeting, so we mailed his certificate to him.

We learned at the last minute that **Stephen Byous**, an ex-FRAC member who is now living and working in Washington, D.C., was in town. So we hastily arranged a small Cox Field observing for him on his last night in town, July 16th. **Larry Higgins** – he's Stephen's cousin — was there, as were **Dwight Harness, yr. editor**, Stephen's brother **Dan** and Larry's son **Dylan**. Clouds moved in and out all evening, but we got to see a surprisingly large number of deep-sky objects. Best of all, though, we got to

spend time with Stephen, Dan and Dylan, and the International Space Station came by to say *Hi!*

On July 20th, **Larry Higgins** and **yr. editor** were guests on UGa-Griffin's weekly radio show on station WKEU in Griffin. They talked about FRAC, and, more specifically, our monthly lunar observations on the UGa-Griffin campus. Larry's voice and face were made for radio, and yr. editor's radio voice sounds like a cross between Mickey Mouse and Donald Duck. But they got through it nicely, and had a good time talking with host **Bobby Chappell**.

Then, after all the talking about it, our July UGa-Griffin observing was rained and clouded out.

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This 'n That. It turns out that the white spot that appeared on **Saturn** in June (*The Observer*, July, 2010, p. 2) wasn't due to an impact. This time, the culprit was a storm that sent ammonia gases high into the Saturnian atmosphere, where it froze into ice crystals that reflected visible light.

*On pp. 54-55 of the Aug. issue of *Sky & Telescope*, there's a panoramic photo of displays and vendors at the 2010 Northeast Astronomy Forum (NEAF) convention held recently in Suffern, N. Y. If you look closely at the photo, near the right edge of p. 55 you'll see a strange sight: a guy wearing a large, round yellow outfit with stegosaurus-like spikes radiating outward around it. It's **Stephen Ramsden** in his **Sun** suit. He was there to conduct a solar observing for the attendees.

My, the man *does* get around! If we were to visit the North Pole, we'd probably find Stephen there, showing polar bears the Sun.

*In a repeat performance of the sort of thoughtfulness that marked his entry into FRAC last year, when **Reese Forshee** sent in his 2010 dues payment recently his check was for \$40, not for \$15. He specified that the overpayment was a gift to FRAC, and not a request for more than one year of membership.

Thanks, Reese. All we can say is, *No wonder people like Reeses to pieces.*

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Upcoming Meetings/Activities. Our first Aug. Cox Field observing weekend, **Fri-Sat., Aug. 6th-7th**, will be almost ideally suited for deep-sky observing, i.e., 2-3 days before the New Moon on the 9th.

Our club meeting will be at **7:30 p.m. on Thurs., Aug. 12th**, on the 2nd floor of the Stuckey Bldg. on the UGa-Griffin campus. **Carlos Flores** will bring an astronomy dvd from his extensive collection for us to watch. He didn't say which one he's bringing, so **Prof. Stargazer** said he'd like to see *Debbie Does Deneb*.

Our other Cox Field weekend will be **Fri.-Sat., Aug. 13th-14th**. With the **Perseids meteor shower** peaking during the early morning hours of Aug. 12th, there should be plenty of tardy Perseid arrivals on the 13th and 14th, possibly as many as 25-50 per hour.

After a highly successful -- from our point of view, at least -- debut that brought out 15 FRACsters in June, we'll be back on the lawn at UGa-Griffin at 7:00 p.m. on **Thurs., Aug. 19th** for our monthly lunar observing. Meanwhile, we'll be trying very hard to get out the message to area residents that we'll be there that night and they should come out and see what we can show them.

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People You Should Know: Doug Maxwell. Here's an apt phrase to describe Doug's approach to life: *Jack of all trades, master of all of them.* Consider:

*Not long after joining FRAC, Doug decided to build his own telescope. But because the 6-in. (f/8) Dob he built didn't have quite the aperture that a deep-sky buff like Doug covets, he embarked on a more ambitious project, i.e., a home-made 13.1-in. (f/4.5) equatorial platform Dob that tracks objects across the sky with unerring accuracy. That 'scope remains the largest and finest telescope ever built by anyone in FRAC.

*An accomplished and highly skilled observer, Doug has earned three A.L. observing pins (Messier, Binocular Messier and Caldwell Club). He would

rank high on FRAC's all-time best-observer list if such a list were to be compiled.

*Highly adept at quilting -- you should see examples of his work -- Doug made his own dust covers for his 'scopes, with material featuring stars, planets, etc. Like everything he does, it's first-rate.

*A hugely funny guy in his own right, Doug also knows more jokes than anyone this side of **Rodney Dangerfield**.

*At age 21, Doug bought a Taylorcraft L2-B, an authentic World War II army observation plane. He sold it in 1974 after it was severely damaged by a tornado -- and 31 years later he found it again, a 62-year-old rusting hulk. (The plane, that is, not Doug.) He bought it, brought it home, restored it to its former glory, and flies it as often as his busy schedule permits.

A few years ago, Doug flew his plane to Camp McIntosh and **Ga. Sky View** at the heady speed of 45 mph. ("I was flying into a 30-mph headwind," he says. "Cars down below were zipping by me like hares outrunning a tortoise.") He performed several flyovers before returning home to drive over to GSV.

*And oh, by the way, Doug is a technician and salesman for Colonial HVAC. His expertise has come in handy at past GSVs in thawing out frozen refrigerator coils and restoring heat in the dorms and elsewhere.

Doug and his lovely wife **Laura** have two married daughters, **Jennifer** and **Stephanie**, who have blessed them with six grandchildren, most of whom are too young to fly with him.

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Meteors in August. If you want to watch the **Perseids meteor shower** at Cox Field on Aug. 13th or Aug. 14th, be sure to bring along a reclining deck chair, insect repellent and a blanket, sweatshirt or sweater. (The reclining chair is so you won't wake up next morning with a crick in your neck from craning

backward to look at the sky.) Sit near someone you'll enjoy talking to, tilt back in your recliner, select a dark area of sky to watch, and the Perseids will do the rest.

The Perseids is arguably the most dependable, and certainly one of the best, of the annual meteor showers. Perseids meteors are remnants of **Comet 109P Swift-Tuttle**, a periodic comet that last returned in 1992. Its next return will be in 2026. On every return the comet deposits new debris, thereby ensuring the meteor shower's survival.

Perseids meteors can be seen anywhere in the sky. They're called "Perseids" because they appear to come from a central point (called the *radiant*) in the constellation *Perseus*, low in the NE sky in August.

Mid-August is an especially good time for meteor watching, because there's more to see than just Perseids meteors.

First, there are **sporadic meteors** that aren't part of any meteor shower, they're just small bits of space debris that wander into Earth's upper atmosphere and burn up. On any given clear night during the year, you might see 3-5 sporadic meteors during an evening of observing.

Beyond that, two other minor meteor showers, the **Delta Aquarids** and the **Kappa Cygnids**, coincide with the Perseids. As you might have guessed, they are named for the stars near which their radiants are located. And, like the Perseids, they can be seen anywhere in the sky.

This combination of meteor showers is especially promising because, every three years, the Moon cooperates and stays away near the Perseids peak.

This is the year.

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TAKING AIM AT THE ARCHER

observing article by Bill Warren

If *Orion (the Hunter)* is the centerpiece of the winter sky, then *Sagittarius (the Archer)* is its worthy equivalent in the summer sky.

A southern constellation, Sagittarius is seen

as a "teapot"-shaped asterism consisting of eight mag. 2 & 3 stars, with five of them forming the "pot" and "lid"; two of those stars and two others forming the "handle" on the eastern side of the teapot; and two other stars forming the "spout" with yet another star on the western side.

In looking at Sagittarius, you're looking toward the center of our galaxy. (The exact center lies roughly halfway between **M6**, an open cluster in *Scorpius*, and **M8**, a nebula in Sagittarius. [See below.]) The **Milky Way**, visible to the naked eye on a clear evening at a dark site like Cox Field, begins in Sagittarius and stretches northward like an elongated cloud through and beyond *Cygnus* and *Cassiopeia*.

With such a profusion of stars within its borders, it's hardly surprising that Sagittarius is an absolute delight to observe in binoculars or telescopes large or small. Fifteen Messier objects can be found in Sagittarius alone.

Four M's and a Gem

***M8 (Lagoon Nebula).** Arguably the best of the summer nebulas, M8 is visible to the naked eye on a dark, moonless night as a hazy patch located 5° – three finger-widths – above the Teapot's spout. M8 is huge (twice as large as the Moon); once you've found it and marveled at the nebulosity and "lagoon"-like dark rift in it, look for **NGC 6530**, an open cluster of about 25 mag. 7-9 stars inside the nebula.

***M20 (Trifid Nebula).** M20 is a lovely nebula located 1° N of M8 and about half its size. To me, at least, M20 resembles a piece of popcorn, due to dark lanes within the nebulosity. Both M8 and M20 are best seen with a narrowband nebula filter.

***M17 (Omega, Horseshoe or Swan Nebula).** M17 is a U-shaped nebula that is often referred to as Omega, or Horseshoe, Nebula. A bright, curving "neck" of nebulosity at the southern end of the U lends it a third and more familiar nickname, Swan Nebula. As with most nebulas, the "U" and "swan" shapes are best seen with a filter. (The swan feature is impressive in all telescopes, looking like a "2" with its

bottom line extended to show the swan sitting in water.)

***M22**. A magnificent globular cluster, M22 rivals mighty **M13** in *Hercules* in size, beauty, brightness and resolution of individual stars. M22 is located about one finger-width E of **Lambda Sgr**, the 3rd-mag. star that forms the top of the Teapot's lid. A 10-in. 'scope will show hundreds of stars at high magnification. (Remember, light is concentrated in globular clusters, so they can take all the magnification you want to apply to them.)

***NGC 6818 (The Little Gem)**. NGC 6818, a stunning little planetary nebula, is vibrant blue, and well worth the effort to find it. Located 2° north of the 5th-mag. star **55 Sgr**, it will appear as a colorful, star-like disk at low power in a small telescope. Once you've found it, pump up the power and enjoy the view. 6818 is one of the prettiest planetary nebulas you'll ever see.

If you don't have GoTo, any decent star atlas such as *Deep Map 600*, *Cambridge Star Atlas* or *Sky & Telescope's Pocket Star Atlas* will show you where to find it.

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TOMMY AND THE DOB

article by **Bill Warren**

Tom Moore recently sent out a very interesting e-mail about his and **Cathy's** latest visit to **Katie** and her Smithsonian National Observatory in Washington, D.C. I hope you took the time to study the photos that Tom attached: their subject matter is a bit of authentic Americana from **John Dobson**, the man who in two different ways has done more to make astronomy accessible to the masses than anyone else in history.

The Dobsonian Telescope. Prior to John Dobson's work in telescope making during the 1950s, any telescope with an aperture or lens of 6 in. or larger was considered a "large" telescope. Few amateur

astronomers could afford the expense of a big telescope.

Enter John Dobson.

As a Vedantan monk living in a monastery in California in the 1950s, Dobson began building telescopes and using them to show people a universe they had never seen before.

Bereft of funds – monks are essentially unpaid workers of the Church, with no money or other worldly possessions of their own – Dobson prowled junkyards for parts he could use in making his telescopes. He ground his first mirrors from discarded panes of porthole glass, and his mounts were made of scraps of plywood. That alone would have marked him as a highly creative individual, but it was his revolutionary lazy Susan-like mount and his use of other inexpensive materials such as sonotube in his optical tube assemblies (OTAs) that forever changed amateur astronomy. His ideas made it possible for people with modest incomes to purchase large telescopes.

Actually, as Dobson has pointed out, he didn't invent the "Dobsonian" concept; he merely was the first person to apply it to astronomy. For hundreds of years armies had waged wars using cannons seated atop Dobsonian mounts. They just didn't call it that.

Dobson didn't patent his new mount, or else he'd be a millionaire many times over by now. He left the Church in 1967 after repeatedly getting caught sneaking out of the monastery at night to build telescopes with other amateur astronomers, or to show the night sky to anyone who might be interested. But he has never applied for a patent for the mounting system that everyone but him refers to as a "Dobsonian" reflector.

Surprisingly, it wasn't until the early 1980s that Coulter Optics began selling commercially prepared Dobsonian reflectors. (**Smitty** has a 10-in. original Coulter, and when Dobson visited the Atlanta Astronomy Club in the early 1990s Smitty got him to autograph his Coulter's OTA. Do you think that 'scope will be a collector's item when 95-year-old Dobson passes on?) Other companies followed suit when they realized what a huge market existed for very large, inexpensive, easy-to-operate, easy-to-manufacture portable telescopes.

Here's how Dobson changed the face of amateur astronomy: 75 years ago, **Alan Pryor's** 20-in. Dob would have been one of the largest telescopes on Earth. And today, 6-in. Dobs are considered small. You can buy one for \$250 or less.

Sidewalk Astronomy. It was other people, and not John himself, who gave the name "Dobsonian" to reflectors of that type. Dobson has always preferred the term "sidewalk telescope," since that's where his were used. Shortly after leaving the Vedantan monastery, he co-founded the **San Francisco Sidewalk Astronomers**, a group of amateurs who took their 'scopes out to the city sidewalks at night, thereby creating the concept of *public outreach* in astronomy. Prior to that, the idea was that people should come to the observing site, rather than moving the observing site to where the people were.

So yeah, it's fair to say that John Dobson has left an indelible mark, not just on the tube of Smitty's 10-in. Dob, but on all of amateur astronomy as well.

In 2005, *Smithsonian* magazine listed John Dobson as one of 35 individuals who have made a major difference during the lifetime of that periodical.

The Smithsonian Dobsonian. From Tom's e-mail: "Lookee what I saw/used at Katie's Observatory in D.C. this past weekend. Follow the pictures:

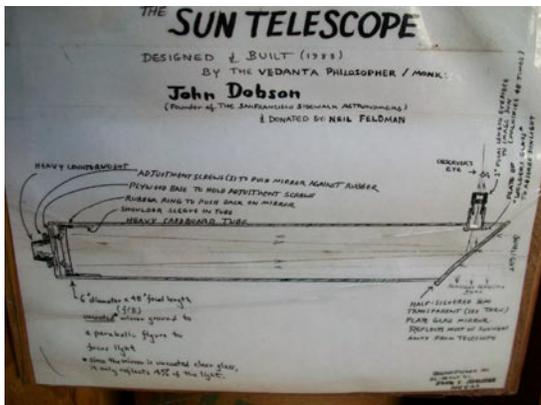


"#3543- It just caught my eye as a quite unusual telescope. (It was obviously home-made, and as out of place in Katie's shiny new observatory as a Wright Brothers biplane on the launching pad at Cape Canaveral. -Ed.)



"#3552- At second glance, I noticed the sign on the 'scope. (It read, in hand-written letters: 'THE SUN TELESCOPE, DESIGNED AND BUILT [1988] BY THE VEDANTAN PHILOSOPHER/MONK JOHN

DOBSON [FOUNDER OF THE SAN FRANCISCO SIDEWALK ASTRONOMERS] AND DONATED BY: NEIL FELDMAN. Below it was a hand-drawn diagram of the Sun Telescope, which included the descriptions ‘a half-silvered semitransparent [see thru] plate glass mirror that reflects most sunlight away from the telescope’ and a ‘plate of welder’s glass to absorb sunlight.’ -Ed.)



“#3553- Suddenly, I became more interested. (And stopped staring at the blonde in the lime green miniskirt who was standing nearby. –Ed.)



“#3554- Wow! A signature model of a Dob made by the ‘Dob man’ himself! (Only an unmitigated boor such as **Larry Higgins** would wonder why Dobson’s signature was on a piece of paper taped to the tube rather than written on the tube itself. –Ed.)



“#3555- We actually used this on the sidewalk outside Katie’s Observatory this weekend for the public solar viewing.” (And enjoyed every minute of it. –Ed.)

Ace reporter **Bill Warren** recently attempted to interview **Prof. Stargazer** for the *Observer* regarding **John Dobson**, but the Professor wasn’t in a talkative mood. Maybe it had something to do with his broken jaw, wired shut after a recent heated discussion with his bookie.

At any rate, all the Professor would agree to tell us was a little joke that he had made up about Dobson. Here it is:

“Back in the early 1970s, John Dobson was in New Guinea to attend a conference when he got the itch to take his sidewalk astronomy to the people. He packed up his little telescope and trekked deep into the

jungles, where he was promptly captured by cannibals.

“When they set him in a pot of water over a roaring fire Dobson protested, ‘You can’t boil me, I’m a friar!’”

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And thence we came forth, to see again the stars.

-Dante Alighieri

The Inferno (XXXIV, 139)

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