

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the
Astronomical League

Vol. 16, No. 8 **October, 2012**

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

Board of Directors: **Dwight Harness;** **Mike Stuart;** **Jessie Dasher;** and **Laura Harness.**

Facebook Coordinators, **Jessie Dasher** and **Laura Harness;** Alcor, **Carlos Flores;** Webmaster, **Tom Moore;** Observing Coordinator, **Dwight Harness;** NASA Contact, **Felix Luciano.**

Club mailing address: 1212 Everee Inn Rd., Griffin, GA 30224. Web page: www.flintriverastronomy.org.

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., Oct. 11: FRAC meeting (7:30 p.m., Rm. 305 of the Flynt Bldg., UGa-Griffin campus); **Fri.-Sat., Oct. 12-13:** club observings (Joe Kurz Wildlife Management Area, at dark); **Mon., Oct. 22:** Orrs Elem. PreK observing (6:30 p.m.); **Tues., Oct. 23:** Orrs PreK rainout date

(6:30 p.m.); **Fri., Oct. 26:** UGa-Griffin lunar observing (7-10 p.m.).

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President's Message. If you weren't able to attend our Sept. meeting but are interested in earning one or more A.L. observing pins, be sure to ask me for copies of the handouts I gave to the attendees. Those handouts showed the pins – well, most of them, anyway – and explained the basic requirements and restrictions for each of the A.L.'s 45 pin programs.

A third handout listed all of the 228 objects that are duplicated in two or more A.L. programs. Knowing which objects appear in more than one program is important to pin seekers because, with certain exceptions that are explained in the handouts, once you've observed an object for one program, you can use that same observation in all other programs in which that object appears. That gives you a small head start toward completing other programs – and the more pins you earn, the more duplications you can use in other programs.

Almost all of the pin programs are designed to require roughly one year to complete, because the A.L.'s goal is to encourage you to become a regular observer. In future talks, I'll tell you what you need to get started, offer advice on how to improve your observing skills and suggest shortcuts you can use to earn pins quickly.

It took me roughly six years to earn my Master Observer pin (five required pins and any five others) – but at least 90% of my work was done in the latter 3-1/2 years. My first 2+ years were spent learning on my own how to observe, and I'll tell you how to take advantage of observing techniques that I wasn't aware of at the time and avoid the kind of mistakes I made as a beginning observer.

Finally, I know you'll want to join me in a resounding "WELCOME TO FRAC!" to our newest members: **Dylan Higgins,** of

Brooks; and **Greg & J Speer**, of Hampton. Dylan is **Larry's** son and, like Larry, a multi-talented individual and an all-around nice guy. The Speers attended our Sept. meeting and joined FRAC two nights later at JKWMA.

-Bill Warren

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Last Month's Meeting/Activities. We had 12 members and two guests at our Sept. meeting: **Carlos Flores; Jessie Dasher; Larry Higgins; Laura & Dwight Harness; Aaron Calhoun; Benjamin, Woody & Brandon Jones; Joseph Auriemma; Roger Brackett; yr. editor;** and visitors **Greg & J Speer.**

At the meeting, yr. editor talked about the A.L.'s pin programs; Carlos reported on A.L. news and showed photos of our new observing site and the recent 1-1/2 sec. explosion on **Jupiter**; and the club voted unanimously to donate \$25 to Orrs Elementary's 5K Run/Walk Race on Sept. 22nd.

On the next night, five FRACsters – **Larry Higgins, Dwight Harness, Carlos Flores, Jessie Dasher** and **yr. editor** -- faced cloudy conditions but visited our new observing site anyway to see if the skies there are as dark as Bill & Larry insisted they'd be. Their gamble paid off in two ways: the sky was clear for at least 90 min. after dark before the clouds took over, and the observing area was delightfully, deliciously dark.

Sky domes of urban light pollution are unavoidable anywhere in the eastern half of the U.S., and JKWMA is no exception – but other than that, the only light to be seen was starlight. In all honesty, folks, those of you who enjoy observing will be blown away by the sky view.

Jessie's congregation surprised him with an 8-in., 200mm equatorially mounted rich field refractor, and his *first light* – the first object he saw in it – was **M13, the Hercules**

Cluster. As yr. editor noted out at the meeting, *When you find an object yourself, you become a co-owner of it along with everyone else who has ever found it.* So Rev. Dasher is now the proud owner of a nifty new 'scope and M13.

On Sept. 15th, five FRACsters – **Erik Erikson, Aaron Calhoun,** new members **Greg & J Speer** and **yr. editor** – found enough potholes in a cloudy sky over JKWMA to see M13, **Albireo, M22, M8 (Lagoon Nebula), M20 (Trifid Nebula)** and **M80.** J brought a couple of trays of brownie delights that were to die for.

Our UGa-Griffin observing on Sept. 21st brought out **Aaron Calhoun, Betty & Steve Bentley, Larry Higgins, Mike Stuart, Carlos Flores, Dwight Harness** and **yrs. truly.** Two nights later at Jackson Rd. Elementary, Larry, Dwight, **Laura Harness, Tom Moore, Woody & Ben Jones** and yr. editor showed the **Moon** to about 100 students, parents and teachers. For those who remained after dark, we showed them deep-sky objects that could be seen under a First Quarter Moon.

Afterward, the JRE teachers presented Dwight with an envelope containing \$30 for FRAC. Classy folks, those Jackson Roaders. We'll use the money for door prizes.

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This 'n That. Please keep **Smitty** in your thoughts and prayers. At writing, he's still in the hospital, but send your get-well cards to him c/o **Steven Smith**, 1203 Allen Rd., Grantville, GA 30220.

*A Note from **The Prince of Darkness** (a.k.a. **Charles Turner**): "Hi gang, I am sorry that I will not make it to the observing tonight. I am in New Mexico, trying to find a dark sky site for my 25-inch! So far it looks like I brought the bad weather from Georgia, but tonight looks good and the next few days as well. I miss you guys, but I am

having fun.” (*Hey, Prince, we’d be happy with either one – clear skies or a 25-in. telescope! –Your Friends in FRAC.*)

***Carlos Flores** has qualified to receive an A.L. Outreach pin. **Larry Higgins** has 94 hrs. toward his Master Outreach pin, and **Betty Bentley** trails closely with 89.5 hrs. (100 hrs. beyond a Stellar Outreach certificate are required for the Master Outreach pin.)

*Every year, **Stephen Ramsden** of the **Charlie Bates Solar Astronomy Project** offers a number of awards and prizes to deserving individuals who excel in public astronomy outreach and/or display a keen interest in the sciences.

One of the winners of CBSAP’s “Jon Wood Award 2012” was **Dr. Richard Schmude** of Gordon College and FRAC. For his ongoing research and his efforts to promote astronomy on all levels, Richard won a 9.25-in. Celestron CPC Schmide-Cassegrain telescope, complete with GPS guidance and all the other bells and whistles that make it such a marvelous instrument. The award was presented to Dr. Schmude by Stephen on behalf of CBSAP.

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Upcoming Meetings/Activities. Mark down 7:30 p.m. on **Thurs., Oct. 11th** as a special date on your calendar. The speaker at our club meeting on that date will be **Anita Westlake**, co-founder and ex-president of the Meteorite Association of Georgia. It will be a return engagement for Ms. Westlake, who spoke at our Sept. 2010 meeting. Based on the popularity of her earlier talk, I can guarantee that you’ll have a good time and learn a lot about meteorites. Anita is a classy lady and a marvelous speaker, as knowledgeable and passionate about meteorites as anyone you’ll ever meet.

Under normal circumstances, we use our telescopes and binoculars to connect us

visually with the universe and solar system that lie beyond our reach – and that’s it. For a couple of hours on one magical evening, however, you’ll be able to see or touch (or even buy) a piece of rock whose origins lie millions of miles away in space. It’s an unforgettable experience – and a humbling one, too – to hold in the palm of your hand something that came here from somewhere else in the solar system.

Yr. editor bought a 16.98-gram fragment of iron shrapnel from the massive Sikhote-Alin meteorite fall that occurred in eastern Siberia on Feb. 2, 1947. Not to be outdone, **Dwight Harness** bought a meteorite that came to Earth from **Mars**, and a tiny chunk of **Moon** rock that he has since managed to lose. Says Dwight, “I can’t imagine how I lost it. (*We can, Dwight. -Ed.*) It’s black and about the size of a grain of salt. If you find it, call me at BR-549. And if **Junior Samples** (*Hee Haw*) answers, we’ve got a problem because Junior died in 1983.”

Returning to the real world, our club meeting will be held in Rm. 305 of the Flynt Bldg. on the UGa-Griffin campus.

On the following two evenings, **Fri.-Sat., Oct. 12th-13th**, we’ll conduct our club observings at the Joe Kurz Wildlife Management Area.

To get there from, say, Hampton, come S on Hwy. 19/41 exactly like you’re going to Cox Field. Turn off the 4-lane 19/41 Bypass at Williamson Rd./Hwy. 362 and set your odometer at 0.0. Bear right, and go 15.8 mi. west on Hwy. 362. Turn left at Mt. Carmel Rd. There’s a sign announcing the intersection just before you get to it.

Go 4.8 mi. on Mt. Carmel Rd. to the JKWMA facility on the right. (There’s a large “Joe Kurz Wildlife Management Area” sign just beyond a gray mailbox.)

Instead of turning right at the mailbox, though, continue ahead on Mt. Carmel Rd. for an additional 0.2 mi. and turn right at the 1st (unpaved) road past the Joe Kurz sign.

We'll have a couple of small day-glo traffic cones to mark the road where you turn. Follow that road for 0.2 mi. and look for another cone to indicate the observing area on the right. It's an open field measuring about 70 yds. long x 50 yds. wide, and you'll see us there if you arrive after 6:30 p.m. If you arrive after dark -- and I recommend that you come before dark if it's your first time -- look for someone's red-beam flashlight to show you where to park.

At 6:30 p.m. on **Mon., Oct. 22nd** we'll conduct a brief observing for the PreK classes at Orrs Elementary School in Griffin.

To get to Orrs from, say, Hampton, come S on U.S. Hwy. 19/41. Go past Ga. 92, and stay on the 4-lane past the next stoplight at Racquethouse. Go over the RR overpass, stay on the 4-lane past the Griffin exit and get off at the next exit (Ga. Hwy. 16, the Griffin/Newnan exit). Turn left, go over the 4-lane and turn left at the second stoplight. Go past Home Depot on the right, and turn left at the 4-way stop. Go one block and turn right, then go another block and turn left into the driveway in front of the school. We'll set up our 'scopes in front of the gym to your left.

The rainout date for Orrs is **Thurs., Oct. 25th**, same place and time.

On **Fri., Oct. 26th** we'll hold our monthly UGa-Griffin observing at the usual place on the Experiment St. lawn from 7-10 p.m.

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Felix Luciano: An Observing Report

Location: Jonesboro, Ga.

Time: 8:55 p.m.

Telescope: Televue 85 (f.l. 600mm)

Eyepieces: 16mm Nagler, 12mm Radian, 6mm Orion.

***M71** (globular cluster in *Sagitta*): "The cluster appeared as a fuzzy patch of light framed by a long string or 'river' of stars

from SW to NE. My Nagler 16 showed a few bright components in the cluster."

***M27 (Dumbbell Nebula in *Vulpecula*)**: "I placed the nebula out of the fov (field of view) of my 6mm Orion and allowed it to drift into the fov. I couldn't make out the familiar 'apple core' shape of M27 tonight, but saw the nebula as a grayish, rectangular bright cloud against the sky."

***NGC 6830** (open cluster in *Vulpecula*): "Using averted vision with my 16mm Nagler, 6830 was a small splash of stars -- an irregular cluster with one bright member standing out near the center. The 8 Radian showed 3-4 brighter members, and the Orion 6mm showed a fuzzy patch of light with many more stars visible and scattered around the cluster. A small group of stars was visible to the east of the cluster."

***M52** (open cluster in *Cassiopeia*): "A large, irregular and fussy patch of light, its brightest star lying in the SW portion of the cluster."

***M103** (open cluster in *Cassiopeia*). A small, triangular cluster with five of its stars forming a Christmas tree shape. Using averted vision with the 8mm Radian revealed many more faint components."

Trumpler 1** (open cluster in *Cassiopeia*): The little "Six of Dominoes***" is my favorite cluster in the sky! My 6mm Orion eyepiece showed one bright row of four stars, with a second row very dim with just one component visible tonight."

***NGC 663** (open cluster in *Cassiopeia*): With my 16mm Nagler, 663 was an irregular cluster with five or six bright components."

"At 10:35, a neighbor's lights washed out my backyard, making it hard to observe."

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Carlos Flores's Photos of JKWMA



Above: This photo was taken looking north from the southwest end of the 70-yd. x 50-yd. observing field. As **Larry Higgins** points out, sky glow to the north is unavoidable, since five million people tend to generate a *lot* of light pollution. That pollution will still be there to a certain extent even on perfectly clear nights, but much of the light to be seen in Carlos's photos is due to (a) residual daylight and (b) light reflected off clouds on an extremely cloudy afternoon and evening.

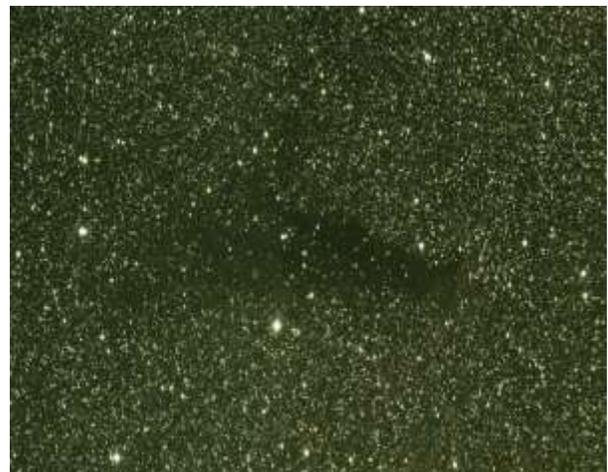


Above: Looking south from the northwest corner of the observing site. Our view of the western sky is somewhat restricted by the treeline to the right of the road (which, incidentally, leads back to Mt. Carmel Rd.). But that's a small price to pay for dark skies of the sort afforded at JKWMA. The southern and southeastern treelines are low, and more important than our western view because the sky rotates from east to west.



Above: As you can see from Carlos's early-evening photo of *Cassiopeia* and the eastern sky, the view is slightly restricted by the eastern treeline. The way to handle restricted horizons at any site is to plan ahead and look for your target objects after they rise into view from the east and before they move out of your view to the west.

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Above: North is up in **Felix Luciano's** photo of **Barnard 145**, a dark nebula in *Cygnus*.

Okay, as yr. editor likes to tell children at public observings when showing them a densely-populated cluster or star field, here's your math assignment for tonight: count the stars you see in Felix's photo. I'll help you get started: one, two, three...

From **Kepple & Sanner's** *Night Sky Observer's Guide, Vol. I* (p. 141): "Barnard 145 is a thin 35' x 6' E-W triangular dark cloud centered just S of a 7th mag. star located at the midpoint of its long N side. It stands out well against the rich Milky Way star field around it. A sprinkling of faint stars shows through it, the brightest a mag. 9.5 object 10' S of the 7th mag. star near the dark cloud's S corner."

So now you know why the Milky Way looks like a long cloud stretching N-S across the summer sky: it *is* a cloud – of stars too faint to resolve and too numerous to count.

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Above: To paraphrase poet **Robert Frost**, "The **Moon** is lovely, dark and deep" in **Carlos Flores's** haunting photo. The bright crater near the right edge is **Tycho**, the largest rayed crater on the Moon.



Above: **Trifid Nebula (M20 in Sagittarius)** is a lovely, popcorn-shaped nebula in **Carlos Flores's** photo.



Above: North is at the top center of **Alan Pryor's** photo of **NGC 7380**, a faint emission nebula and open cluster in *Cepheus*.