### THE

## FLINT RIVER OBSERVER

### NEWSLETTER OF THE FLINT RIVER ASTRONOMY CLUB

# An Affiliate of the Astronomical League

**Vol. 16, No. 12 February, 2013** 

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 site: www.flintriverastronomy.org.

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

\* \* \*

Club Calendar. Thurs., Jan. 31: Banks Stevens Middle School (Forsyth, Ga.) observing, 6:00 p.m.; Fri.-Sat., Feb. 1-2: JKWMA observings (at dark); Fri., Feb. 8: JKWMA observing (at dark); Sat., Feb. 9: Civil Air Patrol observing (6:00 p.m.,

Griffin Airport); **Fri., Feb. 15:** FRAC meeting (7:30 p.m., Room 305 Flynt Bldg., UGa-Griffin campus).

\* \* \*

President's Message. Before stepping aside as president, I want to thank everyone in FRAC for your support over the past five years. You have consistently overlooked my shortcomings and mistakes, and served as a constant reminder of how lucky I am to have friends like you. I can honestly say, echoing the words of baseball great Lou Gehrig in his retirement speech, that "Today I consider myself the luckiest man on earth."

I'm not retiring from FRAC, of course; I'm merely turning over the steering wheel to a younger driver.

At writing, the nominees for elected office in FRAC for 2013 will be: President, **Dwight Harness;** Vice President, **Bill Warren;** Secretary, **Carlos Flores;** Treasurer, **Roger Brackett;** and Board of Directors, **Larry Higgins, Jessie Dasher** and **Mike Stuart.** All of them have agreed to serve if elected; all of them care deeply about FRAC, and they will work hard on the club's behalf if elected.

Those gentlemen are not the only ones in FRAC who are capable of serving in positions of leadership, of course. Other nominees may arise at the election meeting; if so, it would indicate a growing desire among members to become more intimately involved in the club's operation.

However the election turns out, I'm confident that you'll give our new club president the same kind of unswerving, loyal support that you've given me over the past five years.

Finally, I want to express my profound gratitude to four members whose dedication and hard work over my years in office made my job infinitely easier than it would have

been otherwise: Larry Higgins, Steve Bentley, Tom Moore and Dwight Harness. Each of them in his own way has been a blessing in my life that I probably don't deserve but fully appreciate.

#### -Bill Warren

\* \* \*

Last Month's Meeting/Activities. We had five members – Larry Higgins, Erik Erikson, Dwight & Laura Harness and yrs. truly – and a guest, Laura's friend Jenna Paz, at our Jan. 4<sup>th</sup> JKWMA observing. The sky was delectably dark, and Larry used his 100mm rich field 'scope with GoTo to find 30-40 familiar favorites in about 3 hrs.

The only disappointment came when yr. editor couldn't find NGC 7662 (the Blue Snowball planetary nebula in *Andromeda*) and forgot to ask Larry to find it with his GoTo. But yr. editor did find NGC 2261 (Hubble's Variable Nebula), the lovely little Comet Hale-Bopp look-alike in *Monoceros*, so the evening was still an unqualified success.

Fourteen members – Carlos Flores,
Steve & Betty Bentley, Aaron Calhoun,
Dwight Harness, Cynthia Armstrong,
Erik Erikson, Larry Higgins, Steven
"Smitty" Smith, Joseph Auriemma, Tom
Moore, Charles "Prince of Darkness"
Turner, Roger Brackett and yrs. truly –
attended our Jan. meeting. Yr. editor
finished his 2-part talk on "Observing
Basics," and you should have received a
detailed summary of those talks via e-mail.
(It can also be found in the Downloads
section of our website.)

\* \* \*

**This 'n That.** Be sure to mark down on your calendar the change in our Feb.

meeting date. We're moving it from Thurs., Feb. 14<sup>th</sup> to **Fri., Feb. 15<sup>th</sup>.** If you mistakenly show up on Valentine's Day for the meeting, you're likely to find yourself playing gin rummy with the security guard and calling a locksmith to have the locks at home changed back to what they were before you left the house.

\*In Memoriam. Two or three years ago, Phil Sacco and his mother attended one of our UGa-Griffin lunar observings. Phil told us that it was the first time his mother had ever been to one of his observings. We were honored that he chose that occasion to introduce his mom to such an important part of his life. Mrs. Sacco was justifiably proud of Phil's accomplishments in astronomy and elsewhere, and we enjoyed meeting her and talking with her about Phil and astronomy.

Sadly, Mrs. Sacco passed away shortly before Christmas. Along with our heartfelt condolences to Phil and his sisters, we offer the suggestion that their mom isn't gone, not really; she has merely changed residence to the heavens from which she will continue to watch over them.

\*Just a reminder, but an important one: Your 2013 FRAC dues are up for renewal in February. It's still \$15 a year, and to our way of thinking it's the best bargain in astronomy.

To renew your membership, send your \$15 check (payable to FRAC) to: **Bill Warren, 1212 Everee Inn Road, Griffin, GA 30224.** Or you can give it to Bill at the Feb. meeting.

\*Betty Bentley recently underwent eye surgery to improve her vision, and hubby Steve is slated for cataract surgery in the near future. We're looking forward to seeing them at JKWMA, where they'll see for the first time what the universe really looks like.

\*Speaking of **Steve B.,** FRAC owes him a large debt of gratitude for his five years of service as our secretary-treasurer and two years as GSV coordinator. Thanks, man, from all of us. You made it look easy.

\*We received the following message from Outreach Program Coordinator **Mike Ramirez** on New Year's Day:

"(I received) all your submissions...but I've been in in the hospital with heart problems and an infection that about did me in. On top of all that I had a bad reaction to a drug they started me on. I'm trying to catch up, having spent the holidays in the hospital, so bear with me."

\*FRAC's resident "Prince of Darkness" – **Charles Turner** – is due for a promotion. Charles recently purchased a house and property in the wilds of New Mexico, and he will be moving out there in the near future.

Our loss will be Prince Charles's gain: with those luscious mag. 7 skies (under which he'll doubtless build an observatory to house his 25-in. 'scope) to occupy his evenings, it's just a matter of time before Charles becomes the "King of Darkness."

It's also just a matter of time before some of Charles's FRAC friends pay him an extended visit (until our welcome wears out faster than the warranty on a TV set made in Bangladesh). As **Dwight Harness** put it, "Road trip, anyone?"

\*If you're old enough to remember 1950s tv, you might appreciate the following nonsense from **Prof. Stargazer:** 

"'Tom Terrific' was a cartoon superhero on Captain Kangaroo's tv show. He sang, 'I'm Tom Terrific, Greatest Hero Ever! I can be what I wanta be, 'cause I'm so clever!"

"Well, **M1** in *Taurus* is familiarly known as **Crab Nebula**, and **M27** (**Dumbbell** 

**Nebula** in *Vulpecula*) looks like an apple core.

"If those two nebulae were to merge into one, we could name it after Tom Terrific's nemesis: Crabby Appleton Nebula (Rotten to the Core)."

\* \* \*

**Upcoming Meetings/Activities.** On **Thurs., Jan. 31**<sup>st</sup>, we'll conduct an observing for about 250 students at Banks Stephens Middle School in Forsyth, GA. The observing will begin at 6:00 p.m., and will last for an hour or two. We'll need as many telescopes (and their owners) as can make the trip.

To get to the school from, say, Griffin, go E on Ga. Hwy. 16 to I-75S. Set your odometer at 0.0, and go 19.8 mi. south on I-75 to Exit 185 (Ga. Hwy. 18). Turn right, go 0.7 mi. to the dead-end stop sign and turn left onto U. S. Hwy. 41S. Go one mi. on 41S and turn right onto Thornton Rd. Go 0.2 mi. on Thornton Rd., and the first school you come to on the left will be Banks Stephens M. S. (If you reach the second school on the left -- G. Scott Elementary -- you've gone too far.) Drive past the front and go behind the school.

The GPS coordinates for B.S.M.S. are 33° 00' 43.44" N, 83° 54' 59.73" W.

We'll have three JKWMA observings in February, on Fri.-Sat., Feb. 1<sup>st</sup>-2<sup>nd</sup> and again on Fri., Feb. 8<sup>th</sup>. Dress warmly, and c'mon out and join us for one, two or all three nights! It'll be a great opportunity for you to see for yourself why yr. editor is so enamored with Hubble's Variable Nebula.

On **Sat.**, **Feb.** 9<sup>th</sup>, we'll hold an observing for a large group of Civil Air Patrol students and the public at Griffin Airport. The observing will begin at 6:00 p.m.

To get to the observing site from, say, Hampton:

- 1. Come south on U. S. Hwy. 19/41 like you're going to Cox Field or JKWMA. Instead of exiting the 4-lane Griffin Bypass at Williamson Rd., however, continue ahead and turn left at the stoplight at Airport Rd.
- 2. Go 0.3 mi. on Airport Rd. to the stoplight at Everee Inn Rd.
- 3. Stay on Airport Rd. for an additional 0.4 mi. and turn left at the Hill St. stoplight where Airport Rd. dead-ends.
- 4. Turn left at the 1<sup>st</sup> paved road on that side of the street. (It's before you get to the "Kiwanis Fairgrounds" billboard.)
- 5. About 50 yds. ahead, you'll come to a red fire hydrant and a green Dumpster beyond it. Leave the paved road at that point and follow the one-lane unpaved road beyond the Dumpster. (Don't go through the gated fence to the fairgrounds.)
- 6. Go 0.3 mi. on the unpaved road and turn right when you reach a path bordering a football field-sized open grassy area. (The path goes within a few yards of two large signs, the nearer of which reads "UGa-Griffin".) We'll set up on the field beyond the two signs, and we'll set out cones from the dumpster to the observing site.

If you're coming from, say, KFC in downtown Griffin, go out South Hill St. to Griffin Airport, and turn right at the 1<sup>st</sup> paved road beyond the "Kiwanis Fairgrounds" billboard. Look for the red fire hydrant, and follow steps #5-6 above from there.

Our club meeting will be at 7:30 p.m. on **Fri., Feb. 15**<sup>th</sup> – the day after Valentine's Day, which explains the change from our regular meeting date. We won't have a speaker or planned program beyond holding our officer elections for 2013 and stuffing our faces with **Betty Bentley's** culinary treats. (But what the hey!, we can always resolve to lose weight *next year!*)

About those elections: you must attend the meeting to vote.



**Above:** On July 4, 1054 A.D., a new star appeared in the constellation *Taurus*. It could be seen during the daytime for three weeks, and remained bright enough to be seen at night for two more years, after which it faded from view.

That star, of course, was a supernova, the first one in mankind's recorded history. Its presence was noted by Chinese, Japanese and Arab astronomers, and by American Indians as well. Once it disappeared, it lay largely unnoticed for 704 years, until the French comet hunter **Charles Messier** discovered it in 1758 and mistook it for a comet due to its hazy appearance.

Subsequent observings by Messier revealed that, unlike comets, the object did not move from one night to the next. So he began to compile a list of cometary objects that weren't comets, to alert other comet hunters not to waste time studying them. His list became known popularly as the "Messier List," and that object – M1 – is where it all began. It has since become known as Crab Nebula due to its appearance.

Crab Nebula is a cloud of expanding gases from that ancient supernova explosion. It presently measures 11 light years in dia., and after 958 years it is still expanding at a rate of about 1,000 miles per second. It is 6,500 light years from Earth, and eventually

it will dissipate to the point where we can no longer see it.

Until then, however, isn't it a lovely sight for astrophotographers? **Alan Pryor** thought so, and we heartily agree. Good work, Alan.

Although faint, the Crab – which is the only supernova remnant (SNR) on Messier's list – is within easy reach of large binoculars and all but the smallest telescopes. It lies 1° SE of mag. 3 **Zeta Tauri.** 

**Opposite:** Imagine looking into your telescope and seeing, not one, two, three or even four, but *five* tiny galaxies huddled together in a 3.5'-dia. area about as large as your thumbnail. It's **Stephan's Quintet** (**NGCs 7317, 7318A, 7318B, 7319 & 7320**), a compact galaxy group in *Pegasus* located about 15' from the elongated spiral galaxy **NGC 7331.** 

You won't see the kind of detail in your 'scope that **Alan Pryor** captured in his splendid photo of the Quints. In fact, you may not see but one of them, NGC 7320, the brightest member of the group. These are very small, extremely faint galaxies: on a clear night, 7320 is about 1' x 0.5' in dia., and glows faintly at mag. 12.6; the others are smaller and/or fainter, ranging in brightness from mag. 13.1 to 13.6, and all of them are best seen via averted vision.

To find the Quintet, you must first find NGC 7331. That's not a difficult task under a clear sky, because 7331 is bright (mag. 9.5), a tiny slash of N-S oriented light that you'll instantly recognize as a galaxy when you see it.

If the Quintet were brighter, you'd have no trouble finding it, too, because it's located about 1/2° SW of 7331.

Trouble is, the Quintet is so gosh-awful faint that it's easy to miss even when you find NGC 7331. The challenges are (1) to find it, and then (2) to see how many of the members you can see. **Larry Higgins** has

seen all five, and **yr. editor** has seen four – but that was years ago when our vision was considerably sharper than it is now.

So how many of the Quintet can you see? If you like challenges, this is a good one because, along with **Seyfert's Sextet** in Serpens and **Copeland's Septet** in Leo, Stephan's Quintet is the best-known of the galaxy groups in **Paul Hickson's** Atlas of Compact Galaxy Groups (1994).

The Quintet is also the brightest of those three groups. (There are 97 others on Hickson's list of compact galaxy groups.) That tells you how difficult the Seyfert and Copeland groups are to find and observe.



North is toward the bottom of Alan's photo. NGC 7320 is the NW-SE elongated galaxy to the lower left of center. The pair in the center are 7318B (left) and 7318A (right). 7317 is the NW-SE elongated galaxy to the right of 7318B, and 7317 lies to the lower right of 7318A. 7317 is the most difficult to see in a telescopic view.

\* \* \*

### FRAC's Beginning: Jan.-Feb., 1997

#### by Bill Warren

In Dec., 1995, my wife bought me a 100mm Meade refractor and a *Seasonal Star Charts* atlas for Christmas. It was love at first sight. I set about learning how to

operate the telescope and navigate the night sky, unaware that anyone else in the Griffin area was interested in astronomy.

About six months later I met **Larry Higgins**. At the time, Larry was the observing vice president of the Atlanta Astronomy Club. I joined the AAC, and we began car-pooling to Atlanta with a friend of his, **Ken Walburn**, to attend AAC meetings.

Eventually, the three of us got tired of fighting that Atlanta traffic to attend their meetings and observings, and Larry suggested that we should form an astronomy club in Griffin. Ken and I weren't exactly excited at the idea, because neither of us knew much about astronomy. But Larry was persistent, and eventually we gave in. He assured us that our inexperience wouldn't matter because most of the people who joined the club wouldn't know any more about astronomy than we did. It was Larry who came up with the name "Flint River Astronomy Club."

On Wed., Jan. 15<sup>th</sup>, 1997, Larry, Ken and I met in my apartment in Griffin to organize our new club. I had written a set of bylaws based on a model supplied by the A. L., and we set three goals for the club: to teach our members what they need to know about astronomy in order to enjoy it to the fullest; to educate the public about astronomy; and to have fun. Those goals have never changed.

Larry found a meeting site at the boy scout hut in Sunnyside, Ga., just north of Griffin, and our first two meetings were held there. Our first two observings were held in an open field adjacent to the building.

Our inaugural club meeting was on Thurs., Feb. 13<sup>th</sup>, 1997. We chose the second Thurs. of every month because the AAC held its meetings on the first Fri. of every month and we wanted to avoid any conflict with their schedule. (There was no conflict with the Middle Ga. Astronomical

Society (MGAS) in Macon because they had disbanded and didn't reopen for several years.

At our Jan. organizational meeting, Larry had mused that, if we were lucky, in a few years we might have as many as 12-15 members in our club. We had eighteen attendees at our first club meeting, and all of them either joined FRAC that night or sent in their checks shortly thereafter. (Five of those charter members are still in the club: Larry, me, **Smitty**, Ken and **John Wallace**. The first three are still active, Ken is an occasional attendee and John moved to Athens but maintains his membership ties.)

Larry was elected FRAC's first president at our Feb., 1997 meeting. I became vice president and Ken was secretary-treasurer. The club voted unanimously to adopt the bylaws I had prepared, and to affiliate with the Astronomical League in order to participate in their observing pin program.

Larry was the speaker at that first meeting: he used an opaque projector to show us photos of deep-sky objects such as **Andromeda Galaxy, M13** and **Orion Nebula**. Believe it or not, most of us had never seen any of them before even in photographs. I was absolutely stunned that objects in the heavens could be so beautiful. (This was before the computer and Internet era, and astrophotographs weren't as readily available back then as they are now.)

(Editor's Note: A slightly different and largely expanded variation of this article, "FRAC's First Year," can be found on our website.)

##