

# THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT  
RIVER ASTRONOMY CLUB

An Affiliate of the  
Astronomical League

**Vol. 17, No. 10      December, 2013**

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Club mailing address: 1212 Everee Inn Rd., Griffin, GA 30224. FRAC web site: [www.flintriverastronomy.org](http://www.flintriverastronomy.org).

Please notify **Bill Warren** promptly if you have a change of home address, telephone no. or e-mail address, or if you fail to receive your monthly *Observer* or quarterly *Reflector* from the A. L.

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**Club Calendar. Fri.-Sat, Nov. 29-30:** JKWMA observings (at dark); **Mon., Dec. 2:** boy scout observing (7:00 p.m., Brooks United Methodist Church, Brooks, GA); **Sat., Dec. 7:** FRAC Christmas dinner/party (6:30 p.m., Ryan's Buffet Restaurant in Griffin).

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**President's Message.** I know you'll want to join me in welcoming back to FRAC **David O'Keeffe** and his family.

I'd also like to take a moment to wish everyone a Merry Christmas from my family to yours. I hope that this Christmas brings you joy and peace. Astronomers were honored to be mentioned in the greatest story ever told, so let us be humbled and know why we sit out on cold nights staring up at the sky and realize the magnificence of the heavens. Clear skies, and keep looking up.

-**Dwight Harness**

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**Last Month's Meeting/Activities.** We had 11 FRACsters and family members at our Rock Ranch public observing on Oct. 26<sup>th</sup>: **Steve Bentley; Aaron Calhoun; Tom Moore; Dwight Harness; Joe Auriemma; Jane Barreski and Roger, Madalene, Sarah & Rebekah (Watson) Brackett;** and **yr. editor.** The sky cooperated nicely, and Tom did a great job of directing a large number of passersby to our observing site (which, due to a minor glitch in their planning, was located outside the flow of pedestrian traffic).

Chili dogs, hot coffee and even a discreetly hidden-away, curtained -- and lighted -- women's port-a-potty (all courtesy of **Dwight Harness**); clear skies and delightfully moderate temps; and nine attendees -- Dwight; **Felix Luciano; Alan Pryor; Carlos Flores; Aaron Calhoun; Laura & Elizabeth Harness** and **Neal Langford**; and **yrs. truly** -- combined to produce an absolutely splendid "Belated Halloween Zombie Party" at JKWMA on Nov. 2<sup>nd</sup>.

Five of the attendees -- Felix; Alan; Dwight; Aaron; and yr. editor -- stayed till 3 a.m. and received Zombie Award certificates. An added reward for their perseverance was the opportunity to watch a UFO appearance that lasted about 20 min.

Sometime around midnight, Alan and Felix spotted a bright new "star" that appeared suddenly, low in the SE sky.

"It was about 8° above the horizon," Alan said. "During a 5-10 min. period, it repeatedly brightened and dimmed as it moved slowly in random directions. It was yellow, and at its brightest it was

about as bright as Jupiter. The periods of its brightening and fading were not quick or regular, but lasted from 10-15 seconds to more than half a minute each.

“At one point the object split into two pieces. One part rose higher in the sky; the other part dropped slowly, then split in two and continued to fall, separating and brightening until they disappeared below the treeline. The rising piece brightened, and then faded away.”

By this time, the rest of us were aware that something strange was going on, and we began looking for it. It reappeared several times, brightening and fading out or blinking off, only to appear somewhere else maybe 30 seconds later. Every time it reappeared it was east or south of where it was the time before. All five of us saw it, and we agreed that, whatever it was, it was at least five miles away, and possibly much farther than that.

Dwight and Bill decided to try to observe it telescopically. It wasn't easy, though, because it was never found in the same place twice, and it would vanish before they could move from the Tel-Rad to the eyepiece.

Finally, though, they found it and began to follow it. Says Bill, “In my low-power eyepiece, it wasn't one object but two. They were yellow, and disk-shaped like planets, not spiky or pinpoints like stars. They were separated by about 1/8 in., and hard to follow because they weren't stationary, but moving slowly like a distant airplane. Unlike a plane, though, at random times they would hover or reverse direction like a helicopter pilot who couldn't make up his mind which way to go.

“One of the objects was blinking on and off like a turn signal; the other one brightened and dimmed at irregular intervals, but didn't fade away entirely. The distance between them never varied.

“We watched them in our telescopes for about five minutes, and then both objects faded into nothingness. They didn't return after that.”

See what you missed if you weren't there?

Eighteen members – **Larry Higgins; Tom Moore; Steve Bentley; Cynthia Armstrong; Steven “Smitty” & McKenzie Smith; Erik Erikson; Andy Hasluem; Jessie Dasher; Aaron Calhoun; Dwight Harness; Carlos Flores; Joseph Auriemma; Roger Brackett; Dylan Higgins; Richard Schmude;** and **yr. editor** -- attended **Caroline Shufro's** talk at our Nov. meeting about her experiences and responsibilities

while working as a software designer for NASA's space shuttle program. Ms. Shufro designed software for the Abort portion of the program, which guided astronauts to their preferred landing site, an alternate site or at least permitted them to land safely by whatever means necessary. Ms. Shufro worked with NASA until 2011 when the U. S. space shuttle missions were discontinued.

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**This ‘n That. In Memoriam: Jerry Williams.** On Sat., Nov. 16<sup>th</sup>, longtime FRAC member **Jerry Williams** passed away at his home in Fayetteville after an extended bout with cancer. He and his wife **Beverly – Bev** to Jerry and to us – were special in the finest sense of the word: they epitomized what love and marriage should be.

(In all the years of the Williamses' association with FRAC, this is only the second time that **yr. editor** has ever referred to one of them in a sentence without including the other. They were always “Jerry and Bev,” not “Jerry” or “Bev.” To know them was to love them.)

The other instance in which we (briefly) mentioned one of them without the other in the newsletter was when, after seventeen FRACsters visited the Wetumpka, AL, crater in 2008, we were describing what we had seen and done.

At one point during our tour of the site, we hiked about ¼ mi. along a wooded path to an abandoned deck on private property overlooking the crater. As we stood admiring the view across the crater, we were startled by a loud banging noise nearby. We looked around – and there was Jerry with a rock in his hand, pounding on the railing. Bev's eyes widened, and she asked Jerry what he was doing. He said, “There are some loose nails, and I wanted to nail them back in but I don't have a hammer. I don't think the owner would mind.”

That was Jerry Williams – and to this day that moment remains one of our favorite memories of Wetumpka and Jerry.

Jerry was 73. He is survived by Bev, their married daughter, **Suzanne Carter**; a brother and sister and numerous other relatives.

\*An excerpt from a recent e-mail to **yrs. truly** from **Ron Kramer**, editor of the A.L.'s quarterly newsletter, *The Reflector*: “The omission of your article, “Why I Observe,” was entirely my fault. It was slated to be included in the Sept. issue but was

accidentally misfiled...into the March, 2014 issue. The article will be added to that issue. My deepest apologies. The error will be mentioned in the upcoming Dec. issue under 'Corrections & Clarifications,' just under the 'Reflector Mail' column."

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**Upcoming Meetings/Activities.** On **Fri.-Sat., Nov. 29<sup>th</sup>-30<sup>th</sup>**, we'll hold our monthly club observings at Joe Kurz Wildlife Management Area. We aren't designating them as "Zombie Parties," but **Dwight** says he'll be happy to set up the port-a-potty arrangement if any women in the club will let him know they're coming

That doesn't mean you can't come if you don't plan to stay late and earn a Zombie Award, of course. We'd love to have you join us even if you can't stay but an hour or so. But if you *do* stay till 3 a.m., you'll receive an award.

Directions to JKWMA are posted on our website's [Downloads](#) link at [www.flintriverastronomy.org](http://www.flintriverastronomy.org). We'll set up on Site #3, located a mile from the gate. We'll set out cones along the way from the gate to the site on both nights to guide you.

FRAC will conduct an observing for the boy scouts at Brooks United Methodist Church at 7 p.m. on **Mon., Dec. 2<sup>nd</sup>**. To get to the church from Griffin, go N on Ga. 92 (Fayetteville Rd.) to West McIntosh Road on the left. Turn left, and follow that road for 8.9 mi. to Brooks, where it dead-ends. Turn right onto Ga. 85 Connector, cross the RR tracks and go 1.2 mi. to Morgan Mill Rd. Brooks UMC will be on your far right at that intersection, you can't miss it.

Our annual FRAC Christmas dinner/party will be held on **Sat., Dec. 7<sup>th</sup>** at 6:30 p.m. at Ryan's Buffet Restaurant on U.S. 19/41 in Griffin. We won't have a formal program or speaker, just plenty of eatin', fellowship and door prizes to be given out. So bring the whole family -- except crazy old Uncle Albert, who belches a lot and likes to tell about the time he was abducted by aliens from the planet Zark -- and plan to have a really great time. We have about 35 door prizes to hand out, and **Dwight** is hoping that no one else will show up and he'll win all of them by default. (Forget about that, man: you must have forgotten how much FRACsters like to eat and win door prizes!)

Coming south from, say, Hampton on U. S. Hwy. 19/41, drive through the Hardee's/McDonald's stoplight in Griffin where you'd turn left to go to a club meeting or right to go to Fayetteville on Ga. Hwy. 92. Go through the next stoplight a block ahead at Racquethouse health spa on the right and get in the right-hand lane. Before you come to the RR overpass you'll see the red Ryan's neon sign on the right. Turn right at that road, and Ryan's parking lot is on the left.

Coming north from, say Barnesville, stay on the Ga. 19/41 Bypass 4-lane over the RR overpass and drive past Ryan's on the left. Make a U-turn at the stoplight at Racquethouse health spa, and drive back to Ryan's on the right.

We don't have any other activities scheduled for the rest of December due to the demands on your time during the Christmas season and New Year's. We may schedule an informal **Comet ISON** observing if things turn out well after it passes the **Sun**; if so, we'll let you know when and where.

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**Above: M74**, a face-on spiral galaxy in *Pisces*. Discovered in 1780 by **Pierre Mechain** (**Charles Messier's** assistant), **M74** is a classic face-on spiral. As a result, its brightness is spread over an 11' area. Many observers consider M74 to be the most difficult Messier object to find and observe, although it's located just 1-1/2° NE of 4<sup>th</sup>-mag. **Eta Psc**. In a small telescope, you'll see the core – faintly – but it takes a 12-in. 'scope to see hints of the lovely spiral arms shown in **Alan Pryor's** photo.

One other item of interest regarding M74: if you ever decide to do a "Messier Marathon" during the brief period in March when all of the Messiers are visible in a single night, M74 will be either the 1<sup>st</sup> or

2<sup>nd</sup> Messier you'll look for, since it (along with **M77**, a spiral galaxy in *Cetus*) sets just after sundown.

**Below: Barnards 169, 170, & 171**, dark nebulae in *Cepheus*. Dark nebulae are clouds of interstellar



dust that obscure our view of whatever lies behind them. We see them as dark patches silhouetted against bright nebulae – or, in the case of **B169/170** and **B171**, against the **Milky Way**. In **Felix Luciano's** photo, B171 is the large, shapeless dark area to the left of center; B169/170 is the narrow, finger-like extension above and to the right of the stars that separate them.

Dark nebulae benefit visually from low magnification – and the lower, the better. High power scatters the available light, reducing the contrast that reveals dark patches of sky.



**Above: M76 (The Little Dumbbell)**, a planetary nebula in *Perseus*. Another 1780 discovery by **Pierre Mechain**, **M76** owes its nickname to its resemblance to a larger planetary, **M27 (Dumbbell Nebula)** in *Vulpecula*.

Visually, M76 resembles either a peanut or a brick that is brighter at its ends. Due to its tiny

nature, it takes high magnification well, and like most planetaries it is best seen using an O-III or nebula filter.

Particularly striking in **Alan Pryor's** photo are the blue arcs of gas expanding away from the nebula at a very high speed. As with M27, we are seeing M76 from a side view (as opposed to, say, donut-shaped **M57, Ring Nebula** in *Lyra*, in which we are looking through the hole in the donut.)



**Above: Barnards 160 & 365** (dark nebulae in *Cepheus*). Where you find one dark nebula, you're likely to find others nearby. So it is in **Felix Luciano's** photo of **B160** and **B365**. Says Felix, "The larger dark area (B160) looks like a cobra ready to strike. At the top center is B365, which has been described as 'a straggling zigzag line.'"

Both objects lie near **VandenBergh 142** ((better known as **Elephant Trunk Nebula**) in the massive **C1396** star-forming complex that also contains mag. 4.2 **Mu Cephei, Herschel's Garnet Star**. Neither the Elephant Trunk nor Herschel's Garnet Star appear in Felix's close-up photo of the dark nebulae.

**Next Page, Upper Left: Barnards 157 & 364**, a close pair of dark nebulae in *Cygnus*. **B364**, located 15' N of a mag. 7 star, is ten times larger than **B157**, located 24' away to the NE in **Felix Luciano's** photo. We see them silhouetted against the backdrop of the Milky Way. *Night Sky Observer's Guide* (Vol. 2, p. 160) describes 364 as "an irregular checkmark-shaped patch," and 157 as a "teardrop-shaped opacity tapering north."

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## FRAC's Night Before Christmas

by

Bill Warren

*This poem took several years to write. This was my fourth try at it, and I swore that it would be my last. It was extremely difficult to write, like putting together a jigsaw puzzle with the pieces face-down. I had to rewrite the story to make it funny, as well as coming up with something resembling coherent meter and rhymes. It all came together this time, though, and I wrote the basics of it in one day. The rest was just my customary rewriting. I hope you enjoy it. Consider it my Christmas present to you.*

'Twas the night before Christmas, and  
throughout ol' FRAC,  
Not a member was stirring. Some had just hit  
the sack.  
(Not together of course, because that would be  
yucky,  
Like Dwight in the tub with his pet rubber  
ducky.)

We were gathered that night, celebrating the  
season  
When FRACsters buy equipment beyond rhyme  
or reason.  
Our stockings were hung without fanfare or  
drumming.  
We'd gone to bed early because Santa was  
coming.

Few of us could sleep, though. The natives were  
restless.  
Aaron was excited, and Smitty was zestless.  
Roger was tossing, and Alan was snoring.  
Dylan was dreaming that his sermons weren't  
boring.

Eric was nibbling on a month-old prune Danish,  
And Carlos and Felix were dreaming in Spanish.  
Charles T., Jim Roberts and Stephen R. were  
talking,  
And Woody, line-dancing and David Tew, sleep-  
walking.  
John Wallace was fidgeting, hoping intently



### **Above: Double Shadow Transit of Jupiter.**

To quote the great '80s philosopher **Flip Wilson**, "What you see is what you get." As it turned out, **Alan Pryor** was lucky to get anything at all when he tried to capture a double shadow transit of **Jupiter** during the pre-dawn hours of Oct. 26<sup>th</sup>.

Alan writes, "I wanted to shoot Jupiter at a time when I could catch the two moon shadows and the **Great Red Spot**. I caught them between 4:30-5:15 a.m. The sky was unstable to the point where the moons would be there one second and then just start wiggling into 8-10 pieces, disappear, and come back. Jupiter itself would become distorted and egg-shaped. So I couldn't get much detail."

In Alan's photo, **Io** is the nearer moon to Jupiter, and its shadow the more distinct of the two on the planet's surface. **Europa** is farther out, and its shadow faintly seen below and to the right of Io's. The Great Red Spot can be faintly seen on the other side of Jupiter's visible disk, a pale salmon-colored oval along the lower edge of the South Equatorial Belt.

It's a remarkable photo, under the circumstances.

That when Santa came, he wouldn't look like  
Steve Bentley.

Joe M., the two Mikes and Ken Walburn (that  
joker)  
Were involved with David O. in a game of strip  
poker.

Dr. Schmude was playing, too, and said, "I  
believe

That Ken has some aces hidden inside his  
sleeve."

Ken said "You're mistaken, Doc, I'll have you  
know

That I lost my pajama top an hour ago!"  
Jerry said to Bev and to Aimee in panic,  
"This evening is sinking just like the *Titanic*!"

But then, from outside came a noise of such  
dread

That Joe Auriemma nearly fell out of bed.  
He rushed to the window, tore open the curtain,  
And said to the rest of us, "One thing's for  
certain:

Unless I'm mistaken, that fellow down there  
Is either St. Nick, or a red polar bear!"

Santa was seated in a creaky old sleigh  
That looked like it wouldn't last more than a  
day.

His reindeer were scrawny and covered with  
mange,  
And the one in the front was exceedingly  
strange.

It had a red nose, and glasses so wacko  
That we shouted in unison, "Hey, that's Phil  
Sacco!"

Santa winked at us, nodded, and said, "C'mon,  
Phil,

Lead us to the top of the roof if you will!"  
Nine reindeer took flight with precision and  
style,  
And landed together in one massive pile.

Presents were scattered all over the place,  
With Santa on bottom and Phil on his face.  
Santa rose, limping badly, and holding his back,  
He began stuffing presents back into his sack.

As he moved to the chimney, Tom Moore did  
inquire,

"Did anyone remember to put out the fire?"

Tom's question was answered with a **thunk!** and  
then screaming.

Two seconds later, down the stairs we were  
streaming.

Our first sight of Santa, in a mirror reflected,  
Was nothing at all like the man we expected.

His dimples weren't merry, they were covered in  
soot,  
And his clothing ablaze from his head to his  
foot.

His eyes didn't twinkle, his cheeks were not  
roses,

And his language not gentle, like everyone  
supposes.

Jessie and Laura and Cynthia and Andy  
Knew what to do to make themselves handy:  
They picked up St. Nick as he thrashed on the  
floor,  
And carried him quickly beyond the front door.  
Without hesitation, they gave a great throw,  
And tossed him a-spiraling into the snow.

Santa landed, bewildered, and called to his  
steeds

And told them to come down and see to his  
needs.

They responded at once to his call and his  
whistle,  
And promptly crash-landed like a heat-seeking  
missile.

Santa crawled to his sleigh, looking haggard and  
weird,

And scowled at us through what was left of his  
beard.

He shook at the reins, and away they all flew,  
Like a '54 Chevy with an oil leak or two.  
And we heard him exclaim as they rode past the  
Moon,

"If I never come back, it'll still be too soon!"

So none of us got any presents that day.  
We were all disappointed, with nothing to say.  
We sat around moping until Larry spoke:  
"He shouldn't be Santa if he can't take a joke."

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