

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the
Astronomical League

Vol. 17, No. 4 **June, 2013**

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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., June 7-8:
JKWMA observings (at dark); **Thurs.,
June 13:** FRAC meeting (7:30 p.m., Rm.

305, UGa-Griffin campus); **Fri., June 14:**
UGa-Griffin lunar observing (7-10 p.m.).

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President's Message. Until I became
FRAC's president, I wasn't really aware of
how many minor problems arise on a daily
basis. Here's an example. I guess you
could call it "**Ramsden Goes Postal**". Or
maybe "**Check Your Mail, Dwight**."

When **Bill Warren** sent out the 2013
FRAC membership list recently, **Stephen R.**
asked why he wasn't included on the list.

"Who did you send the check to?," Bill
asked.

"I sent it to the address you gave me,"
Stephen said, adding that "I'm not
accustomed to this postal thingy; I haven't
actually mailed anything in several years.
But I bought a stamp and an envelope for
the check, and the guy at the UPS Store said
he'd mail it for me."

As it turned out, the UPS guy *did* mail
Stephen's check. It came to me, but I hadn't
opened it yet. (When you're in the Witness
Protection Program, you open your mail
verrry carefully.)

Anyway, Stephen's check was near the
bottom of a stack of about 5 lbs. of bills and
junk mail. He's on board for two more
years now, and he's on the membership list.

Problem solved. I thought I handled it
nicely. It's amazing how quickly problems
can vanish when you finally get around to
opening your mail.

I mention all this because Stephen asked
if we could set up an electronic payment
system like PayPal for FRAC. I think it's a
good idea, and I asked Bill why we don't
already do it. He said it's because, as
president, he was uncomfortable with any
technology more complicated than a pair of
tin can telephones. **Roger Brackett** and I
are going to look into PayPal, and we'll let
you know if and when it's up and running.

-Dwight Harness

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Last Month's Meeting/Activities. Eleven members – **Aaron Calhoun, Carlos Flores, Joseph Auriemma, Laura & Dwight Harness, Larry Higgins, Betty & Steve Bentley, Felix Luciano, Roger Brackett** and **yr. editor** – attended our May meeting. We talked about everything imaginable – including you if you weren't there – and watched Part Four of **Carl Sagan's** *Cosmos* series. Due to a couple of set-up glitches, there were subtitles at the bottom of the screen throughout -- and worse, they were in Japanese! Somebody suggested that, if we're gonna have glitches like that at next month's meeting, we should at least have the subtitles in Spanish so Felix and Carlos can translate.

Betty's busy little hands prepared pound cake and brownies; we attacked them like a pride of lions feeding on a zebra carcass while we watched the dvd.

Our June JKWMA observings were clouded out.

We had six FRACsters – **Larry Higgins, Laura & Dwight Harness, Tom Moore, Charles Turner** and **yr. editor** – and no visitors at our June UGa-Griffin lunar observing. The sky was so overcast that we saw the **Moon** only 5-6 times for a total of about four minutes, but that didn't matter. We left our telescopes and binoculars in our vehicles, got out our chairs and sat around talking and enjoying each other's company. It's something that we're very good at in FRAC. All that was missing was **Betty Bentley's** tasty treats to add a calorie or two to our daily intake.

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This 'n That. FRAC will lose one of its most experienced and knowledgeable astronomers in August when **Charles Turner** completes his move to the

deliciously dark and desolate desert country near Deming, N.M.

Deming (pop. 14,000) lies in the extreme SW corner of New Mexico, about 50 mi. W of Las Cruces and 25 mi. N of the Mexican border. It wasn't the opportunity to enjoy authentic Mexican cooking that drew Charles to that area, though; rather, it was the chance to buy a house and land where he can use his array of big 'scopes under some of the darkest skies imaginable. He plans to build a 20' x 24' observatory and do some astrophotography as well as observing.

We'll miss you, Charles. We wish you good health and clear skies.

***The Dark Side.** Why are dark matter and dark energy important? Because they comprise 24% and 71.4%, respectively, of the cosmos. Ordinary matter – the stuff we know about – makes up just 4.6% of the universe. (Those facts are courtesy of the Wilkinson Microwave Anisotropy Probe – WMAP – which has also determined that the universe is 13.77 billion years old. That's older than some of **Prof. Stargazer's** jokes.)

*The spiral galaxy **NGC 6872** in *Pavo* (*the Peacock*) is 522,000 light-years wide. (The **Milky Way**, by comparison, is about 100,000 l.y. in diameter.)

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Upcoming Meetings/Activities. Our Joe Kurz Wildlife Management Area (JKWMA) observings will be held on **Fri.-Sat., June 7th-8th.**

To get to JKWMA from, say, Hampton, come S on U. S. 19/41 and stay on the 4-lane past the Hardee's/ McDonald's stoplight at Ga. 92. Continue past the Griffin exit, and past the Newnan-Griffin exit at Ga. 16. Get off the 4-lane at the Ga. 362/Williamson Rd. exit, bear right (west) and set your odometer at 0.0.

Go 15.8 mi. on Hwy. 362W, and turn left at Mt. Carmel Road. (There's a sign announcing the intersection just before you get to it.)

Go 4.8 mi. on Mt. Carmel Rd., and you'll see a large "Joe Kurz Wildlife Management Area" sign on your right, just beyond a gray mailbox.

Continue past the mailbox and sign for 0.2 mi., and turn right at the first (unpaved) road. (We'll have a couple of orange day-glo traffic cones to mark the road where you turn.) Follow that road for exactly one mi., and you'll come to a small, bumpy hill that curves to the right. When you round the curve, you'll see a line of orange cones on the left leading to the observing site. If you arrive after dark, look for someone's red-beam flashlight glow to guide you to the area where we're set up.

Our June FRAC meeting will be at 7:30 p.m. on **Thurs., June 13th** in Room 305 of the Flynt Bldg. on the UGa-Griffin campus. Our June and July meetings will feature two very special programs: a 2-part dvd, *Man on the Moon*, with real-time reporting by **Walter Cronkite** and CBS News.

In June, Cronkite's familiar voice will take us through the early years of NASA's manned spaceflight program, and its failures and triumphs along the way. And in July, you'll have a front-row seat as a clearly emotional Cronkite responds to **Neil Armstrong's** announcement on July 20, 1969, "Houston, Tranquility Base here. The Eagle has landed."

These trips down memory lane are our way of commemorating the 44th anniversary of mankind's single most incredible achievement: landing men on the **Moon** and bringing them home safely.

Appropriately enough, on the following evening, **Fri., June 14th**, we'll hold our monthly UGa-Griffin lunar observing from 7-10 p.m. on the lawn in front of the Flynt Bldg.

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The Sky In June. **Mercury** (mag. -0.3), **Venus** (mag. -3.8) and **Jupiter** (mag. -1.9) continue their dance with the stars begun in late May into early June. **Saturn** (mag. 0.4) will be high in the S sky at dark.

Other solar system sights in June:

The June '13 issue of *Sky & Telescope* (p. 51) shows you where to find Mercury, Venus & Jupiter in the afternoon sky before dark, and also shows on pp. 52-53 where to find **Pluto** on any evening between May and December.

The June '13 issue of *Astronomy* (pp. 42-43) shows & tells you how to identify seven Saturnian moons – **Titan, Dione, Rhea, Tethys, Enceladus, Mimas & Iapetus** – in a 4-in. 'scope, and on p. 43 tells you how to find and identify the mag. 5.5 asteroid **Ceres** near mag. 1.1 **Pollux (Beta Gemini)**. (Best dates are between June 5th-7th.)

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Novels That Make an Impact, Part I

Book Review: *Sunward Passage*, by Harold McAlister

Excerpt: "(Walker and Alyssa) were enveloped in the blackness of the moonless night until their eyes slowly adapted to the dark and they first saw Orion's familiar stars shimmering high in the southeast through the skeletal forms of oak and poplar, recently denuded of their leaves. Low below Orion, Sirius twinkled furiously, the prismatic effect of the atmosphere causing it to glint in all the colors of the spectrum. Within minutes, they were fully dark adapted, and the stars now glittered and twinkled overhead like a multitude of iridescent grains of sugar stuck to an inverted black bowl."

Background. **Harold McAlister** is director of both the venerable Mt. Wilson Observatory and CHARA (Center for High Angular Resolution Astronomy), the array of high-resolution telescopes located atop Mt. Wilson in California.

More to our purposes, Dr. McAlister, a Ga. State University emeritus professor, is also the author of **Sunward Passage**, an exciting and highly readable novel. The professor recently contacted **Dwight Harness** about publicizing his new astronomy-based novel among our members. Dwight told me about it, and I immediately ordered the book. (It's 221 pp. in length and costs \$3.98 from amazon.com in Kindle form, but is not available in paperback or hardcover. Since it's a Kindle book, there are no shipping charges and no long wait to receive it in the mail. You can download it immediately.)

I'm an avid reader but not primarily a sci-fi fan. But *Sunward Passage* is so intensely exciting and well-written, and its portrayal of astronomy and astronomers so compelling, that I couldn't put it down. I read it in two days.

As you know, astronomy is often difficult to understand. But this is an action novel, not a scientific paper. You won't get lost in a forest of complex terminology or technological jargon; rather, you'll find yourself immersed in the sort of high-impact – literally! – thriller that **Michael Crichton** (*Jurassic Park*) might have written if he had lived longer.

Plot. Walker Ransom, a 40-ish astronomer, lives with his Airedale terrier in an isolated cabin located on Clickrattle Creek in the Blue Ridge Mtns. of western North Carolina near Asheville.

A specialist in the study of comets, Dr. Ransom is interrupted by uniformed troops during an observing session at Kitt Peak

Observatory in SW Arizona and taken to a nearby air force base. There, he learns that an old colleague, Joachim Schmidler, has been brutally murdered in Germany. Schmidler's dying words to his wife were to protect his "secret library" and contact the only astronomer who will understand why he has been attacked: Walker Ransom.

Ransom embarks on a quest to decipher Schmidler's cryptic words, which Ransom suspects refer to a long-lost comet for which both of them have been searching for years. Apparently, Schmidler found the comet, plotted its orbit and determined that its path will intersect with Earth's orbit – and someone unknown, for reasons equally unknown, wants that information to remain secret.

With the assistance of Kitt Peak staffers Alyssa Kennedy and Paul Collins and his friend Duke Wayne, Ransom searches for the missing photographic plates that will reveal the comet's whereabouts. Their quest takes them to Germany, Washington, D.C., his home at Clickrattle Creek, and finally to the Big Island of Hawaii, where all the pieces of the puzzle come together under potentially devastating circumstances for the inhabitants of Planet Earth.

Reviews (from amazon.com). 1. "From the first page on, I couldn't set this book (well, actually my wife's Kindle) down. Simultaneously suspenseful, insightful and humorous, I was sitting on the edge of my chair in anticipation of what would happen next to the story's hero, astronomer Walker Ransom, nodding my head in agreement on the devious ways of bureaucracy and laughing at the many truly funny passages in McAlister's novel. The novel honors professional astronomy's hard-working, unsung stars – the mountaintop telescope operators – by assigning Alyssa Kennedy the heroine's role.

“For the nonscientist, this novel provides an illuminating peek into the world of astronomy research. For all astronomers – student, amateur and professional alike – this is a rare treat indeed. And the next time you see an unusually active display of shooting stars – well, I don’t want to give anything away! Enjoy a great novel. At the same time, through your purchase you will be contributing to Mt. Wilson Observatory where **Edwin Hubble** discovered both the immensity of the universe and its expansion.”

2. “I thoroughly enjoyed the mix of science, romance, intrigue and suspense that this book delivered. It is also very timely because the potential for collisions between our spaceship Earth and the multitude of orbiting rocks and snowballs numbers in the thousands. I would heartily recommend *Sunward Passage* to anyone who enjoys a suspenseful read mixed in with some real science.”

3. “It is pretty rare these days to find realistic science coming out of the entertainment industry. But if the author is not only a gifted and entertaining writer but also an accomplished astrophysicist, it really is possible! **Carl Sagan** was a talented storyteller and respected scientist, so it isn’t unheard of.

“Being rather familiar with both Kitt Peak and the Big Island of Hawaii, I was able to add an extra dimension of personal experience to the fast-paced story. With a couple of small exceptions (because this is, after all, a fictional story), the author’s descriptions and details of these locations is spot-on and entertaining. I am a professional engineer who works on observatories for a living, and I can also verify that Dr. McAlister’s descriptions of major telescopes and observatories are accurate and informative.

“The surrealistic night scene during the story’s climax was so well done that I now

have a mental image of it that I will carry around for a long time.

“Good job, Dr. McAlister!”

(Editor’s Note: In case you don’t own a Kindle – or if you’re interested in novels with cometary or asteroidal themes –next month’s Observer will feature reviews of two other “Novels That Make an Impact.”)

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An Interview With Prof. Stargazer

Dwight Harness: You’re a busy man, Professor. Do you have time for books and reading?

Prof. Stargazer: At a star party last weekend I was *booked* by the sheriff, he read me my rights and said I’d do *time* in the slammer.

Hey, I wasn’t stealing that telescope! I just put it in my van to get it out of the rain.

Betty Bentley: But the sheriff caught you driving away with it. And he said it hadn’t rained in three weeks.

Prof. Stargazer: Okay, maybe it was just heavy dew. But I was driving around the observing field, looking for the owner.

Jerry Williams: It must have been a large observing field: when he caught you, you were pulling into your driveway.

Prof. Stargazer: I thought that house looked familiar. I must have made a wrong turn in the dark. Gotta drive with your parking lights on, y’know? Look, can we talk about something else?

Alan Pryor: What else have you been up to lately?

Prof. Stargazer: Well, I've written a country song about a stargazer. As a matter of fact, Alan, I wrote it about you.

In my song, you tell your wife **Vickie** that you're going out to buy a couple of shrimp dinners. But when you get outside, the sky looks so good that you decide to take some astrophotos of the constellation *Cancer the Crab* and **M1 (Crab Nebula)**.

The photos take so long that you send Vickie a text message, and that's what I named the song: "Don't Wait Up For the Shrimp, Mama, 'Cause Papa's Comin' Home With the Crabs!"

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Above: NGC 3628 is the largest but faintest of the three galaxies in the "Leo Trio" galaxy group, forming the northern apex of an isosceles triangle with **M65 & M66**, $1/2^\circ$ to the SW of 3628.

Seen nearly edge-on, 3628 measures $12' \times 1-1/2'$ and shines at mag. 10.9. **Yr. editor's** Herschel 400 notes describe it at 147x as "cigar-shaped, with a stellar (i.e., star-like) core and a thin but prominent dust lane along the S edge." (Photo by **Felix Luciano**.)

Below: NGC 4244, a spindle-shaped galaxy in *Canes Venatici*, is **Felix Luciano's** favorite edge-on galaxy. It's lovely, as you can see in Felix's photo – but because its mag. 10.4 brightness is spread out over an area encompassing $17' \times 2'$, it can be difficult to see much more than its oval core and central halo. On three nights during yr. editor's Herschel II quest, he saw 4244 as "an elongated, thickly tapering glow" measuring $3-1/2' \times 1-1/2'$, $8-1/2' \times 1-1/2'$, and $2-1/2' \times 1-1/4'$.

NGC 4244 (a.k.a. **Caldwell 26**) is one of the best and brightest of the Herschel IIs, and impressive visually. It's very easy to find, too, forming a slightly more than right triangle with 3^{rd} -mag. **Alpha CVn (Cor Caroli)** and 4^{th} -mag. **Beta CVn**, and equidistant from Beta.



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Errata. An unfortunate error in last month's *Observer* resulted in the accidental omission of the name of the winner from FRAC of the 2013 Publisher's Clearinghouse "\$5,000 A Week Forever" jackpot.

As a result, the folks at Publisher's Clearinghouse have accepted our apology and generously decided to double this year's prize to "10,000 A Week Forever" for the lucky winner, who we proudly announce is