

THE FLINT RIVER OBSERVER

Newsletter of the Flint River Astronomy Club
Vol. 7, No. 2 April, 2003

Officers: President/Treasurer, **Steve Knight**, sdknight@bellsouth.net; Vice President, **Larry Fallin**: lbj@mindspring.com; Secretary, **Dawn Knight** (see above); Board of Directors: **David Ward**: dward@flintriverastronomy.org; **Steven (Smitty) Smith**; **Doug Maxwell**: dougmax1@bellsouth.net; and **Felix Luciano**: Montbo2@yahoo.com. Newsletter editor/ observing chairman, **Bill Warren**: warren1212@mindspring.com; Webmaster, **David Ward** (see above); Alcor/Librarian, **Tom Moore**: tmoore@dfiequipment.com; Event Photographer, **Doug Maxwell** (see above). Public Observing Liaison, **Felix Luciano** (see above). Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. Web page: www.flintriverastronomy.org, discussion group at FRAC@yahoogroups.com. Please notify **Bill Warren** if you have a change of address, telephone no. or e-mail provider.

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Club Calendar. Fri.-Sat., April 4-5: Cox Field observings (at dark) and Chiefland Picnic Weekend (Chiefland, Fla.); **Thurs., April 10:** FRAC meeting (Beaverbrook, 7:30); **Fri., April 11:** Beaverbrook observing (at dark); **Fri.-Sat., April 25-26:** Cox Field observing (at dark).

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President's Message. When I said I wanted FRAC to have an open discussion policy, I never expected how well it would be received. At our March birthday party, I intended to cover the basic business and let the party go from there, but **Bill** had a few topics to cover; his remarks led to one of the most interactive discussions I've seen at a FRAC meeting. Everyone got involved, and a lot of very good ideas were tossed around. More than one member has remarked since

then that we ought to have more meetings like that – and we *will*, believe me.

Here is the departure data for Chiefland: We'll meet at **8:30 a.m. on Fri., April 4th** at the Denny's Restaurant in front of the Tanger Outlet Mall at Exit 212 (Locust Grove) on I-75. We'll leave the parking lot at 9 a.m.; from there, we'll head south on I-75 and stop around 10:30 for some leg stretching. We'll stop again in Valdosta for lunch and to get gas at Georgia prices. One more stop around 1:30 or so and from there it's right into the Village – hopefully, at around 3:30-4:00. That will leave plenty of time to set up and get dinner before dark.

Remember, there's no registration fee or camping charge for the picnic weekend, but a \$5.00 per night donation is requested to help cover their expenses. If you come to the Saturday picnic, they ask that you bring a dish. Please call me and let me know that you're coming so we can look for you. And if you plan to meet at Tanger Mall, be sure to let me know beforehand so if you're running late we won't leave you behind. Hope to see you there.

-Steve Knight

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Last Month's Meeting/Activities. Bad weather continued to plague us in late Feb. and throughout March. Cowan Rd. Elem. School cancelled our scheduled outdoor/indoor observing at the last minute on Feb. 27th because, they informed us the next day, "It was too wet even to take the children indoors." Yet on Mar. 4th, **Steve K.** and **yr. editor** staged a highly successful two-man indoor observing for about 40 students, parents and teachers at Futral Rd. Elementary when rain negated the outdoor alternative. Sometimes folks don't know what a bind last-minute cancellations put us in.

Steve & Dawn Knight showed up at Cox Field on Feb. 28th, bringing the clouds with them (to the dismay of **Doug Maxwell** and **yr. editor**, who were doing just fine observing until then). The Sat. observing vanished under a blanket of fog and clouds.

Conditions were better – although hardly ideal – on Mar. 7th, although you wouldn't know it unless your name is **Jerry Williams**, **Smitty** or **Bill Warren**. The lower portion of Cox Field held some standing water

after 2 days of heavy rains, so we parked and set up on the higher ground nearer the entrance than we usually do. Jerry found 5-6 Messiers, checked on some earlier ones that he'd already seen, and brought his Messier total to 82.

Sat., Mar. 8th: Hello clouds, goodbye observing.

Our March meeting consisted of a birthday party – FRAC's 6th – and featured as delicious a cake as you're ever likely to sink your dentures into, courtesy of **Roxanne Ward**. Seventeen members attended the meeting – **Curt & Irene Cole, Doug & Laura Maxwell, Steve & Dawn Knight, Scott & Alisa Hammond, Larry Fallin, Greg Potter, Felix Luciano, Tom Moore, Tim Astin, David Ward, Smitty, Bill Snyder** and yr. editor – and all but one of us – guess who? – agreed that, whenever **David** arrives late in the future, he should bring a peace offering in the form of another cake from Roxanne. **Steve** went back for seconds on the cake at least eight times.

Also at the meeting: **Greg Potter** bolstered the club's treasury with a *very* nice (and much needed) financial donation. **Dawn Knight** (see pp. 3-4) received the 1st annual "**Capt. Midnight**" trophy for having earned more A. L. observing club pins in the past 12 months – three – than anyone else in FRAC. **Doug Maxwell** showed off his new homemade observing chair, which is both larger and better (via a padded seatcover featuring galactic scenes) than the one **Steve K.** made. It's appropriate payback for Steve's lording it over us when he got his 14" Dob.

Also, the members voted unanimously in favor of (a) scheduling public observings at least a week in advance to give **Felix** time to notify everyone, and (b) scheduling only outdoor observings (as opposed to agreeing in advance to go indoors if the weather turns sour). Point (b) eliminates the difficulties associated with notifying our members when, a group cancels a scheduled outdoor/indoor observing at the last minute.

We had about 35 parents, children and teachers at our Crescent Elementary observing on Mar. 18th. The skies were overcast (as usual), so we went indoors and talked about telescopes, binoculars and getting started in astronomy. FRAC's attendees included **Katie, Cathy & Tom Moore, Felix Luciano, Doug Maxwell, Dawn & Steve Knight** and yr. editor.

Doug's photos of the event can be seen at

www.home.bellsouth.net/personal/personal/pages/wp-dmm .

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Membership Renewals Due in April: Joe & Cody Hinton; Alex & Nelda Langoussis; Doug Maxwell; and Dan Newcombe. Please send your check for \$12 payable to either Steve Knight or FRAC c/o Steve's address listed in the upper left hand portion of p. 1.

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Upcoming Meetings/Activities. Our early April Cox Field observings will be held on **Fri.-Sat., Apr. 4th-5th**; since the long-awaited **Chiefland Picnic** weekend also falls on those days, a number of our regular Cox Field attendees won't be there. Please don't let that stop you from going out to Cox Field if the weather permits and you can't go to Chiefland: with the new moon occurring on **April 1st**, the skies should be dark and inviting. Use whatever parking arrangement suits you, and don't forget to use a red flashlight to steer late arrivals toward the observing site.

Our FRAC meeting will be at 7:30 at Beaverbrook on **Thurs., April 10th**. **Tom Moore** will use a power point presentation to acquaint us with ALCON 2003.

On the following night, **Fri., April 11th**, we'll conduct a Beaverbrook observing behind the school.

We'll have a second Cox Field observing weekend on **Fri.-Sat., April 25th-26th**.

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Home Observing Report #1. Felix Luciano (Fri., Mar. 7th). "**Saturn**: very clean/clear views; Cassini division around the planet; able to see the planet's shadows (South Pole?) on the ring; very faint detail/bands on the planet.

"**Jupiter**: No new moons detected this month (☺); Great Red Spot views very nice, during steady seeing periods I saw the band curving around the top of it; one moon on one side of the planet, 3 on the other side, two of them drawing closer to each other.

"**M44**: Jupiter and the **Beehive Cluster** in same finder field of view, nice splash of stars.

"**Castor**: Very nice split between the 2 stars, good dark/black skies between them.

“**NGC 457 (the Owl Cluster)**: My favorite object, always a pleasure to visit it.

“The **Moon**: Strolled around the terminator, very good detail with 6mm and 8mm eyepieces; able to see some craters I couldn’t identify even with Moon map in hand: most likely I was lost (nothing new). That could easily fall along the same lines as my ‘discovery’ last month of an extra moon of Jupiter.”

Home Observing Report #2: Dan Newcombe

(Mon., Mar. 10th). “Just scanning around in a hole through the pines in a semi-dark patch of driveway, I accidentally found the **Owl Nebula**, a gray smudge, barely visible, that moved with the stars. I now felt unstoppable and spent quite a while not finding **M108**.

“I was happy that I was able to drop the Telrad almost right on top of **M81/M82**.

“I learned tonight that: (1) A gray hurricane blower (for cleaning optics) rolling through your equipment box looks a LOT like a mouse scurrying around in the dark; (2) *Finderscopes have a use!!!* I have *Star Atlas 2000*, and I started on **Mizar/Alcor**, looking for **M101** (another no-show). I have a hard time trying to figure out what is in the eyepiece vs. what is shown on the map (i.e., just how much one shows compared to the other). After aligning the finderscope, I was able to star hop through the finderscope, seeing just the stars that were on the star map. I had it right on top of M101, but I guess it was too bright in my driveway to see it – a half-moon, a street light and a floodlight all to the west, lights on in the kitchen and living room; and (3) I learned that, even seen through a filter, the First Quarter Moon will wreck your night vision.”

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This ‘n That. Thanks, **Neal Wellons**, for donating a 4.5” reflector to the club. **Louise Warren** asked that it be used as a prize for a deserving young reader in Beaverbrook’s Accelerated Reader program. **Smitty** is putting the telescope in good working order before we present it to the school.

*Speaking of **Neal**, if you’ve noticed that he hasn’t joined us lately, it’s because he has other, more down-to-earth things on his mind: he just got married.

Neal’s bride is **Frederica (Frede)**, and she owns a business in Americus, Ga. Says Neal, “We had a small wedding on Jan. 1st, and I retired on Jan. 2nd.” The newlyweds presently are dividing their time between love nests in Hampton and Americus.

***Bill Snyder** informs us that **Larry Fruhwirth**, co-owner of the Camera Bug, died of a heart attack on Feb. 8, 2003.

***Doug Maxwell** asked recently if we ever cancel Cox Field observings because of wet fields. **Steve K.**’s answer: “Not yet, we haven’t.” You may have noticed that, after higher ground near the entrance, Cox Field slopes down to a low point near the middle of the runway; sometimes water stands in that low area after heavy rains, but not elsewhere and the downslope provides runoff. Obviously, **Mr. Cox** doesn’t want his grass destroyed by cars, but by parking closer to the entrance than usual and driving slowly when it’s wet we can avoid damaging the grass.

*Congratulations to principal **Ken Bozeman** and the faculty, parents and students of Beaverbrook for earning Accelerated Reader “Master School” status for the third consecutive year, and in the process becoming the first Master School in Ga. – and 13th in the entire U. S. – this year. Beaverbrook’s 600 students check out between 650-700 books from the media center *every day*.

From “Capt. MidKnight”: “I want to thank **Bill** and **FRAC** for the wonderful trophy I received at the March meeting. I will display it proudly in my living room for my family and friends to envy – excuse me, I mean enjoy. I also want to thank everyone who helped me to win the **Captain Midnight** award – people like: **Tom Moore**, whose constant moon observing challenge is an inspiration to us all; **Larry Fallin**, who is so close to completing almost every program in the A. L.’s listing but completed only one of them during the past 12 months; and **Steve**, who is content to carry the heavy Frankenscope to each observing, set it up and then leave to go talk to everyone, leaving me with the telescope all to myself.

If I've forgotten anyone, please know that your contributions meant a lot to me. Seriously, though, I appreciate this award and will enjoy it for years to come.

"For anyone wanting to dethrone me in 2004, I'm already halfway through the Double Star program, so you'd best get observing and logging." -**Dawn Knight**

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The Sky In April. Start with **Saturn** (mag. 0.1) in the W sky. In April, its rings will be as visible as they ever get, tilting 27 degrees away from edge-on in our view. Then, of course, there's **Jupiter** (mag. -2.1), about a degree from **M44 (Praesepe, the Beehive)** in **Cancer** in early April.

The new member of April's parade of planets is **Mercury**, low in the W about half an hour after sunset during the 1st three weeks of April. At mag. -1.1, Mercury will be the brightest "star" in that part of the sky. Lying closer to the Sun than we are, Mercury -- and **Venus** as well -- shows Moon-like phases: during the first half of April, Mercury will go from gibbous (nearly round) to crescent.

On **April 16th**, Mercury will be visible for about 2 hrs. after sunset, displaying a half-Moon shape telescopically although its naked-eye appearance will be that of a bright star. (Due to its brightness, our naked eyes "fill in" the missing portion of Mercury's disk when it's showing a phase telescopically. The same holds true for Venus.)

Mars (mag. 0) will rise between 2-3 a.m. in April; on the morning of **April 23rd**, Mars will lie N of the Last Quarter Moon. Binoculars will show Mars' slightly-out-of-round (i.e., gibbous) shape.

Venus (mag. -3.9) will still be a bright morning star, low in the E.

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People You Should Know: Felix Luciano. If asked to describe Felix in two words or less, **yr. editor** would use the words *curious* and *excited*. They are two of the finest personality traits an astronomer can have.

Curiosity. Apart from a personal goal of finishing the Messier list "in the next two years," Felix -- who is probably our club's most regular observer, setting up his Orion XT8 and Televue 85 at home on many

weeknights -- doesn't confine his astronomical interests to any one category. "I very seldom go out with a specific program in mind," he says. "I try to find at least one new object a week. The challenge for me is to find it tonight, and then find it again tomorrow. I want to be able to find it whenever I look for it."

Enthusiasm. It's impossible to be around Felix for any length of time and not feel the enthusiasm he brings to astronomy. In his one year in FRAC, Felix has become a popular contributor at our public observings -- and not just because he's friendly and extremely likeable, either. Felix brings the night sky to life in his telescopes with passion and flair: he doesn't merely "show" celestial objects to visitors, he "sells" them on the beauty and wonder that is revealed in the eyepiece. The difference in those two approaches is enormous, yet Felix, like any good salesman, makes it look easy. Visitors never leave his telescope bored or unsatisfied.

Felix has been in astronomy for two years and considers himself a beginner. He's wrong, though, or else he wouldn't have been elected to serve as a board member in FRAC this year. He's a willing worker, and that, along with his winning personality and concern for the club, more than compensates for whatever lack of experience he thinks he has. At the March meeting, Felix volunteered to serve as public observings liaison in getting the word out to members about upcoming observings that are scheduled after the *Observer* has been completed and sent out.

Felix lives in Jonesboro with his wife **Anna**. He works in the Student Loans section of the Dept. of Education, and his other hobbies include mountain biking and "reading whatever strikes me as interesting."

When asked what he enjoys most in astronomy and FRAC, Felix replied, "The friendliness, the fun of it, being able to observe and share the sights as a group." His favorite object? "**NGC 457, the Owl Cluster**. I see it as **E. T.**, the extraterrestrial."

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Putting Heat Back In Its Place

tech article by Steve Knight

(Editor's Note: This is the 2nd in a 3-part series of articles on building a homemade dew zapper.)

Now that you have your control box planned, it's time for the telescope aspect of the project of building yourself a dew zapper.

First, you need to decide just what you want to apply heat to. The first and most obvious location is the Telrad and/or finderscope, hung out in the wind and usually sitting right on top of the tube. When you can't point the telescope with any precision, it may as well be cloudy outside. You can wipe the dew away, but besides being aggravating it returns quickly.

Next, your eyepieces start to cloud over. You can wipe them off, but the dew comes right back.

The secondary mirror is last – but you can't wipe it off without risk to the coatings – and you can't tell when the secondary dews over, either: the image just dims until you wonder what's wrong.

Once you decide what you want to heat, some planning is necessary. The front lens of the finderscope is really all that needs to be heated since the rear is angled down and usually shielded. On Telrads, when you heat the glass both sides stay clear. The lens sometimes needs help too, and running the rope along the sides of the lens will keep things nice and clear.

On the focuser, a length around the top of the drawtube will work fine.

Where you mount the rope will determine its length. For instance, the length needed for a Telrad is almost exactly 12" the way I routed mine. I went inside the case, around the lens and all the way around the glass. Twelve inches works out to 73 ohms, 2.0 watts and draws .16 of an amp. That may not sound like much, but all that's needed is a few degrees of difference in heat to keep things high and dry. I made a complete list of the figures needed to effectively place your heat rope with the proper length necessary to do the job. I even did the math for you. All you have to do is measure the area you want to warm up. (Key: **L**= length of heat rope in inches, not including the wire ends; **O**= ohms of resistance; **W**= watts or amount of heat; and **A**= amps of draw on your battery)

<u>L</u>	<u>O</u>	<u>W</u>	<u>A</u>
3	20	7.2	.6
6	37	3.9	.32
9	54	2.7	.22
12	73	2.0	.16
15	93	1.55	.13
16	100	1.44	.12
19	110	1.31	.11
22	137	1.1	.088
25	149	.97	.081
27	162	.9	.074

Nine to 12 inches is a good all-round length for most telescopes; it fits in most places and provides plenty of gentle heat without draining your battery – and you can do your telrad, focuser and secondary with only one piece of heat rope. At \$2.00 for 27" of heat rope from American Scientific and Surplus, it's a steal.

If you want to put 12" of heat rope in an area that won't accommodate that length, you can put in a 50-ohm resistor in line on a 3" section and wind up with the same as a 12" section as far as wattage is concerned. If you have a one-inch secondary, you're covered.

Next month: armed with all this knowledge, we'll assemble this collection of parts into a living, breathing dew zapper.

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Errata. The two **Timothy Ferris** quotes in the March issue of the *Observer* should have appeared as "Smitty's Snippets" – portions of the ongoing series of informative and thought-provoking quotations supplied by **Smitty** from his large collection of books about astronomy.

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