THE FLINT RIVER OBSERVER

Newsletter of the Flint River Astronomy Club
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Editor’s Message. Let me start by wishing each of you a happy new year, along with the hope that Santa was sufficiently impressed with your good behavior last year to have brought you everything that you wanted for Christmas.

Beyond that, there are two very important upcoming events – one in February and one in March – that merit your attention.

First, you should be aware that, starting next month, everyone’s FRAC dues renewal date will be Feb. 1st. We’ll have more to say about it in next month’s Observer (including how much you’ll need to pay when prorated dues are factored in). For now, though, you simply need to be aware that that change will go into effect in February, 2005.

Second, we’ll elect a new slate of officers – president, vice president, secretary, treasurer and board members – at our March meeting. If you’d like to serve, whether as a first-timer or as a repeating incumbent, please contact Smitty and let him know which position(s) you’ll be willing to fill. Smitty’s home address, phone no. and e-mail address appear in the upper left-hand corner of this page.

-Bill Warren

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Last Month’s Meeting/Activities. Our Dec. Cox Field observations were weathered out, of course.

We had better luck with our dinner/meeting at Hong Kong II Buffet Restaurant, which was held indoors on Dec. 17th. Attendees included: Smitty & Mrs. Smitty (Deborah); Curt & Irene Cole; Doug & Laura Maxwell; Steve & Dawn Knight; Larry & Veronica Fallin; David, Roxanne, Rachel & Melissa Ward; Dr. Richard Schmude; Chuck Sims; Mike Stuart; and last, but certainly least, yr. editor, who had to be dragged away bodily, kicking and screaming, from the buffet bar on his 19th visit for refills.

Elsewhere at the meeting: Smitty presented Dawn a sculpture of two bears mauling an unsuspecting camper (or something like that), in gratitude for Dawn’s many contributions to FRAC. While hubby Steve and others are constantly praised in these pages -- and rightly so -- for all they do for our club, Dawn applies herself to numerous tasks, large and small, and
gets them done in an efficient, quiet manner that is all
too often overlooked.

Also, Curt discovered to his surprise and delight
that the way to receive your Honorary Messier
certificate and Binocular Messier certificate and pin is
to show up for our meetings; Dr. Richard Schmude
was recognized for his photo on p. 13 of the Dec. ’04
issue of the Reflector; and door prizes were won by
David Ward and yr. editor, the latter of whom
showed our newly framed “MOST FOR ITS SIZE”
Astronomy Day award and a framed astrophoto of
North America Nebula (NGC 7000) by Scott
Hammonds. Both items (but not Scott) will be on
permanent display at Beaverbrook.

Matt McEwen braved the frigid Dec. weather to
watch the Geminids meteor shower on Dec. 13th.
His report: “It was pretty cold out. Add the wind on
top of the temperature, and it made for some cold
observing for this 8th-generation Florida native.

“The best meteor of the evening was the very first
one I saw, a bright sporadic that wasn’t part of the
Geminids. I first saw it in Lyra, and I followed it
through Cassiopeia until finally it passed beyond the
NE horizon. It changed brightness a few times from,
say, mag. –4 to 0 as pieces flew off.

“The rest of the evening was a steady stream of
Geminids. I counted close to a hundred in the three
hours before midnight. Then I wimped out, went back
inside and stood in front of the fireplace until I
defrosted. –Matt.”

(That wasn’t wimping out, Matt; it’s called
“obeying your survival instincts.” -Ed.)

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“You will eventually want to buy a telescope with
greater light grasp, but don’t rush the process. If you
learn to push your current equipment to its limit you
will be a better observer and be more able to make
good use of better equipment when you do buy it.”

-David E. and Billie S. Chandler
Sky Atlas for Small Telescopes and
Binoculars (p. 6)

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Upcoming Meetings/Activities. Having grown
weary of playing tricks on us in terms of scheduling
our club observings in recent months, the Moon has
graciously granted us two Cox Field observing
weekends in January, although the weekends fall
earlier in the month than previously.

This month, we urge you to wear all the winter
clothing you own and attend some (or all) of our
weekend observing dates: Fri.-Sat., Jan. 7th-8th and
Fri.-Sat., Jan. 14th-15th. (The new moon will be on
Jan. 10th.) Tom Moore won’t bag many new Lunar
Club targets on those weekends, but those of us who
are involved in other pursuits should do very nicely –
weather permitting, of course.

Between those dates, our club meeting in the BB
media center at 7:30 p.m. on Thurs., Jan. 13th.

Note: We will NOT hold a Beaverbrook observing
in January, and we’ll let you know about an Orrs PTA
observing if and when we know more about it
ourselves.

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This ’n That. FOR SALE: Here’s an item that
would be a bargain for anyone with an available
chunk of change now that Christmas is past us. It
comes from David Dempsey, one of our “cousins in
MGAS, down ‘cross the river in Macon”:

“It is with much regret that I have to part with
some of my astronomy toys.

“I am offering my 13.1-inch Discovery Dob for
sale. It is a hybrid version of their DHQ and PDHQ
‘scopes. The optics are very good. It comes with an
8x50 finder and a Telrad. I will let the ‘scope go for
$850.00 with local pickup. Steve (Knight) has seen
and looked through it in the past and can vouch for
the quality.

“I will be happy to answer questions or provide
more info for anyone who is interested. The new
12.5-inch PDHQ from Discovery is listed at $1299 +
$185 shipping.”

You can contact David at (478)474-4949.

His original e-mail to FRACgroups was dated
11/2/04, and in a followup in early December he said
that the ‘scope had not yet been sold.
If you contact him, be sure to ask what eyepieces and accessories come with it beyond what is listed above. It’s unlikely that anyone would buy a telescope that didn’t come with at least one eyepiece. To ys. truly, at least, that would be like buying a car with a tire missing.

*How to Add Your Gear List to the FRAC-a List (courtesy of Curt Cole). “As you know, we are presently compiling a club-wide listing of members’ telescopes, equipment and accessories. Participation is strictly voluntary; the information will be available only at our FRAC-a web site, and only to members who have have been approved by the site moderator. “Since the list cannot be edited except by the originator or the group moderator, you’ll need to copy and paste the column headings into your spreadsheet and then mail it to me. “If you don’t have a spreadsheet, such as Excel, just type or write down the information and mail it to me, either by snail-mail or by e-mail, and I’ll paste it into the one that’s online. “Here’s how to add your gear:
1. Open your spreadsheet.
2. Go online and get into the FRAC-a Yahoo Group.
3. On the left side of the screen, click on Files.
4. Click on FRAC Member’s Gear.xls .
5. Go to Row Two, Column T (the cell under ‘Miscellaneous’), left click on it and continue to hold the button down as you drag the mouse pointer to the cell in the upper left (‘Name’).
6. Select File, Copy (or Cntrl + C) to copy those two rows to the clipboard.
7. Go into your spreadsheet.
8. Paste (Cntrl +V) the two rows into your spreadsheet.
10. E-mail the file to me at: 24e29d55c@speedfactory.net .
11. Save this file in case I need for you to re-send it.
   “If you have any questions, please feel free to write, call or e-mail me at:
   Curt Cole
   190 West James Circle
   Hampton, GA 30228
   phone: (770)946-3405
   e-mail: 24e29d55c@speedfactory.net .”

*Please Note: It is considered both ethical and acceptable to use a Sky Commander, GOTO or any other computerized finder in the pursuit of ALL A. L. observing pins and certificates except the Messier, according to the League’s Southeastern Regional representative, Phil Sacco. With that declaration, achieving advanced observing pins in the deep-sky observing clubs (i.e., the Caldwell, Herschel 400, Arp Peculiar Galaxies, Herschel II and Galaxy Groups and Clusters) just got a whole heap easier for anyone who has access to such a finder system and a telescope with sufficient aperture to pull in the fainter objects in those programs. The A. L.’s obvious rationale for including computerized finding systems is that, when people go out and find objects regularly, they will continue to pursue those pins and their observing skills will improve quickly because they don’t have to spend countless wearying hours searching in vain for the very faint fuzzies that characterize much of those advanced observing programs.

Two personal examples should suffice. First, in searching out the 400 Herschel II targets over a 2-1/2 year period, yr. editor spent an average of 3 hrs. per session over more than 170 visits to Cox Field– and on 26 of those visits he found NO Herschel IIs at all! It was even worse with the Galaxy Groups and Clusters: after another 2-1/2 years of searching, he had found and observed just 59 of the required 120 GG&Cs – and those where the easiest ones! He finally gave up, discouraged and defeated. That is NOT what the A. L. had in mind when they devised those clubs. Their obvious intent was to provide long-term, challenging but achievable observing projects that will give members reasons to keep on taking their ‘scopes out to observe after the initial novelty and excitement of seeing the more familiar celestial sights has subsided.

Not everyone is interested in pursuing pins and certificates, of course. If you are one of those who is interested, however, Sky commander et al is the way...
to go. They do a very nice job of separating the needles from the haystacks.

*All of Which Leads Us To...* a report from Doug Maxwell regarding his new Sky Commander:

“Bear with me just a moment, folks (Doug writes). I’m just about as excited as a poor country boy can be right now. Just came in from a couple of hours of playing with my new Sky Commander.

“I ran through all of the Messiers that were listed as Fall/Winter objects, at a speed that was just about as fast as I could press buttons and move the ‘scope.

“When was the last time you found M81/M82 in the northern sky glow, about 15 degrees above the horizon, with a full Moon? I had no problem finding them, because the Sky Commander dropped me dead on them. I had a little trouble seeing them, of course, but there was no doubt as to what they were. And I couldn’t even make out a single star in Ursa Major, naked-eye, that low and in the glow…

“The darn thing is so intuitively easy to use that I went ahead and turned off the internal clock and started using it with the equatorial platform after about 30 minutes of getting used to it. It was sweet.

“I personally think this is the best investment for the money spent that a Dob owner could ever make. I wonder if they sell stock in the company…You’d think I was a major shareholder after reading all this. –Doug.”

*Thanksgiving in January. (Editor’s Note: Although written as a Thanksgiving message that, due to computer problems, did not make it into the Dec. issue of the Observer, the following message from Steve Knight clearly illustrates that thankfulness is not [and should not be] confined to any day or season of the year.)

“As I look back over my years with FRAC, I realized that I’ve never really said just what this crew means to me. And since, like most people, I tend to be fairly quiet about such things, it’s no surprise that I haven’t.

“I’m thankful for having such a tightly knit group of people I’m able to call my friends. My “friends” list is short and exclusive; in fact, until I joined FRAC I didn’t have anyone outside family I was anywhere near close to.

“Perfectly happy being an introvert, I was literally pushed to the FRAC booth by Dawn at the Griffin Mayfiling in 1999; I took a peek at the Sun, grabbed a flyer and walked away. Now, nearly five years later, I have trouble believing where I am. I have a group I can call on for anything, anytime, and they can call on me for the same.

“I met my best friend at one of the first spring picnics, started writing, and articles of mine have since appeared in the Observer and Amateur Astronomy as well. I now have friends across the southeast, gathered from star parties, discussion groups, combined club functions and chance encounters – and it’s all because of FRAC, and all because of you, my friends. Being involved with you has brought all this to me. I still don’t have many close friends outside this somewhat strange, extremely varied group of people. I get truly disappointed when only a few people make it to an observing or event, because I look forward to seeing all of you, even the crazy Cousins from across the river, as often as possible.

“I’m thankful for other things such as health and family, of course. I wish I could be thankful for clear skies, but thanks to Doug, Scott and the rest of you who keep messing up the weather by buying things, I can’t be. It’s a cliché, but it’s also true that You get to pick your friends, and I’ve got the best group of friends anyone could ask for. So one of the things I’m most thankful for is the group of people whom I choose to be around – and more importantly, who choose to be around me. I love you guys, and I really couldn’t imagine what my life would be like without you in it. –Steve.”

(In like manner, the rest of us might ask ourselves, What would FRAC be like without Steve [and Dawn, of course]? We’d probably still be a club, of course, since a love for astronomy is the common denominator that binds us together – but the richness and quality of our experiences within FRAC would be greatly diminished without those two fine people.

Who among us has not benefited greatly from Steve’s friendship and his devotion to FRAC? Who is not immensely proud to call Steve Knight a friend of
ours? And who among us does not believe that Steve would gladly go the proverbial extra mile for any of us in need? Such a list would be exceedingly short.

Although he doesn’t think of himself in such terms, Steve epitomizes what true, unconditional friendship is all about. Whether or not he chooses to have many close friends outside astronomy, his many friends in astronomy and FRAC are by far the better for having known him and enjoyed the depth of his friendship.

–Ed.)

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“What caused me to undertake the (Messier) catalog was the nebula (M1) I discovered above the southern horn of Taurus on September 12, 1758, while observing the comet of that year…This nebula had such a resemblance to a comet, in its form and brightness, that I endeavored to find others, so that astronomers would not confuse these same nebulae with comets just beginning to shine. I observed further with the proper refractors for the search of comets, and this is the purpose I had in forming the catalog…”

-Charles Messier

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“The nebula (M1) was discovered by the English physician and amateur astronomer John Bevis, in 1731, but was independently found by Charles Messier some 27 years later.

-Robert Burnham

Burnham’s Celestial Handbook
NY: Dober Publications, 1978
p. 1843

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The Sky in January. During the first two weeks of January, Mercury will lie close above Venus in the SE morning sky; Mars will lie to the upper right of them.

Jupiter will rise around 1 a.m. on January 1st, and will rise about 11 p.m. by the end of the month.

Saturn, on the other hand, will be up all night in January. Between January 25th-27th, Saturn will move through NGC 2420, a faint but fairly large and fairly obvious open cluster in Gemini.

Comet C/2004 Q2 (Machholz) will be an easy mag. 4 naked-eye object all month, passing through Taurus and Perseus in January. Along the way, it will pass 2 to 3 degrees W of M45 (the Pleiades) on the evening of January 7th, and between the 12th-mag. galaxy NGC 1275 about 1 degree to its E and Algol about 2 degrees to its W, on January 15th. Charts in the January issues of Astronomy (p. 67) and Sky & Telescope (p. 85) show where to find the comet in January (and, in the latter, during the latter portion of December as well).

The Quadrantids meteor shower, one of the year’s more dependable annual showers, peaks at around 7 a.m. on January 3rd, its radiant lying between the head of Draco and the end of the Big Dipper’s handle, in the NW corner of Bootes.

Unfortunately, the last quarter moon will still be high in the sky at 7 a.m., limiting the number of meteors that can be seen.

(Incidentally, the Jan. ’05 issue of Sky & Telescope contained an uncharacteristically large mistake in saying that “The first-quarter Moon will have set around midnight, leaving the sky potentially quite dark.” (p. 88) Perhaps some of our readers can suggest ways that a first quarter Moon might set at midnight and leave a last quarter Moon high in the sky at dawn…

At any rate, there’ll be a last quarter Moon up. Unlike most meteor showers, Quadrantids meteors don’t begin arriving several days or weeks early or hang around late; rather, they are clustered in the few hours before or after the peak. As Astronomy notes, “Observers rarely see many (Quadrantids) meteors even 1 day before or after the peak.” (p. 66)

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December Observing Reports: Felix Luciano

1. Date: Dec. 2, 2004 (8:00 p.m.-10:25 p.m.)
   Location: Jonesboro, GA
   Temperature: 40s (F)
   Conditions: Some cloud cover with large areas of clear, dark skies. Stars seen as steady points of
light, no twinkling.

Equipment: Orion XT8 Dob (f.l. 1200 mm), Telrad and Orion 9x50 RACI finderscope.

44 Zeta Persei (240x). Double star system, main component white and very bright. Companion located SSW, very small compared to primary star but seen as a bright, steady point of light.

5 Gamma Arietis (240x). Matched white stars oriented N-S, sharp, equally bright.

51 Pegasi. Astronomers at the Univ. of California at Berkeley and San Francisco State Univ. found a planet orbiting 51 Peg. The Jupiter-sized planet orbits some 4 million mi. from its host, with an orbital period of about 4 days. In my 240x eyepiece, 51 Peg was a small, steady point of light sporting a somewhat yellowish color.

M34 in Perseus (75x). An irregularly shaped open cluster with a nice, large, widely scattered group of some 20 bright members.

M36 in Auriga (120x). A large open cluster with 20+ members located at the E end and the central area largely empty. Two strings of stars extend to the E, with black sky between the arms, 2 bright components in the middle of the 2 arms. The main group of stars located in the W portion of the cluster.

M37 in Auriga (120x). The majority of stars located in clumps or groups in the W portion of this open cluster. The E portion much less heavily populated.

M38 in Auriga (120x). Irregularly shaped, scattered open cluster with stars forming a line outward toward the N. Averted vision showed a small group of stars with some nebulosity, direct vision showed a 2-3 star group.

M45, the Pleiades (Orion). Naked eye revealed just 4-5 components, but the 9x50 finder showed a beautiful cluster of stars that fit neatly into the field of view.

M103 in Cassiopeia (240x). A triangle of 18 stars in all, 5 or 6 of them very bright, with the brightest stars in a N-S line and a single star closing the triangle at the W corner of this open cluster.

NGCs 869/884 (the Double Cluster (Perseus). Looking toward the “bent W” end of Cassiopeia, I detected a very faint patch of light where I thought the Double Cluster should be. I pointed the Telrad, looked into the 9x50 finderscope, and there it was! It was, I believe, the first time I’ve ever seen it naked-eye from my backyard in Jonesboro. 48x showed 2 nice splashes of stars with lots of other stars extending between them.

Theta Orionis, the Trapezium (Orion). The four main components of this familiar multiple star – A, B, C and D – were easily visible at 240x. A 5th component, E, was also faintly visible, smaller but steady like the others.

2. Date: Dec. 4, 2005 (7:50 p.m.-8:25 p.m.)
   Conditions: Mainly cloud cover, a few visible stars
   Location, Temperature and Equipment: same as on Dec. 2nd.

M103 (see above). I read that the cluster is shaped like a Christmas tree and “decorated with stars.” After looking at it carefully tonight at 240x I saw both the shape and the stars illuminating the “tree”.

Trumpler 1 in Cassiopeia (150x). A small, compressed open cluster with its stars forming close, parallel lines. The NW line was brighter, averted vision showing its brighter members.

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Trivia

1. What is dark matter?
   Answer: “Matter that emits no discernible electromagnetic radiation but exerts a gravitational
2. True or False: Like the Moon/Earth relationship, Mercury has a “dark side” that never receives sunlight.

Answer: False. This myth arose when observers noted that, whenever Mercury was visible from Earth, it showed the same hemisphere. The myth was revealed as such when, during the early 1960s, radar measurements showed that, while Mercury orbits the Sun approximately every 88 days, it rotates on its axis every 58.7 days. So for every two Mercury years – actually, 175.9 days – the planet rotates three times (176.1 days). All parts of the planet’s surface thus eventually receive sunlight sometime during those two years.

Yr. editor, who predates most of you by more than a day or two, recalls reading books as a teenager in which Mercury’s “dark side” was described as the coldest place in the solar system because it never received sunlight.

3. Who were the Celestial Police?

Answer: They were a group of 16th/17th-century German astronomers who, inspired by Johannes Kepler’s calculations that another planet might be found somewhere in the vast emptiness between the orbits of Mars and Jupiter, set out to find this “Planet X.”

They didn’t find it, of course – but they did discover three asteroids: Pallas (1802), Juno (1804) and Vesta (1807). Their search led to the discovery of an asteroid belt where “Planet X” was supposed to be.

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Astronomy History Dates in January

Jan. 1. Giuseppi Piazzi discovers the asteroid Ceres (1801)

Jan. 2. The Russian spacecraft Luna 1 becomes the first craft to leave Earth’s gravity (1959)

Jan. 7. Galileo discovers Jupiter’s moons Io, Europa and Callisto (1610)

Jan. 10. The U. S. Army Signal Corps makes first contact with the Moon (1946)

Jan. 13. Galileo discovers Jupiter’s moon Ganymede (1610)


Jan. 27. Fire on launch pad kills Apollo 1 crew. (1967)


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