**THE FLINT RIVER OBSERVER**

Vol. 1, No. 8  FLINT RIVER ASTRONOMY CLUB  October, 1997

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<th>Officers:</th>
<th>Ron Harrison. Kimberly teaches astronomy at East Coweta H. S., and Ron teaches astronomy at Mercer University. You'll find more about the Prieser later in this newsletter. We hope all of our new members will enjoy our club and join us at our meetings and observings whenever possible. I think Ron will agree that we take pains to get the very best guest speakers for our club meetings, since I've lined him up to be the speaker at our November meeting. Please be advised that, beginning with the October meeting, we will start our club meetings precisely at the times listed on the Club Calendar. We're sorry if this inconveniences you in any way, but we owe it to our guest speakers, all of whom have traveled considerable distances to address our club at no cost, not to prolog their weeknight evenings by waiting for latecomers to arrive before starting our meetings. To our speakers at previous club meetings -- Jerry Armstrong, Rich Jakiel, Dr. Richard Schmude, Art Russell, and Phil Sacco -- please accept both my thanks for a job well done and my apologies for whatever delays occurred in getting our meetings started. We just didn't want anyone to miss even part of your talks. Your presentations have been just what we needed, and our club members have benefited greatly from your expertise. I hope you'll want to come back and address our club again; if you do, you can</th>
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<td>President's Message. First, I want to welcome our newest members, John and Tamara Prieaer, Kimberly Novak and</td>
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**Club Calendar.** Thurs., Oct. 9: Club meeting (Beaverbrook media center, 7:00); Fri., Oct. 10: "First Light" Beaverbrook Astronomy Club meeting (BB media center, 7:00), followed by FRAC club observing behind the school at dark; Fri., Oct. 24: Observing for East Coweta H. S. astronomy class (ECHS football field, at dark); Sat., Nov. 1: Deep-sky observing (Cox Field at dark).
rest assured that, from now on, we'll start on time.

As you know, our Star Party had to be cancelled due to the rain and overcast weather. We'll re-schedule it for next spring. But that reminds me: new members, we don't call everyone when regular observings are cancelled, and you don't have to call Bill or me, either. My rules of thumb regarding observings are: If it's cloudy, stay home. If it's partly cloudy, see which way the clouds are moving and re-check the sky later in case conditions are improving. Sometimes a partly cloudy sky will be as clear as glass an hour later.

Finally, I want to thank everyone who showed up for our two September observings for Beaverbrook students and parents: Bill, Ken Walburn, John Wallace, Lee Russell, Neal and Cody Wellons, John and Tamara Prieur, and Tim and Celia Astin. The sky could have been better, but I still think we gave 'em, in Ed Sullivan's words, a "rrrrrreally big shew!"

-Larry Higgins

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September Meeting/Observings. You'll no doubt be ecstatic to know that yr. intrepid reporter finally bagged the last 2 Messiers he needed, at the Aug. 29th Cox Field observing. (Did we hear a collective sigh of relief from 60 club members?) You'll doubtless be equally excited to know that I've already found 24 of the Herschel 400 deep-sky objects. (The 24 easy ones, that is.) Gee, only 376 to go, and you get to hear about every one of them along the way, down to the slightest, most nauseatingly insignificant detail of their appearance, how I found them, what I was wearing at the time, etc.

At a rate of one object per month, it'll take me only 31 years to get my Herschel pin! Smitty says he's gonna contact Dr. Kevorkian.

Do you suppose he means for him, or for me?

Five people attended our Cox Field observing: Smitty, Ken Walburn and his brother Mike, Mitch Hammond, and me. You missed seeing about five dozen Messiers (including the elusive M33 and M74), the Cassini division of Saturn's rings standing out like a black eye, and me, stumbling over Smitty's telescope in the dark. (Hey, it probably needed re-collimating, anyway!) Ken W., whose 'scope I tripped over last month, wisely hid his telescope in the tall grass where I couldn't get to it.

We had 6 telescopes and 7 members at our Sept. 11th "Eatin' Greetin' and Meetin' Night" observing at Beaverbrook, and 6 'scopes and 8 members at the club observing at the school the next night. Both nights were hazy and humid, but we had no trouble finding the Blinking Nebula in Cygnus and John Wallace caught Jupiter occulting one of its moons at 11:30.

Neal Wellons and son Cody were there to show off the 2-1/2" refractor that Neal cleverly converted to a Dobsonian, using plans from the Jan. '97 issue of Sky & Tel.

John Prieur (rhymes with fire), who wasn't even a member of the club at the time, was there, showing kids the night skies with his equatorial refractor. Thanks, John!

Larry Higgins, our beloved leader who is wonderful to be around except when he manages to sneak a second helping of pork and beans, was splendid at the BB student astronomy club meeting on Sept. 12th: he left no doubt in anyone's mind as to why he's our head honcho and MVP.

Incidentally, there was a nice front page color photo of Larry showing a Beaverbrook first grader the night sky in
the Sept. 12 Griffin Daily News. I wondered why they didn't want a picture of me, too, until someone pointed out that my fly was open.

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**Upcoming Meetings/Activities.** The Oct. 9th meeting will feature a return engagement by Jerry Armstrong, the Atlanta Astronomy Club's resident expert on comets, meteors and asteroids. Jerry spoke at our very first club meeting back in March, using slides and actual meteor fragments to amplify his remarks regarding Hale-Bopp and other comets, and meteors as well.

Jerry's topic this time will be "Vesta and the June Meteors." (No, Ken, it's not like "Gladys Knight and the Pips.")

At 6th magnitude, Vesta is the brightest of the minor planets, or asteroids; it was discovered in 1807 by Karl Olbers, a member of the European astronomical society known as the Celestial Police. (Seriously.) The job of the Celestial Police was to round up and question people who failed to attend club observations on the 2nd and 4th or 5th Friday nights of every month. (Just kidding, but can't you picture it?: "Come now, Herr Vallburn, veve haff vays uff making you talk; WHERE VERE YOU ON DER NIGHT UFF DER TVELEFTH?"

As you probably know by now, Jerry Armstrong is the talented artist responsible for many of the astronomy-themed tee shirts you've seen several of our members wearing. Each shirt is a hand-painted, original work of art based on any of 12-15 different celestial scenes. John Wallace's shirt shows M51, the Whirlpool Galaxy; my two shirts feature Ring Nebula and Jupiter being impacted by Shoemaker-Levy 9 fragments in 1994. You can order your own shirt(s) from Jerry at the meeting.

Our regular club Beaverbrook observing will be held on Fri., Oct. 10th, after the BB student astronomy club meeting in the media center.

We'll hold a special observing session for the astronomy class at East Coweta HS on Fri., Oct. 24th, at the school's football field at dark. The April issue of the Observer contained a map showing how to get there; you can also call Steven "Smitty" Smith for instructions at the number listed in the top left-hand corner of p. 1.

We know, we know: Sat., Nov. 1st ain't in October -- but since many of you have other plans for Halloween we thought we'd still try to get in our monthly deep-sky observing at Cox Field. The 1st is, after all, the night after the new moon, which is absolutely ideal for deep-sky observing if the weather cooperates. So if you don't have other plans, come on out to Cox Field on Sat., Nov. 1st and find out for yourself whether Lee Russell is really a werewolf.

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**People You Should Know (Part I).**

When he joined FRAC last March, John Wallace had "a 60-mm. children's toy telescope and a few library books about the stars." Now, six months later, he's the proud owner of a new 8" Dob and has become one of the mainstays of our club observing.

"There's so much out there that I want to see," John says. "Deep-sky objects, the Messiers, galaxies, as many as I can find." He's delighted at how nicely his sleek black Dobsonian brings them in.

John and his wife Heidi have two daughters, Sonja and Nikki, both of them "almost grown." He and Mitch Hammond, also a FRAC member, are first cousins. John works with the Ga. Labor
Dept. in Atlanta.

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The Planets in October. With luck (and maybe a bit of guidance), you may be able to see seven of the nine planets this month.

To get you started on a positive note, look down. That's one. #s 2-3 are likely to be Jupiter, which reaches its highest point in the sky at 8 p.m. and sets at 1 a.m., and Saturn, which is up all night and rides the sky like Jupiter did in September. Saturn's largest moon, Titan, is visible about five ring-widths from the planet. #s 4-5, Venus and Mars, are low in the southwest and fairly close together, Venus setting at 8 p.m. and Mars at 9 p.m. Both are at least as bright as any star you'll see in that part of the sky. Visible planet #6, Uranus, is 7-8° west of Jupiter and #7, Neptune, another 7-8° west of Uranus. Uranus is supposed to be marginally naked-eye visible under good skies, and Neptune visible in binoculars. At least, that's what they say, but for me they've been as invisible as Pluto, which is perched in the western sky above Venus but Sky & Telescope says we can't see it. Believe it. For most of us, the only way we'll see Pluto is to get The Disney Channel.

Mercury is hiding behind the Sun, which gives me a good excuse for not seeing it for the 67th consecutive month.

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People You Should Know (Part II). Lee Russell is FRAC's resident Stephen King look-alike. (You know, the guy who writes about vampires, monsters, ghouls, the undead, etc.) Like Ken Walburn, Lee receives more than his share of ribbing in these pages. But Lee and Ken both know I wouldn't kid them if I didn't mean every word of it. I consider us good friends, which shows how hard up they are for friends.

Lee got his 8" Dob last May; since then, he's been known to share its views occasionally with his wife Sara, son Travis, 19, and daughter Jennifer, 15. Travis attends Gordon College, Jennifer is in the Griffin High band, and Lee is an information systems officer, whatever that is, with United Bank. Sara deserves the Red Badge of Courage for having the patience to endure Lee's occasional outbursts of impatience. But it's hard to be patient on those nights when your Telrad isn't cooperating with your telescope, the full moon is up, the seams of your shirt begin to split, and you find yourself turning into a werewolf. (In women, the condition is called PMS.)

All of us have special favorite observing targets; for Lee, they're Orion Nebula and Praesepe, the Beehive. Lee's immediate goal is to gain an easy familiarity with the bright stars and constellations associated with the various seasons. He'd be closer to achieving his goal, though, if he didn't turn into a hairy, slavering, fanged creature out of The Howling every time the full moon rises. (Or is he like that all the time, Sara?)

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Overhead this month we find the constellation of **Cygnus**, "The Swan," also known as the "Northern Cross." When I see **Cygnus** high overhead I know that the cooler days of Autumn will soon follow and with it a general clearing of the haze and humidity so prevalent during our southern summers. However, even the presence of the summers' impediments to viewing have not stopped most of us from cruising through some of the season's brighter objects. This month's star-hop takes us to two of the northern skies' more prominent members, the globular clusters M13 and M92. Along the way, we'll also take in two much lesser known galaxies in close proximity to M13, NGC 6207 and the seldom observed IC 4617.

**Star-Hop #1, M13, NGC 6205.** Also known as the "Great Cluster in Hercules," M13 is undoubtedly the most well known globular cluster in the northern skies. In fact many beginning astronomers cut their teeth in learning how to locate M13. Big and bright, it is easily seen in the moderately sized binoculars and small telescopes which are often used by the beginner. As can be imagined, it is even more impressive in larger telescopes and so offers something for beginning and advanced observers as well. Take your time to find M13. Over the years you'll find yourself returning here time and time again.

Locating M13 at this time of year is not difficult. Beginning near the zenith, directly overhead, we find ourselves in the constellation **Cygnus**. Scan the sky about 15 degrees (the distance spanned between your index and little fingers spread against the night sky at arms' length) west of **Cygnus** is the bright star Vega which prominently marks the constellation **Lyra** and its nearby "Ring Nebula", M57. From Vega, scan the sky to find the "Keystone" consisting of the four stars Zeta, Eta, Pi and Epsilon Herculis in the heart of the constellation **Hercules**. The Keystone consists of 4 moderately bright stars and is about 20 degrees (the distance spanned by your thumb and little finger spread against the night sky at arms length) to the west-southwest of Vega. Once you've located the Keystone, you've solved the problem of locating M13. M13 is located on the west side of the Keystone and is 1/3rds of the way along an imaginary line extended south from Eta Herculis to Zeta Herculis. M13 appears very prominently in binoculars and smaller telescopes, often presenting a bright core which fades uniformly towards its edges. In larger telescopes at higher magnifications one can resolve many of the globular cluster's constituent stars and discern random patterns within the cluster yielding a truly spectacular view!
would worship and pray for the sun to stop its departure and hasten its return. As we now know, the days following the winter solstice will reveal the sun rising again, regardless of our lack of sacrifices and prayers. But we should not lose the lessons these events can teach us. We have provided here a beautiful example of the cycle of life that operates in our universe. At winter solstice, the descending sun of the current year "dies". We hardly feel its feeble, old light. At the same time, the sun for the new year is "born". Feeble as well, its strength takes time to grow. It is not until the summer solstice that the risen sun in all its strength and vigor "takes the thrown" and rules, revealing its character and what it has to offer through the bounties of the harvest season. Truly, every fruit and vegetable is a development and a ripening of the sun's gifts to our world. So too, our lives reflect this pattern. We are born weak and unable to affect much — but grow in our abilities and eventually the fruits of our labors are manifest. As the year takes its course, remember that the sun is more than a class G2 star; it is the basis of your existence and it can be the source of inspiration if you keep its lessons in your heart.

From the Observing Chair
by Philip Sacco

Well with the month of September upon us, and Fall not far behind, cooler gazing and HOPEFULLY clearer skies lie ahead.

The last couple months have seen many observing sessions washed out by uncooperative skies, but we have had two good outings to the Turkey Farm.

Here are some of the upcoming events to mark on your calendar:

Sept. 5th- Villa Rica. "Tools, Training and Techniques". Observing training and techniques, facility check-outs, and "Drawing at the Eyepiece to record your Observations" presented by Rich Jakiel. Call Rich for the exact time. These sessions are for all members, not just our new ones, and participation is encouraged. The Moon will be in an early waxing phase thereby setting early, and giving even our deep sky hounds a chance at the sky.

Sept. 6th- Villa Rica. Start time 7:00 p.m. sharp. "Public Gaze and Newcomers Welcome and Orientation". Join us for a delightful introduction to astronomy, our club, and our facilities. Weather permitting, the Sky should be there too!

Sept. 12th- Camp Twin Lakes. Star gazing with the children of Camp Second Chance. Call Joe Sheppard or Philip Sacco for details.

Oct. 4th- Turkey Farm. Annual Zombie Deep Sky Gaze. Show up early for this camping event. Site will be open by 3 p.m. for arrival and setup. Come prepared for a couple surprises this year...This is a Primitive site. Here are the directions...please keep these for future reference:

>From Atlanta take I-75 north from I-285. You will go about 80 miles to the site.... Take I-75 to I-575 and head to Eljay/Blue Ridge. Once in Blue Ridge, pass the McDonalds, and go thru the light, looking for the Wendy's on the right. Go under the overpass and take a right on 'Wendy Ridge Rd'. Go about 1/4 mile to a three way stop and go left. Go 1/4 mile to 'Aska Rd.' on right. Go right on Aska Rd. for about 6 miles. Look for a sign to Necowa Cove on the right and left side of the road. Go left, uphill, 2/10th of a mile to 'Turkey Farm Rd.' on the right. Go right on Turkey Farm Rd., and follow on in to the Forest Service Property. There is a gate across the road leading in. (The dirt road you will be on has a turn off marked by a blue road sign and a small 'Dry Hydrant' sign to the right. Do not turn off of Turkey Farm Road! Stay to the left at the fork.)

Oct. 10th- Training, Tools and Techniques', Villa Rica. I hope to have a class presented by one of our CCD astronomers. Start time 8:30 p.m. Everyone is invited to these sessions, and encouraged to explore the many different observing techniques to be presented throughout the year.

Oct. 11th- Villa Rica. "Public Gaze and Newcomers Welcome and Orientation". Begins 7:00 p.m. sharp.

Oct. 25th- Annual Picnic and Rededication. This is a new date scheduled in memory of the 20th anniversary of the dedication of the Walter Barber Memorial Observatory. Come make this historic occasion at Villa Rica. Details forthcoming on Atstro and at the Oct. meeting. Plan on spending a nice COOL Oct. afternoon chatting and catching up with friends, and an evening of viewing. Bring side dishes.

Plans are in the making for a work detail at Villa Rica in conjunction with our ATM group. We would like to mount our 7" Mak on a Pier out there and need some interested parties to contact Joe Sheppard or Eric Shelton about helping out. Lots of little projects are in the making, as are plans to paint the facility. How about HOT PINK?! Well, that's my suggestion, and if no one objects......Anyway, everyone is invited to help beautify and preserve our facility....

A Note from the obs. chair

Our Facility continues to see a heavy use and all are welcome. Any member wanting to use the facility MUST be checked out by the Observing Chairman, or a delegated overseer in order to obtain the combinations to the observatory. We have had a compromising situation occur at the facility concerning our security of the site, therefore, be ADVISED–THE LOCKS TO THE FACILITY WILL BE CHANGED AFTER THE SEPTEMBER MEETING. Members presenting the old combos will be given the new ones. Check-outs on the clubs eqpt will be done regularly during the posted 'Tools, Training and Techniques' nights, or by special arrangement with the observing chair or KEMPER SMITH. Kemper has willingly volunteered for this special duty, and new members are encouraged to call Kemper and schedule a check-out time with him if you can not make it to one of the 'TTT' sessions.

Please note that the new Telrads in the observatory need to be turned off after using the scopes, and it is a club requirement that anyone using the facility Sign-In. The Log book is on the chart table, and that's what it is there for. It is useful in generating a club history, and to assess the amount of use the observatory is getting.
**Star-Hop #2: NGC 6207**  This small 11.9 magnitude galaxy is located less than a half degree away from M13. In fact many observers never notice this small galaxy and are surprised to find it located so close to such a prominent galaxy.

Locate NGC 6207 1/2 degree from the center of M13 to the northeast. This galaxy is best observed at higher powers so locate M13 first and then star-hop from there to M13. This object is definitely an object for beginner's binoculars. In larger telescopes at higher magnifications you may observe that NGC 6207 is generally oriented north to south, is very faint and may suggest some structure within the halo of the galaxy.

**Star-Hop #3: IC 4617.** By the way; on your star-hop to NGC 6207, did you happen to notice a VERY (!) faint (magnitude 15.5) galaxy about half way between NGC 6207 and M13? You might have noticed it next to a parallelogram of 4 stars which remind me of the parallelogram in Lyra which locates the "Ring Nebula," M57. If you noticed this small galaxy (definitely use a large telescope at high power!) count yourself among the fortunate few. IC 4617 isn't even charted on Uranometria! In a large telescope at high magnification this galaxy will appear very small, dim, and best seen with averted vision. If you try to track this galaxy down, welcome to a very small and exclusive group. Very few have seen IC 4617, but not because it is so difficult to view. Rather, because it is not catalogued in many of the standard references used by amateurs.

**Star-Hop #4:**
M92, NGC 6341. M92 is the other Messier object located in the constellation Hercules.
In fact, if it weren't for the fact that its overshadowed by its larger cousin, M13, M92 would be recognized as a very attractive globular cluster in its own right. As it turns out, everybody looks at M13, but nobody looks at M92!

Locating M92 from the "Keystone" is as easy as finding M13. Start at the eastern side of the Keystone and find the star Pi Herculis. Extend a line north of Pi Herculis for a distance of about 6 degrees, or a little more than the distance spanned by 3 fingers held together at arm's length against the night sky. Search this area with a moderate set of binoculars and you'll rapidly come upon the pale glow of the thousands of stars comprising this splendid globular cluster. Easily seen even through my finder scope, the core of M92 is bright with many resolved stars.
The Focal Point

Newsletter of The Atlanta Astronomy Club, Inc.

FROM:
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The Atlanta Astronomy Club Inc., the South’s largest and oldest astronomical society, meets at 8:00 p.m. on the third Friday of each month at Emory University’s White Hall or occasionally at other locations (check the hot line for details). Membership is open to all. Annual dues are $25 ($10 for students). Discounted subscriptions to Astronomy ($20), and Sky & Telescope ($27) magazines are available. Send dues to: The Atlanta Astronomy Club Inc., 3595 Canton Road, Suite A9-305, Marietta, GA 30066.

Hot Line: Timely information on the night sky and astronomy in the Atlanta area is available on a twenty-four hour basis on the Atlanta Astronomy Club hot line: 770-621-2661.

Check out our ASTRO discussion list on the Internet: ASTRO@Mindspring.com. Also visit our Internet home-page: http://atlspb.gtri.gatech.edu/astrotxt/atlastro.html

First Class

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