Officers: President, Steven (Smitty) Smith (583-2200); Vice President/newsletter editor, Bill Warren (229-6108 -- or, if you prefer e-mail: warren1212@mindspring.com); Secretary-Treasurer, Ken Walburn (P. O. Box 1179, McDonough, GA 30253 / 954-9442; Alcor, Neal Wellons, and Web Site Coordinator, Cody Wellons (946-5039); Librarians, Tom and Katie Moore (228-6447); Telephone/Hospitality Committee Chairman: Dan Pillatzki (707-0270). Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. All of these phone numbers have 770 area code prefixes. FRAC web page address: http://welcome.to/frac.

Please notify Bill Warren promptly if you have a change of address or e-mail.

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Club Calendar. Thurs., Sept. 2: FRAC meeting (BB media center, 7:30) ; and Fri.-Sat., Sept. 10-11: club deep-sky observings (Cox Field at dark).

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President's Message. I want to welcome our newest member, Chuck Hancock, of McDonough. Chuck, who joined FRAC at the star party, describes himself as an intermediate level observer who is interested in Messiers, the Herschel 400, and astrophotography. Perhaps those interests will lead you to compile an album of Herschel photos, Chuck; if so, it would certainly be a blessing to others who need more detailed visual information than is presently available regarding these sometimes-confusing and difficult objects.

It was good to see so many of you out at Cox Field for the star party. I hope you'll plan to come to our club observings this month; remember, the weather is hot and humid now, but the closer we get to winter the clearer the skies will become. If this is your first fall and winter in astronomy, you won't believe the universe of wonders and beauty in store for you. Join us at Cox Field at let me show you M15, the bright globular cluster in Pegasus. M13 gets all the attention, but M15 ranks right up there with the best and brightest deep-sky objects you'll ever see.

-Steve (Saratoga Smitty) Smith

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Last Month's Meetings/Activities. It's been a bummer of a summer for stargazing. Still, our Aug. meeting was literally a breath of fresh air, an evening spent in and around the pool where not all the heavenly bodies were in the sky. We had 25 in attendance at our "swimmin' with the women and eatin' meetin'." It was nice to have so many wives present to beautify the landscape and add a touch of sanity to the proceedings. Those lovely ladies included: Lenora Sykes; Roxanne Ward; Dawn Knight; Kathy Pillatzki; Doris Walburn; and Louise Warren.

Meanwhile, back in the pool, there was: Cody Hinton, tossing the football around like John Elway and catching it with his nose; Katie Moore, doing flips off the diving board -- and, following Katie's gracefully elegant example, fellow diver Danielle Stuart, managing to land in or around the pool most of the time; her father Mike, showing us why he isn't playing basketball in the NBA; and need we mention the bawdy behavior of Kathy
("the Mad Flasher") Pillatzki?

In our meeting, we examined the AL's new Universe Sampler observing program -- at least, most of us did: Dan Pillatzki and Tom Moore used the time to pass notes and giggle like students in detention -- which likely was their home away from home in high school. You don't want to know the ridiculous ways they came up with to measure angular distances.

On a more intelligent level, David Ward handed out information regarding the making of a "barn-door tracker," i.e., a device consisting of 2 wooden panels hinged together to produce equatorial motion. (Steve Knight would build one, but he doesn't have a barn door and can't understand why anyone would want to track one.) David also passed out information on Comet Lee. Ken Walburn simply passed out. (Not really, but if Ken were any more laid back, he'd have flowers on his chest.)

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A Night to Remember. The place: Cox Field. The time: Saturday sundown to Sunday sunrise, Aug. 14-15, 1999. The occasion: the second night of our FRAC/AAC "Perseids Meteors/Zombie Star Party". The participants: Smitty; Robert Hall; Chuck Hancock; Joe Auriemma; Cody & Joe Hinton; Charles Sykes; David Ward; Dan Pillatzki; Dawn & Steve Knight and their nephew Michael; and yrs. truly, in whose humble opinion this was by far the greatest single evening of stargazing our club has ever experienced. Consider:

At 12:00, all but one of the above-named were still observing;

At 2 a.m., the list had dwindled by only three, leaving ten FRACisters enjoying the rare sight of crystal-clear summer skies (with a limiting magnitude of about 6);

At 3 a.m., five of us -- Smitty, Charles, David, Dan and ye olde reporter -- were still going strong, Dan in pursuit of his final Binocular Messier targets. (He got his last one, M38 -- or maybe it was M36 -- at about 5 a.m.)

Shortly after 5 a.m., yr. bloodshot-eyed reporter called it a night, leaving the other four stalwarts to usher in the sunrise.

Those four all-nighters -- Smitty, David, Dan and Charles -- are hereby named the first official FRAC "Zombie Die-Hards," and will receive certificates commemorating the occasion and their status at our next meeting.

You may, if you like, refer to them as Zombies #1, 2, 3 and 4, respectively.

The way we'll do it is this: to become a Zombie and receive your numbered certificate proclaiming you as such, you must stay out observing all night (i.e., from no later than midnight till sunrise), and you must do so in the presence of at least one club member who isn't a member of your family. You don't have to do it at a Zombie (or any other) star party, though. Anywhere, anytime will do.

Then, having earned Zombie status, you will remain a Zombie for one calendar year unless you renew your certificate at an earlier date by staying out all night again.

Sorry, Larry H., but your previous Zombie status has expired; mine has too, and my staying up till 5 a.m. didn't quite do the trick. We'll have to do it all over again to qualify.

(For those of you who don't know it already, Larry invented the Zombie/Die-Hard concept a few years ago, while serving as AAC's observing chairman.)

Perhaps you'll forgive a reference to religion in these pages, but it was almost as if God said, As a reward for your patience in waiting all summer for good observing conditions, I'm giving you a night to remember. Now, take advantage of it! And did we ever!

It wasn't just a case of members staying up late chatting and socializing, either. No, these 13 folks, a number of whom are quite new to astronomy, were spending quality time talking about the sky, helping each other find things, studying star charts, honing the search skills that every visual astronomer needs -- and having fun doing it! I want to convey a sincere Thank You to every one of them for affording me an evening that fulfilled my dream of what our club should be. You can't possibly imagine the joy -- and pride -- you brought me on that magic night.
It really was a night to remember.

We also want to thank Gil Shilcutt, a really, really neat guy who also happens to be AAC's Observing Chairman, for helping our members to find things on numerous occasions during the night.

Mr. & Mrs. Cox, the owners of Cox Field, were typically gracious hosts, even to the extent of inviting us to escape Saturday's blistering heat by taking a dip in their pool. Gil and another AAC member took them up on their offer.

Most praiseworthy of all, though, was the work of our president, Steven "Smitty" Smith, in making the preparations that made the star party possible -- you know, little things like Port-O-Lets and communicating with AAC about arrangements.

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Membership Renewals Due in September:
None.

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Move Over, Stephen Hawking. In another of the starkly brilliant leaps of logic that has placed him among the greatest thinkers in astronomy today, Tom Moore offers the following advice to lunar observers during the Moon's 1st and 3rd Quarter (i.e., half-full) phases: "If you're using the side of a tree to steady your binoculars and the feature(s) you're looking for are hidden in the Moon's dark half, move to the other side of the tree."

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Upcoming Meetings/Activities. We'll be back at the Beaverbrook media center for this month's club meeting at 7:30 on Thurs., Sept. 2nd. Our program will feature a video about Percival Lowell, Clyde Tombaugh (Pluto's discoverer) and Lowell Observatory. The latter is also where Robert Burnham, Jr., author of the marvelous 3-volume Burnham's Celestial Handbook, worked for 2 decades -- and it's a site visited by Tom & Katie Moore this summer. (Of course, yr. servile reporter would have been there, too, testing those luscious Arizona skies, if Katie had let him tag along as her lady's maid. But enough about that.)

Our Cox Field weekend observing on Fri.-Sat., Sept. 9th-10th, will be one day after the new moon, so you need to consult Warren's Celestial Excuses (see pp. 4-5) to find plausible reasons not to attend if you aren't turned on by things like the Milky Way, Andromeda Galaxy (M31), the Blinking Nebula, the Coathanger, or Steve Knight applying insect repellent.

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The Sky in September. Mars will be near mag. 1 Antares (Alpha, α, Scorpii), low in the SW sky, all month. Jupiter (mag. -3) returns to the night sky in September, rising about 10 p.m. as the month begins and two hrs. earlier by the end of Sept. Saturn (mag. 0), another welcome returnee to the night-time planetary lineup, trails Jupiter by 40 minutes. Green Uranus (mag. -6) will be an easy find for anyone with a star chart and binoculars, or a telescope, the planet lying within the field of view of Theta (θ) Capricorni for most of the month. Venus (mag. -4.6) will be a morning star rising in the E. Mercury will be too near the Sun to observe, and you'll need finder charts (see the May issue of S&T, p. 108) to capture Neptune.

Elsewhere, Comet Lee will be carving a path through the constellation Auriga in Sept.; at mag. 8, it will be an easy target for small telescopes. Just don't expect it to be as spectacular as Hale-Bopp. Astronomy (Sept. '99) suggests looking for Lee near the Double Cluster (NGCs 869/884) in Perseus on Sept. 25-27. Astronomy (p. 65) says that another comet, 9th-mag. Tempel 2, will be "very close to the Lagoon Nebula (M8) in Sagittarius this month." And on p. 60 it adds, "Go out before September 12;" beyond that date, the Moon will "wash out" the sky around the comet.

Collinder 399 (a.k.a. "The Coathanger" or Brocchi's Cluster) is one of the most striking asterisms, or patterned open clusters, in
the night sky. In 10x50 binocs, the cluster is seen as 10 bright stars forming a neathooked shape that neatly fits your field of view, with 6 stars in line forming the hanger and 4 other stars S of the hanger forming the hook.

To find Cr 399, start with 1st-mag. Altair in the constellation Aquila (the Eagle). Altair (Alpha, Aql, Aql) has 4th-mag. Beta (β) Aql on one side of it and 2.6-mag. Gamma (γ) Aql on the other side, the three of them forming roughly a straight line. Follow that line slowly upward for 10° -- a fist-width at arm's length against the sky -- from Gamma Aql, and the Coathanger will slide into your binocular view. Once you've found it a couple of times, you'll be showing it to everyone you know.

If you've already mastered the Coathanger in binocs, try it in a telescope and move your field of view 1° beyond the NE end of the hanger to see the faint little open cluster NGC 6802. At mag. 8.8, 6802 appears in a 10” scope as a rectangular, nebulos haze with 12-14 stars resolved at 134x. The rest of its roughly 50 stars are mag. 12 or fainter; still, this Herschel 400 cluster is easy to find in a star-studded field.

Another interesting deep-sky object in September is the lovely little planetary nebula NGC 6826 in Cygnus. Better known as the "Blinking Nebula," 6826 "blinks" on and off like a firefly when you switch back and forth between direct and averted vision; the phenomenon is due to the appearance and disappearance of the 11th-mag. central star.

You'll find 6826 1/2° E of 16 Cygni, which lies about a fist-width held at arm's length against the night sky NE of Deneb (Alpha, A, Cyg). At mag. 6, 16 Cyg is marginally naked-eye at Cox Field under decent observing conditions; it -- but not necessarily 6826 -- appears on most beginners' star charts of the area. Remember, though, to scan the area slowly because you may not see 6826 via direct vision. Look for a little blue disk in your field of view but outside your direct gaze, then center it and look toward and away from it rapidly.

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Ask Mr. Stargazer
(Wherein your editor answers questions about stargazing, the universe and our place in it.)

*Is kerosene an effective insect repellent when applied liberally to exposed areas of your anatomy? -Dan P. Mr. Stargazer isn't sure about the answer to that, Dan, but it will keep the rest of us a respectable distance downwind from you -- that, and your personality and close physical resemblance to Marilyn Manson.

*Do naked-eye observers wear clothes? -Ken W. Yes, they do, Ken, especially when their knees are as knobby as yours.

*Do aliens from outer space actually exist? -Steve K. Mr. Stargazer is glad you asked him that, Steve. It's a good question, and deserves an honest, forthright answer.

Just last week a UFO landed in California's Mojave Desert. Its occupants, three carrot-like creatures, marched up to a cactus and, with weapons drawn, demanded, "Take us to your leader!"

*What's the funniest astronomy joke you know? -Cody H. A newcomer to his astronomy club walks up to a long-time observing veteran who's been at his telescope all night and is still going strong, and the newcomer asks, "Don't you get tired, standing up all night?" "Oh, I don't mind," the veteran replies, "I never could stand sitting down."

Okay, so Mr. Stargazer doesn't know many astronomy jokes. But did you hear the one about the nun and the three-legged aardvark?...

*Are you making up these questions and blaming us for them? -Joe A. To paraphrase Bill Clinton: What do you mean by "are"?

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Excerpts From WARREN'S CELESTIAL EXCUSES: 10,001 Valid Reasons Why I Couldn't Make It to Last Month's Cox Field Observings

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humor by Bill Warren

Reason #10,001: I just washed my telescope, and I can't do a thing with it!

Reason #9,063: My solar-powered car won't run at night.

Reason #8,724: I misplaced my copy of Millennium Star Atlas, and I'm simply lost without it.

Reason #7,713: I just watched the Deep Impact and Armageddon videos, and I was afraid I might get hit by an asteroid or meteor.

Reason #6,288: It was raining in Seattle, and slightly overcast in Hawaii and Guam.

Reason #5,495: Cox Field isn't air-conditioned.

Reason #4,037: My wife used our map to Cox Field to line the bottom of the birdcage.

Reason #3,581: I ran out of bug spray, my red LED flashlight needs batteries, the North Koreans refused to sign the nuclear test ban treaty, and I'm afraid of this Y2K thing.

Reason #2,349: I'm still waiting for them to pave Turner Road.

Reason #1,076: What's the matter with you guys?!!! Nobody was there when I showed up at Cox Field 15 minutes early for our FRAC meeting, or at Beaverbrook the next weekend for our deep-sky observations, either!

Reason #279: My wife is using the struts of my 24" truss tube Newtonian reflector to hold up the clothesline.

The #1 Reason Why I Couldn't Make It to Last Month's Cox Field Observing: I'm doing my observing at home now. They just built a nurses' dormitory across the street from my backyard.

**The Lunatix Challenge Series: #7**

by Philip Sacco (Lunatic #82)

(Editor's Note: This is the 7th in a series of 12 monthly "Challenges" devised by AAC's Phil Sacco to make your Lunar Club award quest more interesting. Remember: If you miss a given feature one month, you can always look for it next month; and you can look for naked eye or binocular targets with a telescope or binoculars if you prefer to do so.)

**Naked-Eye Targets.** 1. Name the month and year of the first and last manned moon landings. 2. In what month and year was the first UN-manned landing on the moon? 3. In general, what is the size in miles of the smallest feature on the moon that is observable with an amateur telescope with a resolution of 1 arc second?

**Pickering's Naked-Eye Challenge.** Can you see: 1. The light area around the crater Lubiniezky? This is a rated 8 challenge. 2. The notch in the Mare Tranquillitatis/Plinius region (rated 6)? See this month's #5 telescope object...This is the second time you have been to this area since you first visited Mare Tranquillitatis.


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