

# THE FOCAL POINT

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## CLUB CALENDAR

**Next Meeting:** August 17, 8:00 p.m. at Northside Planetarium.  
**Program:** Bob Tate of the Harper Planetarium will present "Thoughts about Astronomy". See the program preview on page 4 for more information.

**Editor:** ..... Steve Gilbreath  
**Contributing Editors:** ..... Dr. Ralph Buice, Hal Crawford

The *Focal Point* is published monthly during the academic year by the Atlanta Astronomy Club, Inc. The AAC is a non-profit organization dedicated to the advancement of amateur astronomy. Meetings are held the third Friday of each month (except the second Friday in December) at the Bradley Observatory on the Agnes Scott campus. Dues are \$35 annually for a family membership and \$25 for a student membership and include a subscription to *Sky & Telescope* magazine and use of the club observatory in Villa Rica.

**Submissions:** Article submissions are welcome, and may be delivered to the editor for consideration. Articles on computer floppy disk are encouraged.

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## MEET THE NEW CLUB OFFICERS!

by G.T. White

At the May astronomy club meeting held at the Villa Rica observatory, the following members were elected as the Atlanta Astronomy Club officers for 1990-1991. They will take office in September:

**Hal Crawford - President** - currently the AAC treasurer, he is a Systems Engineer for Modems Plus, Inc., a manufacturer of computer peripheral equipment. Hal first became seriously interested in astronomy in the Boy Scouts, when he earned the Astronomy merit badge. He joined the AAC in 1987, when he could finally free up his Friday nights. He has a degree in Business Administration and a BS degree from the University of Georgia. His other interests include photography, writing, politics, and playing with his cat, Boo. He and his wife, Margaret, announced a new addition to the family in January, Melissa Kate.

**Steve Gilbreath - 1st Vice President (Program Chairman)** - currently newsletter editor, he works in computers as a Systems Support Specialist for the Georgia Institute of Technology. Involved in astronomy for the past 15 years, he is an AAC member since 1980. He is a private pilot and plans to fly with his ophthalmologist across the Atlantic in a small plane this spring. Also an avid traveler, Steve has had the pleasure of touring major observatories such as Palomar, Mt. Wilson, Kitt Peak, and Mauna Kea in Hawaii. His personal goal is to make the AAC as large as the Atlanta Ski Club (it has 6000 members!). And girls, he's STILL SINGLE!

**Bill Snell - 2nd Vice President (Observing Chairman)** - works in media services at the Emory Library. He got started in astronomy in 1972. "When I could first learn to read, I was an armchair astronomer; then at age 14 I finally got a telescope and just started looking." Bill has ground his own mirrors, and assembled four telescopes as well as worked in astronomy at Fernbank Science Center as an observatory assistant for 15 years. His hobbies include computers and he is currently making plans to see the solar eclipse next year.

**Mike Kazmierczak - Corresponding Secretary (Newsletter Editor)** - Mike began his interest in astronomy with a homemade telescope his father made for him. Growing up in Atlantic Beach, Fla. he was active in the Astro-Gator Astronomy Club, where he met fellow AAC member Will Rogers, who was also a Astro-Gator. Mike attended Georgia Tech where he received his B.S. and M.S. in Textile Chemistry. He continued his studies at NCSU where he took his Ph.D. in Fiber and Polymer Science. While living in Raleigh, Mike was a member of the Raleigh Astronomy Club and often spent time using an 8" telescope from his deck. Now employed by Hercules, Inc, he resides in Conyers with his family and now has a Meade 10" which he uses

often. His astronomical interests include occultations, meteors, asteroids, variable stars and is beginning astrophotography.

Jacquelyn Cochran - Treasurer - born in Gainesville, Jackie became interested in astronomy through a friend a few years ago. She has an undergrad degree in French (from North Georgia College) and a graduate degree in Accounting from Georgia State. She is a Certified Public Accountant so she is eminently qualified to be the treasurer! Astronomy is her first love, although she occasionally can be seen jogging the streets of Marietta. A two-year member, she has her own telescope and observes several times a month.

Bill Washburn - Recording Secretary - a 12-year member, Bill was introduced to the AAC by Emily Boland. Growing up in Zaire, Africa, he was the son of Presbyterian missionaries. He graduated from Rhodes College in Memphis with a degree in Mathematics. Today he works as a technical specialist in Academic Computer Services at Agnes Scott College. He and his wife, Marilyn, have three boys: Bill, 12; James, 10; and John, who will be 1 year old this month. He is fluent in French and Tshiluba. His interest in astronomy stemmed from his search for a cure for insomnia; eventually his hobby got "out of hand," as he is now working on an astrophysics degree from Georgia State!

### BUILDING YOUR OWN BACKYARD OBSERVATORY

by Gary Kratzer

With the thought firmly in mind of lugging a 17.5 inch Dobsonian around, I decided I needed a storage area, so an observatory was a logical conclusion to the dilemma. I chose a 10 foot by 10 foot by 6 foot roll-off roof design which provided an unobstructed view of the sky. The structure took one month to complete, and I might add I built the structure on my own with virtually no carpentry experience. The foundation is elevated for better clearance of trees and measures 11.25 inches thick. I left a small frame (16 inches by 16 inches) slightly submerged in the foundation's center which could be removed as to accommodate a pier mount in the future. I also ran conduit in the foundation for future hookups.

The next step was framing. I studied a carpentry book I picked up at the local lumber yard and satisfied myself that I could indeed frame it up! I decided to secure the frame with lag bolts and duplex nails which could be dismantled easily for possible movement of the building in the future. This method, to date, has proven to be quite sturdy.

During construction of the roof, I screwed five 3 inch casters on to the two bottom roof plates which were then supported on the base frame temporarily by two by four pieces. Remember, the base frame supports the entire roof and the entire structure rolls. Pipe clamps secured the roof plate to the top frame plate while the roof was constructed. I used pressure treated lumber for the roof support track. I later added an angle iron track which guides the roof quite well and creates a straight smooth surface for wheel movement. Pressure treated landscape timbers work well for the four large upright support beams which support the roof while rolled off of the main structure. The roof is additionally guided by 1 inch by 6 inch strips nailed and glued parallel on the peak sides of the roof and over hang the building and track 4 inches. This design keeps the roof from moving to the right or left while straddling the building and track. Having the roof on wheels creates a gap between the bottom plate of the roof and the top plate of the walls. The cure this, I cut two strips of linoleum about 6 inches wide and nailed them to the 2x4 base plate of the roof and let it drape down about 3 inches over the sides of the building. This will help control the temperature and the humidity. I paneled the inside and ceiling to keep unwanted insulation dust off the scope. A dehumidifier helps keep moisture levels low on hot humid days. I attached a garden hose to the unit, drilled a hold in the side wall, and ran the hose outside for drainage of the dehumidifier.

The roof can be pushed off from the inside by positioning a section of 2x4 on a crosspiece nailed on the rafters. A pulley system is used to pull the roof back on. The roof is then locked on by four large turnbuckles. Large eyehooks are screwed into the corners of the roofs base plate and top plate of the walls at angles to each other. The turnbuckles are attached permanently to the eyehooks on the wall. Simply hook and screw once the roof is rolled back. Small removeable strips are wedged between the roof base plate and top wall plate to prevent sagging of the parts of the roof not supported by casters.

Charts, pictures, and a hinged fold-down desk with 1.25 inch holes drilled for eyepieces put the finishing touch to the interior. The local utility company was very cooperative and installed two of the new shielded design street lights which direct light straight down instead of up into the sky. These new lights have made a significant improvement in stray light reduction. Don't be afraid to ask the local utility company. I stressed the fact that many school groups and local citizens would be coming to the observatory often and the facility would serve as a resource center for teachers as well.

It has been three years since I have opened my observatory. Though the demand has subsided somewhat, I still conduct observing sessions often for area groups. Being a science teacher, the facility has greatly inspired my students as well as

students for many area schools. The structure is holding up well. I have restrained the cedar siding once. I even put a garden between the roof support beams for my wife!

I recently acquired a Starlab Planetarium and this really put "the icing on the cake" for my astronomy program in Calcasieu Parish.

Portable scopes are terrific, but nothing gives an amateur astronomer more pleasure and feeling of worth than owning his own backyard observatory.

Clear Skies,  
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## THE CASUAL ASTRONOMER: AUGUST 1990

by Hal Crawford

### A Lucky Coincidence

It's funny how things turn out sometimes. I was flying on Delta flight 437 to St. Louis last Tuesday afternoon, reading (what else?) my *Sky & Telescope* magazine. I was actually going to visit three of our customers who were experiencing problems with our product. Two of these customers were in St. Louis, and I was to take a quick drive to Kansas City (at the other side of the state) to fix up the third one. As I finished the magazine and the plane prepared to land, a thought occurred to me: when is the Astronomical League convention going to be? I knew that it would be in St. Louis this year, but had given up any chance of going because I treasured what few vacation days I had.

Flipping through the August issue of *Astronomy* (yes, I read both of them), I found it: the convention was July 31 through August 4th, almost exactly coinciding with my trip! I couldn't believe it. Actually, there was no chance that I could actually attend the convention, but I could certainly try to meet up with some Astronomical League officers and just get an idea of what the ALCON was all about.

I finished up my first day on the site late, and after eating dinner around 7:00, I decided to look for Washington University, where the ALCON was to be held. Looking for the place is a story in itself. Are any of you familiar with the history of the QWERTY keyboard? The original inventor of the modern typewriter placed the keys where they were because it turned out

that to organize them in any other manner ran the risk of the typewriter keys jamming because the typist would work too efficiently. The guy who laid out the streets of St. Louis must have used the same chain of thought. At one point, just a stone's throw from the central campus, I had to detour about two miles because the streets were deliberately closed to through traffic to help keep the congestion down. Nice touch.

The next trick was looking for the convention site. I immediately found the engineering school, but no where at 8 pm on a summer night could a student be found who knew what was going on. I was about to give up hope and head back to my car when I looked up and saw - voila! - an observatory dome!!! Racing around to the other side of the building, which I learned to be Crow Hall, I found some students who worked for the astronomy department, who gladly led me up to the hallowed halls of the astronomy labs.

The observatory was open, and the subject of the moment was the setting planet Mercury. The telescope itself was an ancient but impressive 6-inch refractor, mounted on an equatorial mount. Talking with the students gave me insight on the instrument's interesting history: When Washington University first opened in 1857, the first Chancellor William G. Elliot announced that businessman James Erwin Yeatman had donated \$1500 for the making of a "superior telescope." The lenses were made by Henry Fitz & Co. and refigured in 1882 by the firm of Alvan Clark & Sons (!), and they are still in use today. (Because of Clark's involvement with the telescope, the Smithsonian has expressed an interest in procuring it. However, there are no plans to retire the instrument.) Among other duties, the Yeatman refractor was used to determine longitude and as a source of standard time.

After my visit there, I looked for people that I might possibly know. As luck would have it, two members were there, one of whom receives the Focal Point newsletter. Richard Wiesen and Dan Koehler, members I know on the Compuserve Computer Network, were listed in the observatory log, and after asking around a little bit, I met and discussed astronomy with them for a little while. Finishing up with some humor about our president and fellow CIS member Leonard Abbey, I headed back to my hotel a happier man.

I was unable to attend any other aspect of the convention -- work simply made it impossible. I would have enjoyed meeting the people and listening to what I knew were fascinating lectures on the present course of amateur astronomy -- but of course there's always next year.

**A FINAL MESSAGE FROM THE EDITOR**

by Steve Gilbreath

This is my final issue as editor of the Focal Point after 24 long months. In many ways I'm very happy about that. Being editor is hard, hard work. How hard? It's so hard it makes spending one's entire life in Cleveland look pretty good. It's so hard I'm in Hawaii to get away from it (don't believe me - check out the post mark on this issue).

As I reflect on the past couple of years I realize we have an outstanding club. A great club! And we have it because of the people in the club.

We have quality members who are very friendly and will always greet you at the door of each meeting and treat you like family. Several people who have come from other clubs to join ours have remarked to me that we're the friendly club they've seen.

We need to keep our quality club and to do that we need quality volunteers. We need people to help with projects, hold office, and keep our club growing stronger. Remember, my goal is to make our club the size of the Atlanta Ski Club. It's the largest ski club in the country with over 6000 members and no snow for hundreds of miles; Try to figure that one out!! What I'm trying to say is you will only get out of the AAC what you put

into it. So I ask you to roll up your sleeves and lend a hand.

As I said earlier, I'm rejoicing over my last issue. However, I'm also very sad that it's over. I'm still not out of volunteer program though; I'm moving on to 1st Vice President and Program Chairman. This means I must come up with some really interesting entertainment for our meeting each month. That sounds pretty tough too! Gee, Cleveland is looking better and better.

**PROGRAM PREVIEW**

For August, a change of pace. Bob Tate of the Harper Planetarium will present Thoughts about Astronomy at the Northside Planetarium, Friday, August 17, 8 p.m. Bob's talk will be a potpourri on astronomy, education, philosophy, and planetarium equipment.

Both Harper and Northside planetariums are operated by the City of Atlanta School System.

Take I-75 to Northside Drive. Go north 1-2 miles to Northside High School, 2875 Northside Drive.

This is your chance for an inside glimpse of one of Atlanta's little-known astronomical gems. See you on the 17th!

*Steve Gilbreath  
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**THE FOCAL POINT**

First Class Delivery



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