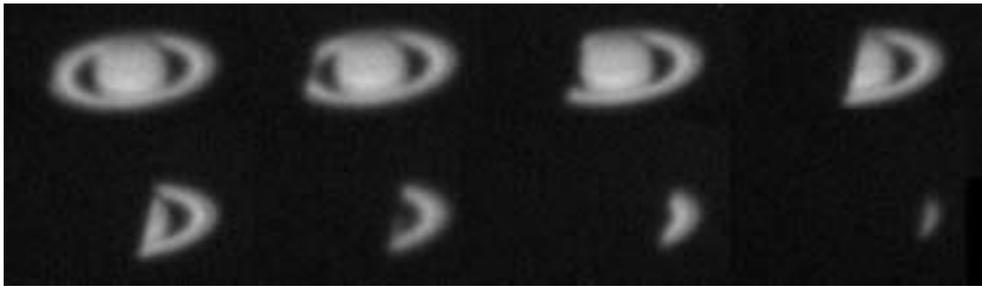


# The Focal Point

The Atlanta Astronomy Club  
Established 1947  
March 2002

Vol XIV No. 10

Editor: Keith Burns



Series of pictures to the left are of the February 20th Saturn- Lunar Occultation. Pictures taken by Larry Owens in Alpharetta, Georgia. Pictures taken with a 10 inch LX-200 SCT with a ST7E/ CFW CCD camera attached.

## Farewell

Linwood Beck, a club member for more than 30 years is departing Atlanta. Although not active in the club for the past few years, he has always been in contact with me. He also made a considerable donation to the club when we purchased the 24".

His parting comments: No new e-mail address so far. This note gives me a chance again to say thanks for all you are doing for Amateur Astronomy. We'll miss the association with all you guys and gals. Say 'hello' to them for us. With appreciation...Lin Beck.

M. Linwood Beck  
5950 N. Fountains Ave  
Casita 2102  
Tucson, AZ 85704

## Contributing to the Newsletter

Please send articles, pictures, and drawings on anything astronomy related. All formats are acceptable. Pictures can be sent as either JPEGs, GIFs, or other formats. I can also scan hard copies of pictures. Articles can either be sent to Keith Burns 3740 Burnt Hickory Road Marietta, Georgia 30064 or email at [Keith\\_B@bellsouth.net](mailto:Keith_B@bellsouth.net). You can submit articles anytime up and including the deadline date. The **deadline** for the **April issue** is **March 30th**.

## March General Membership Meeting

We have a special secret guest speaker this month. It's so secret that even I don't know who the speaker is. Even the topic of discussion is a surprise. Come and find out. Meeting at 8PM. Emory University at White Hall.

## In This Issue:

**Page 1-2...**Saturn occultation. Farewell. Secret speaker! From the prez's desk.

**Page 2-4...**What's that satellite do? Part two.

**Page 4...**Feb 17 board meeting minutes. Tri-Star 2002.

**Page 5-6...**Crab nebula. Jan 6th board meeting minutes.

**Page 6-7...**Zombie Party

**Page 7...**Amateur telescope makers group. AAC contacts.

**Page 8...**M81-M82. Saturn.

**Page 9...**Events calendar.

## From The Prez's Desk

Spring begins on March 20<sup>th</sup> at 2:16 p.m. Happy Vernal Equinox to all!

March is also "Messier Marathon" month. It is the only time in the year that you are able (if Urania, the goddess of the sky is smiling upon you) to bag ALL the Messier objects in one night. If you are up to the challenge, come out on March 16<sup>th</sup> to either Woodruff, CEWMA (or Chiefland) and show off your skill. The March issue of *ASTRONOMY* magazine had a great guide to the Marathon, written by Phil Harrington.

Speaking of great articles, don't miss the one in the April *Sky & Telescope* about installing "astronomy friendly" light fixtures around your home's exterior. We amateurs are always complaining about light pollution – but do we set an example by cleaning up our own property first? I have to confess that, while I don't keep my outside lights on all night, I didn't rush out to replace those ubiquitous carriage lights on my front porch until they stopped working. I replaced them with fixtures from

*Continued on the next page.*

Lowe's that look like the Old Brooke Light on page 46 – not 100% full cut-off, but pretty close. Now, about that ugly “jam jar” on my back step.....

The AAC Zombie Party will be at Whitewater Express from April 12 –14<sup>th</sup>. Remember, you have to book your spot in advance with Whitewater Express, NOT through the AAC.

The AAC's Annual Banquet will be on Friday April 19<sup>th</sup>. It will be at a restaurant, not Emory and you must pre-register and pay in advance.

We are gearing up for our 2<sup>nd</sup> Annual Atlanta Astronomy Expo on May 3 –5. Saturday May 4<sup>th</sup> will be declared “Astronomy Day” in Georgia. The organizers could use volunteers to help with the organization and during the event. Contact Tom Crowley if you can help out.

Finally, our election of new officers will be at our General Meeting on May 17<sup>th</sup>. All Executive and three Board positions are open. If you are interested in a position or have someone you would like to nominate, contact our Nominating Committee – Alex Langoussis; Rauna Long; Frank Marchese or Art Russell.

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. Membership is open to all. Membership fee's are **\$30** for a family or single person membership. College Students membership fee is **\$15**. These fees are for a one year membership.

Magazine subscriptions to Sky & Tel or Astronomy can be purchased through the club for a reduced rate. The fees are **\$30** for Sky & Tel and **\$29** for Astronomy. Renewal forms will be sent to you by the magazines. Send the renewal form along with you check to the Atlanta Astronomy Club treasurer.

<b>Club address is:</b>	<b>Treasurer's address is:</b>
Atlanta Astronomy Club	Peter Macumber AAC
PMB 305	1057 Trestle Drive
3595 Canton Road A9	Austell, Georgia 30106
Marietta, Georgia 3006	

Atlanta Astronomy Club Hot Line: Timely information on the night sky and astronomy in the Atlanta area. Call **770-621-2661**.

Internet Home Page: <http://www.AtlantaAstronomy.Org>

Send suggestions, comments, or ideas about the website to [webmaster@AtlantaAstronomy.org](mailto:webmaster@AtlantaAstronomy.org). Also send information on upcoming observing events, meetings, and other events to the webmaster.

## What's That Satellite Do? Part Two

By Thomas Faber

### Polar Spacecraft

Polar was launched in February 1996 to study the interactions of the solar wind with the polar regions of the earth's magnetosphere. It is part of the International Solar-Terrestrial Physics program, along with the Wind, SOHO, Geotail, and Cluster projects.

<http://www-istp.gsfc.nasa.gov/istp/polar/>

### QuikSCAT - Quick Scatterometer

QuikSCAT is designed to record sea surface wind speed and direction for global climate research and weather forecasting. It was launched in June 1999.

<http://winds.jpl.nasa.gov/missions/quikscat/quikindex.html>

### ROSAT X-ray Observatory

ROSAT (Röntgen Satellite) was a joint project between Germany, the United States, and the United Kingdom. It was launched in 1990 and continued to operate until early 1999.

<http://heasarc.gsfc.nasa.gov/docs/rosat/roskof.html>

<http://wave.xray.mpe.mpg.de/rosat/>

### RXTE - Rossi X-ray Timing Explorer

RXTE is a high time resolution, moderate spectral resolution X-ray spectrograph. It is used to study the variability of X-ray emissions from neutron stars, black holes, active galactic nuclei, and other exotic astrophysical phenomena for clues to the processes going on there. It was launched in December 1995.

<http://heasarc.gsfc.nasa.gov/docs/xte/XTE.html>

### SAMPEX - Solar, Anomalous, and Magnetospheric Particle Explorer

SAMPEX studies the energy, composition, and charge states of particles from the distant reaches of the galaxy, from solar flares, and from nearby interstellar space. It also monitors the magnetospheric particle populations. SAMPEX was launched in July 1992.

<http://surya.umd.edu/www/sampex.html>

### SOHO - Solar & Heliospheric Observatory

The SOHO project is a joint mission being carried out by the United States and Europe as part of the International Solar-Terrestrial Physics program. The SOHO spacecraft observes the sun and its corona in various wavelengths of the EM spectrum and monitors sunspots and solar outbursts. SOHO was built in Europe with instruments provided by both US and European scientists and was launched in December 1995 by the United States. SOHO is in a halo orbit around the earth-sun L1 point where it can continuously watch the sun.

<http://sohowww.nascom.nasa.gov/>

### SWAS - The Submillimeter Wave Astronomy Satellite

SWAS is designed to study the chemical composition of interstellar gas clouds by producing spectra of the high frequency (480-560 GHz) radio emissions from these clouds. The primary objective of SWAS is to survey water, molecular oxygen, carbon, and isotopic carbon monoxide and water emissions in a variety of galactic star forming regions. SWAS was launched into low Earth orbit on December 5, 1998.

<http://sao-www.harvard.edu/swas/>

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## **Terra Spacecraft**

Terra was the first spacecraft launched as part of NASA's Earth Observing System. It carries five instruments that observe the earth in visible and infrared wavelengths to study energy transport in the atmosphere, levels of certain pollutants, and image the surface. Terra was launched on December 18, 1999.

<http://terra.nasa.gov/>

<http://eos-am.gsfc.nasa.gov/index.html>

## **TIMED**

TIMED - Thermosphere, Ionosphere, Mesosphere Energetics and Dynamics Mission TIMED will study the influences of the sun and humans on the least explored and understood region of Earth's atmosphere, the Mesosphere and Lower Thermosphere/Ionosphere (MLTI). The MLTI region is a gateway between Earth's environment and space, where the sun's energy is first deposited into Earth's environment. TIMED will focus on a portion of this atmospheric region located approximately 40-110 miles (60-180 kilometers) above the surface. TIMED was launched on December 7, 2001.

<http://www.timed.jhuapl.edu/>

## **TOPEX/Poseidon & Jason-1**

TOPEX/Poseidon is a joint mission between the United States and France designed to study global ocean circulation, improve global climate predictions and monitor events such as El Nino, La Nina, and the Pacific Decadal Oscillation. The spacecraft was launched in August 1992. A satellite called Jason-1 was launched on December 7, 2001 (on the same rocket that launched TIMED) to continue the work of TOPEX/Poseidon. The two will work jointly for a while then Jason-1 will take over when TOPEX/Poseidon is shut down.

<http://topex-www.jpl.nasa.gov/>

## **TRACE - Transition Region and Coronal Explorer**

### **Atlanta Area Astronomers Listserv**

While the Focal Point is a good source for information among other things, it cannot be undated after it is printed. If you have email access with a computer, then you can subscribe to the Atlanta Astronomers Listserv. This is a great source for up to the minute info on observing events. You can also post questions about astronomy. You can talk to fellow astronomers about the hobby or other things related to it.

Subscribe to the Atlanta Area Astronomers Mailing List: The name of the new list is: AstroAtlanta. The address for messages is: [AstroAtlanta@yahoogroups.com](mailto:AstroAtlanta@yahoogroups.com). To add a subscription, send a message to: [AstroAtlanta-subscribe@yahoogroups.com](mailto:AstroAtlanta-subscribe@yahoogroups.com). To cancel your membership, send a message to [AstroAtlanta-unsubscribe@yahoogroups.com](mailto:AstroAtlanta-unsubscribe@yahoogroups.com). Messages for the list-owner (me) go to: [AstroAtlanta-owner@yahoogroups.com](mailto:AstroAtlanta-owner@yahoogroups.com) or to [LAbbey@mindspring.com](mailto:LAbbey@mindspring.com). The "home page" for the list, from which you can change your account defaults is: <http://www.yahoogroups.com/group/AstroAtlanta>. This list is owned by Lenny Abbey.

The purpose of the TRACE mission to image the solar corona and transition region at high angular and temporal resolution. TRACE was launched in April of 1998.

<http://vestige.lmsal.com/TRACE/>

## **TRMM - Tropical Rainfall Measuring Mission**

TRMM is a joint mission between the United States and Japan. It is designed to monitor and study tropical rainfall and the associated release of energy that helps power the global atmospheric circulation patterns. TRMM was launched in November 1997 from Japan. TRMM is one of the brightest satellites in orbit and is easily seen when a good pass occurs.

<http://trmm.gsfc.nasa.gov/>

## **UARS - Upper Atmosphere Research Satellite**

UARS was launched by the Space Shuttle in 1991. Its mission is to measure ozone and chemical compounds found in the ozone layer which affect ozone chemistry and processes. UARS also measures winds and temperatures in the stratosphere as well as the energy input from the Sun.

<http://umpgal.gsfc.nasa.gov/>

## **Wind Spacecraft**

Wind was launched in November 1994 to study how the plasma, energetic particles, and magnetic field of the solar wind interact with the earth's magnetosphere. Wind has done this from various orbits including a stay in a halo orbit at the earth-sun L1 point. Wind is part of the International Solar-Terrestrial Physics program, along with the Polar, SOHO, Geotail, and Cluster projects.

<http://www-istp.gsfc.nasa.gov/istp/wind/>

## **Yohkoh Solar Observatory**

The Yohkoh Solar Observatory is a cooperative mission of Japan, the United States, and the United Kingdom to study the sun. Yohkoh was launched in 1991.

<http://www.lmsal.com/SXT/>

## **XMM Newton - X-ray Multi-Mirror Satellite**

XMM Newton is Europe's version of the Chandra X-Ray Observatory. XMM Newton was launched from the European spaceport in French Guiana on December 10, 1999.

<http://sci.esa.int/home/xmm-newton/index.cfm>

Some of these satellites, especially the larger ones in low earth orbit (HST, UARS, TRMM, etc.), are easily visible with the naked eye. To find out when they can be seen go to <http://www.heavens-above.com/> and follow the directions. To get a really cool space based view of all of the satellites in earth orbit go to the <http://liftoff.msfc.nasa.gov/RealTime/JTrack/3D/JTrack3D.html> site. This site opens a window that shows the current location of the satellites and it updates in near real-

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time. You can zoom in and out and drag the view around to any orientation. When you click on a satellite it is identified. Things immediately apparent are the large number of satellites in low earth orbit, and the ring of geostationary satellites above the equator. Most of the ones in the ring are communications satellites, but there are some weather and other satellites there too. The satellites scattered about mid-way between low earth orbit and the ring are mainly the GPS navigation satellites. Two satellites that are in orbits that extent way beyond the ring are Chandra and XMM Newton.

This covers most of the major scientific satellites in earth orbit and near the earth. I hope this article answers your questions about the many satellites up there and what they are doing, or at least points you in the right direction to find the answers. Clear Skies!

### Get the Focal Point Online

The Focal Point is available online in PDF format. The PDF version is also in color. The free Adobe(R) Reader allows you to view, navigate, and print PDF files across all major computing platforms. Download the free reader at [www.adobe.com](http://www.adobe.com)

Visit [www.AtlantaAstronomy.org](http://www.AtlantaAstronomy.org) on the web. The link to Focal Points is located at the top of the front page of the website. If it works for you and you want to get the FP via email, send Peter Macumber an e-mail at [pmacumber@nightsky.org](mailto:pmacumber@nightsky.org). The Focal-Point web can be entered by using the Username of **AAC** and a password of **Aries**. These names are case sensitive! Type **AAC** and **Aries** exactly as you see it here.

## Feb 17, 2002 AAC Board Meeting Minutes

Meeting called to order by B. Simmons at 3:10 pm. Board members present were Peter Macumber, Sharon Carruthers, Bear Simmons, Chuck Painter, Keith Burns, Karen Stiles, Gil Shillcutt, Tom Crowley. Others present: Alex Langoussis, Art Russell, Ken Poshedly.

**Committee Reports:** Focal Point (K Burns) –No report. Observing (K. Poshedly)—Club is going to pay a \$100 deposit to Whitewater Express for the Zombie party next month.

**Old Business:** S. Carruthers presented proposed changes to CEWMC By-Laws, previously approved by Board. Also assisting in the presentation was B. Simmons.

Corrections and changes discussed. Consensus of the Board was that once there is an interest by a group in forming an AAC chapter, the Board provides the prospective entity with a copy of the By-Laws which will be in a template form. When the chapter is organized, a proposal is brought before the AAC Board for ratification of the chapter. The following changes to

the By-Laws were motioned, seconded and approved unanimously: (1) First Heading “By-Laws for Prospective Chapters of the Atlanta Astronomy Club” (2) Second Heading “By-Laws for the Atlanta Astronomy Club, Inc. (Chapter Name) Chapter” (3) Correction—Change CEWMC and AAC throughout document to Charlie Elliot Wildlife Management Center and Atlanta Astronomy Club, Inc., respectively (4) Article 1- Section 1 Line 4 change “locale” to “location” (5) Article VI- Section 3 Line 1 change “President” to “Chapter Director” (6) Article VIII Heading— add in parentheses after heading (Reserved for Chapter Specific Considerations) (7) Article VIII Section 1 Line 1 change “it’s” to “its” and Line 3 change C.L. to Coordinating Liaison.

Revisions to proposed 02 budget presented to Board by P. Macumber. The budget has been split to reflect two distinct streams of funds: monies for maintenance and annual expenses to be separated from capital expenditures. Motion made, seconded and unanimously approved to pass Operating Budget as presented. Issues brought up for discussion regarding future directions, vision and mission of club to be reflected in capital expenditures and budgetary allowances. A. Langoussis offered to call Don Hall to have him re-examine the 20” telescope at VR and suggest what corrective actions are necessary. Issues of expenditures for Woodruff, Villa Rica and any future proposed Dark Site for the club discussed vis a vis budget. Motion made, seconded and approved to pass item D1.1 of budget \$100 Electrical Upgrade for Woodruff building. Motion made to table discussion on other items of Capital Budget, seconded, voted and passed. Motion made, seconded and passed for Board to appoint committee to perform prioritization of budget items and develop survey for general membership regarding member’s interests and priorities. Members of Committee selected: Chuck Painter, Art Russell, Alex Langoussis, Joanne Cirincione. (Sharon Carruthers will serve as alternate).

**New Business:** Board meeting dates set for Sunday, March 10<sup>th</sup> and March 31<sup>st</sup> 3pm at Five Seasons Restaurant. Meeting adjourned at 6:10pm.

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## Trip to Tri-Star 2002

I took a trip up to Greensboro, NC in order to visit a friend and attend the Tri-Star 2002 Expo sponsored by the Greensboro Astronomy Club and Guilford Technical Community College. Speakers included Dr Robert Rood of the University of Virginia(spoke on ET and later Globular Clusters.) Gayle Riggsbee of Charlotte(spoke on History of Palmor Telescope.) Dr Jerry Watson of North Carolina State University(spoke on Alternative Atmospheres on other planets.) Dr Steve Danford of UNC of Greensboro(spoke on future space exploration.) Rain kept us from doing any observing. Yours truly wow two prizes in the drawing. I nailed M1 in the scope friday night with the bright moon and cirrus clouds present.



Picture above is the Crab Nebula. Located in the constellation of Taurus; 5000 light years distant, and about 10 light years in diameter. First documented by Chinese astronomers in 1054 when the supernova occurred and was visible during the day for 23 days and at night naked eye for two years. It is still expanding at a rate of about 700 miles/second.

Image taken by Roth Ritter out at the Walter Barber Jr Observatory north of Villa Rica. Equipment used include a C11 SCT Celestron telescope with a SBIG ST-7E CCD camera @ F/6.3 Exposure taken at 10:30PM on February 8, 2002.

## Jan 6, 2002 AAC Board Meeting Minutes

Meeting called to order by B. Simmons at 3:05 pm. Board members present were Peter Macumber, Sharon Carruthers, Bear Simmons, Chuck Painter, Keith Burns, Tom Crowley, John Lentini, Gil Shillcutt, Karen Stiles, Carol Abernathy. Others present: Alex Langoussis, Art Russell, Ken Poshedly, Joanne Cirincione, Don Hall.

**Standing Committee Reports:** Observing (S. Carruthers)-Observing schedule set through

May '02. Villa Rica-No report. Newsletter (K. Burns)-Focal Point late due to computer problems. Speakers (C. Abernathy)-January April Whitt scheduled, February-David King from Auburn University, March-Edward Albin (Fernbank), Banquet-Glenn Burns. Treasurer (P. Macumber)-Taxes filed by accountant last week for a cost of 250\$/year (750\$ total) for FY 1998, 1999, 2000.

**Special Committee Reports:** Light Pollution-No report. GASP (J. Cirincione)-goal for GASP this year to increase num-

ber of parks served. Astronomical League-No report, Website-No report, Woodruff (S. Carruthers)-Boys Scout organization pleased with affiliation, recruitment for summer teaching sessions will begin shortly. Please volunteer. PSSG (K. Poshedly)-Levy and Tirion confirmed for PSSG '02. Free '01 souvenir programs available. AAE (T. Crowley)-planning going well for this year's event. Program for professional astronomers planned in conjunction with Agnes Scott for Friday, Saturday and Sunday programs open to the public. Speakers confirmed. Joint dinner between AAC and professional astronomers planned for Friday night.

**Old Business:** Independent audit discussed. In lieu of costs for an external audit, AAC committee has been formed to conduct internal audit in Spring '02. C. Painter to chair the committee. Taxes—see Treasurer's report. Training/Public Sessions (G. Shillcutt)—No report. Phone for VR (K. Poshedly)-No report. PSSG (K. Poshedly)—Board requested final accounting for PSSG '01 prior to discussion for plans for '02.

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Will be provided at next Board meeting.

**New Business:** Proposed '02 budget presented to Board by P. Macumber. It was suggested to split budget into general operating expenses and capital expenditures. Discussion ensued and questions answered on budget items by P. Macumber. Shortfall in budget for second year in a row noted with recommendation from treasurer for dues increase. Motion made, seconded and passed to raise Individual/Family dues to \$30/year and student membership to \$15/year (an increase of \$5) effective March 1<sup>st</sup>.

Issues brought up for discussion related to future directions of AAC, vision and mission of club. Consensus that this should be reflected in capital expenditures of budget. Motion made, seconded and approved to pass Treasurer's budget with some changes on a temporary basis until next Board meeting when more detailed information and recommendations will be provided by Treasurer.

**Announcements:** Open House/Orientation-Sat Jan 19<sup>th</sup> at Villa Rica; Saturn Occulation-Weds. Feb. 20<sup>th</sup> Bradlye Observatory; Sidewlak Astronomy, Winter Campout-Jan 12<sup>th</sup>.

Next Board Meeting scheduled for Sunday February 3<sup>rd</sup> 3pm at Five Seasons Restaurant (Prado Shopping Center/ I-285 and Roswell). Meeting adjourned at 6:40pm.

Note that material you see in the Focal Point has been sent to me is for use in our newsletter only. If anyone wants to use the material elsewhere, please contact the author of the article or photographer who has taken the picture. With rare exceptions, most people will grant you permission.

## AAC Spring "Zombie PARTY"

Location is the "Whitewater Express" dark-sky Resort which is just 99 minutes north of Atlanta via I-575. Dates for the event are Friday-Sunday April 12-14, 2002.

AAC'ers Phil Bracken and Charlie Cottingham would like to invite you, your family and friends to take part in our Club's spring "Zombie Party" observing retreat at this scenic 90-acre resort near Blue Ridge, GA. Feel free to drive up as early as midday Friday and depart as late as Sunday afternoon. This is the same excellent resort chosen for our 2002 Peach State Star Gaze, October 3-6, 2002. If our successful "mini-retreat" last September at Whitewater Express was any indication, you'll enjoy not only their huge dark-sky observing field, but also their many convenient amenities & activities.

**OUR "BASE FEE" OF \$4.77 PER PERSON PER NIGHT COVERS:** 1) Entrance and Parking at the Whitewater Express resort. 2) Overnight Camping in your own tents & RVs (no hookups). 3) Use of Comfort Stations & Hot Showers. 4) Use of the large dark-sky Observing Field. 5) Freedom to ex-

plore the resort's Expansive Scenic Areas & Trails. 6) A free Ocoee River-side Scenic Dayhike excursion midday Sunday.

The WHITEWATER EXPRESS HIGH ADVENTURE CAMP & RETREAT CTR. (Est. 1995) is in Tennessee just north of its 3-way corner with GA and NC — an easy under-2-hour drive from Atlanta via I-575. (See Directions\* at end of these notes.) In addition to their SUPERB OBSERVING FIELD, the resort offers NUMEROUS INEXPENSIVE EXTRAS for those who would like to opt for them. These OPTIONS include BUNKING IN LOG CABINS, having one or more MEALS IN THE OPEN-AIR DINING HALL — also taking part in EXCITING GROUP ACTIVITIES that are enjoyable for the entire family. These include a horse-drawn HAYRIDE, HORSEBACK RIDING, RAFTING on the nearby Ocoee River, mountain BIKING, and an intro to RAPPELLING.

Charlie will guide a FREE AAC OCOEE RIVER DAYHIKE & PICNIC late Sunday morning. Also, for you golfers, the well-kept Copper Basin GOLF COURSE adjoining the resort is open to the public. Please SIGN UP AS SOON AS POSSIBLE by taking the steps detailed below.

**SIGN-UP and FURTHER QUESTIONS :** 1) SELECT SPECIFIC OPTIONS from the list below for each person in your party, including bunk lodging if desired, and any desired meals or activity options. 2) BY FRIDAY MARCH 22, if possible: CALL WHITEWATER EXPRESS at 404-325-5295 (their local Decatur Office, open generally 9AM-5PM M-F). Tell them you're with our AAC group, and book your space. You can also Fax their office at 404-325-3918 or call them Toll-free at 1-800-676-7238. 3) BOOK YOUR OWN SPACE with THEM (at \$4.77 per person per night plus fees for any desired options) by giving them a major CREDIT CARD number & expiration date. If you need to cancel part of your booking due to a personal emergency, etc., notify them by Apr 11 and you may be permitted to apply fees toward future events at Whitewater Express.

**NOTE FOR LATECOMERS:** If you can't commit to going by March 22, it is likely that through about April 10 you can still sign up for camping/ observing — but not so likely that all Lodging, Meals, & Activity options will still be available.

**FURTHER QUESTIONS??** If you need more details about the resort's fees, facilities, meals, or activities, feel free to consult our friends at the Whitewater Express office discussed above. For more details about the AAC observing activities contact Charlie Cottingham or Phil Bracken. Email Charlie at: Cott4Treks@aol.com or Phone/Fax him at 404-321-4831. Email Phil at: PhilB@mindspring.com or Phone/Fax him at 770-941-6517.

**FEES FOR EXTRA OPTIONS** (Like our Base Fee, these include 6% tax). 1) \$4.77 per night additional for BUNK IN LOG CABIN. Cabins near the observing field and dining hall

*Continued on the next page.*

each sleep up to about 14 in bunks with thick foam mattresses. Bring your own twin linens, blanket & pillow (or sleeping bag) if you desire this option. 2) MEALS (optional, in Dining Hall by observing field.) \$4.77 Breakfast. \$5.30 Lunch. \$6.89 Dinner. 3) \$30.21 for OCOEE WHITEWATER RAFTING (Suggested AAC time 2:30PM Sat.) Paddle exciting rapids on the nearby river that hosted the '96 Olympics. Professional guiding & instruction. Prior experience not required, but you must be at least 12 years old. 4) \$27.56 for HORSEBACK RIDE (Suggested AAC time 1:00PM Sat. at stable) About 1-1/2 hrs on forested trails in and around resort. Children under 7 must have their horse led by adult — a guide may be available for this. 5) OTHER OPTIONAL ACTIVITIES: \$6.36 Old-Fashioned Horse-Drawn Hayride (AAC: 7:00PM Sat.) \$16.96 Mountain Biking for 1 hr (or \$27.56 for 2 hrs.) \$27.56 Low and High Ropes Course (or \$16.96 for one course.) \$19.08 Climbing/Rappelling on 55-foot wall.

**\*DIRECTIONS** from Atlanta to WHITEWATER EXPRESS: The "High Adventure Camp & Retreat Center" is 3 miles E. of Ducktown, TN and less than one mile NW of the point where U.S. Hwy 64 crosses the TN/NC state line. Suggestion: Zero your Trip Odometer at each turn and note mileages. **1)** From I-75/I-285 Interchange in NW Atlanta (I-75 Mile#259), take I-75 N about 9 miles, passing Marietta en route. **2)** Exit to your Right (Exit #268) onto I-575 North, and stay on I-575/ GA-515/ GA 5 for about 70 miles, all the way to the GA-5 North Traffic Light in Blue Ridge, GA. (En route, bypass Canton & Tate, and pass thru Jasper & Ellijay.) **3)** In Blue Ridge at the traffic light just before McDonalds (on your left), turn Left off GA-515 onto GA-5 North and go 10 miles to McCaysville, GA. **4)** In McCaysville, (on GA/TN state line) turn left at traffic light onto TN Hwy 68, and continue 3 more miles (through Copperhill, TN) to U. S. Hwy 64/74. **5)** Bear Right at the ramp onto US-64/74 East, and go about 3.5 miles on this big 4-lane hwy to Golf Course Road on your left (last Left in TN, where big US-64 right curve begins). If you cross the state line sign into NC you're 0.2 mile too far. There's a small blue "Whitewater Express" sign just before the correct Left turn.) **6)** Turn Left (north) onto Golf Course Road, follow it around the bends for about 0.9 mile. **7)** Turn Right at the "Whitewater Express" entrance sign onto a gravel road. After passing the stable on your left, and then a second wooded area, you'll see a large grassy field to your left. **8)** Continue straight ahead to the open-air resort Dining Hall on the far side of this field. Check in here. If no resort personnel are here, look for AAC member assistance in the large observing field beyond (north of) the Dining Hall.

As a member of the AAC, you are automatically a member of the Astronomical League. For more information on the AL, either go to the website at <http://www.astroleague.org> or contact ALCOR (Keith Burns).

## Amateur Telescope Makers Group

Interested in building your own telescope? Want to enhance your current scope with some features or fix problems with it? Do you want to grind your own mirror or learn how it is done? This is the group for you. The ATM group meets every couple of weeks at Skip Cook's house. He has generously offer this location for this purpose. Contact him via phone (404-325-4987) or email ([scz9@cdc.gov](mailto:scz9@cdc.gov)) for more information and directions. Tracy Wilson runs the group and has much expertise to offer. You can contact him via email ([tracy@c2optical.com](mailto:tracy@c2optical.com)). Announcements of meetings will be posted on the AAC listserv. You can also find out about upcoming meetings from Skip.

**The ATMer's are looking for a place to hold meetings and work on projects.** If you know of a location or have one to offer, please contact either Skip, Tracy, or Sharon Carruthers. It's amazing what hard work, determination, shared knowledge, and a little money can do to make these wonderful instruments.

### AAC Contacts

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**Woodruff Observ. Coordinator:** John Lentini 7-984-0175  
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Image above of M82-M81. Picture taken by Bob Holzer. 3x600's with a C8 SCT telescope @ f/1.95. A Fastar W/MX7C CCD camera that was selfguided w/star 2000. Taken at the Walter Barber Observatory north of Villa Rica, Georgia.

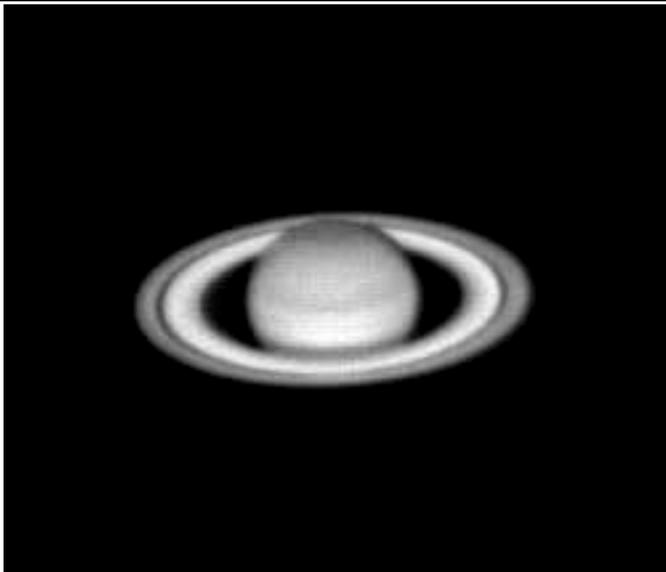


Image of Saturn to the left. Taken by David Barmore. Exposure: 5x.09s. Equipment used is a C8 SCT Celestron telescope with a SBIG ST-237A. Used Celestron Ultima 2x barlow at f/20. Notes: First attempt at imaging Saturn. Focus was slightly off as was collimation.



## *The Focal Point*

Newsletter of The Atlanta Astronomy Club, Inc.

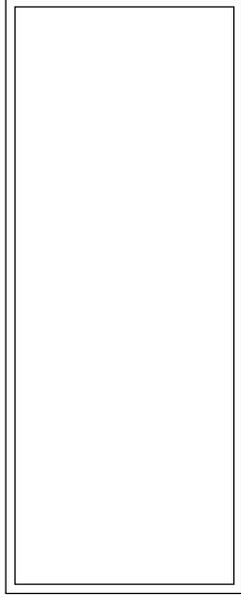
FROM:

Keith Burns  
3740 Burnt Hickory Road  
Marietta, Georgia 30064

*We're here to help! Here's how to reach us:*

Atlanta Astronomy Club  
PMB 305  
3595 Canton Road A9  
Marietta, GA 30066

FIRST CLASS



## Calendar

**March 10th- Board Meeting** at Bradley Observatory at 3PM. Discuss CEWMA chapter.

**March 15th- General Membership Meeting.** Mystery Speaker and topic. Meeting at 8PM with refreshments at 7:30PM. Location Emory University at White Hall.

**March 16th- Deep Sky Observing** to be held at the William A. Calder Observatory located at Woodruff BCS. Woodruff located near Blue Ridge, GA. Starts at Dusk.

**March 23rd- Open House and Orientation** at our Villa Rica Observatory AKA Walter F. Barber Jr. Starts at 4:30PM. Training to.

**March 30th- Focal Point** article deadline for April issue.

**April 7th- Board Meeting** at 5 Seasons in the Prado Shopping Center in Sandy Springs. Starts 3PM. Continue to discuss budget.

**April 12-14th- Spring Zombie Party** at Whitewater Express Camp located east of Ducktown, Tn.

**April 19th- AAC Annual Banquet.** Speaker Glen Burns of Channel 2?. Location TBA.

**April 20th- Open House and Orientation** at the CEWMA site. Orientation at Visitors Center.

**April 20th- GASP** sidewalk astronomy at Providence Canyon/ Florence Marina. Located near Florence, Georgia which is south of Columbus.

**May 3rd-4th- Atlanta Astronomy Expo.** Location Agnes Scott College Campus. Details TBA.

**May 17th- General Membership Meeting.** Speaker TBA and election of 2002-2003 officers.

**May 18th- Open House and Training** at the Walter Barber Jr Observatory north of Villa Rica.

**May 24th-27th- GASP** Monte Santo State Park near Huntsville, Alabama. Sidewalk astronomy with the AAC and VBAS folks.