



# R. A. C. NEWS

## March - 2001

www.rocklandastronomy.com  
Message Line (201) 768-3295



### ADVISORY COMMITTEE

#### Membership Services, Treasurer

Don Urban, 201-768-3295, 73 Haring St, Closter, NJ 07624  
DonUrban@RocklandAstronomy.com, Don\_Urban@Juno.com

#### Newsletter Editor

Lisa Canino-Dymbort, 908-835-8995, 1 Edgemere Terrace,  
Washington, NJ 07882. Lcanino@juno.com

#### Webmaster

Steve Scott, webmaster@rocklandastronomy.com

#### Assistant Webmasters

Dan Roman, 201-385-7675, N2mfc@injersey.com

#### NEAF (Northeast Astronomy Forum & Telescope Show) Chairman

Alan Traino, 973-423-3017, Alan3203@sprynet.com

#### SSP (Summer Star Party) Organizer

Don Urban, 201-768-3295, 73 Haring St, Closter, NJ 07624  
DonUrban@RocklandAstronomy.com, Don\_Urban@Juno.com

#### Astrophotography

Tom Massey, 201-447-2908, Cmassey@gowebway.com  
Bill Thys, 973-881-8372, billthys@aol.com  
Dominick Morelli, 914-623-5633, morelli1@worldnet.att.net

#### CCD Imaging

Jim Burnell, 914-986-3332, Burnell@Frontiernet.net  
Dominick Morelli, 914-623-5633, morelli1@worldnet.att.net

#### Telescope Making

Jim Burnell, 914-986-3332, Burnell@Frontiernet.net  
Mike Pass, 914-496-6320, ironhors@frontiernet.net

#### Wawayanda Observing Coordinator

NY -- Frank Bifulco, 914-354-3965, frankbif@earthlink.net  
NJ -- Alan Traino, 973-423-3017, alan3203@sprynet.com

#### Mid-Hudson Observing Coordinator

Mies Hora, 845-429-0923, mies@ultimatesymbol.com

#### Children's Programs

Ed Siemenn, 914-783-3442, edsiemenn@hotmail.com  
Lisa Canino-Dymbort, 908-835-8995, Lcanino@juno.com  
Audrey Salvatore, 914-928-6697, nebula@frontiernet.net

#### Model Rocketry

Mark Hettinger, 201-768-5720, mlmkshett@aol.com

#### Fund Raising Programs

Mark Hettinger, 201-768-5720, mlmkshett@aol.com

#### Equipment Manager

Ed Siemenn, 914-783-3442, edsiemenn@hotmail.com

#### Advisors

Al Nagler, 914-354-2552  
Dr. Jack Rosen, Deepsky3@juno.com  
Andrew Warrington, 914-420-8620, Awarrington@bestweb.net

#### Observing and Meeting Locations

North Rockland High School Planetarium, Thiells, NY  
Rockland Community College, Suffern, NY  
Iron Horse Farm, Mike Pass, 914-496-6320, Campbell Hall, NY  
\*Anthony Wayne Recreation Area, Exit 17, Palisades Interstate Pkwy  
\*Lake Sebago, Seven Lakes Drive, Exit 16, Palisades Interstate Pkwy  
\*Silvermine Ski Area, Exit 18, Palisades Interstate Pkwy  
\*Wawayanda State Park, 973-853-4462, Highland Lakes, NJ  
\*Tahquanic State Park\* Taconic State Parkway, Ancram, NY

- *Special permits are required to observe.*

### WELCOME NEW MEMBERS

**Greg Dell'Aquila** 460 First St. Apt. 1, Palisades Park, NJ 07650 (201) 585-9398.

**Sean Donolon** 109 Conashaugh Rd. Milford, PA 18337

**Pierre-Louis Turnier** 1 Red Rock Rd., New City, NY 10956 (845) 06 34-4420.

**Anthony Valvo** 1 Farview Terr., Suffern, NY 10901 (845) 369-1922.

### NEAF SPEAKER BIO'S

**Dr. Alex Filippenko** (Ph.D., California Institute of Technology, 1984) is Professor of Astronomy at the University of California--Berkeley, where he has taught since 1986. He has won both of UC-Berkeley's top teaching awards, and in 1995 students voted him "Best Professor on Campus." His accomplishments as a researcher have been recognized by the Newton Lacy Pierce Prize of the American Astronomical Society, among other honors. In December 1998, *Science* magazine credited Prof. Filippenko and his international team of astronomers with the "Science Breakthrough of 1998" for research on exploding stars (supernovae) which seems to show that the universe is expanding at an accelerating rate.

**Dr. H. John Wood** is an astronomer and serves as an optical engineer for the Optics Branch at Goddard Space Flight Center. Since June 1990, he has been Optics Lead Engineer on the Hubble Space Telescope (HST) Project. He led the team that successfully determined the prescription of HST while on orbit. He then led NASA's effort to develop and test the corrective optics for HST. In addition to Hubble, he currently manages the Instrument Synthesis & Analysis Laboratory for new instrument engineering design at Goddard.

A graduate of Swarthmore College, Dr. Wood. earned the M.A. and Ph.D. in Astronomy from Indiana University. He has been at Goddard Space Flight Center for 16 years. In addition to the Hubble Project, he has been Lead Optical Engineer on other Goddard projects: the Mars Observer Laser Altimeter and the Diffuse Infrared Background Experiment aboard the Cosmic Background Explorer (COBE). Earlier he was assistant to the director at Cerro Tololo Interamerican Observatory (Chile) for two years. He held a Fulbright Research Fellowship for two years at the University Observatory in Vienna, Austria; He also served five years as a staff astronomer at the European Southern Observatory in Chile. His

career began with six years on the astronomy faculty of the University of Virginia at Charlottesville.

Winner of the 1992 NASA exceptional service medal and the 1994 NASA exceptional achievement medal for his work on COBE and HST, he is the author of 50 research papers in astronomy and space optics. He was invited to edit special editions of Applied Optics and Optics and Photonics News on the HST first servicing mission. He served on the HST Independent Optical Review Panel that was charged with the determination of the optical parameters for the HST while on orbit.

Although his career has comprised astronomical research as well as the building and testing of scientific instruments, Dr. Wood has given talks and presentations to thousands of elementary and middle school students and their teachers. He has been technical officer and science editor on the "PCs in Space" software development program of Jackson & Tull. This interactive software enables children in grades 3 to 9 to learn about Astronomy, Physics, Mathematics', Geology and Earth Science using images from orbiting satellites.

### **A GREAT LEARNING TOOL**

I received an e-mail message from an amateur astronomer who recently ordered a set of videotapes about astronomy. He is extremely pleased with his purchase, so I thought the subject deserved some space in our newsletter.

"Understand the Universe - An Introduction to Astronomy", is a series of 40 informative lectures, each 45 minutes in length, contained on 15 VHS videotapes. The astronomer presenting the lectures is none other than Dr. Alex Filipenko, the featured speaker at this year's NEAF.

The name of the company selling the videotapes is THE TEACHING COMPANY. Complete information about the series (item number SV 180) can be found on their web site [www.teachco.com](http://www.teachco.com). Their phone number is 1-800-832-2412.

The entire set is currently being offered at a cost of \$129.95, a significant savings off the regular price of \$499.95.

**Don Urban**

### **ATTENTION JUNO USERS**

Big Brother inside your computer.

TANSTAAFL is the acronym for "There Ain't No Such Thing As A Free Lunch." It was first popularized by author Robert A. Heinlein many years ago. Of course, it refers to the fact that things that appear free usually have a hidden cost, and we've discussed the TANSTAAFL principle twice before in these pages. (See <http://search.atomz.com/search/?sp-q=TANSTAAFL&sp-a=0008002a-sp00000000>) And it's back now, big time.

Reader Theo Tanalski, who is a user of the Juno ISP service, noticed something ominous in a recent change in the terms of service. Although Juno is the first, I can easily believe other ISPs will try the same thing soon. In fact, I'm amazed that AOL hasn't announced something similar yet.

Theo sent along this clip extracted from Juno's latest service agreement dated 1/18/2001:

2.5. You expressly permit and authorize Juno to (i) download to your computer one or more pieces of software (the "Computational Software") designed to perform computations, which may be unrelated to the operation of the Service, on behalf of Juno (or on behalf of such third parties as may be authorized by Juno, subject to the Privacy Statement), (ii) run the Computational Software on your computer to perform and store the results of such computations, and (iii) upload such results to Juno's central computers during a subsequent connection, whether initiated by you in the course of using the Service or by the Computational Software as further described

below. In connection with downloading and running the Computational Software, Juno may require you to leave your computer turned on at all times, and may replace the "screen saver" software that runs on your computer while the computer is turned on but you are not using it.

There's lots more, but the above encapsulates the amazing part: In effect, Juno is saying that you must give them the right to use your PC for whatever purposes they choose, when they choose.

You see, Juno wants to lash up its subscribers' computers into an ad-hoc distributed computing network and sell the aggregate computing power to others. Someone with a large computational problem will contract with Juno, which will divvy up the large problem into smaller chunks and force-feed it into its subscribers' PCs. Those Juno-laden PCs, which must be left on and running, will execute this external code and send the results of the computations back to Juno. The process then repeats.

This kind of distributed computing is a very powerful thing, and has been used for good purposes among businesses (which have the right to run whatever they want on their own PCs) and among volunteer operations, such as SETI@home.

But I believe this is the first attempt by an ISP to grab a piece of its subscribers' PCs in such a blatant manner. This isn't just stealing a little bandwidth to cram some ads down the wire at you--- this is taking over your PC at a fundamental level.

And that might lead you to wonder, "What happens if Juno's software trashes my system?" That's spelled out in the rest of the amended terms of service: The subscribers must perform these forced services at their own risk and expense: You pay for the power consumed to run Juno's calculations; you pay for the call (if needed) to send in the results; and if Juno's software crashes your PC and eats your data, well, tough luck.

Juno calls this the "Virtual Supercomputer Project," and describes it in glowing PR-speak at <http://www.juno.com/corp/news/supercomputer.html>.

So: not only TANSTAAFL but TANSTAAFISP--- there ain't no such things as a free ISP. Juno users will have to weigh the cost of the force-fed ads, plus the cost and risks of running unknown software on their PC--- software of un-

known quality, by unknown parties for unknown purposes--- against the benefit of saving a few bucks a month.

Sometimes "free" lunches turn out to be very expensive.

## **MARCH MEETINGS**

Date: Friday, March 2

Time: 8:00PM

Place: Planetarium, North Rockland High School

(This program was originally scheduled for January but was canceled due to inclement weather.)

### **Sundials - The Solar Timekeepers**

Bill Greenlee, an electrical engineer by education and resident of Stony Point, NY, will introduce many of the sundial's most interesting historical points, describe the differences among the basic types of sundials and explain dial dependence on season of the year and other factors affecting appearance and accuracy.

Bill will exhibit some of his own working dial designs and describe the graphical and PC based techniques he employs to design them. Following this, Bill will welcome Q & A's and will offer a follow-up clinic to anyone interested in the details of PC based dial design or tips for evaluating dials which you may encounter or consider in the future.

### **Biographical Sketch - William E. Greenlee**

Bill is a Project Management Engineer for a Pearl River telecommunications firm. He spent the first twenty years of his professional life as an active duty Naval Flight Officer where he served in various shipboard and flying assignments. Also a graduate of the US Navy Test Pilot School, he has over 2600 flight crew hours in carrier-based aircraft.

Bill's interest in solar timekeeping originates from training and operational experience in maritime and aircraft navigation in many parts of the world. In the interest of advancing the public's awareness and understanding of sundials, he has published magazine articles and made presentations on sundials to science classes at local public schools. He is a member of the North American Sundial Society.

## **RAC MESSIER MARATHON**

Dates: Friday and Saturday, March 23 and/or 24

Location: Wawayanda State Park

Time: Sunset to Sunrise (or any hours in- between)

Due to the unique positioning of the Messier objects – a wide area of the sky does not contain any of them - it is possible to view all 110 objects in a single night. Notice I said "possible." Most times, however, even the most experienced observers catch only about 105 – 108. Factors that come into play include (1) the phase of the moon – a new moon is best, but two days on either side are also very good; (2) the dates observing will be done – ideally the best dates are within 5 days of the Spring Equinox; and (3) the location from which you are observing – the flatter the horizons, the better your chances of picking up the objects hugging the horizons in the twilight at dusk and dawn.

This year's observing opportunity is especially good, as the new moon occurs on the 24th (4 days after the equinox) and will not be a factor. And the dates are great, falling on a weekend when you don't have to get up in the morning to go to work. Of course, the most important factor is weather. March is notoriously fickle. One year we had 3 consecutive days with daytime temperatures in the 70's and nights in the 40's. But in 1993 we had 36 inches of snow on the ground!

RAC will award a special prize to the club member who bags the most Messier objects over the weekend. No cheating! Following rule applies: all objects must be verified by another observer for it to be part of your count.

The special prize will be a free weekend at RAC's Summer Star Party! Report your Messier count to Don Urban, along with the name of the person who confirmed your observations. Use the form included in this newsletter to log your observations.

## **ASTRONOMICAL LEAGUE CERTIFICATE OF ACCOMPLISHMENT**

The "Messier Marathon Observer Log" included with the March newsletter can be used to qualify for a "Certificate of Accomplishment" issued by the Astronomical League. It is important to note the date and time each Messier object was observed.

When all 110 objects have been observed, the log sheet should be mailed to Don Urban and he will forward it to the Astronomical League.

Unlike a Messier Marathon, where all 110 objects are usually observed on a single night or weekend, you may take as long as you like view and record them for the special award.

Note: It is not necessary to have each item verified for this purpose since the Astronomical League assumes that no one will claim to have seen an object that he or she did not see.

## **ABOUT CHARLES MESSIER**

Charles Messier was an 18th century comet hunter living in France. His telescope was about 4 inches in diameter, just about the minimum size to catch all 110 objects. Of course, Charles did not catalog all of them in a single night. Rather, it took him a number of years.

In his search for comets, Messier would frequently come across what he referred to as "trash objects". To avoid wasting time trying to determine if they were comets, he cataloged their positions in the sky. Subsequently, whenever he saw one, he would refer to his log to see if he already had it entered. If he did, he would quickly continue his search for comets.

Little did Messier know that these "trash objects" would become the most observed celestial delights by amateur astronomers of the 21st century! My memory escapes me – and I'm too lazy to look it up – but I believe he discovered more than 36 comets during his lifetime.

**Don Urban**