

# Mountaineer Skies

Volume 2, Issue 2

<http://www.as.wvu.edu/~planet/index.html>

February 2002

## From the Editor

1. An excellent way to learn more about astronomy is by joining an astronomy club. If you are interested in this, see the article about the **WVU Astronomy Club** at right. You do not have to be a member of the University to join.

2. During the evening of Wednesday, February 20, 2002 the **Moon will occult Saturn**. An occultation happens when one body, in this case the Moon, passes in front of another body, in this case the Saturn. For this evening the Moon will be at about 51% illumination.

At 7:12:46 p.m. EST Saturn will disappear into the dark limb of the Moon. A little more than an hour and a quarter later at 8:33:37 p.m. EST, Saturn will reemerge on the other side.

Local occultation data was supplied by Dr. Jack Littleton, Department of Physics, WVU.

Though you can see this event with the naked eye, a pair of binoculars or a telescope will probably make it more interesting.

## In The Sky This Month

**Jupiter**, located in the constellation Gemini, the Twins, is spectacular this month. Even with a small telescope, you should be able to see banding on its surface.

**Saturn** in Taurus is much smaller than Jupiter, but the rings should be easy to spot, again, even with a small instrument.

**Mars** though still in Pisces continues to fade as it moves farther away from Earth. An orange spot is the best you can expect even with a telescope.

**Venus** is usually a difficult object to find. The persistent person might be able to spot it low in the western sky late in the month shortly after sunset.

## The Astronomy Club of WVU

The Astronomy Club meets every other Wednesday night at 8:00 p.m. in the Planetarium, 425 Hodges Hall. The "every other Wednesday" is chosen so that one meeting is near First Quarter Moon and the next is near Last Quarter, giving us the moon to observe in prime viewing conditions at one meeting and a dark sky for viewing fainter objects at the second meeting. For the spring semester the first regular meeting will be on January 23. Anyone who is interested in astronomy is invited to attend. No knowledge of astronomy is required.

The Club's main activity at meetings is using the Tomchin Observatory's 14"

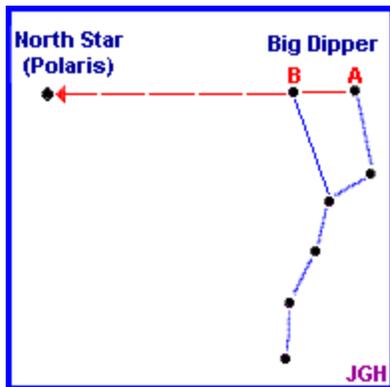
(Continued on page 2)

## INSIDE THIS ISSUE

- 1 From The Editor
- 1 In The Sky This Month
- 1 **The WVU Astronomy Club** by Jack Littleton
- 2 About: **Finding True North/South**
- 3 Planetarium Show Schedule
- 3 Selected Sunrise/Sunset, Moon Rise/Moon Set Times
- 4 Monthly Sky Chart

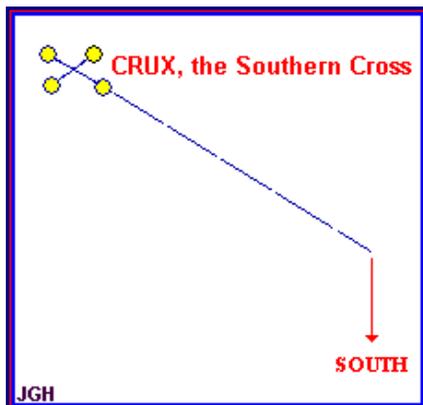
### About: Finding True North/South

In the **northern latitudes**, the direction North can be found by using the stars. First, find the **Big Dipper**. Second, find the two stars at the end of the bowl, labeled **A** and **B** in the diagram below. Finally, mentally connect those stars and draw an imaginary line five times the distance between **A** to **B**. This will bring you to the **North Star** also called **Polaris**, the Pole star. Remember that the North Star is not very bright.



Once you have found the North Star, you know that to the right is East, to left is West, and behind you is South.

In the **southern hemisphere**, you find the four cardinal directions by first finding south. Unfortunately, there is not a "South Star" so it is a little more complicated.



You first find **Crux**, also know as the **Southern Cross**. Then connecting the two stars along the long axis, imagine 4.5 lengths. Then drop a vertical line to the horizon. That is south.

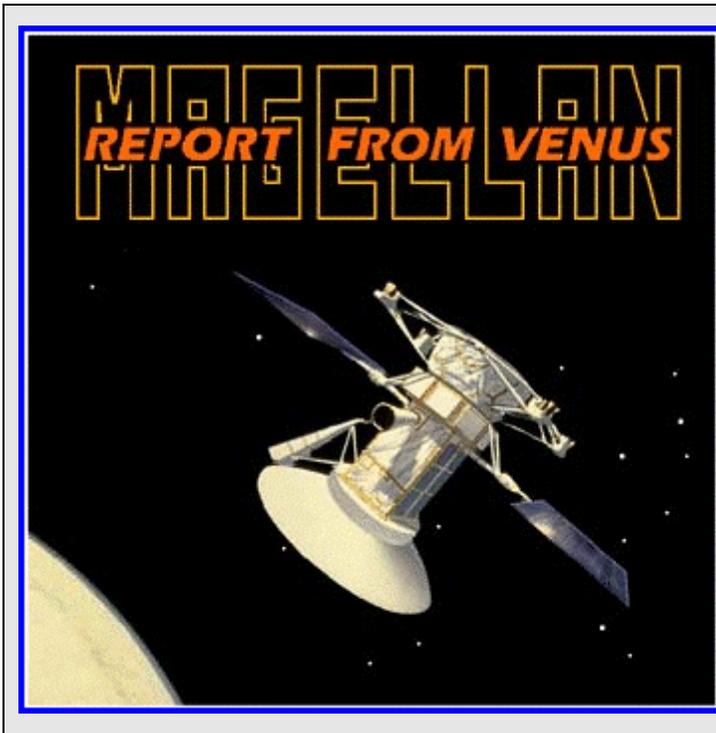
### (Astronomy Club continued)

Celestron telescope to view objects in the sky. If skies are cloudy on a meeting night we usually view a video that describes some aspect of astronomy or look at recent astronomy news available on the Internet. Sometimes we turn on the projector in the Planetarium and practice constellation identification. We also provide help with setting up and using telescopes for people with new telescopes, so if you're having some difficulties getting that new telescope to work properly, bring it to a meeting or one of our star parties and we'll give you a hand getting it operating.

The Club also has outside activities. On Friday and Saturday nights near new moon we often have a star party at Chestnut Ridge Park, away from the lights of Morgantown and its bright sky. Members of the Club who have telescopes set them up in the parking lot at the Archery Range. Then they and members and visitors who don't have telescopes look at the various sky objects at which the telescopes are pointed. We usually make a trip to Green Bank annually to tour the National Radio Astronomy and on a few occasions, when there was sufficient interest among members, the Club has visited Allegheny Observatory in Pittsburgh.

Although we are officially a University organization, membership is open to anyone, and we encourage everyone who is interested in astronomy to attend our meetings. You can keep track of our activities by regularly checking the Club's Web page at <http://www.as.wvu.edu/~jel/astroclub.html>. You can also contact the Club's president, Brian Kent, by e-mail at [brkastro@yahoo.com](mailto:brkastro@yahoo.com) or the Club's advisor at [john.Littleton@mail.wvu.edu](mailto:john.Littleton@mail.wvu.edu) or 293-3422, Ext. 1454.

## 2002 Planetarium Show



### **Magellan: Report from Venus**

The Magellan radar-mapping mission to Venus was extraordinarily successful; the spacecraft returned more data than all NASA's previous planetary missions combined. During this half-hour planetarium show, we follow Magellan's progress, from its launch through the most significant discoveries. Included are spectacular images of volcanoes, impact craters and landslides. Important planetary science topics of volcanism, tectonism, and impact cratering are covered, and radar imaging is discussed.

February 8 & 22, 2002 <i>Magellan from Venus</i>	March 8 & 22, 2002 <i>Magellan from Venus</i>	April 12 & 26, 2002 <i>Magellan from Venus</i>
May 10 & 24, 2002 <i>Magellan from Venus</i>	June 14, 2002 <i>Magellan from Venus</i>	July, 2002 Closed

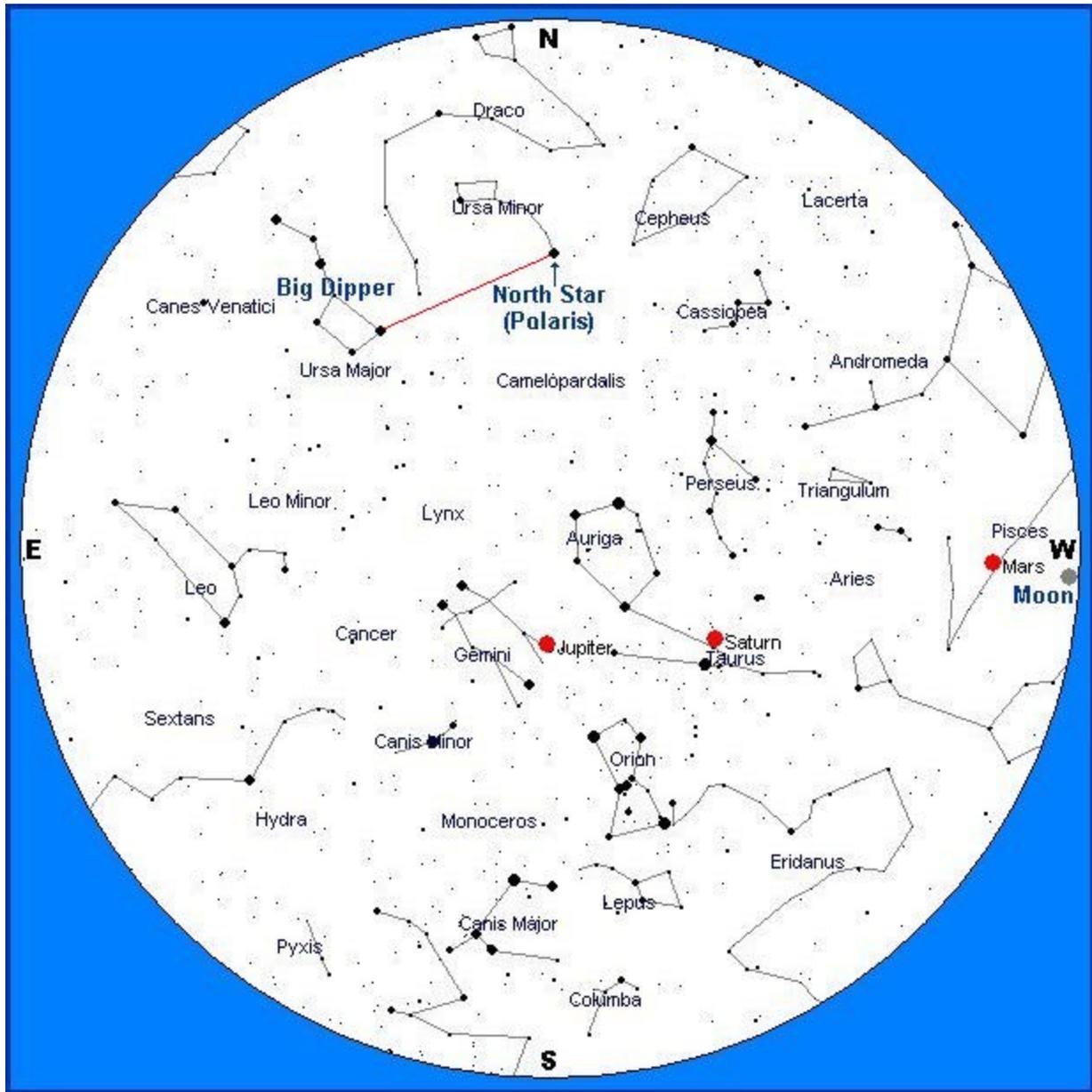
For those who are interested in bringing a group, such as schools or scouts, during the day, please call for more information. These shows are usually given on Tuesday or Thursday mornings.

For further information or reservations, please call John Hopkins at (304)293-3422, extension 1443 or by email at: [jhopkins@mail.wvu.edu](mailto:jhopkins@mail.wvu.edu)

### **Selected Sunrise/Sunset and Moon Rise/Moon Set Times**

Date	Sunrise	Sunset	Moon Rise	Moon Set	Moon Phase
Feb 4	7:25 A.M.	5:43 P.M.	12:42 A.M.	11:36 P.M.	Last Quarter
Feb 12	7:16 A.M.	5:53 P.M.	7:49 A.M.	6:15 P.M.	New Moon
Feb 20	7:06 A.M.	6:02 P.M.	11:21 P.M.	1:08 A.M.	Waxing Gibbous
Feb 27	6:56 A.M.	6:10 P.M.	6:42 P.M.	7:27 A.M./.	Full (Snow) Moon

**February 2002 Sky Chart\* for:**  
**8:00 P.M at the beginning of the month**  
**9:00 P.M in the middle of the month**  
**10:00 P.M at the end of the month**



\* Sky Chart used with the kind permission of **Heavens-Above** at <http://www.heavens-above.com/>

The Tomchin Planetarium is named in honor of the late Harold Tomchin, of Princeton, W.Va., who made a generous donation to ensure its continuing operation, and whose family continues to support the planetarium for the educational benefit of WVU students, staff, and faculty members, as well as the local community. Contributions can be made in support of the planetarium through the WVU Foundation Inc.



Edited by John Hopkins  
 (304)293-3422, extension 1443  
 jhopkins@mail.wvu.edu

