



The index to the Jan-Dec 2005 editions of Guidescope is found at [Guidescope\\_index.html](http://Guidescope_index.html)

**B.R.A.S. Officers**

**President: Mike Harkey**

**Vice-President: Dave Lengyel**

**Treasurer: John Reising**

**Secretary: Dave Gulyas**

## COMING UP!!!

January 4th: Carlisle Visitors Center - Video about the Earth's magnetic field

Jan 12th: Blue Sky Restaurant - BRAS Board Meeting

Jan 27th: Nielson Observatory - Bees and Rings 7-9pm

February 1st: Carlisle Visitors Center - Video, TBA

February 9th: BRAS Board Meeting

Friday February 24: Nielson Observatory - Meet up with Mercury 7-9pm

March 1st: Carlisle Visitors Center - Ken Hubal, Solar flare monitoring

Friday March 3: Nielson Observatory - Mars Meets the Moon 7-9pm

March 9th: BRAS Board Meeting

Friday March 24: Nielson Observatory - Saturn for Springtime 8-10

April 5th: Carlisle Visitors Center - Mike Plas, TBA

Friday April 7: Nielson Observatory - Moon Madness 9-11pm

April 13th: BRAS Board Meeting

Friday April 28: Nielson Observatory - Leo Leads the Way 9-11pm

May 3rd: Carlisle Visitors Center - Dave Lengyel, Road trip

Friday May 5: Nielson Observatory - Cinco de Mayo 9:30-11:30pm

May 11th: BRAS Board Meeting

Friday May 19: Nielson Observatory - Eskimos in May 9:30-11:30pm

Sunday May 28: Nielson Observatory - Safely View The Sun 1-4pm

Friday June 2: Nielson Observatory - Spring into Summer 9:30-11:30pm

June 7th: Carlisle Visitors Center - Tim Kreja, TBA

June 15th: BRAS Board Meeting

Friday June 23: Nielson Observatory - Summer Solstice Stars 9:30-11:30pm

Sunday June 25: Nielson Observatory - Safely View the Sun 1-4pm

July 5th: Carlisle Visitors Center - Barb Hubal Lunar transient phenomenon

July 14th: BRAS Board Meeting

**Sept 23rd: Birmingham Methodist Church Hall - BRAS 25th OTAA Meeting!!!**

## LOCATIONS

[Nielsen Observatory](#) - 13630 Diagonal Road, LaGrange, OH at the Lorain County Metro Parks Carlisle Equestrian Center

[Carlisle Visitor Center](#) - The Lorain County Metroparks Visitors Center is on Nickel Plate-Diagonal Road in Carlisle Township.

[Birmingham Methodist Church Hall](#) - 15018 South St., Birmingham, OH

## CLUB NEWS

### FOR SALE

**4-inch Celestron-Vixen OTA for sale - \$300 - See Ken Hubal (330-769-4107 or hubalkj@netzero.net)**

## FEATURE OF THE MONTH

*[Article taken from SPACEFLIGHT NOW on 27-Dec-2005. The URL for the web site is <<http://spaceflightnow.com/news/n0512/02crabnebula/>> ]*

## Hubble paints giant mosaic of the Crab Nebula

HUBBLE-ESA INFORMATION CENTRE NEWS RELEASE

Posted: December 2, 2005

A new Hubble image - among the largest ever produced with the Earth-orbiting observatory - gives the most detailed view so far of the entire Crab Nebula. The Crab is arguably the single most interesting object, as well as one of the most studied, in all of astronomy. The image is the largest ever taken with Hubble's WFPC2 workhorse camera.

The Crab Nebula is one of the most intricately structured and dynamic objects ever observed. The new Hubble image of the Crab was assembled from 24 individual exposures taken with the NASA/ESA Hubble Space Telescope's Wide Field and Planetary Camera 2 (WFPC2) and is the highest resolution image of the entire Crab Nebula ever made.

The Crab Nebula is a six-light-year-wide expanding remnant of a star's supernova explosion. Japanese and Chinese astronomers witnessed this violent event nearly 1,000 years ago in 1054.

The filaments are the tattered remains of the star and consist mostly of hydrogen. The rapidly spinning neutron star embedded in the centre of the nebula, only barely visible in this Hubble image, is the dynamo powering the nebula's eerie interior bluish glow. The blue light comes from electrons whirling at nearly the speed of light around magnetic field lines from the neutron star. The neutron star, like a lighthouse, ejects twin beams of

radiation that appear to pulse 30 times a second due to the neutron star's rotation. A neutron star is the crushed ultra-dense core of the exploded star.

The Crab Nebula derived its name from its appearance in a drawing made by Irish astronomer Lord Rosse in 1844, using a 36-inch telescope. When viewed by Hubble, as well as large ground-based telescopes such as ESO's Very Large Telescope, the Crab Nebula takes on a more detailed appearance that yields clues into the spectacular demise of a star, 6,500 light-years away.

The newly composed image was assembled from individual Wide Field and Planetary Camera 2 exposures taken in October 1999, January 2000, and December 2000. The colours in the image indicate the different elements that were expelled during the explosion. Blue indicates neutral oxygen, green singly ionised sulphur and red doubly-ionised oxygen. The Hubble data have been superimposed onto images taken with the European Southern Observatory's Very Large Telescope at Paranal Observatory, Chile.

**Black River Astronomical Society  
Monthly Board Meeting  
Blue Sky Restaurant in Amherst, Ohio.  
December 15, 2005 7:00PM**

At 7:05PM Dave Lengyel called the meeting to order with, J. Reising, T. Kreja, G. Cox, D. Gulyas present.

November minutes: The November minutes were approved.

Treasures Report: Beginning & end balances sent to club members via email..

Instrumentation: Repair work has started on the Unitron drive.

Programming:

January: Video about the Earth's magnetic field

February: Video, TBA

March: Ken Hubal, Solar flare monitoring

April: Mike Plas, TBA

May: Dave Lengyel, Road trip

June: Tim Kreja, TBA

July: Barb Hubal Lunar transient phenomenon

Public observing dates:

January 04, 2005: 7:00PM - Regular monthly meeting: Carlisle Visitors Center.

January 12, 2005: 7:00PM - Regular monthly board meeting: Blue Sky Restaurant, Amherst.

January 27, 2005: 7:00 - 9:00PM -Nielsen Observatory: Bees and Rings.

Old Business:

2006 OTAA date set for September 23. Wooden legs for the Blue Lady have arrived. A commemorative item for the 25th OTAA anniversary was discussed.

New Business:

The film holders for the Schmidt camera are sill missing. Anyone having any

idea of their whereabouts please contact a Board member. An alternative date and time for the December Holiday dinner was discussed.

G. Cox made the motion to adjourn with a second by T. Kreja at 8:17PM.

Respectfully submitted,

Dave Gulyas  
Secretary, Black River Astronomical Society