



NRAO NM NEWS

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NOTES FROM THE AD

Another year has passed, the end of my third year as Assistant Director for VLA/VLBA. I'd like to thank all the NRAO staff for their efforts in operating successfully our current telescopes and developing the new ones. A number of individuals received STAR awards for their extra contributions this year, but our accomplishments show that you all have been stars in carrying out your tasks.

I'd especially like to mention some efforts in the software areas during the last year. A very small AIPS group has continued to support both of our operating telescopes, the VLA and VLBA, enabling thousands of observations each year to be processed and analyzed by astronomers worldwide. The Science Software Group working on the AIPS++ code has focused extremely well, after years of concern from the community, and passed all their critical ALMA milestones for the year. And finally, although funding for data flow and data management has been extremely limited, we now have an on-line data archive and are well on our way to an NRAO-wide tool for submitting proposals to our telescopes.

The EVLA has progressed well during the last year, and all those who have contributed should be recognized. A major milestone was passed late in the year with the first successful correlation between two EVLA antennas, numbers 13 and 14. Thanks to all who made that possible, particularly to those in the electronics division who have been working extra hours, to the engineering services personnel who have been resurrecting the VLA antennas as EVLA antennas, and to the software engineers who help make everything play together. And, of course, thanks to Barry Clark for continuing to have fun in making things work, despite his formal retirement!

I look forward to a successful 2005 for NRAO in New Mexico and at the distant VLBA stations. Our strength as an organization is in all of you, and I will continue to do my best to provide the management support and tools that you all need to do your jobs effectively.

Jim Ulvestad

WELCOME

Betty Scott, Eric Reynolds, ALMA; Nissim Kanekar, Jean-Pierre Macquart, DSAA; Matt Metevier, Engineering Services; Hichem Ben Frej, Michael Johnson, Matt Luce, EVLA.

VLA Surplus Acquisition

Rail Equipment is very costly and in most cases too expensive for NRAO to purchase. On November 8, 2004, Pat Lewis discovered a cache of Rail Equipment on the FEDS (Government Surplus). A tie extractor/insertor and a switch tamper caught Pat's eye. A tie insertor/extractor would reduce the number of men and eliminate the use of other heavy equipment, currently needed for tie replacement. Additionally, a switch tamper could be used as a backup or perhaps for spare parts, to our existing tamper. After a quick consultation with Lew Serna and Jon Thunborg, the decision to check out the equipment was made. These opportunities are rare and speed is essential when acquiring government surplus. If you delay the opportunity is lost.

Pat Lewis asked Brent Avery to freeze the surplus equipment for our inspection as soon as possible. Paul Savedra (track crew leadman) was to fly in to Crane, Indiana, on November 30, to inspect the equipment and see if it was worth getting.

Meanwhile the VLA transport truck (Volvo) was being inspected in preparation for the trip to pick up the equipment, assuming a trip would be worthwhile. Picking up the equipment ourselves as opposed to having the equipment shipped saves a few thousand dollars. The inspection revealed a faulty clutch on the Volvo, a major mechanical repair job for the auto shop. Dennis Mobely was assigned

to make repairs and the trip was scheduled for December 6, 2004, one week away.

Paul reported that the equipment was in very good condition and the trip was on. The auto shop made all necessary repairs to the Volvo just in time for the trip. A lowboy trailer on loan from the Bosque Del Apache was used to carry the equipment back. Dennis accompanied Paul on the trip to Indiana, in case of mechanical problems and to help with the drive.

Paul and Dennis picked up the equipment on 12/8/04. Before beginning the trip back to New Mexico, several attachments to the tamper had to be removed in order to avoid special permits for oversize loads. A minor electrical problem, an intermittent short on a blinker, was repaired on the Volvo while underway and no mechanical problems were encountered. They arrived back, in good shape, on Saturday 12/11/04. Buen Jale to the auto shop and to those involved with this acquisition!

Lew Serna

NOTES FROM THE EMPLOYEE COMMITTEE

The NRAO employee committee is in the process of installing suggestion boxes at the AOC, AOC West and the VLA sites. These boxes are intended to provide an easy way for employees to provide input to management via the committee. The employee committee meets approximately every quarter, with the next meeting due to occur in January 2005. The members review and discuss at the meeting all ideas and suggestions given to them by employees. The committee is very careful to maintain confidentiality and the anonymity of individuals. Afterwards, a list of employee-generated items will be presented to Jim Ulvestad by the chair person.

The employee committee consists of AOC and VLA employees representing most of the division and groups. The original members were appointed by Miller Goss to evaluate the first appraisal process.



The National Radio Astronomy Observatory is a facility of the National Science Foundation operated under cooperative agreement by Associated Universities Inc.

Afterwards, they were asked to form an employee committee. Members serve for as long as they are willing. When a vacancy on the committee occurs, the group solicits new members, usually from the same group/division as the departing member. However, in the interest of diversity and in receiving as much employee input as possible, the committee is happy to know of anyone interested in serving. Contact Peggy.

Current committee members are: Lori Appel, Laurel Armijo, Tom Baldwin, Claire Chandler, Charley Chavez, Bill Hancock (MK VLBA), Wayne Koski, Patty Lindsey, Peggy Perley (Chair), Melcolm Peralta, Sheila Reasner, Paul Savedra, Pete Whiteis, Brent Willoughby. The email address, nmec@aoc.nrao.edu, can be used to contact all members. A web page for the Employee committee is currently under construction. The committee is gathering input and preparing a proposal for a "wellness" program for NM NRAO employees. Marie Glendenning is spearheading that effort - please contact her with your ideas. We will provide more information on that in a future newsletter article.

We believe that the best ideas for improving the work environment at NRAO come from the employees themselves. We look forward to getting your thoughts and suggestions, and, making NRAO an even better place to work.

Peggy Perley

TAX SEASON IS COMING FAST WE HAVE SOME HELP

As fall gives way to winter we all pull out the winter clothes, sit by the crackling fire with a warm cup of hot cocoa and think of such things as... Taxes.

NRAO NM Fiscal would like to take this opportunity to get the word out that all NRAO employees are eligible to save 15% off TurboTax® for the Web tax preparation online service. And because your W-2 comes from our payroll provider ADP, you are able to automatically import your W-2 information into your TurboTax return using the TurboTax Instant Data Entry feature. This service will become available January 1st at <http://taxpartner.adp.com>.

Make sure to visit the ADP Tax Center for free online access to 2004 Tax Law Changes, tax estimator tools and calculators, information on how life changes can impact your tax situation, year-round tax savings tips, plus much more ... The Tax Center will help you minimize your taxes by taking full advantage of deductions and tax saving strategies.

We hope you enjoy this value-added benefit to help make tax preparation faster, easier and more accurate.

TurboTax is a registered trademark and TurboTax for the Web is a service mark of Intuit Inc.

Brad Strong

SAFETY CORNER: CARBON MONOXIDE KILLS

Carbon monoxide kills about 1,300 people a year in the US. In addition, perhaps one-half of the nearly 6,800 non-transport annual fire deaths result from carbon monoxide intoxication. At least 10,000 to 12,000 additional persons seek medical attention each year for CO exposure. More deaths occur in the winter months, a time when confinement indoors and heater use are prevalent.

The toxicity of this deadly gas is not a new phenomenon. Carbon monoxide has polluted our air since the creation of fire on this planet and it has been recorded as a lethal poison since the time of ancient Greece. In the world today, nearly 200 million tons of carbon monoxide are produced yearly. Three-fourths of that amount comes from automobile exhaust, but home appliances, heaters, recreational campers, and factories contribute their share. It should be no surprise to us that the highly industrialized and affluent nation in which we live contributes more than half of the world's output of carbon monoxide.

If a family member or a friend was overcome with carbon monoxide, what would you do? The following are some helpful tips, but you should contact 911, or, have them seek medical attention.

An individual suffering from the effects of carbon monoxide should be removed immediately from the contaminated area into an area free from carbon monoxide gas and kept comfortably warm. If breathing stopped, or the individual is weak or breathes in spasms, artificial respiration should be administered until normal breathing has resumed. Regardless of the apparent severity of the exposure, oxygen or artificial respiration should be administered as soon as possible. Pure oxygen is preferred, but if a carbon monoxide/oxygen mixture is used it should be administered only by a qualified person. It is extremely important to keep the patient warm and away from drafts. Use blankets to help maintain body temperature. The patient should be rested and lying down to prevent a strain on their heart. As an aid to circulation, their body should be in an inclined, head down position and at a slight angle. They should be treated as a convalescent and given plenty of time to rest and recuperate.

The after-effects of carbon monoxide poisoning should be treated symptomatically by a physician. They may be serious enough to warrant hospitalization.

It is recommended that all homes have at least one carbon monoxide detector. The carbon monoxide detector should be tested twice a year.

See the Site Safety Officers for additional information on this topic.

James B. Sullivan, NRAO Safety Officer

January 2005 Skies

Saturn continues its prominence in the early evening sky. Rising just after sunset, it will be visible all night long throughout the month. On the 13th it will reach opposition shining at magnitude -0.4. This is just about as bright as it can get.

While we gaze at Saturn this month, a visitor from Earth will land on Saturn's large moon Titan. Released from the Cassini Space craft, the Huygens space probe, will attempt the landing on Titan on the 14th. If successful, we should have some interesting views of the surface of this large moon.

Jupiter now rises about midnight and will be almost twice as bright as Sirius, the brightest star viewed from Earth. The best telescopic views of Jupiter will still be in the early pre-dawn sky when the planet is high in the south.

During the first half of the month Venus and Mercury will be keeping company low on the eastern horizon, about ¾ of an hour before sunrise. On the first, Mercury is slightly above Venus. By the 15th they will have switched positions and Venus will be above Mercury.

Mars will be up and to the right of Venus and Mercury and can be found in Scorpius, where it will pass by the bright orange/red star Antares (the rival of Mars).

The Moon will be last quarter on the 3rd, new on the 10th, first quarter on the 17th and full on the 25th.

There is yet another winter visitor that will provide some good viewing well into 2005. Comet Machholz, C/2004 Q2, will probably be visible to you with binoculars or a small telescope. During January, the comet should transit Taurus, Perseus and Cassiopeia and on the night of January 7-8, can be found just two degrees west of the Pleiades.

On January 16th, beginning at 7:00 p.m., there will be a star party at the Etscom Campus Observatory. Special guests will be a Boy Scout Troop from Albuquerque. The public is cordially invited to attend. To reach the Campus Observatory take Canyon Road past the golf course shop. At the 4-way stop turn right on Buck Wolfe Drive and follow the signs to the Observatory.

Jon Spargo, New Mexico Tech Astronomy Club

**** Happy 2005 to all! ****