

NRAO NEWS



Volume 1, No. 1

Winter 1994

from the Director

The Employee Newsletter, which will be published quarterly starting with this issue, is the result of staff suggestions for improving communications within the Observatory. NRAO has grown over the years and now consists of four major sites plus ten VLBA stations. It is hoped that this newsletter will contribute to a better understanding throughout the NRAO of the programs at each of our facilities and of the unity of NRAO's activities. We will begin with informative articles on issues that affect all employees; for example, the employee benefit program. There will also be articles featuring projects and developments at the various sites. Your suggestions will be welcomed by the editor, Wendy Mahle, who can be reached by phone at 804-296-0265 or by email at wmahle.

Paul Vanden Bout

Win Cash!

Pick the Employee Newsletter Name

This is the first issue of the NRAO News, an informational newsletter written for employees of NRAO. If you don't like the name and you do like money, then submit your suggestions for a name to the "Name that Newsletter" contest. Artwork and design ideas are also welcome. The employee who makes the winning suggestion will receive a check for \$50. The contest rules are simple: Entries must be sent to Wendy Mahle, Personnel Office, Charlottesville or to wmahle through email. Entries must be received by March 15, 1994. All suggestions will be reviewed by a panel of employees and the editor (that's me). A selection will be made at the end of March and the winner will be notified. Watch for the next issue of the newsletter at the end of April to see the winning name.

Visiting Committee

The Observatory is preparing for a meeting with the Visiting Committee in April. The nine-member committee is composed of leading scientists in astronomy, physics, and astrophysics. The committee meets annually to evaluate the management at the Observatory and the quality of science produced at NRAO telescopes, reporting their evaluation to the Trustees of AUI.

Its charge from AUI is "...to ensure that the scientific and technical efforts of the NRAO staff are appropriate, productive and of the highest quality." The site management teams and other staff members will deliver reports on the activities of the past year and on progress in construction projects. This year the meeting will be held in Tucson on April 27, 28, and 29.

Scientific news...

Orbiting VLBI EARTH STATION project

Orbiting VLBI is a new branch of radio astronomy. It involves extending the technique of very long baseline interferometry (VLBI) by including radio telescopes placed in orbit around the earth. VLBI involves simultaneous observations from widely separated radio telescopes. The signals received at each telescope are recorded and later played back at a central facility where they are correlated to produce a single image.

VLBI has been an important technique in radio astronomy for over 20 years because it produces images whose angular resolution is far higher than that of any other technique at any wavelength. The associated technology has steadily improved over the years.

Two OVLBI spacecraft are presently under development. One, the Radioastron, is being built by Russia. The second, the VLBI Space Observatory Project (VSOP), is being built by Japan. Both are officially scheduled to be launched in mid-1996.

The earth stations now planned include one in Russia, one in Japan, three at the NASA DSN sites (California, Spain, and Australia), and one at the NRAO in Green Bank. The DSN and NRAO stations are being funded by NASA. The NRAO station will use an existing 13.7m diameter antenna. All electronics and software are being developed by an NRAO technical group in Green Bank. The project will be complete and the station ready for operation by the middle of 1994, well in advance of the expected launch dates.

Documentation available over the Internet using Mosaic

Organizations like the NRAO can now make documents available on line to interested users over the Internet through Mosaic and the World Wide Web recently developed by the National Center for Supercomputing Applications (NCSA) and the European Center for Nuclear Research (CERN).

Mosaic is a software system which provides an interface to documents, text files, images, and even audio clips. A vast amount of information is readily accessible through Mosaic, ranging from documents from

numerous astronomical institutions to art museum catalogs. White House documents can be accessed also. These documents are available with a few clicks of the mouse button to a user running NCSA Mosaic software. This software is installed on all general purpose Unix computers at the NRAO and is also available for Microsoft Windows and Macintosh formats.

The NRAO intends to make a large variety of information available through Mosaic. Currently, there is information about major facilities and instruments, important initiatives, instructions for the preparation and submission of proposals, and other general topics. Recent significant accomplishments are also documented. For example, users may be interested in seeing the first scientific results from the VLBA correlator, including copies of high resolution images. Plans are underway to provide a variety of documentation for the GBT, the proposed Millimeter Array, the AIPS and AIPS++ software projects, and other initiatives.

For further information, consult your local computer divisions.

New Employees

Charlottesville

P. Gayle Dodson, Fiscal
Wendy L. Mahle, Personnel Office
David J. Nice, Basic Research
Jeffrey A. Uphoff, Computing

Green Bank

Todd M. Pfalzgraf, Student Support
Alan T. Wright, Plant Maintenance

Mauna Kea

Michael A. Prater, Electronics

Owens Valley, CA

Rayford A. McFarlin, Electronics

Socorro

Thomas E. Briscoe, Array Operations
Claire J. Chandler, Basic Research
Craig A. Lewis, Array Operations
Eric Wollman, Basic Research

Tucson

Simon J. E. Radford, Millimeter Array

Departures

Charlottesville

Barbara A. Marcks
Julie L. Norris

Green Bank

Charles Brockway, Retired
Winston S. Cottrell, Retired
Alexandre Novikov
Winfred Sheets, Retired
Douglas M. Varney
Robert G. Viers, Retired

Socorro

Donald J. Conger
Robert T. Duquet, Retired
Michael L. Kesteven
Joe S. Ortiz, Retired
Campbell M. Wade, Retired

Tucson

Rodney J. Bessett

Transfers (Site to Site)

James Porter, Sr Systems Analyst from GB to SO
Gary Fuller, Research Associate from TU to CV
Glen Langston, Assoc. Scientist from CV to GB

Listings are from 10/1/93 through 2/25/94

from the sites

Charlottesville

- During January, Associated Universities, Inc. concluded negotiations with the National Science Foundation for the renewal of the cooperative agreement. This agreement, copies of which are available in the libraries, provides our operating guidelines through December 31, 1998.
- Valentine's Day brought wonderful news from Karen Thach. She accepted a marriage proposal from Lee Whitcomb.

Green Bank

- Green Bank employees were actively involved in three productions of the one-act play "Love Letters" on Valentine's weekend through the Pocahontas County Drama Workshop. The play was done as a Reader's Theatre in which fifty years of letters from the two characters are read. There were two characters and it played three nights over the weekend with a different cast each night. Five of the six actors were NRAO employees or spouses. The play was directed by Lou Macknik. Stars included: Aron and Dawn Bennett, Carol Ziegler, Ron Maddalena, and Sue Shears.

- Green Bank employees and spouses are participating in a volunteer program called Hands on Science. This program is an afterschool recreational program which provides an opportunity for kids grades K-6 to experience science outside the classroom. The program helps foster attitudinal changes about who can be a scientist, improves

general science literacy, and dispels fears that science is too difficult for most people.

Before participating, volunteers are trained by an area leader, who has been trained at the group's national headquarters in Maryland. Green Bank's area leader, Sue Ann Heatherly, says the group has planned four lessons in energy for this year.

Volunteers include employees Ray Creager, Shirley Curry, Rich Lacasse, Ron Maddalena, Mark McKinnon; and spouses Kathy Norrod and Karen Weadon.

Socorro

- Construction of the NRAO guest house in Socorro began in August 1993 and is on schedule. The building is expected to be ready for occupancy the first of March. The guest house accommodations include eight single rooms, four double rooms, two 2-bedroom apartments, a common room, kitchen and laundry room for use by employees and other visitors to the Socorro location. The guest house is located within walking distance of the Socorro offices.

"How was your day at work, Dear?"
"Terrible, I lost at Ping-Pong."

- At the VLA Site, the old Cafeteria Dining Room has been turned into an Employee/Visitor recreation area. Lunch time is fun! There are two ping-pong tables set up and for 30 minutes each day employees challenge each other to see who is best at whacking the little white ball back and forth, while others stand in line to be the next pair

up. It is great exercise for those who spend the day sitting and a welcome break for those who are physically active on the job and need some stress reduction.

Plans are underway to also acquire two stationary bikes, a nordic skier machine, and a treadmill. These will also be available for those visiting astronomers who face periods of boredom between runs.

HERE'S TO YOUR HEALTH!

Tucson

- A workshop on Multi-feed Systems for Radio Telescopes will be sponsored by NRAO and hosted in Tucson on May 16-18. Early response has been extremely favorable and internationally well represented. The meetings will take place in the Lecture Hall of Steward Observatory on the campus of the University of Arizona. Two and a half days of sessions will cover theory, feeds & feed optics, complete multi-feed systems, multi-feed receivers, backends, and observing strategies & data processing. Invited talks will be presented by Rachael Padman (Cambridge), Nick Whyborn (Chalmers), Sander Weinreb (Martin-Marietta), and Paul Goldsmith (Cornell). The Astronomical Society of the Pacific will publish the proceedings in the ASP Conference Series.

Tours of the 12 Meter Telescope at Kitt Peak and the University of Arizona Mirror Lab are scheduled for Wednesday afternoon. A southwestern dinner is planned on Tuesday evening at the Arizona-Sonora Desert Museum.

Personnel news...

Pre-admission certification required for hospital stays

If you or a covered member of your family are about to be hospitalized, please remember that you must obtain "pre-admission certification" from NRAO's approving consultant, Intracorp. The process is simple--it involves calling an 800 number and answering a few questions asked by an Intracorp representative. If the hospitalization is an emergency, you are required to call within two business days after the admission; otherwise you must call in advance. Some hospitals will make this call for you, but it is your responsibility to make sure Intracorp is notified.

The pre-admission certification process allows a team of doctors and nurses from Intracorp to work with your doctor in exploring all possible approaches to your treatment. In some cases, there are alternatives to hospital confinement that provide the same quality care but with less disruption to your lifestyle or exposure to other illnesses. Intracorp will either certify that you need to be admitted to the hospital or contact your doctor to discuss whether treatment at another type of medical facility is advisable.

If you fail to contact Intracorp regarding hospitalization, your medical insurance benefits will be reduced to cover only 50% of your hospital expenses, up to a maximum penalty of \$500.

Intracorp's 800 number and instructions are printed on the back of your medical insurance identification card, which you should carry at all times. If you lose your card, please be sure to request a replacement from the Personnel Office.

Healthy pregnancy program for healthy babies

NRAO endorses a program for expectant parents through CIGNA called *Healthy Babies*. The program has been developed by leading health care experts to help expectant mothers avoid problems that may lead to complications and premature births. It also helps to identify and manage possible risks to the mother and child. Each participant receives a package of free information, including a book called *From Here to Maternity* (available in English and Spanish).

Expectant parents who call Intracorp for their hospital pre-admission certification (see article on the left) will automatically be enrolled in the program. During a short phone call, a qualified health professional will ask a few, specific questions which will ascertain whether the chances of a high risk pregnancy or pre-term birth are present.

If a high risk potential is revealed, the Intracorp nurse will contact your physician and will help to monitor your progress throughout the pregnancy.

Mothers-to-be are encouraged to call Intracorp during their first trimester. Remember that while participating in the *Healthy Babies* program is optional, receiving pre-admission certification for your hospital stay is not.

The phone number for Intracorp is on the back of your medical insurance card. Additional information on the *Healthy Babies* program is available by calling the Personnel Office in Charlottesville.

What's Your Number?

A new law which takes effect this year requires NRAO to collect the Social Security numbers of all dependents covered by our medical insurance plan. If you have dependents covered by NRAO's medical insurance, you will be receiving a form requesting their names and Social Security numbers. Please complete the form and return it to your local personnel representative.

Notes from the Editor

This is your newsletter. If there is information you would like to see in this newsletter, please feel free to contact the editor. Prior to this printing, two suggestions have been received from employees: a Suggestion email Box and a section for Q&A's in the newsletter. These are described below.

Suggestion email Box

If you would like to make a suggestion to improve the operation of NRAO or to improve worklife, submit the suggestion to me in the Personnel Office or send email to wmahle.

Q&A

If you have a question you would like answered or a topic you would like addressed in this publication, please submit it in writing. All questions and topics will be referred to the appropriate person. Their responses will be published in the next issue, as space is available.

You may request that your question or suggestion be submitted confidentially. If you do, only I will know who sent the question. However, I do ask that you include your name with your question/suggestion.

Wendy Mahle