



THE POINT SOURCE

Winter 2003

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NRAO/AUI/NSF News

Dear colleagues,

Another year has come to a close, and this past year many changes have taken place at the NRAO.

Thanks to you all, much progress has been made.



EVLAI is making steady progress, and first light on the test antenna was achieved. ALMA has seen the signing of the Bilateral Agreement and the ground breaking at the Operations Support Facility (OSF) in Chile, the completion of the prototype antenna, and other accomplishments. And we expect our Japanese colleagues to join in the spring of 2004. The GBT is becoming fully operational, and the trial approach to the track fix looks very promising.

Just to name a few more notable events, the VLA detected Carbon Monoxide (CO) from the most distant quasar, and the VLBA is getting involved in space-craft tracking, with both remaining very productive facilities in great demand.

As I have always said, the NRAO is nothing more or less than the staff in it. So, for all the accomplishments the Observatory has achieved, I would like to express my appreciation for your hard work and dedication that made them possible.

Wishing all of you a happy and wonderful New Year.

Fred K. Y. Lo

ALMA's Official Debut into World Society

The Atacama Large Millimeter Array, or ALMA as we know it, had its world debut on November 5, 2003, at the official groundbreaking ceremony. The event took place at the site of the future Operations Support Facility (OSF) at 2900 meters (9,500 feet) above sea level. Approximately 200 people gathered at this remote facility, including top dignitaries from the government of Chile, the National Radio Astronomy Observatory, the U.S. National Science Foundation, Associated Universities Inc., the National Research Council of Canada, the European Southern Observatory, Spain, and ALMA's future partner, Japan.

The ceremony was held in an 800 square-meter (8610 square feet) tent, with windows overlooking the Licancabur Volcano on a crystal clear day. During lunch, representatives from each of the ALMA partners presented their views on the importance of ALMA and the importance of its construction in this "oasis" for millimeter astronomy, and how ALMA will push our understanding of the Universe further back in space and time. These concepts were reaffirmed in a speech by AUI President, Riccardo Giacconi. After lunch was served, the official ALMA logo was unveiled and groundbreaking took place with the help of shovels and mortar to install the first blocks.



New ALMA logo



The tent was set up again after strong winds sent it flying three days before the ceremony.

The logistics of the event required perfect attention to detail. Although unavoidable problems were encountered, none of them were visible to the guests. One snafu example was the installation of the tent, which was erected three days before the ceremony. The area's strong winds were more than a match for this "sail" and it was blown away. After much head scratching, it was decided to re-erect it but a set of sea containers was used to hold it in place; it took 36 hours of uninterrupted work to be on time. Nearly all of the tent's glass windows shattered when it went flying; however, not all broke, so it was possible to have a window overlooking the Licancabur.

For the partner organizations participating in ALMA, the ceremony had already started a couple of days earlier. On November 3 and 4, the ALMA Board met in Chile's capital, Santiago, and on November 5 an "expedition" was organized to visit the ALMA site at 5,000 meters (16,500 feet) above sea level and next to the Chajnantor Mountain. This also displayed the great organization used to plan the event, since more than 50 people caravanned in some 20 vehicles from the OSF to the ALMA Operations Site (AOS) on the new road built by the project, which, by the way, was opened only a couple of days before the event. Safety was a prime concern for this venture so we can say that, except for some headaches, nobody had anything

important to report. Since oxygen deprivation is a main concern at that altitude, everybody had a personal disposable canister of oxygen for the whole trip.

ALMA has many challenges ahead and, as in all great scientific and engineering endeavors, it is not only getting there that matters, it's also the process of getting there.

Mauricio Pilleaux



The blocks, a shovel, and the flags of the participant countries remain after the groundbreaking ceremony.

For more information on the ceremony you can see the NRAO official press release at <http://www.nrao.edu/pr/2003/almaground/>

NRAO Exhibits at the National SACNAS Conference

The Observatory sent a delegation of staff to the annual conference of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) held this year in Albuquerque, New Mexico. This conference, the first time attended by NRAO staff, has a thirty year history of providing networking and career opportunities for students and teachers. Universities and employers are also able to network and recruit future talent to their prospective organizations.



Robyn Harrison in front of the NRAO display at SACNAS conference.

This conference provided several “firsts” for the Observatory. As a cross-divisional collaboration, the Human Resources Division with the help of Patricia Smiley and Lee Shapiro, Education and Public Outreach, and John Hibbard and Tim Bastian, Basic Research, designed a dynamic and reusable exhibit booth and recruitment materials. The booth’s design describes the diversity of the scientific, engineering, computing, and administrative efforts required in our organization. This effort will allow the Observatory to increase its regional and national recruiting presence. The Observatory staff, recruited to represent the NRAO, was intentionally diverse and cross-functional. Robyn Harrison from the EPO staff represented the student and teacher programs; Bob Zavala of Socorro Scientific Services was there for the pre-doc, post-doc and scientific professions; Roy Norville of Human Resources represented Cooperative Education and general Observatory employment.

A few conference highlights: There were over 160 exhibit booths and over 2,500 students, teachers and professional members present. Members came to the conference from as far away as Puerto Rico and Hawaii. Many of the leading Native American and Latino scientists and other research professionals were present and gave talks. There was a unique session for students entitled, “Conversations with Scientists”



Conference attendees numbered more than 2,500 and there were 160 exhibit booths.

that allowed in-depth discussions into the many and diverse fields of science, engineering and computing. Over 320 student posters were presented. Ninety-nine visitors spent time with one or more of the NRAO staff members in the booth as many more stopped by to view the booth and pick up brochures and posters.

Roy Norville

Retirement Planning News

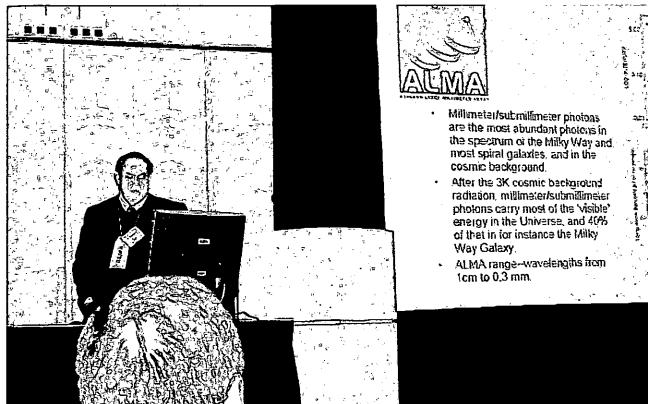
Fidelity Investments had added four new Freedom Funds to its portfolio. In 2004, Fidelity has introduced Freedom Funds “on the 5’s” which are available to NRAO participants through the 403(b) accounts at this time. The funds 2005, 2015, 2025, and 2035 are meant to fill the gap between the original 2000 series.

IRS Increases Mileage Allowance for 2004

The mileage reimbursement rate for authorized travel using privately owned vehicles for the upcoming year (January 1 to December 31, 2004) will be \$0.375 per mile.

This rate is based on Internal Revenue Service guidance and will be updated annually. If you have any questions regarding this change, please contact the Fiscal Office.

ALMA Town Meeting



Al Wootten giving a presentation on ALMA science at the first ALMA Town Meeting, January 1, 2004 in Atlanta, GA.

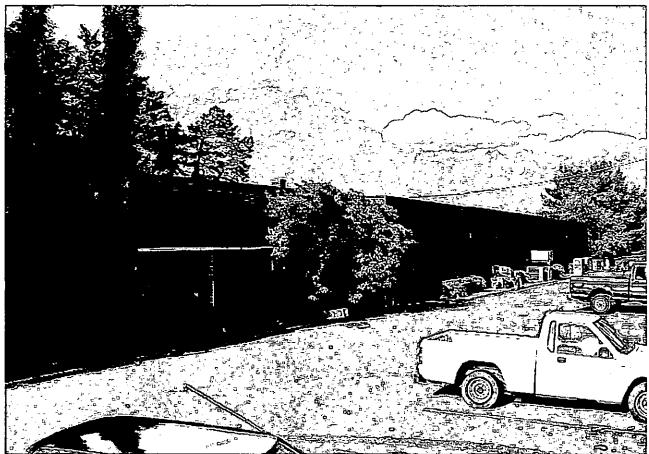
The 203rd meeting of the American Astronomical Society, at the Hyatt Regency in Atlanta, Georgia, was the site for holding the first ever ALMA Town Meeting. Though held in the afternoon of the last day of the conference, there was still an enthusiastic turnout of about sixty people. Five speakers were scheduled to provide an introduction to the Atacama Large Millimeter Array and focus on the interaction between ALMA and the North American users through the North American ALMA Science Center (NA-ASC). First, Richard Crutcher, Chairman of the ALMA Science Advisory Committee (ASAC) gave some introductory remarks and also presented a list of members of the Advisory Committee who can be contacted by the astronomical community to provide input into the directions in which ALMA use and research should proceed. Then Fred Lo, Director of the NRAO, provided an explanation of the ALMA Executive and his overall assessment of the ALMA Project. Massimo Tarenghi made a few remarks mainly seeking input from astronomers on ALMA. Darrel Emerson, Head of the NRAO ALMA Division, spoke of the role the NA-ASC will play in providing the conduit by which North American astronomers will use ALMA for research. Al Wootten, ALMA NA Project Scientist, concluded the meeting by describing the types of research that could be done with ALMA and then took questions from the audience.

Charlottesville NRAO Construction Renovation — Stage 3

Ongoing changes in Charlottesville include not only construction at the Edgemont Road building (officially Stone Hall to the University of Virginia) but also renovation of two buildings at a complex on U.S. Route 250 (Ivy Road). This complex was previously known as the Institute of Textile Technology and the site actually consists of seven buildings. The NRAO has an agreement with the new owner of the complex, which has now been renamed the Boxwood Professional Center, to occupy two of those buildings which are undergoing major renovation. The NRAO will use two of the largest buildings, one a three-story building (photo below) and the other a one-story (shown on next page). Renovation of the one-story building is proceeding briskly with an expected completion prior to the end of 2004, while renovation of the three-story is past the occupancy stage, it is still a work in progress. This new facility for NRAO has been designated the NRAO Technology Center (NTC) and will house both the Central Development Lab (CDL) and the ALMA Front End Group. The CDL group is in the midst of moving out of the old CDL quarters at 2015 Ivy Road and into their new quarters at the NTC at 2551 Ivy Road (located just east of the Boar's Head Inn and the Farmington Country Club). Some equipment is already in place on the



The NRAO Technology Center (NTC) 3-story building (front view)



The NRAO Technology Center (NTC) one-story building.

lowest level and on the highest level, not counting the penthouse conference room, while a number of offices are occupied at the midlevel which also serves as the main public entrance. There are some very lovely grounds in front of the building.

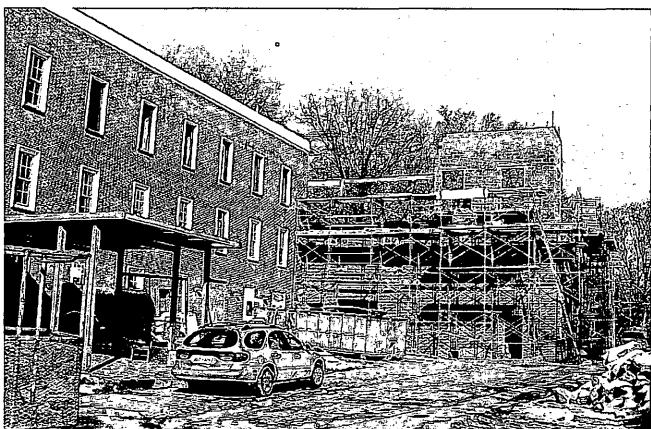
Meanwhile, construction/renovation at Edgemont Road continues at a frantic pace. The girdering for much of the midlevel of the addition is now in place, and some of the highest level, and one can see the framework of what will come, though completion is still almost a year away (2 pictures from above and from the lower level). Parking continues to be an adventure, especially when those from the other CV sites descend on ER for meetings, colloquia, or other business. Much of the lower parking lot is currently unusable for staff use, though some of the new parking expected down there is anticipated to be available in the next month or so. Mary Mayo's old office no longer has an outside exit, while she has moved to Chuck Blue's old office, the mailroom is back where it started, and all but Dave Brown of the Computing and Information Services group have returned to their old quarters at the lower level. That last shift is temporary as eventually the Computing and Information Services Group is planned, when renovations are complete, to be on the middle level (Auditorium level floor). For a few desperate days the kitchen area was unavailable due to asbestos abatement in the hallway



The Edgemont Road renovation continues

area, but somehow the employees managed to survive. Billie Rodriguez for a month or two has joined those sheltering from the construction at Old Ivy Commons (OIC), Dave Hogg has retreated to his old office, and the Director is for the most part holding out in his old office. The noise, at times, has been enough to make those who remained in the building perhaps wish they had been the ones designated to move to OIC. As a reminder, if you visit Edgemont Road during the construction, it is vital that you log your vehicle onto the daily chart board near the main (auditorium) entrance, so that in the event of impeding construction need, the driver can be identified, the driver located, and the vehicle moved in a timely fashion.

Lee Shapiro



The Edgemont Road lower parking lot.

Affirmative Action for Veterans and Individuals with Disabilities 2004 Statement of Policy

It is the policy of the National Radio Astronomy Observatory not to discriminate on the basis of a physical or mental disability or an individual's status as a disabled veteran, a veteran of the Vietnam Era, or any other eligible veteran with regard to recruitment or recruitment advertising, hiring, training, promotion, and other terms and conditions of employment, provided the individual is qualified, with or without reasonable accommodations, to perform the essential functions of the job. The Observatory does and will take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities, disabled veterans, veterans of the Vietnam Era, and other eligible veterans without discrimination based upon their physical or mental disability, or veterans' status, in all employment practices as follows:

All personnel actions or programs that affect qualified individuals with disabilities, disabled veterans, veterans of the Vietnam Era, and other eligible veterans such as employment, upgrading, demotion or transfer, recruitment, advertising, termination, rate of pay or other forms of compensation, and selection for training will be made without discrimination based upon the individual's physical or mental disability or veterans' status.

The Observatory makes and will continue to make reasonable accommodations to promote the employment of qualified individuals with disabilities and disabled veterans unless such accommodations would impose an undue hardship on the Observatory's business.

Robert D'Angio, Affirmative Action Officer for the Observatory, will manage the National

Radio Astronomy Observatory's Affirmative Action Plan for individuals with disabilities, disabled veterans, veterans of the Vietnam Era, and other eligible veterans. All managers and supervisors will take an active part in the Observatory's Affirmative Action Plan to ensure that all qualified employees with disabilities, disabled veterans, veterans of the Vietnam Era, or other eligible veterans and prospective employees are considered and treated in a non-discriminatory manner with respect to all employment decisions. Furthermore, the National Radio Astronomy Observatory will solicit the cooperation and support of all employees for the Observatory's policy and Affirmative Action Plan. The Affirmative Action Officer has been assigned responsibility for periodically reviewing progress in the compliance and implementation of the policy of affirmative action for individuals with disabilities, disabled veterans, veterans of the Vietnam Era, and other eligible veterans. In accordance with public law, the Observatory's program of affirmative action for individuals with disabilities, disabled veterans, veterans of the Vietnam Era, and other eligible veterans is available for inspection in the Human Resources Department during regular business hours upon request.

In addition, as required by the Rehabilitation Act of 1973, as amended, employees and applicants shall not be subjected to harassment, intimidation, threats, coercion, or discrimination because they have engaged in, or may have engaged in, activities such as filing a complaint, assisting or participating in an investigation, compliance review or hearing, or opposing any act or practice made unlawful, or exercising any other right protected by the Act.

*Fred K. Y. Lo
Director
November 1, 2003*

Affirmative Action for Minorities and Females 2004 Statement of Policy

To further its goal of equal employment opportunity for all employees and prospective employees without regard to race, color, religion, sex, age, national origin, disability, or any other basis prohibited by applicable law, the Corporation states as its policy the following:

It will be the policy of the National Radio Astronomy Observatory, in accordance with all applicable laws, to recruit, hire, train, and promote persons in all job titles without regard to race, color, religion, sex, age, disability, or national origin, or any other basis prohibited by applicable law.

All employment decisions shall be consistent with the principle of equal employment opportunity, and only valid qualifications will be required.

All personnel actions, such as compensation, benefits, transfers, social and recreational programs, etc. will be administered without regard to race, color, religion, sex, age, disability, or national origin, or any other basis prohibited by applicable law.

To assure compliance with the plan, Robert D'Angio, Affirmative Action Officer, has been designated to administer and monitor the plan and make reports to Senior Management. The Plan is available for inspection in accordance with applicable regulations.

*Fred K. Y. Lo
Director
November 1, 2003*

In Memorium: Ronald B. Weimer, 32 Year Employee

Following a six-year battle with prostate cancer, Ronald B. Weimer died November 20, 2003, at M. D. Anderson Cancer Center in Houston, Texas.



Ron started his career with NRAO in July 1967. He worked in Green Bank, WV, until 1989, and then relocated to New Mexico, working in VLA/VLBA Operations, as Principal Digital Engineer, until his retirement in 1999. At NRAO he was legendary for his unique ability to reverse engineer analog and digital devices that had little or no documentation.

Ron was also well respected for his community efforts. The March 1976 edition of the "Observer" ran a photo of Ron at a plane crash site. It was taken sometime around January 29, 1976, when the missing plane was discovered near the Observatory. According to the story, the plane went down on Januray 21 due to bad weather. Ron helped set up an air traffic control center. He was awake all night and day looking for the missing plane's radio beacon signal, and also helped the Marlinton rescue team in the recovery.

The full text of his NRAO Friends remarks can be viewed on the HR web page under "Bulletins."

Friends of Ron Weimer

New Regular Full-time Employees



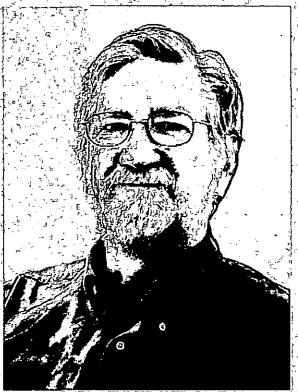
David Hubbard

Head of Observatory
Program Office - CV



Michael Solatka

Designer, Senior - CV



Arthur Symmes

Structural Engineer,
Senior - CV/GB



Lynette Doolittle

Housekeeper/ Foodhandler -
GB



Shamibrata Chatterjee

Research Associate - SOC



Nissim Chudoff

Junior Technician - SOC



Dongshan Guo

Software Engineer II - SOC



Dennis Mobley

Auto Diesel Mechanic - SOC



Phillip van Buskirk

Software Engineer III - SOC



Christopher Groppi

Research Associate - TUC

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