

VLA/VLBA NEWSLETTER

From the World's Premier Centimeter Wave Radio Synthesis Telescopes

WEATHER STATS		
	HIGH	LOW
May	92.8° (31st)	23.1° (6th)
June	93.3° (30th)	37.3° (5th)
Total Precipitation: .17"		

AROUND THE VLA

Welcome aboard Greg Hendley, Machine Shop.

Gerald O'Connell completed a Single Axle Truck/Loader Course at the NMIMT Equipment Operator Training Program May 13 through 17.

Summer Youth Employment Program participants James Durand and Neil Sabol have been working at the VLA, helping Dave Alderman and James Sullivan, among others. Their last work day will be July 3.

NOTES FROM THE A.D.

I'd like to congratulate Fred Lo on his appointment as the new NRAO Director, effective September 1. Some of you may know the incoming Director as a long-time user of both the VLA and the VLBA; we hope he'll find time to continue as an observer in his new job! Details about his background and the appointment are in a press release available from the main NRAO World Wide Web page.

In late June, employees received their Personnel Action Notices containing notification of their salaries for the year beginning July 1. The new salaries are on the new NRAO salary scale that has resulted from the compensation study conducted by an outside consulting firm in 2001 and 2002. We all should thank the NRAO Human Resources Manager, Bob D'Angio, for commissioning and implementing the study while busy with a million other day-to-day details. Information on the new scales and some new job titles is contained in a revised version of the NRAO Salary and Wage Manual, available on the NRAO internal web site or in the library.

As stated in the new manual, it is desirable for experienced employees with good performance to receive salaries well above the

minimum, but funds are not available to make such adjustments within the first year of the new scale. If possible within the constraints of NRAO's budget, the appropriate changes will be sought over the next few years. Employees with questions about the new salary structure should feel free to contact the local Human Resources Manager (Allen Lewis), their division heads, or me for further information.

At the American Astronomical Society (AAS) meeting in June, NRAO organized a special day-long session on "The New Radio Universe" that typically was attended by 150 to 200 astronomers. In conjunction with that meeting, we also hosted a press tour of the VLA. So far, that tour has resulted in two significant articles about the VLA and its expansion, one in the New York Times' Science Times section and one released by Reuters News Service that appeared on the CNN web page. Thanks to all those who organized meetings, gave presentations, or participated in tours associated with the AAS meeting.

We will hold the third in our quarterly series of All-Hands meetings at both the AOC and the VLA in July. The meetings tentatively are scheduled for Tuesday, July 23, at 9:30 a.m. in the AOC and 1:00 p.m. at the VLA site. Reminders and agenda items will be circulated in advance.

J. Ulvestad

CONTEST WINNER!

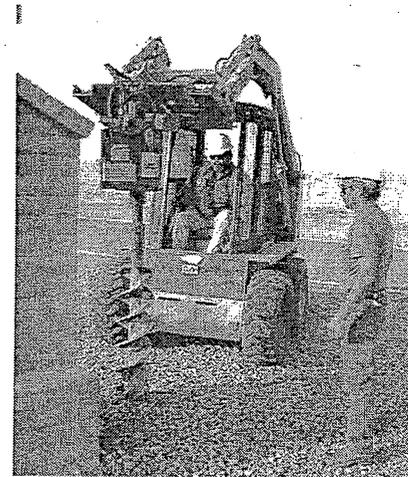
Ian Hoffman wins \$100 for two entries in the transporter naming contest. "Jack of Diamonds" and "High Plains Lifter" were selected by a panel of five judges. Transporter I will carry the name "Jack of Diamonds" and Transporter II will carry the name "High Plains Lifter." The names will be placed on the main cab of each transporter along with the NRAO logo and a running tab of the number of antenna moves. Congratulations, Ian!

L. Serna

SITE & WYE NEWS

The Auto Shop personnel have been extraordinarily busy the last two months. Jim Rexrode has built the rear chute for the trencher that will be used to install the fiber optic cable and is in the process of building a cab. Richard Murillo and Linda Major are picking up a surplus trailer that will be used as the fiber optic field unit.

The Carpentry Shop has been busy doing and re-doing remodel work. Charley Chavez and Gerald O'Connell had almost completed the fiber optic patch room when the plan changed (sound familiar?) and the room had to be enlarged. The contractor that set up the ALMA office trailer did a poor job of anchoring and guess who got to do the contractor's work? Even with all this, Charley and Gerald managed to keep their sense of humor.



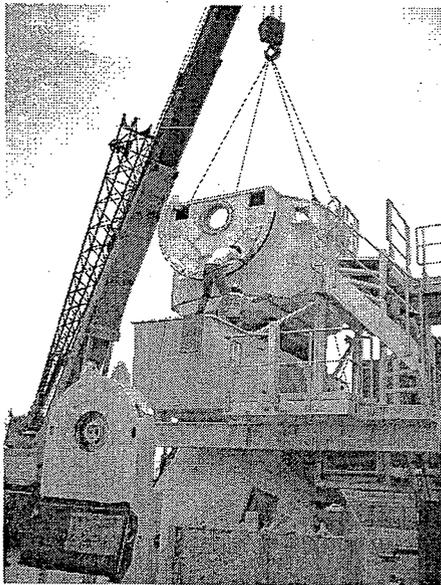
The Grounds Crew, Godin Otero and Johnny Gonzales (pictured), has been building a visitor viewing/parking area near the VLA sign at the SR166 mile post 1 marker. In a few short months that crew will increase from two to about eight and they will begin installing fiber optic cable. This will be in addition to their regularly scheduled duties.

The Track Crew is preparing to start tie replacement on the North Arm. Quite a few intersections were repaired or rebuilt before starting the tie replacement. The Track Crew has only two temporary employees this season but with additional equipment we have acquired they will still try to install 5000 ties. The Crew will hold up, just hope the old equipment does!!

P. Lewis

ALMA PROGRESSES

VERTEX, the contractor for the U.S. version of the ALMA Antenna has arrived. Jay Brown, supervisor for VERTEX along with Kevin Hayman and Kendall Hayman subcontractors from MECHANTECH have been assembling the antenna since June 2nd. Several major antenna pieces arrived on May 13th and antenna assembly began soon thereafter. Final assembly is expected to occur around July 29th and acceptance testing should occur around August 19th.

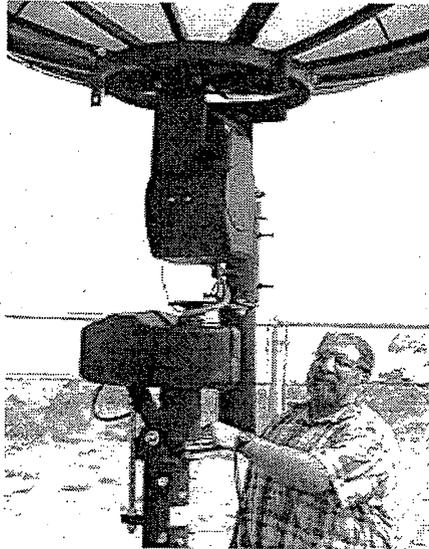


So far, Victor Gasho, Jinquan Cheng, and Nick Emerson have been visiting us from Tucson as part of the NRAO ALMA Antenna Evaluation Group (AEG). More AEG members will be arriving soon. Office space and living quarters are being provided at the VLA for the AEG.

L. Serna

SO, WHO IS THAT GUY?

We've all seen him around. He seems to like to hang out at the Visitor Center or at a work bench in the Control Building. Just who is he and what is he up to?



Meet Vic Moore. He is our first RET (Research Experiences for Teachers), a program similar to REU (Research Experience for Undergraduates) funded by a grant from NSF. He spends the school year in Tillamook, Oregon, teaching high school chemistry, physics, and astronomy. This summer his project is to get the Small Radio Telescope outside the Visitor Center to a point that it can actually be used by the general public. He is a great conversationalist and will be taking work breaks to give impromptu explanations and tours to visitors. If you need to reach him, his e-mail is vmoore@nrao.edu. When he is in his "office" at the AOC, his extension is 7096. Welcome, Vic!

R. Harrison

PROGRESS ON EVLA FIBER OPTIC CABLE

Steve Grayson and Linda Major have nearly completed the manhole cable tray that will be used to route the fiber cables into the Fiber Termination Room, located near the back door of the Control Building. Charlie Chavez, Gerald O'Connell, Jaime Montero, and Shane Baca have prepared the Termination Room for the fiber frame equipment.

The fiber-optic direct-burial cable will begin to arrive in mid-August, and Godin Otero and crew will start to install the cable in October. The cable has three jackets and two steel armors, and 12 to 96 optical fibers. Many people have asked how much cable we will install in the ground for EVLA. The total cable length is 95 miles, enough cable to reach Belen from the VLA. The total fiber length is 2760 miles, enough to span the continent from Los Angeles to Washington DC.

A new Ditchwitch has been purchased that can dig a trench 12 inches wide and 48 inches deep. We will also rent a rock saw for some stretches of the array. Several cables will be installed in the same trench; in some areas eight cables will go into the same trench. Jim Rexrode is designing and building special rollers and chutes for the trencher that will guide the cables into the trench, and is modifying a flatbed trailer to hold the reels. Some of the reels will be eight feet tall, four feet wide, and will weigh over 8000 pounds. Before the cables can be installed, Jaime will locate all the cable and waveguide crossings, and many of the cables and waterlines will have to be cut and then re-assembled after the job is done.

T. Baldwin

JULY SKIES

The remaining player from this spring's grand planetary parade, Venus, can still be seen shining brightly in the early evening western sky. But, if it's more planets you crave, you will have to be an early riser.

From July 2 through 9 you'll be able to see two in close proximity. Look low in the east-northeast and you should be able to pick out Mercury and Saturn in the pre-dawn twilight about 40 minutes before sunrise. Mercury at magnitude -0.5 will be the brightest. Saturn should be less than a degree to the left. While Mercury will soon dip below the horizon Saturn will continue to climb, rising a full $1\frac{1}{4}$ hours before sunrise by the end of the month.

The real show stopper this month is the Milky Way, our home galaxy and the faint ribbon of light transiting our summer skies. As midnight nears, this band of light should be directly overhead. One way to find it is to look for what is called the Summer Triangle. Three bright stars form the triangle.

The western most is Vega (of movie fame in Contact) in the constellation Lyra or Lyre "the Harp." To the east is Deneb "the tail of the hen," the bright star in the tail of Cygnus "the Swan" or the top star in the Northern Cross (take your pick), and is smack in the middle of Milky Way.

To the southeast is Altair "the flying one" in the constellation Aquila "the Eagle." These three form the triangle that nicely locates the plane of our galaxy. Scanning the Milky Way with binoculars reveals a myriad of stars and many other interesting objects.

J. Spargo