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NOV 5 1999

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NEWSLETTER

From the World's Premier Centimeter Wave Radio Synthesis Telescopes

SUMMER WEATHER STATS

	RAIN	HIGH	LOW
JUNE	—	92°	41°
JULY	6.9"	95°	52°
AUG	5.5"	84°	47°
SEPT	2.8"	82°	33°
Oct	—	78°	16°

L. Brothers

AROUND THE VLA

Welcome to the new VLA Operators - Jim Campbell, Sam Gilmore and welcome back to Jaime Montero; it is nice to see him around the VLA again.

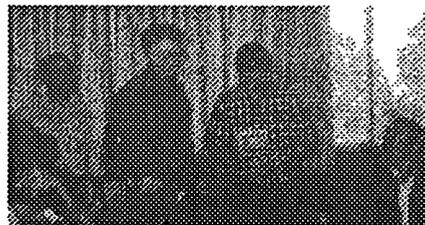
The annual VLA "End of the Summer" party was held on Thursday, October 7. The Track Crew did a great job preparing beef and goat in a bar-b-que pit. Many thanks to Shella Lewis (Pat's "better half") who made bar-b-que sauce, green chile, potato salad and macaroni salad. Ellen Ary made buns and red chile, and had everything ready for the ES supervisors to serve. Richard Murillo provided music during lunch. We noted accomplishments by all groups and said goodbye to the summer temporary workers. Special guests included Miller Goss and Dick Sramek. We all ate too much and enjoyed the great food and great company!

The Visitor Center received a face lift! Charley Chavez and Godin Otero have been working evenings to avoid the crowds during the renovation. The interior walls have been painted, outdated and damaged displays have been removed and new signs installed. With Emma Rice's help the backlit astronomy display has been restored. All this and the new multimedia slide show give the whole place a bright, new look.

The Pie Town Water Association hopes to rebuild the village water system, solving the ongoing water problems at Pie Town and the PT VLBA site. The Catron County Commission is supporting the project as a candidate for a Community Development Block Grant. A successful grant would preclude us from having to drill a well at the site.

On October 29, the ES Division said "so long" to Clint Janes, our Division Head for the last three years. Clint replaces Larry

Beno as Electronics Division Head. VLA employees gathered in the Cafeteria to give Clint a proper send off. He was presented with mementos and roasted with stories of his time at the VLA, along with best wishes for his new assignment.



Jon Thunborg presents Clint with an engraved piece of VLA track railing.

MAINSAYER

Mainsaver is being run parallel with Old Maint for "corrective maintenance" work orders. The bulk of the inventory has been entered, but since ES Division plans to expand their database from what was on Old Maint, there will be more assets to add to the database in the future.

ES Division is planning to use Mainsaver as its primary maintenance program as soon as possible. December 15 is the scheduled target date to be running exclusively on Mainsaver and, hopefully, Old Maint can be retired permanently. We need to be prepared for the changeover on December 15; the sooner we begin using Mainsaver the better off we are.

The "Preventive Maintenance Module" will be the next feature to bring into operation. Hopefully, we can get the PM module into full operation before the end of the year. Supervisors should plan to input PM information into the database as soon as possible so that PM continuity into the new year is preserved.

L. Serna

ARREST

In response to a request from the Safety Committee, we have been looking for ways to improve fall protection for people working at the antenna apices. The effort is in two parts: A better 'Ladder Safety Device' (LSD) for the quad leg, and improved protection for workers once they reach the apex.

Several commercially available LSDs were considered, and two antennas were outfitted with a system offered by French Creek Products. The French Creek system is a major improvement over what we currently use, but it falls short of being ideal for our steeply inclined quad leg ladders. We designed a LSD specially for use with inclined ladders. Prototypes have been built and seem to work well. Extensive strength and performance tests will begin in the next few weeks.

A prototype apex handrail has been installed on antenna 24. Handrails around the apex ring would generally eliminate the need to tie off. They make transitions between the quad leg ladder and ring easier, and improve employee comfort.

So, why didn't we do this years ago? One reason was concern about adding weight to the apex. Recent computer modeling and field tests of the VLA antennas shows that the extra weight of the handrails will not have a noticeable effect. Another reason is that the handrails might degrade antenna performance. Tests are scheduled for November to assess the effect on performance.

We hope to start installing LSDs and handrails next year. In the mean time, we can improve safety by discouraging the practice of carrying stuff up and down the ladders by hand. Both hands should be free when climbing! Consider buying backpacks or tool belts, or using a rope to raise and lower tools.

Jim Ruff

VLBA SITE TECHS

VLBA drive motors and tachs were the main focus of a candid dialog between the visiting VLBA site techs and representatives of the site Servo Shop. Special jigs and tools to check motor undercut and to align brush holders are planned as a result of the discussion. To avoid risk of damage to expensive drive motor armatures, the decision was to use a fine grit stone to dress the copper commutators where possible, and to replace the armature where the damage is too severe to correct with the fine stone. Tom Frost is hopeful that a selection of brushes better suited for the drive motors will reduce armature problems. Paul Rhodes announced plans to replace the blower filter for the motors which may reduce contamination of the armature with foreign particles and suspended water droplets.

C. Janes

BR DRIVE WHEEL

Early in October, the Brewster antenna suffered an axle failure resulting in almost three weeks of downtime. The axle installed last year broke at the point where it shoulders down for the outside bearing. The cause was fatigue failure at a point of high stress concentration.

A new assembly was designed, built, and installed on an emergency basis. Many thanks to the Brewster site techs, machine shop, antenna mechanics, and purchasing for their help in bringing BR back to life quickly.

J. Ruff

CB WATER MAIN

Water was 2-3" deep in the CB equipment rooms and running out of the walls from a broken water main leading to the fire protection system. Incredibly, no valve had been installed between the line and the 8" main. Consequently a main line water valve had to be turned off which shut off the CB, Cafeteria, VSQs, and Visitor Center.

The line broke underneath the CB foundation. In order to replace the broken line, an 8' deep hole had to be opened, from the main to the CB and underneath the wall foundation. Steve Troy and Shane Baca, with help from Ed Gray, Godin Otero, Johnny Gonzales, Joe Sanchez and others, installed a new T and valve along with giant concrete thrust blocks to restore water.

C. Janes

REMINDER

There are many rules about using company vehicles. One of main things we are having a problem with is purchasing premium grade unleaded gasoline. NRAO is billed back for those purchases, and therefore pays twice for that fuel (once in the mileage fee and once for the individual gasoline purchase). Fueling rules: 1. Fill up at the VLA site whenever possible; 2. Always use self service pumps, never full service; 3. Use Regular unleaded gasoline, NEVER premium grades; 4. Shop for lowest gas prices when feasible.

Vehicle use rules: 1. Driver must possess a valid drivers license; 2. Family members may not be transported in government vehicles; 3. No parking at residences without prior approval; 4. No smoking and no alcoholic beverages allowed in vehicles; 5. Always lock unattended vehicles and remove property when appropriate; 6. Report accidents to police promptly; Report damage or loss of credit card ASAP to NRAO management.

S. Lagoyda

SATELLITE TRACKING

The VLA will soon be a satellite tracking site thanks to work by the IPG (Interference Protection Group). Bill Brundage, NRAO's representative to the ITU, the international frequency coordination organization, claims that the VLA station will provide the only satellite monitoring information freely available to US astronomers. Coupled with radio frequency monitoring equipment and Web access already installed at the IPG VLA site, the 3 meter dish will track radio emissions from low earth satellites which pass across the sky in less than 15 minutes, many times faster than the VLA antennas. The measurements of signal strengths and frequencies will aid in the design of the highly sensitive low noise receivers used on radio astronomy antennas. Circuitry must be installed on the astronomy receivers to protect from overload caused by satellite signals which are enormously stronger than signals from cosmic sources.

The pedestal and power for the tracking station were planned by Guy Stanzione and installed by ES Division crews. Kerry Shores plans to have the station up and running early next year.

K. Shores & D. Mertely

ENERGIZER BUNNY

All spent lead acid batteries shall be turned over to the VLA warehouse. The warehouse personnel shall make arrangements for batteries to be recycled/removed from the VLA site using a salvage collector.

For disposal of small batteries such as alkaline, ni-cad, gel-cell, etc., designated containers are located in the VLA Servo Shop, Control Building Electronics Lab and in the AOC Electronics Lab. Before placing batteries in the containers, tape both the positive and negative terminals. The VLA containers shall be emptied every two months with the contents transferred to the AOC. The AOC Safety Officer shall check the container periodically and make arrangements for disposal from this point.

G. Cole

NATIONAL SAFETY CONGRESS

Three NRAONM employees, Gene Cole, Jim Ruff, and Jon Spargo attended the National Safety Congress and Exposition in New Orleans.

Gene and Jon are officers in the Research Development and Emerging Technologies Section of the NSC. This year Jon was program chairman for the RD&ET Section and arranged for four technical sessions at Congress. One of these sessions featured Jim Ruff, who gave a well received presentation, moderated by Gene Cole, on his newly designed fall arrest system for inclined ladders. Jon moderated two other sessions and was a panelist for a round table discussion session on problem solving in a R&D environment.

The NRAO people also attended numerous sessions on a wide variety of topics that included Violence in the Workplace, Ergonomics, Accident Repetition, First Aid, Automatic Electronic Defibrillators, Fall Protection, Creating Interesting and Dull Safety Meetings, Behavior-Based Safety and Solid and Hazardous Waste Management. Gene also attended a personal development seminar on how to get supervisors to become observers and mentors for a safety program.

J. Spargo

REMINDER: Check the batteries in your smoke detectors!