

VLA/VLBA NEWSLETTER

JULY WEATHER STATS	
HIGH	LOW
88.3°(1st)	50.4°(10th)
Total Precipitation: 2.3"	
VLA Operations	

From the World's Premier Centimeter Wave Radio Synthesis Telescopes

AROUND THE VLA

Welcome: Carlos Soto, Antenna Paint Crew, and Facio Gomez, Track Crew. Two new faces in Operations are Sonja Mendoza and Greg Patterson.

Dave Fugate and George Henckel, two Tech students working with Marie Glendenning, will be updating the VLA PC inventory the week of August 6-10.

STAR AWARD WINNERS AT THE VLA!

Three ES Division employees are the first "Star Award" recipients. On July 11th, Miller Goss presented Star Awards to Gene Cole, Melcolm Peralta and Jim Rexrode who were the first employees in the company to receive these awards. The Star Award is one of two new programs available for recognizing employees' outstanding contributions to the Observatory. This award is a monetary award ranging from \$50 to \$900 and can be awarded for individual achievement or group accomplishment.



Star Award recipients Melcolm Peralta, James Rexrode, and Gene Cole

Gene Cole receives his award for outstanding effort in accident prevention through effective training programs and for reducing accidents in the ES Division by 20% in one year.

Melcolm Peralta receives his award for developing production techniques and tools that allowed him to build 36 handrail assemblies in just a few months. The labor required to build these handrails would have otherwise been overwhelming. Mel's initiative brought us into compliance with OSHA guidelines quickly and efficiently.

Jim Rexrode receives his award for his initiative in repairing a critical piece of track machinery by fabricating failed parts worth \$2,000 with \$20 worth of material in ten hours, saving the company money and downtime.

Congratulation for a Job Well Done to all recipients!

L. Serna

SITE & WYE NEWS

The Track Crew has placed and spiked about 5,100 ties on the East Arm. At present they are adding ballast and tamping. They are about 80% complete with this task.

The Servo group has been working the "bugs" out of the electronics components of the Jackson Truss tamper. They hope to be ready for an operational test within two to three weeks after parts on order arrive. The Auto Shop personnel have worked on the tamper to try to get all the hydraulic leaks stopped and are pretty well done.

The Carpentry Shop personnel have been up to their elbows in stucco!! They have stuccoed all the exterior walls and the southern interior wall of the guest house in Socorro along with the parapet wall on the Visitor Center at the site. They are in the process of moving the first floor kitchen in the Control Building to a new location and remodeling the library to form four cubicles for needed office space.

The Grounds Crew has begun the "long line potential" measurements on the West Arm and will continue until all three arms are complete.

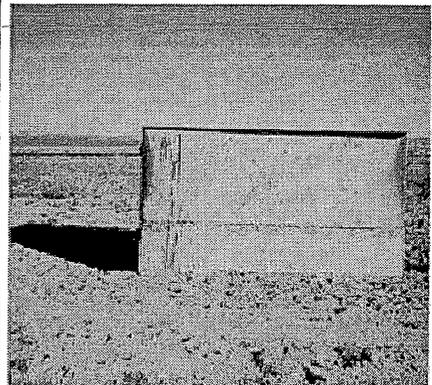
They, along with help from Steve Grayson and Jerad Montoya from Cryo, replaced the concrete manhole at DE-1 with a steel culvert. They have one more manhole to replace at CE-6 but it must wait until the painters have finished painting at that location..

The Auto Shop personnel are in the process of converting a 5000 gallon tanker into a concrete transit truck, the engine on our old mixer is kaput! As usual, Jim Rexrode had to manufacture the parts for the conversion. They have been trying to keep up with all the maintenance and repairs that are part of the summer work season, especially the dump trucks. Four out of six are down at present.

P. Lewis

WAVEGUIDE EXPOSED

Just last week an exposed section of waveguide was discovered at AW6B. AW6b is the waveguide manhole between the AW6 and AW7 antenna stations on the west arm. Over twenty two years of prevailing south-west winds have eroded the sandy soil down close to three feet to expose the waveguide. Dean Otero and Johnny Gonzales, the Grounds Crew, will bury it again, and this time ballast will be added to the soil in an effort to arrest the wind



Eroded Waveguide Manhole

erosion. Areas on the west and north arm are very sandy and wind erosion can occur very quickly.

Early in the 1900's, while the new power line was being installed, sections of the old high voltage power lines which had originally been buried four feet deep, were found to be exposed. Wind erosion around several other waveguide manholes have been noted and will be attended to when time permits. The waveguide is buried at various depths and no other incidences of exposed waveguide have been reported as yet. Perhaps in another twenty two years.

L. Serna

REQUEST FOR PAYCHECKS

Requests for picking up payroll checks at the AOC need to be received in the Fiscal Department by noon on Thursday, the day before payday. Fiscal sends the payroll checks to the site on Thursday afternoon to be ready for distribution by Thursday afternoon at 4 p.m. Because of the scheduled mail delivery to the VLA, the checks and stubs are on their way to the VLA early Thursday afternoon. Remember you don't need to worry about picking up your check if you are using direct deposit; it's automatically deposited to your account on payday.

We are here to insure that you receive your check; therefore you must request the check personally. Fiscal will NOT accept requests from spouses, other family members, or friends to pick up your check.

Please contact Nancy (7444) or Laurel (7436) if you need to have your check to be held. Checks cannot be picked up before 2:00 pm on Thursday afternoon.

Don Welty

AUGUST SKIES

Mars will continue to dominate the early evening sky but this will be the last month that Mars will be favorably placed for close up viewing through a small telescope or binoculars. With the summer monsoon season upon us, viewing Mars may require some patience while waiting for holes in the clouds to view it. Such "sucker holes," as we amateurs call them, are usually found on all but the most serious of overcast nights in Socorro County. The next Star Party scheduled for the Etscorn Campus Observatory at New Mexico Tech will be on Friday, August 17th. Mars will certainly be one of the favored targets for that evening.

Last month we talked about the occultation of Venus by the moon. This month it will happen again, only this time the planet will be Jupiter! At about 2:30 p.m., MDT on August 15th, find the waning crescent moon about 46 degrees west of the sun. Sighting your fist at arms length, the moon should be about 4-fists west of the sun. The moon will only be about 15% illuminated which will make it a bit of a challenge to find. If you can find the moon in a good pair of binoculars or a small telescope, Jupiter should be very nearby.

It will take almost a full minute for Jupiter to disappear behind the moon and it should reappear about an hour later. The exact length of time will depend on the viewer's latitude. For us, of course, there is the ever present danger of monsoon clouded skies to contend with. For that reason most of us couldn't view Venus' date with the moon in July.

Another traditional sky show in August is the famed Perseid meteor shower. The shower actually lasts several weeks but will peak locally in the early morning hours of August 12th. The best viewing will be after midnight before the waning crescent moon rises. This meteor shower is the result of the Earth's encounter with the debris trail left by the comet Swift-Tuttle. In 1992, after a lapse of 130 years, Swift-Tuttle returned and presumably deposited fresh debris in its wake.

Indeed, since then, the peak counts of meteors per hour have been above traditional averages. Clear skies and no moon early on this Sunday morning could produce meteor counts as high as 60 per hour or one per minute on average. All you need to do is find a good dark spot, away from street and house lights with an open view of the sky. Looking to east, the point of origin, known as "the radiant," should be about halfway between the horizon and the zenith during the hours just after midnight. A reclining lawn chair or a blanket should make you comfortable for a good viewing session.

I would be interested to hear some numbers if anyone decides to keep count. We'll publish results in next month's issue. Clear, Dark Skies!

Jon Spargo

SPIKY, THE WANDERING BEAR

While working on the East Arm the last week of July, an unusual visitor was spotted near the old "CC Camp." A small black bear was seen by a few VLA employees, photographed

by a few, and not seen at all by some who tried to spot him (or her). He was estimated by Tom Olney to be around 150 pounds and 3 or 4 years old.

The North American black bear is the best known and most widespread of the North American bears. It is of medium size among bears, averaging 135 to 350 pounds, although some over 600 pounds have been found. The black bear is an agile climber, an alert creature with a sense of smell more highly developed than other large animals, with exceptional hearing but apparently only average eyesight.



A Black Bear, but not the "Spiky, VLA Black Bear"

Scarcity or abundance of natural food has much to do with black bear behavior. Not only will a black bear eat almost anything, it will gorge itself until its stomach can hold no more, sleep it off, and start the process over again. During spring, black bears feed mainly on grasses. Always in search of food, in June, they add insects, grubs, and ants to their diet, and in the fall the main source of foods are berries, mushrooms, and acorns with supplemental carrion when available. Occasionally, they will take small domestic animals, however, they are attracted to the odor of rotting flesh by their sensitive noses, and are often unjustly blamed for killing animals.

P. Lindsey

Safety Reminder: School begins this month! While driving, watch out for children crossing the street. Be prepared to stop for school buses and slow down while driving through school zones.