

Subject: for Alan Bridle

Date: Thu, 26 Aug 1999 09:11:15 -0600

From: Terry Romero <tromero@aac.nrao.edu>

Organization: NRAO

To: smarks@zia.aoc.NRAO.EDU

CC: tromero@zia.aoc.NRAO.EDU


Hi Shiela,

Would you give copies of this attachment to Alan Bridle. I sent this to Billie back on 2 August, but only asked her to print it out for Paul.

Let me know that the file came across in good form.

Thanks,

Terry Romero

 y2kcomments.tr.wpd	<p>Name: y2kcomments.tr.wpd Type: Corel WordPerfect 8 Document (application/x-unknown-content-type-WP8Doc) Encoding: base64</p>
--	--

COMMENTS FROM NM/NRAO / Y2K Contingency Plan

Skip Lagoyda

- Back up power is available in various degrees at the AOC, VLA, and VLBA sites. At the AOC, there are UPS units that provide short term power (approx one hour) to some components of the computing and data communications equipment. They also back up the telephone switch equipment on campus, which serves telephone communications to AOC & VLA. Stand-by generators have never been seriously considered for use at the AOC.
- At the VLA, stand-by diesel generators and UPS units are in place to provide both an abrupt and long term power source for the central site. Long term commercial power outages can be handled as long as diesel fuel is supplied on a regular basis. We have been assured by our diesel fuel provider that we will have full fuel tanks just prior to year end and that we will be supplied fuel on a regular basis thereafter. The fuel tank can supply enough fuel for about 3 days.
- The VLBA sites have short term back up generators to supply emergency power to protect systems. They are not intended to use as standby power for ongoing observing. Due to the very limited storage capabilities at each site and low volume of orders, supply of fuel to power these units is not guaranteed for long term outages.
- Continuation of observing programs during power outages is not recommended. Emergency power generation is best suited for safeguarding telescope equipment to prevent damage to systems.
- Emergency lighting at all but the VLA lasts for only a few hours as they rely on battery power. VLA power generation equipment can sustain building lighting during emergencies.
- Since electrical power interruptions also effect office equipment, building HVAC systems, as well as lighting, office workers will find it difficult to perform routine work. It is recommend that only necessary and specially identified positions report for work during long term interruptions of utilities.
- Socorro Operations has in place emergency call out staff to respond to work related emergency issues such as weather related problems, power interruptions, security issues, etc. They are contacted by telephone.
- Most staff live relatively close to the AOC or VLA that they can be contacted if phones don't work. Also many NRAO employees are ham radio operators who could assist in communicating others if the telephone system were to fail, assuming they had electricity or back up generation to power radio equipment.
- Relying on commercial vendors for mail communication is fruitless. These providers rely heavily of supplies of petroleum based fuel for transportation and electric power for office systems. If these supplies were interrupted, there would be no mail delivery or courier mail.
- Payroll/Personnel/ Fiscal issues are being dealt with by others in the organization. We will follow there plans.

Clint Janes

- Power outages: Plains G&T Coop provides our electricity. They have tested a mockup of their control system using spare parts and corrected some problems. Their fall back position is to insert the date of a past year with the same calendar as Y2000 if some other problem emerges. If the national grid fails, the Newman Plant in El Paso will "black start" and hold an independent grid for El Paso and NM.
At the site, Dial Oil will top off our 25,000 tank at the end of December so that we can run off of

generators for up to 1 1/2 weeks. The site is accustomed to running full-up on emergency power so the comments about "brown-outs", etc. do not apply. Dial is Y2K compliant and their supplier, a refinery in Bloomfield, NM is compliant. Dial hopes our accounts payable is compliant. The VLA site is self-sufficient as long as there is fuel for the generators.

In the event power fails and we are unable to get fuel, it will be necessary to shut down the site and tell people to stay home. This can be done by the phone message used for weather, by radio stations,.

If shutdown is necessary, the site shutdown procedures used for Christmas and New Year's should suffice.

- Telephone: The site switchboard is owned by Tech, but is dependent on WNM and US West leased lines. Tech ISD should address specific questions. Telephone lines are not essential for operation of the Array as long as the observe files have been received. Operations should insist that all observe files for at least the month of January 2000 have been received by the end of December. Communications and data tapes can be hand-carried by vehicle. Observe files for the VLBA for January should be sent to the sites in advance, though there is tape to support observing only for a short time.
- Mail, freight: The site warehouse should make sure that stocks of essential supplies are full up before the end of 1999. If shipment of spare parts and supplies were delayed for an extended period of time and parts ran out, antennas would have to be taken out of service as they failed. Failure of shipping will close the VLBA in a short time because of a tape shortage.
- Transportation: If there is no fuel for vehicles, there will be no fuel for power generating stations and no fuel for our emergency generators, so we will be out business, see para. 1.
- Shutdown: Division Heads should be responsible for shutting down and securing their area once the word is received from the AD. Operations would shut down the array and ES Division would arrange security.
- Liaison: Holm Bursom at First State Bank might comment in this area. At the site, we have emergency agreements with surrounding communities already. PR announcements are left for Dave Finley and the AD.

Jim Ulvestad

- All observe files for first weeks of January should be turned in early.

Gustaaf van Moorsel

- Comments already included in overall computer Y2k report.

Joan Wrobel

Array Operations will be taking care of 2 key needs:

- Ordering DATs and Exabytes, both for the VLBA archive and for distribution from that archive to the user community.
- Ordering paper for the line printer at the VLA site that halts observing if the printer lacks paper.

Larry Beno

No comments received.