

**Subject: Re: Y2K contingency planning**

**Date:** Tue, 13 Jul 1999 13:21:44 -0400

**From:** Paul Vanden Bout <pvandenb@NRAO.EDU>

**To:** Alan Bridle <abridle@NRAO.EDU>, jdesmond@NRAO.EDU, mpetty@NRAO.EDU, jwebber@NRAO.EDU, rbrown@NRAO.EDU, abeasley@NRAO.EDU, jlockman@NRAO.EDU, mmckinnon@NRAO.EDU, mgoss@NRAO.EDU, dsramek@NRAO.EDU, julvesta@NRAO.EDU, demerson@NRAO.EDU, jmangum@NRAO.EDU

**CC:** Ruth Milner <rmilner@NRAO.EDU>

ADs et al. - In the message below Alan Bridle argues for putting some thought into contingency plans for Y2K problems beyond what we have in place for computing. Please read the memo, noting the comments I have inserted. I think some of this we can and should do; some is simply beyond any control or ability to deal with, but noting that might be worthwhile in itself. Please return your comments by the end of the month. Paul

Alan Bridle wrote:

> TO: Paul Vanden Bout

>

> FROM: Alan Bridle

>

> DATE: 28 June 1999

>

> RE: Y2K Contingency Planning

>

> I notice that the July A/D meeting, at which you and I had discussed raising the issue of Y2K contingency planning, has been canceled. I will be away at the normal time for the August A/D meeting, hence this message.

>

> This will summarize my views about what Y2K contingencies may need to be considered soon.

>

> In suggesting that the NRAO should make preparations for possible Y2K contingencies/interruptions, I do not imply that I believe they will all occur, only that there is some risk to our operations unless we recognize that they are possible. Disaster recovery plans that sites may already have made for storms, etc. may assume that only one or two services are impacted at once, and only for a short time. Such assumptions may not work for Y2K.

>

> Y2K brings a risk of simultaneous impacts on several fronts, whether from actual failures or from supply congestion produced by Y2K uncertainties and work-arounds (including the contingency plans of other agencies, hoarding, etc.)

>

> Also, Y2K is not a case where "all or nothing" may happen just on January 1, 2000 ... we may see spot shortages or significant price inflation for some services and materiel both before and after the rollover. (Before, because of unease and lack of firm information about key industries. After, because of what are now unpredictable supply-chain problems, particularly if any shortfalls in oil supplies have long-term effects on transportation systems.)

>

> An extended period of uncertainty as the rollover approaches is the perhaps the only Y2K issue that we can be certain of.

>

> It may therefore be prudent to consider how the NRAO would handle:

>

- > 1. Extended power outages or brownouts (the latter now
- > thought by the NERC to be more likely than blackouts):

We should decide for each site how far we will attempt to go in operating without power or with low voltage power from the commercial grid. Just use our standby systems to power down to a safehold posture or actually try to operate for a while?

- >
- >
- > o Where backup power is available: how long will it provide
- > service with the usual fuel reserve? Do we understand the
- > Y2K preparedness of fuel suppliers, or have priorities for
- > support of the most critical systems?
- >
- > o How long will emergency lighting systems function without
- > recharge? When were they last tested?
- >
- > o Are all brownout-vulnerable devices (essentially, those
- > with electric motors) sufficiently protected?
- >
- > o What stance should we take about power on/off for
- > sensitive devices at the rollover (until the overall state
- > of power supply and conditioning is clear)?
- >
- > o Are there other personnel/equipment safety,
- > heating/cooling issues to consider?
- >
- > o Where we have electronic-key doors, who has keys to
- > over-ride them and where will they be on critical
- > dates/times?
- >
- > 2. Phone/communications systems problems:
- >
- > o What alternatives do we have to use of regular phone,
- > PBX's?
- >
- > o If PBX's/phones were out of service for any reason, which
- > personnel know about alternative communications and where
- > are they (alternatives/personnel) located?

My guess is that operations without communications is hopeless. We close.

- >
- >
- > 3. Failure, or significant slowdown, of service by:
- >
- > o US Mail
- >
- > o FedEx or UPS
- >
- > o Airports
- >
- > (Note that the newer Y2K-compliant ATC systems are apparently
- > worse at handling heavy traffic situations than the
- > non-compliant systems they are replacing. Some slowdown of
- > air traffic is still being talked about even if all US
- > systems are indeed Y2K-compliant in principle.)

Snail mail is increasingly irrelevant and if we had email, the FedEx would be too for internal stuff. Not traveling would be a mercy. Are there any proposals due at the critical time?

>

- >
- > 4. Payroll/Personnel/Fiscal Issues
- >
- > o Could we establish an alternative payroll process if the
- > usual electronic communications channels became
- > unreliable, out of service, or choked? Do manual
- > alternatives still exist?
- >
- > o What paper backups of personnel records, etc. will exist
- > at end of 1999?
- >
- > (The banking industry is believed to be generally in good
- > shape, but can we find out specifically how prepared NRAO's
- > banks are? Have they tested, or when will they test, their
- > communications with US government agencies, ADP?)

This is for Jim and Monroe to answer.

- >
- >
- > 5. Transportation/travel difficulties
- >
- > It is conceivable that supply interruptions in the oil
- > industry could lead to gasoline/oil shortages or sudden price
- > inflation, much like the situation in the mid-1970's. Many
- > other countries are thought to be much less prepared for Y2K
- > than the USA is.
- >
- > o Do we have any contingency plans to cover operations if
- > gasoline is in short supply, or if employees are unable to
- > report to work via their usual transportation for any
- > extended period of time?
- >
- > o As year-end approaches, the NRAO may need to advise
- > employees about domestic and foreign travel Y2K issues.
- >
- > 6. Who at the NRAO will be responsible for what, if any Y2K
- > disruptions turn out to be significant, or long-lived?
- >
- > o Who would initiate any contingency plan actions?
- >
- > o Do plans exist for orderly shutdown of sites? Do those
- > plans contain criteria for deciding whether a site
- > shutdown (even partial) is appropriate?
- >
- > o If so, do such plans rely on external communications, and
- > should they be modified to deal with a Y2K scenario?
- >
- > o Should the NRAO prioritize areas to which resources
- > or supplies would be applied to in an emergency?
- >
- > o Should the NRAO ensure that staff are available in
- > critical response areas for some period of time around the
- > Y2K rollover?

These questions are probably worth asking independently of Y2K. We managed the collapse of the 300-Foot with no advance planning, but it was a zoo. Some understanding of how to proceed, on all levels, with emergencies is a good thing.

- >
- >
- > 7. Liaison with other agencies.
- >
- > o Have sites established any liaison with local community