

VLBA ANTENNA MEMO
#10
VLBA NORTH LIBERTY TRIP REPORT
May 18, 1998

The following points were covered during a site visit by this writer to VLBA North Liberty, April 20, 1998.

1. Subreflector: Has one place about 1 inch across near the center where the paint has lifted from the silver coating underneath. Guy Stanzione has pictures. This is one of the refurbished subreflectors. The issue of subreflector is under study and a separate report is being prepared.

2. Antenna painting: There are many hard-to-reach areas which need attention. Again, Guy has pictures. ES Division has submitted a purchase requisition to continue antenna painting this year.

3. Rail: The rail visibly moves at the joints when the wheel crosses over. I am told this is normal because the rail tends to curl up at the ends. After the visit, I advised the site tech to draw a chalk line across the joint with the wheel away from the joint. Then run the wheel across and measure the deflection of one rail end from the other with a ruler. If the deflection is greater than 1/16", report that to Jon Thunborg or Bob Broilo.

Also, on the rail, I noticed a void in the Vulcum coating. I am told from pictures of the hole that the void is over a splice plate and will cause no harm.

4. Vertex room HVAC compressor: The compressor has been moved off the elevation platform to a bracket outside the platform railing. The site tech was concerned about accessibility. Steve Troy says that the only service to this unit by the site tech would be to the fan at the top of the unit. Otherwise, the unit may be removed by rigging up a come-a-long to the antenna support structure.

Also on HVAC, the book on site HVAC systems includes writeups on the Hoffman and Smart II systems, but the sections on building, pedestal room, vertex room, and Contempo are empty. The drawings section contains 1 drawing. I am told the books at the other VLBA sites are similarly maintained. ES Division needs to bring this book up-to-date.

5. Grounds: Trees are growing through the chain link fence that surrounds the site property. The fence is much longer than at other sites because the property includes the old University of Iowa antenna site. The trees should be removed or killed, a job that may be beyond the capability of the site techs considering the length of the fence, in which case ES Division should contract with a landscaping company to prevent vegetation from growing through the fencing. Pat Lewis has pictures. The site tech should initiate a MAINT work request.

On this subject, the site owns a lawn tractor which the site techs use for mowing. The site has an attractive park-like appearance as a result.

Another grounds problem, the access road needs gravel. ES Division needs to arrange for this work; the site tech should initiate a MAINT work request.

6. Hazmat: Waste oil is stored temporarily in 50 gal metal drums which should be kept in a containment vessel. Gene Cole sent information on vessels the site may order.

A metal cabinet should be ordered for storage of chemicals and flammable materials. ES Division can provide order information on request.

7. Wireless phone: VLBA NL uses a 49 MHZ wireless phone for responding to telephone calls when the site tech is on the antenna or otherwise away from the phone. IPG tells me that the wireless phone is not a problem.

8. Buildings: The roof leaks on the storage/workroom shed left by the University of Iowa. The site tech conjectures that the roofing nails used to hold down the corrugated steel roofing have worked loose so that the gaskets no longer keep out the rain. ES Division will help figure out the best way to effect a repair; the site tech should initiate a MAINT work request.

9. Security: The site has installed an outside TV camera with an AZ/EL rotator for security. A 500 watt lamp provides illumination for the antenna at night. Images can be accessed via the Web page. This work is seminal for further VLBA and VLA security improvements.

Clint Janes