

Periodic Maintenance on a MISER System

Periodic maintenance should be done on a MISER system to back up disk files, keep computer disks clean and check the performance of the field communications. Each of the steps below should be taken once a month.

1. Use MSRBACK Option 1 to back history files onto tape. Most customers will want to delete the previous month's history from the disk. MSRBACK asks whether it should do this when Option 1 is selected.

Usually, the same tape will hold more than one month's history.

2. Use MSRBACK Option 2 to back up site-specific files. Option 2 overwrites the tape that is used.

On MISER systems, any site-specific source code is kept on only one computer (to avoid confusion when programmers dial-in to make fixes). The site-specific backup should be done on this machine. In most dual-redundant systems, source is kept on the "B" machine. Some systems are exceptions to this rule, though.

3. Use the CLEANUP procedure on each computer to get rid of files that don't need to be there. You should give all system users a day's warning before cleaning-up the disk. Use the CLEANUP option that purges the disk, and the one that looks for common unneeded files. CLEANUP is run by entering:

```
$ TOOLS <ret>
$ CLEANUP <ret>
```

4. Run DUP_ADD to find any duplicate point addresses. This is done by entering, on any MISER workstation:

```
$ TOOLS <ret>
$ DUP_ADD <ret>
```

Output from this program goes to the spool printer.

5. Run NCS to check field communications. NCS outputs a report on communication errors to the spool printer. Check for RTUs that have unusual numbers of communication errors, and for deterioration from previous NCS reports. To run NCS, on any workstation enter:

```
$ NCS <ret>
```

6. Run COSCNT. This program prints a report on five minutes' COS on the system. Look for large numbers of COS coming from particular points. On any workstation, enter:

```
$ COSCNT <ret>
```

7. Run DISCRP. This program compares the current value of each field point in its RTU, with the value in the point database on the workstation where DISCRP is run. DISCRP then prints a list of points that disagree. Analog points are in discrepancy if they disagree by more than the COS reporting tolerance. Output is goes to the spool printer.

DISCRP usually takes a long time (perhaps 30 minutes) to run,since it has to send an inquiry to the field for each point.

DISCRP will invariably come up with some discrepancies. This is because of timing; some points will change while DISCRP is checking them. Therefore DISCRP should be run twice. Any points that show up in both discrepancy lists, should be checked.

To run DISCRP, on any MISER workstation, enter:

```
$ DISCRP
```

To send output to the file:

```
define/user mnet$printer sys$login:file.txt  
dup_add  
type sys$login:file.txt
```

To send output to the terminal:

```
define/user mnet$printer tt  
dup_add
```