MMCR Disk Swapping Procedure

I. Purpose:

This procedure describes how to replace the Firewire (IEEE-1394) external disk drive for the upgraded MMCRs (PIRAQ-III processor) at the TWP facilities in Manus, Nauru, and Darwin. The Maxtor drives used at the TWP facilities must be replaced approximately every two weeks. The drives can hold more data than two weeks' worth, but changing out every fortnight will maintain a buffer and will not put too much data at risk in case of damages that may be caused during shipping.

II. Cautions and Hazards:

- Data can be lost if disk swaps and Archive downloads are not done correctly or timely.

III. Requirements:

- PIRAQ-III MMCR
- 250-GB Maxtor External Hard Drives (6 per site)
- 2-TB External Hard Drive for on-site storage (1 per site)
- Swap frequency every fortnight (every second Monday)

IV. Procedure:

A. Swapping Maxtor External Hard Drive (HD)

1. Open LAP/XM program window.

2. Click on **Stop** – blue square (see Figure 1).
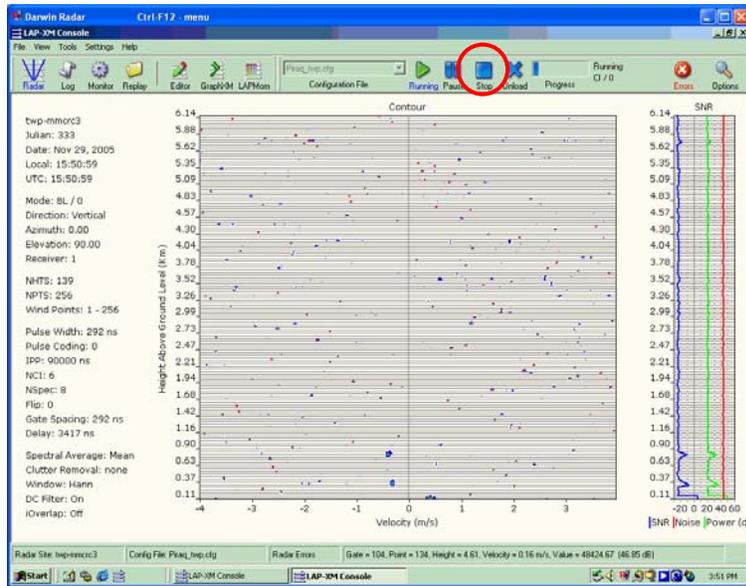
Figure 1

3. On the MMCR computer create a manifest file:

   ⇒ Type:

      dir f:\mmcr_spec*>twpc3yyymmdd.txt

      (assuming **f:** is the disk drive, **yyymmdd** is the date swap is done)

   ⇒ Send the file as an e-mail attachment to ARM Archive
      armarchive@ornl.gov

4. Unplug Maxtor External HD:

    a) Click on the "Unplug or Eject Hardware" icon in the lower right-hand corner of the desktop (see Figure 2).
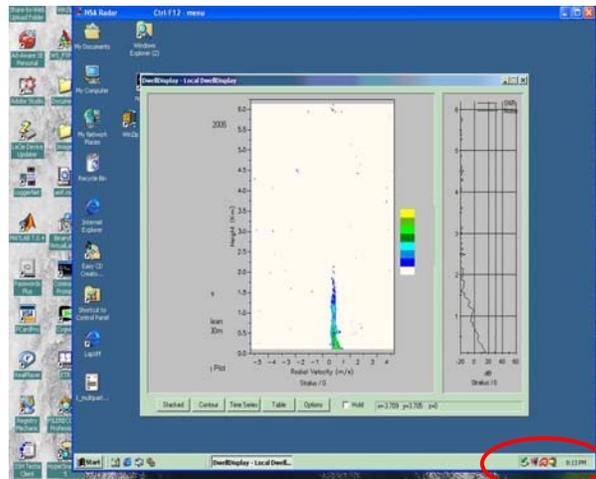
Figure 2

    b) Click on **Stop** (see Figure 3).
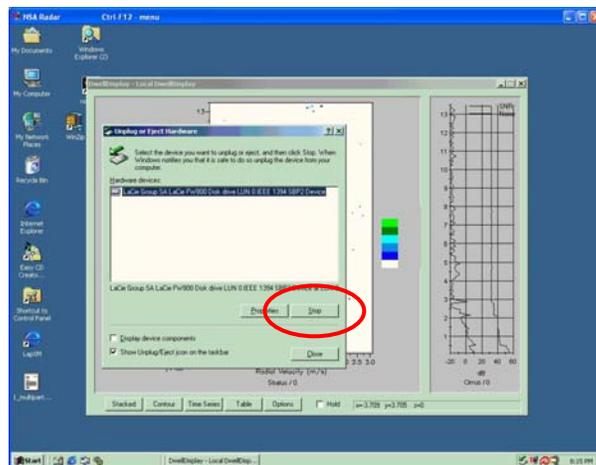
Figure 3

    c) Unplug the HD from the Firewire cable.

    d) Unplug the HD power cable.

    e) Put the full HD in shipping case. (When there are two HDs in the case, send to ARM Archive at Oak Ridge National Laboratory – see last step)

5. Plug in a new empty external HD:

   a) Remove the "E" sticker from the new empty HD.

   b) Plug in the new empty HD power cable.

   c) Plug in the Firewire cable to the new empty HD.

   d) If the system asks for a driver disk, click on **Cancel**.

6. Right-click on Start on the lower left-hand corner of the desktop, and select **Explore** to open the "Start Menu" window:

   a) Check to see that there is a **\mmcr_spec** folder (see Figure 4)
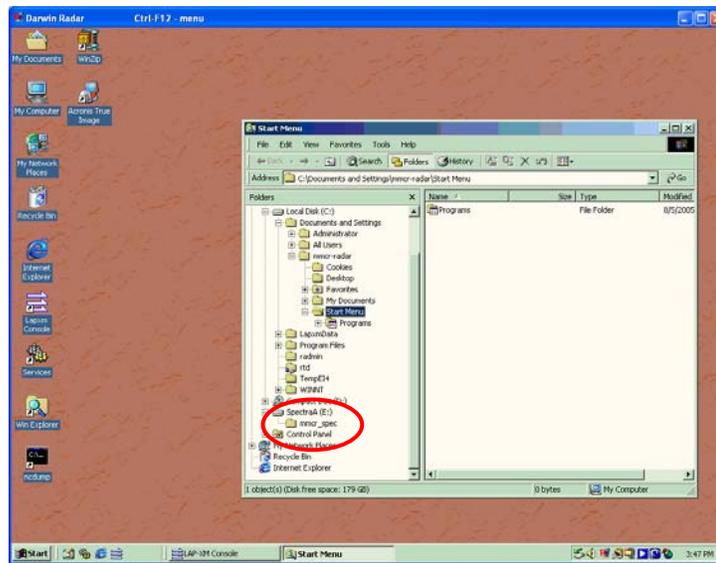
Figure 4

   b) If you do not see a **\mmcr_spec** folder, create one by right-clicking on the right-side pane, select **New**, and then **Folder**.

   c) Name the new folder as **mmcr_spec**.

   d) Close the "Start Menu" window.

7. Open LAP/XM program window.

8. Click on **Start** (green arrow); it will change to **Running** (see figure 5).

9. Check that new data are being collected (see Figure 5).
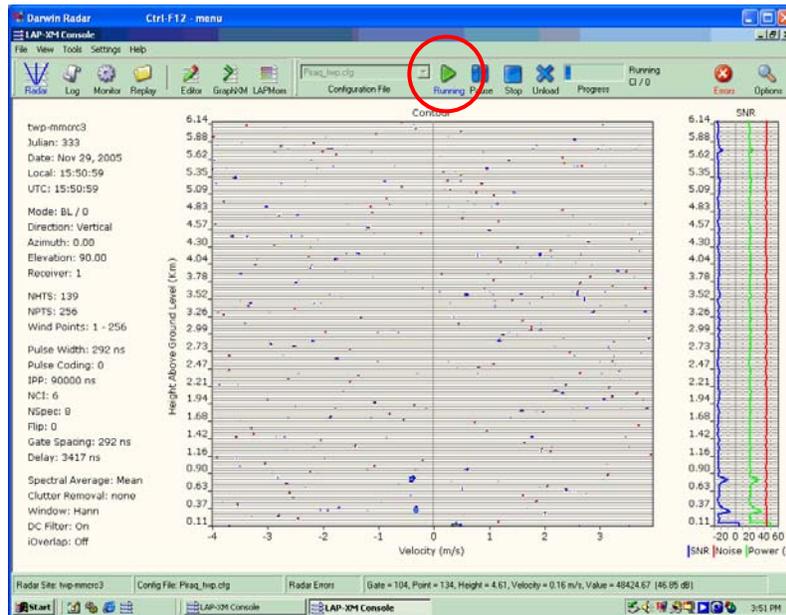
Figure 5

10. Pack the full HD in a Pelican case. When there are two HDs, ship the case:

   a) Fill out a TWP/AMF shipping form available on the TWP/AMF website (www.twppo.lanl.gov).

   b) E-mail the completed shipping form as an attachment to receivals@lanl.gov.

   c) Print the completed shipping form and include it in the case with HDs.

   d) Ship it to the following address:

> Raymond McCord
> Oak Ridge National Laboratory
> Building 1507, MS 6407
> P.O. Box 2008
> Oak Ridge, TN 37831-6407
> U.S.A.
>
> Phone: 1-865-574-7827

11. When Raymond McCord receives the two full HDs:

   a) Download data from the HDs to ARM Archive.

b) Clean all data from the HDs and prepare them to accept data once returned to the site of origin.

c) Attach an "E" sticker to each HD to indicate "Empty."

d) Fill out a TWP/AMF shipping form and e-mail the completed form to receivals@lanl.gov.

e) Put the two HDs and a hard copy of the shipping form into the Pelican case, and them ship it to SGP with "Final Destination" selected (Manus, Nauru, Darwin, or AMF).

V.   References:

None.

VI.   Attachments:

None.