Class notes for "Mark 5 Advanced Topics" Workshop
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For the latest version of this document, see

ftp://gemini.haystack.mit.edu/pub/dls/Smythe.OW.txt

All of these Memos are on the Haystack web site:

http://www.haystack.mit.edu/tech/vlbi/mark5/memos.html

1) Memo #064.2 Mark 5B DIM Stand-alone testing

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/064.2.pdf

2) Memo #063.4 Testing the Mark 5B (VSI4) Sampler Module

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/063.4.pdf

3) Memo #089.2 StreamStor Utility Programs

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/089.2.pdf

4) Memo #073.2 Mark 5B File Utility Programs

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/073.2.pdf

5) Memo #086 Software correlator for station checks

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/086.pdf

6) Memo #078.1 Voltage and Temperature Monitoring on newer Mark 5 units
   with Intel S5000 Boards (Mark5-7xx)

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/078.pdf

7) Memo #092 Voltage and Temperature Sensors for oldest Mark 5 Units
   (Dell and SuperMicro main boards)

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/092.pdf

I could not find a software driver for monitoring voltage or temperature on
older Intel SE7520 main boards.

8) Memo #091.1 Mark 5C Command Set Version 2.0

   http://www.haystack.mit.edu/tech/vlbi/mark5/mark5_memos/091.1.pdf

9) SDK vs. API:

ftp://gemini.haystack.mit.edu/pub/mark5/API2SDK.txt

```
SDK    API     Driver
6.x    5.21     623
7.3    6.04     702
7.4    6.05     801
7.5    6.06     801
7.6    6.07     801
8.1    7.10     910
8.2    10.07    921
8.3    10.09    1001 fixes B2A, has ssprintVersions utility
8.3beta 10.09   1001 FirmwareVersion 12.13 or 15.57 fixes eVLBI
9.0    11.02    1011
9.1    11.17    1021
9.2    11.25    1031
9.2a   11.25    1031  for >2-TB drives
9.2a has FirmwareVersion 13.05 for XF2 or 16.37 for Amazon
9.3a   11.33    1110 requires Debian Lenny (kernel >= 2.6.26)
```

10) 'dim' script for starting 'dimino'
    Requires:
    ~/scripts directory
    [mkdir ~/scripts]
    World writeable /data directory
    [As root, 'mkdir /data;chmod og+w /data'

ftp://gemini.haystack.mit.edu/pub/mark5/utilities/dim

```
#!/bin/tcsh
cd /data
if ($1 == '') then
   echo "Usage: dim <script file name>."
else
   date >>! ~/scripts/$1.script
   dimino -m0 |& LLogr >>& ~/scripts/$1.script &
   sleep 1
   tail -f ~/scripts/$1.script
endif
```

11) 'startdrs' for starting 'drs'
    Requires ~/log directory
    [mkdir ~/log]

ftp://gemini.haystack.mit.edu/pub/mark5/utilities/startdrs

```
#!/bin/tcsh
cd ~/log
drs &
sleep 1
tail -f `ls -t | head -1`
```