## Mauna Loa Solar Observatory Observer's Log \_\_\_\_\_\_ Tue Feb 15 17:27:31 GMT 2005 Year: 05 Doy: 046 Observer: koon Tue Feb 15 17:32:02 GMT 2005 MKIV Start Patrol Tue Feb 15 17:32:30 GMT 2005 CHIP Start Patrol Tue Feb 15 17:32:48 GMT 2005 PICS Start Patrol WEATHER COMMENT: Tue Feb 15 17:27:31 GMT 2005 Clear sky, wind=5 mph from the SSE, temp=39F. end MKIV COMMENT: Tue Feb 15 17:35:21 GMT 2005 Centered occulting. end PSPT COMMENT: Tue Feb 15 17:53:55 GMT 2005 Observing. end Tue Feb 15 18:00:18 GMT 2005 PTCS Flat Tue Feb 15 18:02:37 GMT 2005 End Flat PICS Tue Feb 15 18:02:44 GMT 2005 PICS ReStart Patrol Tue Feb 15 18:02:46 GMT 2005 CHIP LSD Tue Feb 15 18:04:35 GMT 2005 CHIP End LSD Tue Feb 15 18:04:51 GMT 2005 BiasLSD CHIP Tue Feb 15 18:05:45 GMT 2005 End BiasLSD CHIP Tue Feb 15 18:05:54 GMT 2005 Bias CHIP Tue Feb 15 18:06:46 GMT 2005 End Bias CHIP Tue Feb 15 18:06:53 GMT 2005 ReStart Patrol CHIP MKIV COMMENT: Tue Feb 15 18:18:55 GMT 2005 Centered occulting. end Tue Feb 15 18:19:36 GMT 2005 MKIV End Patrol Tue Feb 15 18:19:44 GMT 2005 MKIV Start Cal A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Tue Feb 15 18:27:43 GMT 2005 Tue Feb 15 18:38:27 GMT 2005 End Cal MKIV Tue Feb 15 18:38:34 GMT 2005 Start Patrol MKIV \*\*PICS PROBLEM\*\*: Tue Feb 15 21:02:38 GMT 2005 At 2010 UT I did several iterations of timing the properly functioning movements of the occulting wheel and the Halle filter stage, and checked the timing of the software. Davis recently installed a 20 second timeout to continue the observing sequence incase the Halle filter (and hopefully the occulting wheel too) doesn't make it to its correct position, if a signal indicating the correct wheel or stage position doesn't get to the observing program within 20 seconds then the program wait will timeout and continue with the sequence. There is a 20 second delay between each of the following sets of events shown in the PICS Status window fields: "Program: H-alpha.disk"

to "Camera: Busy" and "Program: H-alpha.limb" to "Camera: Busy", could this be the 20 second delay David added? It seems like it should be shorter for

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one interval because it takes 18 seconds for the Occulting wheel to go from
"Occulting" to "Clear" but only 9 seconds to go the other way. It takes
7 seconds for the Halle filter to go in or out.
  end
**PICS PROBLEM**: Tue Feb 15 22:35:04 GMT 2005
At 2200 UT I redid the timing tests noted earlier with the same results.
MKIV COMMENT: Tue Feb 15 22:36:13 GMT 2005
Centered occulting.
  end
**PSPT PROBLEM**: Tue Feb 15 23:21:45 GMT 2005
Crashed at 2240 "Taking CaK image", kill runPspt.pro and restarted.
  end
COMMENT: Tue Feb 15 23:22:19 GMT 2005
Spar bumped ladder, reset pointing.
 end
MKIV COMMENT: Tue Feb 15 23:45:38 GMT 2005
Centered occulting.
  end
**PICS PROBLEM**: Wed Feb 16 00:09:35 GMT 2005
I just finished another 2 sets of checking the mechanism and program timing.
Halle In and Out takes 7 seconds like before, Occulting wheel In is 17 to 18
seconds and Out is 8 to 9 seconds - like before. Timing is 20 seconds from
Program: H-alpha.disk/limb to Camera: Busy, same for both and same as before.
No bad images yet either.
  end
**PICS PROBLEM**: Wed Feb 16 01:18:08 GMT 2005
Did the timing checks again, all numbers are the same, no slowdown, no bad
images either.
end
MKIV COMMENT: Wed Feb 16 01:41:16 GMT 2005
Centered occulting.
end
Wed Feb 16 02:24:31 GMT 2005
                                        End Patrol
                                MKIV
Wed Feb 16 02:24:23 GMT 2005
                                         End Patrol
                                CHIP
Wed Feb 16 02:55:19 GMT 2005
        MkIV
00 00.rawmk4
              01 45.rawmk4
                              18 50.rawmk4
                                             20 36.rawmk4
                                                            22 25.rawmk4
00 03.rawmk4
              01 48.rawmk4
                              18 53.rawmk4
                                             20 39.rawmk4
                                                            22 28.rawmk4
00_06.rawmk4
              01_51.rawmk4
                             18_56.rawmk4
                                             20_41.rawmk4
                                                            22_31.rawmk4
00 09.rawmk4
              01 54.rawmk4
                              18 59.rawmk4
                                             20 44.rawmk4
                                                            22 34.rawmk4
                              19 02.rawmk4
00 12.rawmk4
              01 57.rawmk4
                                             20 47.rawmk4
                                                            22 37.rawmk4
00 14.rawmk4
              02_00.rawmk4
                             19 04.rawmk4
                                             20 50.rawmk4
                                                            22 40.rawmk4
00 17.rawmk4
              02 03.rawmk4
                             19 07.rawmk4
                                             20 53.rawmk4
                                                            22 43.rawmk4
00 20.rawmk4
              02 06.rawmk4
                             19 10.rawmk4
                                             20 59.rawmk4
                                                            22 46.rawmk4
00 23.rawmk4
              02 09.rawmk4
                             19 13.rawmk4
                                             21 03.rawmk4
                                                            22 49.rawmk4
00 26.rawmk4
              02 12.rawmk4
                             19 16.rawmk4
                                             21 06.rawmk4
                                                            22 51.rawmk4
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00_	29.rawmk4	02_15.rawmk4	19_19.rawmk4	21_09.rawmk4	22_54.rawmk4
00_	32.rawmk4	02_18.rawmk4	19_22.rawmk4	21_12.rawmk4	22_57.rawmk4
00_	35.rawmk4	02_21.rawmk4	19_25.rawmk4	21_15.rawmk4	23_00.rawmk4
00_	38.rawmk4	17_32.rawmk4	19_28.rawmk4	21_18.rawmk4	23_03.rawmk4
00_	41.rawmk4	17_35.rawmk4	19_31.rawmk4	21_20.rawmk4	23_06.rawmk4
00_	44.rawmk4	17_38.rawmk4	19_34.rawmk4	21_23.rawmk4	23_09.rawmk4
00_	47.rawmk4	17_40.rawmk4	19_37.rawmk4	21_26.rawmk4	23_12.rawmk4
00_	50.rawmk4	17_43.rawmk4	19_40.rawmk4	21_29.rawmk4	23_15.rawmk4
00_	53.rawmk4	17_46.rawmk4	19_43.rawmk4	21_32.rawmk4	23_18.rawmk4
00_	56.rawmk4	17_49.rawmk4	19_46.rawmk4	21_35.rawmk4	23_21.rawmk4
00_	58.rawmk4	17_52.rawmk4	19_49.rawmk4	21_38.rawmk4	23_24.rawmk4
01_	01.rawmk4	17_55.rawmk4	19_52.rawmk4	21_41.rawmk4	23_27.rawmk4
01_	04.rawmk4	17_58.rawmk4	19_54.rawmk4	21_44.rawmk4	23_30.rawmk4
01_	07.rawmk4	18_01.rawmk4	19_57.rawmk4	21_47.rawmk4	23_35.rawmk4
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01_	34.rawmk4	18_38.rawmk4	20_24.rawmk4	22_13.rawmk4	c18_25.rawmk4
01_	37.rawmk4	18_41.rawmk4	20_27.rawmk4	22_16.rawmk4	c18_31.rawmk4
01_	39.rawmk4	18_44.rawmk4	20_30.rawmk4	22_19.rawmk4	
01_	42.rawmk4	18_47.rawmk4	20_33.rawmk4	22_22.rawmk4	