Mauna Loa Solar Observatory Observer's Log ______ Fri Jan 26 17:18:50 GMT 2007 Year: 07 Doy: 026 Observer: yasukawa WEATHER COMMENT: Fri Jan 26 17:19:05 GMT 2007 Clear, SE wind 12 mph, temp 35 F. end Fri Jan 26 17:24:34 GMT 2007 CHIP Start Patrol Fri Jan 26 17:24:46 GMT 2007 PICS Start Patrol SBM COMMENT: Fri Jan 26 17:25:28 GMT 2007 Observing end PSPT COMMENT: Fri Jan 26 17:25:37 GMT 2007 Starting up. end PSPT COMMENT: Fri Jan 26 17:33:52 GMT 2007 Observing. ____end_ A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Fri Jan 26 17:42:16 GMT 2007 Fri Jan 26 17:51:57 GMT 2007 MKIV Start Patrol Fri Jan 26 17:54:25 GMT 2007 MKIV End Patrol **MKIV PROBLEM**: Fri Jan 26 17:54:37 GMT 2007 Mk4 startup failed at ReadKCC waiting (on cmdtool). did an "end4" on nahenahe.... no response. Killing and restarting. Also reset KCC. Problem may have been precipitated by my wiggling cables and tapping on boards looking for any looseness that may be causing the intermittent negative signal Joan alerted us to. Nothing appeared loose, by the way. end Fri Jan 26 17:56:24 GMT 2007 MKIV End Patrol Fri Jan 26 17:56:38 GMT 2007 MkTV Mauna Loa Solar Observatory Observer's Log ______ Fri Jan 26 17:56:52 GMT 2007 Year: 07 Doy: 026 Observer: yasukawa Fri Jan 26 18:01:42 GMT 2007 MKIV Start Patrol Fri Jan 26 18:02:38 GMT 2007 CHIP End LSD Fri Jan 26 18:02:44 GMT 2007 CHIP BiasLSD Fri Jan 26 18:03:23 GMT 2007 CHIP End BiasLSD Fri Jan 26 18:03:29 GMT 2007 CHIP Bias Fri Jan 26 18:03:38 GMT 2007 PICS End Flat Fri Jan 26 18:03:43 GMT 2007 PICS ReStart Patrol

Fri Jan 26 18:04:19 GMT 2007 CHIP End Bias Fri Jan 26 18:04:31 GMT 2007 MkIV

Fri Jan 26 18:04:24 GMT 2007 CHIP ReStart Patrol ______ Mauna Loa Solar Observatory Observer's Log ______ Fri Jan 26 18:10:58 GMT 2007 Year: 07 Doy: 026 Observer: yasukawa Fri Jan 26 18:11:00 GMT 2007 PICS Start Patrol Fri Jan 26 18:14:08 GMT 2007 MKIV Start Patrol **MLSO PROBLEM**: Fri Jan 26 18:11:35 GMT 2007 Did a soft shutdown of nahenahe, paused PICS, CHIP, and SBM due to quiding shutdown during KCC power down. PICS and CHIP crashed, did not endPatrol. Powered KCC back up, Killed and restarted PICS and CHIP, rebooted nahenahe. Restarted SBM. Restart attempt on MK4 failed again. KCC appears crashed. end **MKIV PROBLEM**: Fri Jan 26 18:50:53 GMT 2007 Checked out KCC control panel functions. Appears DC motor drive functions work, stepper motor functions do not--Barrel & tilt plate. end **MKIV PROBLEM**: Fri Jan 26 19:49:47 GMT 2007 Power supplies to stepper interface box measured OK. end **MKIV PROBLEM**: Fri Jan 26 19:57:48 GMT 2007 Barrel pulses are not being produced at KCC/signal transformation board. Checked pins at J6 on STB and see no pulses that should be going up to Stepper motor tranceivers end **MKIV PROBLEM**: Fri Jan 26 20:17:52 GMT 2007 I believe that the problem resides in a faulty VMIC 2540 Intelligent Counter/Controller board in the KCC. Appears that there are no pulses coming out of the board, probed at J6 on the STB, which is essentially a pass-thru to the mechanisms on the spar. This might explain the negative images seen on MK4, reported by Joan, as the FLC also gets timing signals from the VMIC 2540. I am also seeing no pulses at the 1/rot-64/rot test points which also reside on J6. I do not see the 1/rot and 64/rot pulses at the back of the KCC rack (digital isolator panel) which has me a bit puzzled at this time. end Fri Jan 26 20:34:47 GMT 2007 MKIV End Patrol **MKIV PROBLEM**: Fri Jan 26 21:00:33 GMT 2007

___end___

MK4 down for now.

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Fri Jan 26 23:21:06 GMT 2007
                                MKIV
                                        Start Patrol
Fri Jan 26 23:28:26 GMT 2007
                                MKIV
                                        Start Patrol
**MKIV PROBLEM**: Fri Jan 26 23:28:49 GMT 2007
MK4 back up!
Thanks to David's review of the relationship between the 1/2-wave plate
pulses and the output pulses from the VMIC 2540 board, I found a flaky
connector that provided +12VDC in to the encoder electronics. Secured it
temporarily and saw the 64/rot pulses reappear. Reset KCC. Started
MK4 patrol--all appears well now. This may be the cause of the negative
images Joan was seeing too.
____end_
Fri Jan 26 23:41:23 GMT 2007
                                        End Patrol
                                MKIV
                                        Start Patrol
Sat Jan 27 00:01:47 GMT 2007
                                MKIV
NICE MK4
              IMAGE: 2337
              IMAGE: 1901
NICE CHIP
NICE PICSLIMB IMAGE: 2006
NICE PICSDISC IMAGE: 1902
**MKIV PROBLEM**: Sat Jan 27 01:45:48 GMT 2007
scan just went negative, but that was caused by a static discharge between
me and the OCP frame.
end
Sat Jan 27 02:29:43 GMT 2007
                                CHIP
                                         End Patrol
Sat Jan 27 02:30:35 GMT 2007
                                         End Patrol
                                PICS
Sat Jan 27 02:38:03 GMT 2007
        MkIV
00 01.rawmk4
               00 37.rawmk4
                              01 12.rawmk4
                                             01 47.rawmk4
                                                            02 22.rawmk4
00 04.rawmk4
               00 40.rawmk4
                                                             02 25.rawmk4
                              01 15.rawmk4
                                             01 50.rawmk4
00_07.rawmk4
               00_42.rawmk4
                              01_18.rawmk4
                                             01_53.rawmk4
                                                            23_28.rawmk4
00_10.rawmk4
               00 45.rawmk4
                              01_21.rawmk4
                                             01 56.rawmk4
                                                            23_31.rawmk4
00 13.rawmk4
               00 48.rawmk4
                              01 24.rawmk4
                                             01 59.rawmk4
                                                            23 37.rawmk4
00 16.rawmk4
               00 51.rawmk4
                              01 26.rawmk4
                                             02 02.rawmk4
                                                            23 45.rawmk4
00 19.rawmk4
               00 54.rawmk4
                              01_29.rawmk4
                                             02 05.rawmk4
                                                            23 51.rawmk4
               00 57.rawmk4
                                                            23 57.rawmk4
00 22.rawmk4
                              01 32.rawmk4
                                             02 08.rawmk4
00 25.rawmk4
               01 00.rawmk4
                              01 35.rawmk4
                                             02 11.rawmk4
                                                            c23 41.rawmk4
                                                            c23 48.rawmk4
00 28.rawmk4
               01 03.rawmk4
                              01 38.rawmk4
                                             02 13.rawmk4
00 31.rawmk4
               01 06.rawmk4
                              01 41.rawmk4
                                             02 16.rawmk4
                                                            c23 54.rawmk4
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01_44.rawmk4

02_19.rawmk4

00_34.rawmk4

01_09.rawmk4