Mauna Loa Solar Observatory Observer's Log _____ Mon Sep 24 16:36:03 GMT 2007 Year: 07 Doy: 267 Observer: yasukawa WEATHER COMMENT: Mon Sep 24 16:36:22 GMT 2007 In broken cirrostratus, S wind 12 mph, temp 47 F. ___end Mon Sep 24 16:41:54 GMT 2007 CHIP Start Patrol Mon Sep 24 16:41:59 GMT 2007 PICS Start Patrol PSPT COMMENT: Mon Sep 24 16:43:02 GMT 2007 Starting up. end MKIV COMMENT: Mon Sep 24 16:48:34 GMT 2007 Ted Benning of Solution Systems Technologies emailed instructions to get KCC processor that was repaired to boot up. I'll try that later on today. end PSPT COMMENT: Mon Sep 24 16:51:58 GMT 2007 Observing. ___end___ Mon Sep 24 16:56:32 GMT 2007 MKIV Start Patrol MKIV COMMENT: Mon Sep 24 17:03:36 GMT 2007 MK4 has cleared dome cylinder. end Mon Sep 24 17:26:15 GMT 2007 MKIV End Patrol MKIV COMMENT: Mon Sep 24 17:25:59 GMT 2007 Stopping to swap MVME 162-023 processor boards in the KCC. end MKIV COMMENT: Mon Sep 24 17:26:51 GMT 2007 Turning off KCC. end Mon Sep 24 18:00:44 GMT 2007 CHIP LSD Mon Sep 24 18:01:16 GMT 2007 PICS Flat Mon Sep 24 18:02:30 GMT 2007 CHIP End LSD Mon Sep 24 18:02:38 GMT 2007 CHIP BiasLSD Mon Sep 24 18:03:31 GMT 2007 CHIP End BiasLSD Mon Sep 24 18:03:34 GMT 2007 PICS End Flat Mon Sep 24 18:03:42 GMT 2007 CHIP Bias Mon Sep 24 18:03:45 GMT 2007 PICS ReStart Patrol Mon Sep 24 18:04:38 GMT 2007 CHIP End Bias Mon Sep 24 18:04:45 GMT 2007 CHIP ReStart Patrol **MKIV PROBLEM**: Mon Sep 24 18:03:55 GMT 2007 Tried instructions from Ted. Board did not boot up. I get the feeling that it needs to be told where the boot instructions, specific to the KCC, are located. Swapped the in-service board back in. Resuming obs.

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MKIV PROBLEM: Mon Sep 24 18:08:51 GMT 2007 Ah phooey! KCC monitor won't come up with the normal KCC processor and error messages indicate DQ board problem. MVME162 board was not seated all the way. Retaining screws were not engaged as I was swapping boards. Tightened screws and boards resumed talking to each other. end WEATHER COMMENT: Mon Sep 24 18:21:39 GMT 2007 In thicker cirrostratus overcast. end **MKIV PROBLEM**: Mon Sep 24 18:23:46 GMT 2007 According to Ted at SST, once I set the clock and the environment to autoboot as I did once, the board will keep that info when powered down (removed). The jumper at J22 pins 9-10 can be removed so the board can boot up. Jumper sets the board into BUG mode and it cannot boot up in that mode. Replace jumper to go back into BUG mode. Board was sent back in factory default condition according to Ted so if there was any in-house code on the timekeeper/ram chip, that chip was replaced by them which may be why I cannot boot our application at this time. ____end_ GONG COMMENT: Mon Sep 24 18:41:49 GMT 2007 Going down to GONG to do weekly PM while in cirrostratus. end Mon Sep 24 19:00:47 GMT 2007 MKIV Start Cal WEATHER COMMENT: Mon Sep 24 19:00:54 GMT 2007 Clear hole. end GONG COMMENT: Mon Sep 24 19:01:03 GMT 2007 Back from GONG. end Mon Sep 24 19:18:45 GMT 2007 CHTP End Patrol Mon Sep 24 19:19:29 GMT 2007 MKIV End Cal COMMENT: Mon Sep 24 19:19:24 GMT 2007 Stopping to reconfigure dome shutter. end Mon Sep 24 19:19:27 GMT 2007 PICS End Patrol Mon Sep 24 19:24:35 GMT 2007 MKIV Start Patrol Mon Sep 24 19:24:49 GMT 2007 CHIP Start Patrol Mon Sep 24 19:25:01 GMT 2007 PICS Start Patrol MKIV COMMENT: Mon Sep 24 19:35:01 GMT 2007 Pausing while in cirrostratus. end **MKIV PROBLEM**: Mon Sep 24 20:00:12 GMT 2007 Data transfer failures for 4 scans. Checking it out. end____ Mon Sep 24 20:12:14 GMT 2007 MKIV End Patrol Mon Sep 24 20:14:50 GMT 2007 MKIV Start Patrol **MKIV PROBLEM**: Mon Sep 24 20:21:44 GMT 2007

Data Xfer failures stopped after doing a Pau/Run cycle on the console. end MKIV COMMENT: Mon Sep 24 20:32:11 GMT 2007 Stopping to compare jumpers on MVME162 boards again. end Mon Sep 24 20:32:46 GMT 2007 MKIV End Patrol **MKIV PROBLEM**: Mon Sep 24 21:28:55 GMT 2007 Jumpers were same except for BUG jumper on J22. Removed it and swapped replacement board into KCC. Found Allen's instructions for vxWorks and the parameter settings for the KCC. Edited the parameters according to Allen's document and tried boot. Got thru the parameter print-out, attaching network interface ei0, attaching network interface lo0, and got to Loading... and there's where the boot stalls. Progress, bu not fixed yet. end **MKIV PROBLEM**: Mon Sep 24 21:40:40 GMT 2007 Reinstalled in-service board and checking parameters on it against what Allen has written down. end Mon Sep 24 22:03:17 GMT 2007 MKIV Start Patrol Mon Sep 24 22:09:38 GMT 2007 MKIV End Patrol MKIV COMMENT: Mon Sep 24 22:06:49 GMT 2007 After I replaced the in-service board with the replacement again, the boot parameters were back at the default goblygook. I re-entered the MLSO parameters and the board bootd up. Might have mis-typed something the first time or something may have gotten messed up when I was trying to understand some of the parameters that were not on Allen's list -- they were eventually cleared and left blank. Ran a Patrol loop to test things out. Rebooting KCC again to confirm that things are working. end **MKIV PROBLEM**: Mon Sep 24 22:12:11 GMT 2007 Powered off KCC to reboot. Boot parameters did not "stick"! Got back to the default stuff, did not boot. end WEATHER COMMENT: Mon Sep 24 22:25:39 GMT 2007 In borken orographic clouds. ____end MKIV COMMENT: Mon Sep 24 22:26:30 GMT 2007 Reboot after re-entering parameters worked. Powering down again to test boot volatility. end Mon Sep 24 23:11:28 GMT 2007 CHIP End Patrol Mon Sep 24 23:11:36 GMT 2007 PICS End Patrol WEATHER COMMENT: Mon Sep 24 23:12:03 GMT 2007 In orographic clouds. Testing KCC and shutting down. end **MKIV PROBLEM**: Mon Sep 24 23:12:35 GMT 2007

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The boot parameters have to be saved in the NVRAM. We will need to figure
out which ENV parameter on the replacement board needs to be changed in order
to save the boot parameters. Left Allen instructions to do that tomorow.
Reinstalled in-service board and checked it out before shutting MK4 down
for the day. This will allow Allen to get some data before proceeding
with the swap tasks.
KCC came up OK with the in-service board. Replacement board is in box
on Allen's desk.
   _end_
NICE MK4
              IMAGE: 1720
NICE PICSLIMB IMAGE: 1719
NICE PICSDISC IMAGE: 1721
NICE CHIP
              IMAGE: 1721
Mon Sep 24 23:28:24 GMT 2007
        MkIV
16 56.rawmk4
               17 14.rawmk4
                              19 16.rawmk4
                                             20 14.rawmk4
                                                            22 03.rawmk4
16 59.rawmk4
               17 17.rawmk4
                              19 24.rawmk4
                                             20 17.rawmk4
                                                            22 06.rawmk4
                                                            c19 00.rawmk4
17 02.rawmk4
               17 20.rawmk4
                              19 27.rawmk4
                                             20 20.rawmk4
                                                            c19_06.rawmk4
17_05.rawmk4
               17_23.rawmk4
                              19_30.rawmk4
                                             20_23.rawmk4
17_08.rawmk4
               19_03.rawmk4
                              19_33.rawmk4
                                             20_26.rawmk4
                                                            c19_13.rawmk4
17 11.rawmk4
               19 09.rawmk4
                              20 09.rawmk4
                                             20 29.rawmk4
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