Mauna Loa Solar Observatory Observer's Log _____ Wed Jul 26 16:28:27 GMT 2006 Year: 06 Doy: 207 Observer: yasukawa WEATHER COMMENT: Wed Jul 26 16:28:47 GMT 2006 Clear, SW wind 5 mph, temp 38 F. end Wed Jul 26 16:38:23 GMT 2006 CHTP Start Patrol Wed Jul 26 16:38:28 GMT 2006 PICS Start Patrol SBM COMMENT: Wed Jul 26 16:39:54 GMT 2006 Observing end PSPT COMMENT: Wed Jul 26 16:40:03 GMT 2006 Starting up. end **MKIV PROBLEM**: Wed Jul 26 16:52:18 GMT 2006 Barrel completely nonresponsive to either akamai commands or manual commands requested at gui. end Wed Jul 26 16:53:12 GMT 2006 MKIV Start Patrol PSPT COMMENT: Wed Jul 26 16:54:51 GMT 2006 Observing. ___end Wed Jul 26 17:26:01 GMT 2006 MKIV Start Patrol **MKIV PROBLEM**: Wed Jul 26 17:26:08 GMT 2006 Barrel started turning "spontaneously" while I was attending to something else. It was running at a slow (30) rate. Went to 176 and stopped. Started Patrol. end **PSPT PROBLEM**: Wed Jul 26 17:31:45 GMT 2006 Crash at 1714 UT, k/r. end Wed Jul 26 17:55:48 GMT 2006 MKIV End Patrol Wed Jul 26 18:00:19 GMT 2006 PICS Flat Wed Jul 26 18:02:39 GMT 2006 PICS End Flat Wed Jul 26 18:02:46 GMT 2006 CHIP LSD Wed Jul 26 18:02:52 GMT 2006 PICS ReStart Patrol Wed Jul 26 18:04:48 GMT 2006 CHIP End LSD Wed Jul 26 18:04:57 GMT 2006 CHIP BiasLSD Wed Jul 26 18:05:39 GMT 2006 End BiasLSD CHIP Wed Jul 26 18:05:47 GMT 2006 CHIP Bias Wed Jul 26 18:06:28 GMT 2006 CHIP End Bias Wed Jul 26 18:06:36 GMT 2006 CHIP ReStart Patrol Wed Jul 26 18:16:33 GMT 2006 MKIV End Cal Wed Jul 26 18:16:39 GMT 2006 MKIV Start Patrol GONG COMMENT: Wed Jul 26 18:17:10 GMT 2006

Going down to GONG to do a requested tape change. end GONG COMMENT: Wed Jul 26 18:44:03 GMT 2006 Back from GONG. Previous stored tape indicates wekkly PM wasn't done on Monday. Performed the PM while down there. end **MKIV PROBLEM**: Wed Jul 26 19:28:46 GMT 2006 There was a light leak at the tube ahead of the tilt plates. Connecting tube wasn't secured after tilt problem fix and there was about a 3/8" gap caused by the tube rotating and sliding forward a bit. Secured tube. end Wed Jul 26 19:38:18 GMT 2006 CHIP End Patrol COMMENT: Wed Jul 26 19:38:29 GMT 2006 Stopping to reconfigure dome shutter. end Wed Jul 26 19:38:26 GMT 2006 PICS End Patrol Wed Jul 26 19:39:12 GMT 2006 MKIV End Patrol Wed Jul 26 19:45:04 GMT 2006 MKIV Start Patrol Wed Jul 26 19:45:23 GMT 2006 CHIP Start Patrol Wed Jul 26 19:45:34 GMT 2006 PICS Start Patrol COMMENT: Wed Jul 26 19:46:27 GMT 2006 Declination recentered itself. Repointed and reset. end NICE MK4 IMAGE: 1806 NICE PICSLIMB IMAGE: 1806 NICE PICSDISC IMAGE: 1806 IMAGE: 1807 NICE CHIP **MKIV PROBLEM**: Wed Jul 26 20:42:47 GMT 2006 Stopping MK4 to test startup. May lose guiding while KCC turned off. end Wed Jul 26 20:44:13 GMT 2006 MKIV End Patrol Wed Jul 26 20:51:10 GMT 2006 MKIV Start Patrol **MKIV PROBLEM**: Wed Jul 26 20:52:15 GMT 2006 Idle, then End Day, then Turning off KCC power. Turning on KCC power after 30 sec., restarting guiding. Barrel rotated from 359 (stow) to 176 as normal once VxWorks loaded. Patrol started normally. Nahenahe was left on and in Run state during this test. end Wed Jul 26 21:00:08 GMT 2006 MkIV Mauna Loa Solar Observatory Observer's Log _____

Wed Jul 26 21:06:02 GMT 2006 Year: 06 Doy: 207 Observer: yasukawa Wed Jul 26 21:07:05 GMT 2006 MKIV Start Patrol **MKIV PROBLEM**: Wed Jul 26 21:07:22 GMT 2006 Stopped Patrol with End Day. Pau on cmdtool. Exited desktop. Logged out. Turned KCC off. Waited 30 seconds. Turned on KCC. Logged into nahenahe. Akamai displayed "connected" and monitor screen came up and qui displayed. Barrel rotated from 359 to 176 and stopped. Patrol started OK after that when selected. -- no problem. end WEATHER COMMENT: Wed Jul 26 22:27:42 GMT 2006 In scattered orographic clouds. end Wed Jul 26 22:55:05 GMT 2006 CHIP End Patrol Wed Jul 26 22:55:25 GMT 2006 PICS End Patrol WEATHER COMMENT: Wed Jul 26 22:55:27 GMT 2006 In thick clouds, pausing instruments. end Wed Jul 26 22:59:01 GMT 2006 MKIV End Patrol Wed Jul 26 23:13:06 GMT 2006 MkTV Mauna Loa Solar Observatory Observer's Log _____ Wed Jul 26 23:19:27 GMT 2006 Year: 06 Doy: 207 Observer: yasukawa **MKIV PROBLEM**: Wed Jul 26 23:20:51 GMT 2006 Tested shutdown and startup again. Did not do "Run" until akamai monitor came up and barrel rotated from 359 to 176 and stopped. Akamai only displayed "connected", VxWorks load scroll did not happen. end Wed Jul 26 23:26:33 GMT 2006 MKIV End Patrol Wed Jul 26 23:30:00 GMT 2006 Mktv Mauna Loa Solar Observatory Observer's Log _____ Wed Jul 26 23:32:21 GMT 2006 Year: 06 Doy: 207 Observer: yasukawa **MKIV PROBLEM**: Wed Jul 26 23:37:46 GMT 2006 Turned things off again using nominal shutdown procedure, exited, and logged out. Turned on KCC, logged in, started "Run" as soon as desktop came up, before akamai loaded completely, as I often do to get things started early. This time VxWorks dialog scrolled thru the akamai window. Monitor came up with grey slanted stripes as it sometimes does. Reset akamai.

VxWorks dialog again scrolled thru on the akamai window, monitor came up with the correct gui and barrel scanned from 359 to 176. Pretty typical, no stall problems. end Wed Jul 26 23:44:08 GMT 2006 MKIV Start Patrol Wed Jul 26 23:44:27 GMT 2006 Start Patrol CHIP Wed Jul 26 23:44:38 GMT 2006 PICS Start Patrol WEATHER COMMENT: Wed Jul 26 23:44:55 GMT 2006 Clouds broke up. Resumed observations. end **PSPT PROBLEM**: Thu Jul 27 01:53:17 GMT 2006 Crashed at 0141 UT, k/r. end **PSPT PROBLEM**: Thu Jul 27 02:20:39 GMT 2006 Crashed again at 2000 UT. Serial port buffer overflow. Shutting down for the day. ____end_ Thu Jul 27 02:27:18 GMT 2006 CHIP End Patrol Thu Jul 27 02:27:20 GMT 2006 PICS End Patrol Thu Jul 27 02:31:08 GMT 2006 End Patrol MKIV **MKIV PROBLEM**: Thu Jul 27 02:29:36 GMT 2006 Midday startup tests went OK. Set up scope on access points on signal transformation board (J6) to look at pulses between the counter/controller in the KCC and the tranceivers in the STM box on the spar. If the barrel doesn't run in the morning, I'd like to see if the KCC is still trying to send pulses up to the barrel. If it is, the problem may be upstairs in the electronics or the barrel may be in need of lubrication in its bearings. If there are no pulses, then the problem may be in the electronics downstairs or in the transfer of the VxWorks or in nahenahe's software. end **MKIV PROBLEM**: Thu Jul 27 02:41:10 GMT 2006 So far, I haven't found any consistent procedure or comments that point to a solution in the barrel problem written in the logs. end Thu Jul 27 02:43:04 GMT 2006 MkIV 00 01.rawmk4 01 40.rawmk4 18 25.rawmk4 20 05.rawmk4 21 57.rawmk4 00 04.rawmk4 01_43.rawmk4 18_28.rawmk4 20 08.rawmk4 22 00.rawmk4 00 07.rawmk4 01 46.rawmk4 18 31.rawmk4 20 11.rawmk4 22 02.rawmk4 00 10.rawmk4 01 49.rawmk4 18 34.rawmk4 20 14.rawmk4 22 05.rawmk4 00 13.rawmk4 01_52.rawmk4 18 37.rawmk4 20 17.rawmk4 22 08.rawmk4 00 16.rawmk4 01 55.rawmk4 18 40.rawmk4 20 20.rawmk4 22 11.rawmk4 00 19.rawmk4 01 58.rawmk4 18 43.rawmk4 20 23.rawmk4 22 14.rawmk4 00 22.rawmk4 02 01.rawmk4 18 45.rawmk4 20 26.rawmk4 22 17.rawmk4 00 25.rawmk4 02 04.rawmk4 18 48.rawmk4 20 29.rawmk4 22 20.rawmk4

02_07.rawmk4	18_51.rawmk4	20_32.rawmk4	22_23.rawmk4
02_10.rawmk4	18_54.rawmk4	20_35.rawmk4	22_26.rawmk4
02_13.rawmk4	18_57.rawmk4	20_38.rawmk4	22_29.rawmk4
02_16.rawmk4	19_00.rawmk4	20_40.rawmk4	22_32.rawmk4
02_19.rawmk4	19_03.rawmk4	20_51.rawmk4	22_35.rawmk4
02_22.rawmk4	19_06.rawmk4	20_54.rawmk4	22_38.rawmk4
02_25.rawmk4	19_09.rawmk4	21_07.rawmk4	22_41.rawmk4
02_27.rawmk4	19_12.rawmk4	21_10.rawmk4	22_44.rawmk4
17_26.rawmk4	19_15.rawmk4	21_13.rawmk4	22_47.rawmk4
17_29.rawmk4	19_18.rawmk4	21_16.rawmk4	22_49.rawmk4
17_32.rawmk4	19_21.rawmk4	21_18.rawmk4	22_52.rawmk4
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17_49.rawmk4	19_45.rawmk4	21_36.rawmk4	23_50.rawmk4
17_52.rawmk4	19_48.rawmk4	21_39.rawmk4	23_53.rawmk4
18_06.rawmk4	19_51.rawmk4	21_42.rawmk4	23_56.rawmk4
18_13.rawmk4	19_53.rawmk4	21_45.rawmk4	23_58.rawmk4
18_16.rawmk4	19_56.rawmk4	21_48.rawmk4	c17_55.rawmk4
18_19.rawmk4	19_59.rawmk4	21_51.rawmk4	c18_03.rawmk4
18_22.rawmk4	20_02.rawmk4	21_54.rawmk4	c18_10.rawmk4
	02_10.rawmk4 02_13.rawmk4 02_16.rawmk4 02_19.rawmk4 02_22.rawmk4 02_25.rawmk4 02_27.rawmk4 17_26.rawmk4 17_29.rawmk4 17_32.rawmk4 17_31.rawmk4 17_40.rawmk4 17_40.rawmk4 17_40.rawmk4 17_49.rawmk4 17_52.rawmk4 18_06.rawmk4 18_13.rawmk4 18_16.rawmk4	02_10.rawmk4 18_54.rawmk4 02_13.rawmk4 18_57.rawmk4 02_16.rawmk4 19_00.rawmk4 02_19.rawmk4 19_03.rawmk4 02_22.rawmk4 19_06.rawmk4 02_25.rawmk4 19_09.rawmk4 02_27.rawmk4 19_12.rawmk4 17_26.rawmk4 19_15.rawmk4 17_32.rawmk4 19_21.rawmk4 17_33.rawmk4 19_27.rawmk4 17_37.rawmk4 19_27.rawmk4 17_40.rawmk4 19_30.rawmk4 17_46.rawmk4 19_35.rawmk4 17_52.rawmk4 19_45.rawmk4 17_52.rawmk4 19_51.rawmk4 18_13.rawmk4 19_53.rawmk4 18_13.rawmk4 19_50.rawmk4 18_16.rawmk4 19_50.rawmk4	02_10.rawmk418_54.rawmk420_35.rawmk402_13.rawmk418_57.rawmk420_38.rawmk402_16.rawmk419_00.rawmk420_40.rawmk402_19.rawmk419_03.rawmk420_51.rawmk402_22.rawmk419_06.rawmk420_54.rawmk402_25.rawmk419_12.rawmk421_07.rawmk402_27.rawmk419_15.rawmk421_10.rawmk417_26.rawmk419_15.rawmk421_16.rawmk417_32.rawmk419_21.rawmk421_21.rawmk417_34.rawmk419_27.rawmk421_21.rawmk417_40.rawmk419_30.rawmk421_27.rawmk417_49.rawmk419_35.rawmk421_33.rawmk417_52.rawmk419_45.rawmk421_36.rawmk418_13.rawmk419_51.rawmk421_42.rawmk418_13.rawmk419_51.rawmk421_45.rawmk418_16.rawmk419_59.rawmk421_48.rawmk418_19.rawmk419_59.rawmk421_51.rawmk4