Mauna Loa Solar Observatory Observer's Log \_\_\_\_\_ Sun Mar 23 17:17:37 GMT 2003 Year: 03 Doy: 082 Observer: koon Sun Mar 23 17:24:12 GMT 2003 MKIV Start Patrol WEATHER COMMENT: Sun Mar 23 17:24:30 GMT 2003 Clear sky, wind=5 mph from the SE, temp=40 F. PSPT COMMENT: Sun Mar 23 17:32:51 GMT 2003 Observing A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Sun Mar 23 17:42:39 GMT 2003 Sun Mar 23 17:43:40 GMT 2003 MKIV End Patrol Sun Mar 23 17:51:16 GMT 2003 Start Patrol MKIV Sun Mar 23 18:01:50 GMT 2003 CHIP LSD Sun Mar 23 18:03:46 GMT 2003 CHIP End LSD Sun Mar 23 18:04:00 GMT 2003 CHIP BiasLSD Sun Mar 23 18:04:07 GMT 2003 PICS Flat Sun Mar 23 18:05:03 GMT 2003 CHIP End BiasLSD Sun Mar 23 18:05:18 GMT 2003 Bias CHIP Sun Mar 23 18:06:18 GMT 2003 CHIP End Bias Sun Mar 23 18:06:43 GMT 2003 PICS End Flat MKIV COMMENT: Sun Mar 23 18:14:58 GMT 2003 Centered occulting. Sun Mar 23 18:50:39 GMT 2003 End Patrol MKIV Sun Mar 23 18:50:51 GMT 2003 Start Cal MKIV Sun Mar 23 19:09:38 GMT 2003 End Cal MKIV Sun Mar 23 19:09:50 GMT 2003 MKIV Start Patrol MKIV COMMENT: Sun Mar 23 19:24:33 GMT 2003 Centered occulting. COMMENT: Sun Mar 23 19:30:18 GMT 2003 Extended the dome slot. MKIV COMMENT: Sun Mar 23 19:42:09 GMT 2003 Centered occulting. MKIV COMMENT: Sun Mar 23 20:43:55 GMT 2003 Centered occulting. MKIV COMMENT: Sun Mar 23 21:47:27 GMT 2003 Centered occulting. \*\*PSPT PROBLEM\*\*: Sun Mar 23 21:47:36 GMT 2003 Crashed "taking CAK image", killed runPspt.pro and restarted. MKIV COMMENT: Sun Mar 23 22:31:30 GMT 2003 Centered occulting. MKIV COMMENT: Sun Mar 23 23:27:29 GMT 2003

Centered occulting. \*\*MKIV PROBLEM\*\*: Mon Mar 24 00:04:22 GMT 2003 Apparently had another stall at end of a scan. I'm trying something different, I cycled the power to the KCC, I'll see if that helps anything. \*\*MKIV PROBLEM\*\*: Mon Mar 24 00:06:06 GMT 2003 After the main power cycle to KCC the barrel is now being moved CW. I didn't physically push the barrel as I have after other similar stalls. Resetting the power fixed the "end of CCW scan" barrel stall. COMMENT: Mon Mar 24 00:18:21 GMT 2003 Declination pointing started to get bad, but I reset the guider and it corrected itself without me pointing the telescope by hand. Mon Mar 24 00:19:38 GMT 2003 MKIV Start Patrol COMMENT: Mon Mar 24 00:19:27 GMT 2003 Note that I have been regularly resetting the guider throughout the day, as usual, in an attempt to prevent loos of guiding, yet guiding still went off a bit. Mon Mar 24 00:38:02 GMT 2003 MKIV End Patrol Mon Mar 24 00:39:13 GMT 2003 MKIV Start Patrol Mon Mar 24 00:47:58 GMT 2003 MKIV End Patrol \*\*MKIV PROBLEM\*\*: Mon Mar 24 00:25:18 GMT 2003 I noticed that the barrel was turning very slowly compared to normal so I went upstairs to watch and test things. The barrel moved jerkily, sometimes in one direction and sometimes changing direction for a degree or so then going back to the original direction. Net movement was in the correct direction. At about the 0 degrees position it stopped like it does at the end of a normal scan, after a few seconds it continued at the normal speed in the correct (same) CW direction in which it was previously moving slowly. Back downstairs the realtime scans apparently started again at that position where the scan speed returned to normal. Now I see the partial scan problem that we've noticed lately, with the barrel stopping at the +/-45 degree position from the "straight up" (North) position. I set the scan to Idle and it stopped at the correct position, it is interesting that on the last CW scan before it idled the scan was complete like a normal scan. So I started the Patrol again to see if the scans are normal again, they weren't normal, and this time the "Idle" position occurred at the 307 degree position on the CW scan - this I've seen before. The cables aren't binding in the wrapup. Mon Mar 24 00:59:14 GMT 2003 MKIV Start Patrol Mon Mar 24 01:05:30 GMT 2003 MKIV End Patrol Mon Mar 24 01:05:42 GMT 2003 MKIV Start Cal Mon Mar 24 01:24:26 GMT 2003 MKIV End Cal Mon Mar 24 01:24:37 GMT 2003 Start Patrol MKIV \*\*MKIV PROBLEM\*\*: Mon Mar 24 00:50:04 GMT 2003 I cycled the main power rocker-switch to KCC, back to normal scans again. MKIV COMMENT: Mon Mar 24 01:51:16 GMT 2003 Centered occulting. COMMENT: Mon Mar 24 02:04:54 GMT 2003 Extended the dome slot again. \*\*PSPT PROBLEM\*\*: Mon Mar 24 02:19:41 GMT 2003 Crashed "starting photometric data", killed runPspt.pro and shutdown. Mon Mar 24 02:28:08 GMT 2003 CHIP End Patrol Mon Mar 24 02:28:26 GMT 2003 PTCS End Patrol Mon Mar 24 02:29:28 GMT 2003 MKIV End Patrol Mon Mar 24 02:38:34 GMT 2003

## MkIV

0.0 1.0	0.0	10.00	20 20	00 10
00_19.rawmk4	02_20.rawmk4	19_09.rawmk4	20_38.rawmk4	22_13.rawmk4
00_23.rawmk4	02_23.rawmk4	19_12.rawmk4	20_41.rawmk4	22_16.rawmk4
00_28.rawmk4	02_26.rawmk4	19_15.rawmk4	20_43.rawmk4	22_19.rawmk4
00_33.rawmk4	17_24.rawmk4	19_18.rawmk4	20_46.rawmk4	22_22.rawmk4
00_39.rawmk4	17_27.rawmk4	19_21.rawmk4	20_49.rawmk4	22_25.rawmk4
00_42.rawmk4	17_32.rawmk4	19_24.rawmk4	20_52.rawmk4	22_28.rawmk4
00_59.rawmk4	17_38.rawmk4	19_27.rawmk4	20_55.rawmk4	22_31.rawmk4
01_02.rawmk4	17_51.rawmk4	19_30.rawmk4	20_58.rawmk4	22_34.rawmk4
01_08.rawmk4	17_54.rawmk4	19_33.rawmk4	21_01.rawmk4	22_37.rawmk4
01_14.rawmk4	17_57.rawmk4	19_36.rawmk4	21_04.rawmk4	22_40.rawmk4
01_21.rawmk4	18_00.rawmk4	19_39.rawmk4	21_10.rawmk4	22_43.rawmk4
01_24.rawmk4	18_03.rawmk4	19_42.rawmk4	21_14.rawmk4	22_46.rawmk4
01_27.rawmk4	18_06.rawmk4	19_45.rawmk4	21_17.rawmk4	22_49.rawmk4
01_30.rawmk4	18_09.rawmk4	19_48.rawmk4	21_20.rawmk4	22_52.rawmk4
01_33.rawmk4	18_12.rawmk4	19_51.rawmk4	21_23.rawmk4	22_55.rawmk4
01_36.rawmk4	18_14.rawmk4	19_53.rawmk4	21_26.rawmk4	22_57.rawmk4
01_39.rawmk4	18_17.rawmk4	19_56.rawmk4	21_28.rawmk4	23_00.rawmk4
01_42.rawmk4	18_20.rawmk4	19_59.rawmk4	21_34.rawmk4	23_03.rawmk4
01 45.rawmk4	18 23.rawmk4	20 02.rawmk4	21 38.rawmk4	23 06.rawmk4
01_48.rawmk4	18_26.rawmk4	20_05.rawmk4	21 41.rawmk4	23_09.rawmk4
01 51.rawmk4	18_29.rawmk4	20_08.rawmk4	21 44.rawmk4	23 12.rawmk4
		20_11.rawmk4	21 47.rawmk4	c01 05.rawmk4
01 56.rawmk4		20 <sup>_</sup> 14.rawmk4	21_50.rawmk4	
		20_17.rawmk4	21 53.rawmk4	
02 02.rawmk4	18 41.rawmk4	20 20.rawmk4	21 56.rawmk4	c18 50.rawmk4
02_05.rawmk4	18 44.rawmk4	20 23.rawmk4	21 59.rawmk4	c18 56.rawmk4
02_08.rawmk4	18 47.rawmk4	20 26.rawmk4	22 02.rawmk4	c19 03.rawmk4
02 11.rawmk4	18 53.rawmk4	20 29.rawmk4	22 05.rawmk4	
02_11.rawmk4	19 00.rawmk4	20_29.rawmk4	22_03.rawmk4	
02_11.rawmk4	19_00.rawmk4	20_32.rawmk4	22_00.rawmk4	
02_1/•10Wmm1	T>_00.Tawunt1	20_33.rawmr1	22_10.10WWW1	